UNIVERSIDADE ESTADUAL DE CAMPINAS
Faculdade de Ciências Aplicadas

ANDRÉ LUIZ TAVARES DAMASCENO

NEGÓCIOS DIGITAIS: ANALISANDO A INTENÇÃO EMPREENDEDORA E O EMPREENDEDORISMO DE ALTO CRESCIMENTO

LIMEIRA
2023

UNIVERSIDADE ESTADUAL DE CAMPINAS
Faculdade de Ciências Aplicadas

ANDRÉ LUIZ TAVARES DAMASCENO

NEGÓCIOS DIGITAIS: ANALISANDO A INTENÇÃO EMPREENDEDORA E O EMPREENDEDORISMO DE ALTO CRESCIMENTO

Tese apresentada à Faculdade de Ciências Aplicadas da Universidade Estadual de Campinas como parte dos requisitos exigidos para obtenção do título de Doutor em Administração.

Orientador: Prof. Dr. Cristiano Morini
Coorientador: Prof. Dr. Edmundo Inácio Junior

ESTE EXEMPLAR CORRESPONDE À VERSÃO DA TESE DEFENDIDA PELO ALUNO ANDRÉ LUIZ TAVARES DAMASCENO, E ORIENTADA PELO PROF. DR. CRISTIANO MORINI.

LIMEIRA
2023

Ficha catalográfica
Universidade Estadual de Campinas
Biblioteca da Faculdade de Ciências Aplicadas
Renata Eleuterio da Silva - CRB 8/9281

D18n

Damasceno, André Luiz Tavares, 1980-
Negócios digitais : analisando a intenção empreendedora e o empreendedorismo de alto crescimento / André Luiz Tavares Damasceno. – Limeira, SP : [s.n.], 2023.

Orientador: Cristiano Morini.
Coorientador: Edmundo Inácio Júnior.
Tese (doutorado) – Universidade Estadual de Campinas, Faculdade de Ciências Aplicadas.

1. Empresas - Crescimento. 2. Unicórnio (Finanças). 3. Capital social. I. Morini, Cristiano, 1974-. II. Inácio Junior, Edmundo, 1972-. III. Universidade Estadual de Campinas. Faculdade de Ciências Aplicadas. IV. Título.

Informações Complementares

Título em outro idioma: Digital business : analyzing entrepreneurial intention and high-growth entrepreneurship
Palavras-chave em inglês:
Corporations - Growth
Unicorns (Finance)
Social capital
Área de concentração: Gestão e Sustentabilidade
Titulação: Doutor em Administração
Banca examinadora:
Cristiano Morini [Orientador]
Dirceu Silva
Christiano França da Cunha
Roosiley dos Santos Souza
Cristina Dai Prá Martens
Data de defesa: 23-05-2023
Programa de Pós-Graduação: Administração

Identificação e informações acadêmicas do(a) aluno(a)
- ORCID do autor: https://orcid.org/0000-0003-1140-3123
- Currículo Lattes do autor: http://lattes.cnpq.br/9461809524273965

FOLHA DE APROVAÇÃO

Autor: André Luiz Tavares Damasceno

Título: Negócios digitais: analisando a intenção empreendedora e o empreendedorismo de alto crescimento

Natureza: Tese

Área de Concentração: Gestão e Sustentabilidade

Instituição: Faculdade de Ciências Aplicadas, Universidade Estadual de Campinas

Data da Defesa: Limeira-SP, 23 de maio de 2023.

BANCA EXAMINADORA

Prof. Dr. Cristiano Morini (Orientador) – Presidente
Faculdade de Ciências Aplicadas (FCA/UNICAMP)

Prof. Dr. Dirceu da Silva
Faculdade de Educação (FE/UNICAMP)

Prof. Dr. Christiano França da Cunha
Faculdade de Ciências Aplicadas (FCA/UNICAMP)

Profa. Dra. Roosiley dos Santos Souza
Universidade Federal do Mato Grosso do Sul (UFMS)

Profa. Dra. Cristina Dai Prá Martens
Universidade Nove de Julho (UNINOVE)

A Ata da defesa com as respectivas assinaturas dos membros encontra-se no SIGA/Sistema de Fluxo de Dissertação/Tese e na Secretaria do Programa da Unidade.

DEDICATÓRIA

Eu dedico este trabalho à minha esposa Glória, que dedica a sua vida à felicidade de sua família e que constantemente dá provas de seu amor incondicional. À minha mãe, Terezinha Damasceno, principal torcedora dos seus dois filhos. Ao meu pai, Jorge Damasceno, que se estivesse vivo, estaria contente com a conclusão dessa etapa. Aos meus avós, Moacir e Nilza, já falecidos, que foram segundos pais para mim, e me dispensaram todos os cuidados necessários.

AGRADECIMENTOS

A Deus Nosso Senhor, que habita em luz inacessível e em cada coração iluminado pela Graça. A Nosso Senhor Jesus Cristo, cujo Trono da Cruz está fincado no centro do universo, e que constantemente nos envia Seu Santo Espírito de misericórdia e retidão. À Mãe do Céu, Maria Santíssima e a Seu casto esposo, São José. À minha esposa Glória e às minhas filhas, Cecília e Isabel, que me ajudam a crescer e aprender as lições dessa desafiante e recompensadora escola que é a vida familiar. Ao meu irmão, Tiago Damasceno, amigo e confidente de todas as horas. À minha sogra, Dona Fátima, pelo seu amor de mãe e amiga. Ao nosso padre, Dom Lourenço Fleichman, OSB, que nos ajuda a esquecer o supérfluo e contemplar o "Único Necessário". Ao grande amigo Ronaldo (*in memoriam*) que, infelizmente, não pode estar aqui, para compartilhar desse momento tão esperado. Aos amigos Átila Indalecio, André Fonseca, Carlos Henrique e Ronald Chaves, que me incentivaram, com exemplos e palavras, na escolha dessa bela e exigente profissão que é a magistério. Aos professores Cristiano Morini e Edmundo Inácio Jr, respectivamente orientador e coorientador da tese, pelo seu apoio, exemplo profissional e atenção dispensada durante a jornada.

RESUMO

As pesquisas sobre negócios digitais justificam-se pela sua crescente relevância para as economias desenvolvidas e emergentes, e as pesquisas sobre o tema são endereçadas a públicos diversos, incluindo pesquisadores, empreendedores e estudantes. A tese teve como objetivo principal investigar o tema, desdobrado em três objetivos específicos: (i) propor um framework e uma agenda de pesquisa sobre o empreendedorismo digital de alto crescimento; (ii) compreender os fatores que levaram uma empresa digital a um crescimento exponencial, levando-a à categoria de unicórnio; e (iii) avaliar a influência do capital social e das emoções (positivas e negativas) antecipadas nas intenções empreendedoras digitais de jovens graduandos. Cada objetivo específico foi tratado em um artigo. A primeira etapa da metodologia de cada um dos três artigos consiste numa Revisão Sistemática de Literatura sobre os temas. O primeiro artigo analisou trabalhos sobre alto crescimento, propondo um framework com uma síntese das capacidades essenciais e uma agenda de pesquisa; o segundo artigo efetuou um estudo em profundidade da Companhia A, empresa a tornar-se unicórnio de forma mais rápida no Brasil, apresentando os achados à luz da Visão Baseada em Recursos (BARNEY, 1991), apresentando 7 (sete) lições sobre o caso analisado; e por fim, o terceiro artigo investigou as relações entre o capital social, as emoções antecipadas as intenções empreendedoras digitais à luz da Teoria do Comportamento Planejado (AJZEN, 1991). Neste estudo, foi verificado que o capital social exerce influência sobre as atitudes, mas não tem impacto significativo sobre as intenções empreendedoras digitais; além disso, as emoções não têm efeito moderador significativo nas relações entre o capital social e as intenções empreendedoras. Apesar das normas subjetivas não influenciarem as intenções empreendedoras, a família e os demais grupos de convivência são elementos determinantes para a formação do caráter e as aspirações profissionais do indivíduo. Num contexto mais amplo, a pesquisa concluiu que o empreendedorismo de alto crescimento depende da aquisição e desenvolvimento de capacidades individuais e coletivas, que devem ser fomentadas por meio da colaboração de agentes públicos, universidades e empresas. Os programas de apoio ao empreendedorismo precisam identificar e incluir, dentre seus objetivos, a evolução de organizações com potencial de crescimento exponencial.

Palavras-chave: Negócios digitais. Alto crescimento. Unicórnios. Intenções empreendedoras.

ABSTRACT

Research on digital business is justified by its increasing relevance to developed and emerging economies, and research on the topic is addressed to diverse audiences, including researchers, entrepreneurs, and students. The thesis' main objective was to investigate the topic, unfolded into three specific objectives: (i) propose a framework and research agenda on high-growth digital entrepreneurship; (ii) understand the factors that led a digital company to exponential growth, taking it to the unicorn category; and (iii) assess the influence of social capital and anticipated emotions (positive and negative) on young undergraduates' digital entrepreneurial intentions. Each specific objective was addressed in a paper. The first step of the methodology for each of the three articles consists of a Systematic Literature Review on the topics. The first article analyzed works on high growth, proposing a framework with a synthesis of the essential capabilities and a research agenda; the second article carried out an in-depth study of Company A, the company to become the fastest growing unicorn in Brazil, presenting the findings in the light of the Resource-Based View (BARNEY, 1991), presenting 7 (seven) lessons about the case analyzed and finally, the third article investigated the relationship between social capital, anticipated emotions and digital entrepreneurial intentions in the light of the Theory of Planned Behavior (AJZEN, 1991). In this study, it was found that social capital exerts influence on attitudes, but has no significant impact on digital entrepreneurial intentions; moreover, emotions have no significant moderating effect on the relationships between social capital and entrepreneurial intentions. Although subjective norms do not influence entrepreneurial intentions, family and other social groups are key determinants of an individual's character formation and career aspirations. In a broader context, the research concluded that high-growth entrepreneurship depends on the acquisition and development of individual and collective capabilities, which should be fostered through the collaboration of public agents, universities, and companies. Entrepreneurship support programs need to identify and include, among their objectives, the evolution of organizations with exponential growth potential.

Keywords: Digital business. High growth. Unicorns. Entrepreneurial intentions.

LISTA DE TABELAS

LISTA DE ABREVIATURAS E SIGLAS

MEE-MQP	Modelagem de Equações Estruturais por Mínimos Quadrados Parciais
PLS-SEM	Partial Least Squares Structural Equation Modeling
RBV	Resource Based View
TCP	Teoria do Comportamento Planejado
TPB	Theory of Planned Behavior
VBR	Visão Baseada em Recursos
VRIO	Valor, Raridade, Imitabilidade e Organização

SUMÁRIO

CAPÍTULO 1: INTRODUÇÃO

Ao tratar do fenômeno da digitalidade sob o aspecto econômico, observa-se que ela vem despertando a atenção de governantes, pesquisadores, líderes e profissionais de variados setores e segmentos da economia (BLASCHKE; CIGAINA; RISS; SHOSHAN, 2016; RANTALA; UKKO; SAUNILA; PUOLAKOSKI *et al.*, 2019; SASTRE; DEL MAR BENAVIDES-ESPINOSA; RIBEIRO-SORIANO, 2021a; WIßOTZKI; SANDKUHL, 2017), e tem sido uma força central para entender as grandes mudanças observadas neste século XXI (GERINGER, 2020).

O impacto da tecnologia nos negócios gera desafios como (i) a (re)formulação da estratégia, (ii) o delineamento e a adaptação dos modelos de negócios e processos e (iii) a gestão de talentos, sendo que ela (a tecnologia) domina os esforços de inovação de muitos setores (TAMBO; FILTENBORG, 2020). As tecnologias digitais impactam a forma como novos empreendimentos são imaginados e criados (ELIA; MARGHERITA; PASSIANTE, 2020) e o próprio processo empreendedor alterou-se, de modo significativo (HANSEN, 2020; MAHMUD, 2020), com a ascensão das abordagens ágeis (CARROLL; CASSELMAN, 2019; GHEZZI; CAVALLO, 2020; RIES, 2011), que consideram as características de um novo sujeito: o cliente digital.

A capacidade continuada de gerar resultados para o consumidor digital depende da identificação e do teste de suposições de valor e crescimento (RIES, 2011) tendo em vista a inovação corporativa (HOLT, 2018; LASRADO, 2017) e a eficácia da estratégia de lançamento de produtos e serviços (WIESBÖCK; HESS, 2020). A capacidade de gerar os dividendos e o impacto projetado pelos fundadores do negócio não depende apenas de utilizar tecnologia, mas ofertar produtos e serviços baseados em tecnologia para resolver problemas (HASSELBLATT; HUIKKOLA; KOHTAMÄKI; NICKELL, 2018).

Organizações de todos os portes têm sido desafiadas a gerir a transformação digital de seus modelos e processos (EL HILALI; EL MANOUAR; JANATI IDRISSI, 2020; LAURENS, 2019; OKANO; INOUE; FADINI; SIMÕES *et al.*, 2019; RAVARINI; LOCORO; MARTINEZ, 2020), já que as formas convencionais de fazer negócios estão mudando rapidamente (MET; UYSAL; ÖZKAYA; ORÇ, 2020). Essas mudanças têm gerado incômodos e dificuldades mesmo para empresas estabelecidas, que podem ser surpreendidas por inovações disruptivas (CHRISTENSEN, 2013).

As organizações exercem papel fundamental na inserção de tecnologias no cotidiano de pessoas e empresas, por meio da oferta de produtos e serviços, suprindo as variadas

necessidades humanas, sem esquecer das necessidades econômicas das organizações (KOTLER; KELLER, 2019) e buscando geração de riqueza e longevidade. Isso pode exigir, frequentemente, o sacrifício de resultados de curto prazo (LEENDERTSE; VAN RIJNSOEVER; EVELEENS, 2021).

Graças à transformação digital, mudanças econômicas e sociais significativas fizeram emergir um enorme segmento econômico baseado nos negócios digitais. A terminologia sobre o tema ainda está em desenvolvimento e consolidação, o que pode gerar ambiguidades e dificultar a comunicação entre os pesquisadores. No contexto desta pesquisa de tese, consideram-se que **negócios digitais** são empreendimentos que dependem de tecnologia para entregar valor a seus clientes (SENGUPTA; NARAYANAMURTHY; HOTA; SARKER *et al.*, 2021), quer seja no suporte aos processos ou na entrega de valor propriamente dita. Esses negócios têm gerado desafios e discussões frequentes, não apenas no campo da estratégia, mas também no campo das políticas públicas e nos mecanismos de regulação estatais (CLEMONS; MADHANI, 2010; TSATSOU; ELALUF-CALDERWOOD; LIEBENAU, 2010).

KONYA-BAUMBACH; SCHUHMACHER; KUESTER e KUHAREV (2019) apresenta três estratégias de *design* de modelos de negócios digitais: classificações de clientes, comunicação de benefício e modelo de receita, enfatizando que a confiança inicial serve como um mediador crítico na relação entre essas estratégias de design e intenções de adoção dos consumidores. A criação de um modelo de negócios exclusivo está no cerne da inovação (FLOREK-PASZKOWSKA; UJWARY-GIL; GODLEWSKA-DZIOBON, 2021). Para a criação de modelos de negócios digitais bem-sucedidos, é essencial que os gestores tenham capacidade de descobrir e criar oportunidades de negócios (AHAMAT; CHONG, 2014), antes mesmo da identificação dos recursos necessários para o atendimento da demanda identificada e inexplorada.

Apesar do aprimoramento dos processos de prospecção, incubação e aceleração de novos negócios, as taxas de fracasso de *startups* nas fases iniciais continuam elevadas (FONT COT; LARA NAVARRA; SERRADELL-LÓPEZ, 2021; KONYA-BAUMBACH; SCHUHMACHER; KUESTER; KUHAREV, 2019). Altas taxas de falha de inovações digitais de startups indicam que (também) os negócios digitais devem investir tempo e recursos para desenvolver e testar seus modelos de negócio, por meio de iterações com o mercado e de práticas centradas no cliente (SETIA; VENKATESH; JOGLEKAR, 2013), antes de buscar investimentos externos (KÖNIG; UNGERER; BALTES; TERZIDIS, 2019). O alto risco das soluções oferecidas deve-se, muitas vezes, à inexperiência no desenvolvimento

de um modelo de negócios concreto ou dificuldade em estimar o tamanho do mercado e os potenciais compradores, ou ainda, por causa da superestimação dos benefícios da nova ideia (ALHAZZA; BOURINI; ZUBAIDAH; BT SELAMAT, 2019). A principal razão de falha está no modelo de negócio adotado (ANAGNOU; HANDRICH; SCHNELLBÄCHER; HEIDENREICH, 2019). Dentre essas falhas, está a dificuldade de identificar uma proposta de valor que o cliente considere como tal (LE; SUH, 2019). Já que desenvolver um novo produto é uma missão desafiadora (ALHAZZA; BOURINI; ZUBAIDAH; BT SELAMAT, 2019). Além disso, as razões que podem ocasionar a falência, crescimento e longevidade das organizações nem sempre são compreendidas pelos empreendedores, que adotam uma abordagem “pragmática”. Nessa abordagem, o *feeling* e a experiência são supervalorizados, em detrimento da investigação das causas e assimilação das práticas que podem induzir o crescimento.

O **crescimento organizacional** foi abordado por uma série de autores. Penrose (1959) ressalta que as empresas podem ser definidas como estruturas que orientam os esforços de indivíduos e grupos que contém recursos produtivos para exploração de oportunidades existentes. A Visão Baseada em Recursos (VBR), proposta por BARNEY (1991), considera que as vantagens competitivas das organizações estão diretamente relacionadas aos recursos estratégicos e competências que as empresas acessam e possuem. Dentro de um determinado setor de atuação, dificilmente recursos e competências estão perfeitamente distribuídos entre as empresas.

Empresas digitais enfrentam o desafio de alocar eficientemente os investimentos e concorrer com empresas estabelecidas nas fases iniciais do negócio (ASGHARI; GEDEON, 2010), além de otimizar custos, sobretudo nas fases mais avançadas, quando a empresa busca ganhar escala (NALINTIPPAYAWONG; WAIYAWATPATTARAKUL; CHOTIPANT, 2018). Ainda segundo BARNEY (1991), os recursos e competências devem possuir quatro características: (i) Valor, (ii) Raridade, (iii) Inimitabilidade e (iv) Organização (dando origem à matriz VRIO, acrônimo em inglês). Um dado recurso ou competência que gera vantagem competitiva sustentável possui (i) Valor, quando gera impacto real para o negócio ou setor de atuação; (ii) Raridade, quando é (quase) exclusivo da organização, em comparação com seus concorrentes; (iii) Inimitabilidade, quando possui barreiras que dificultam a sua aquisição por outras empresas; (iv) Organização, quando o recurso ou competência pode ser efetivamente utilizado.

MATRICANO (2010), conforme já apontado anteriormente por SENGE (1997), considera que as capacidades de (i) adquirir e (ii) promover conhecimentos são essenciais;

isso é verdadeiro, sobretudo nas organizações de alto crescimento, pois perpassa e penetra todas as funções e processos empresariais, criando, mesmo, ecossistemas empreendedores digitais e toda uma nova economia digital (SAHUT; IANDOLI; TEULON, 2021). Os modelos de negócios digitais, complexos e mutantes como são, demandam pesquisas que consideram os atores, aspectos e variáveis envolvidos (ELIA; MARGHERITA; PASSIANTE, 2020; GHEZZI; CAVALLO, 2020; ZAHEER; BREYER; DUMAY, 2019a), que a um só tempo devem se esforçar para possuir (i) precisão e objetividade e (ii) relevância e generalização.

Os investidores de risco desejam encontrar *startups* de alto potencial em seus primeiros estágios (ZHANG; ZHONG; YUAN; XIONG, 2021), sobretudo as *startups* inovadoras (CAVALLO; GHEZZI; ROSSI-LAMASTRA, 2021), que são "empreendimentos empresariais que buscam rentabilidade e crescimento por meio de práticas inovadoras" (CARLAND; HOY; BOULTON; CARLAND, 1984). As *startups* inovadoras promovem o empreendedorismo produtivo (BAUMOL, 1990), criando valor para seus *stakeholders*.

O empreendedorismo digital tem grande dependência de fontes externas de financiamento para fomentar o crescimento (CAVALLO; GHEZZI; DELL'ERA; PELLIZZONI, 2019). Muitos negócios digitais que alcançam o status de unicórnio, ou seja, o valor de mercado de pelo menos US$ 1 bilhão, optam pela estratégia de postergar o seu IPO (*Initial Public Offering*), pois tendem a obter maior valorização com a adoção dessa estratégia (LEE; IL, 2020). Nesse contexto, pode-se usar a analogia do crescimento humano. Ao deixar a casa dos pais, o indivíduo precisa lidar com demandas, por vezes, desconhecidas, desenvolvendo a capacidade de adaptação a novas situações que se apresentam. Quando o processo de IPO é efetivamente concluído, as *startups* “atingem a maioridade” e passam a ser designadas *exited unicorns*, ou seja, a expressão unicórnio não é mais utilizada para as empresas naquela categoria que abriram o capital. Deixam, então, o estágio de inicialização e aceleração para alcançar outro patamar no mercado. Nessa fase, a empresa digital busca acesso a fontes de financiamento que possam viabilizar o crescimento orgânico, por meio de melhorias internas e/ou inorgânico, com fusões e aquisições (BENNING; FLATTEN, 2020; OFER; NAAMATI, 2019).

A dinâmica dos negócios digitais não é linear. Os resultados do atual estudo empírico de pesquisa revelam que a dimensão da inovação tem o efeito mais forte do desempenho do empreendedorismo (KASANAGOTTU; BHATTACHARYA, 2017). Uma empresa consolidada pode lançar um novo produto ou serviço inovador (por meio de uma *spin off*, por exemplo) e retornar à fase de inicialização, apesar do empreendimento maior (que pode

ser uma *holding*) estar em pleno crescimento ou expansão. Ao considerar o crescimento propriamente dito, a organização pode optar pelo crescimento orgânico (melhorias internas) ou por meio de fusões e aquisições de outras empresas, quer para consolidar a sua posição no mercado de atuação, quer no ingresso e exploração de novos mercados WEIL (2012).

Os ambientes competitivos exigem rápidas mudanças e adaptações estratégicas, táticas e operacionais por parte das empresas. Essa necessidade de mudar para competir se reflete nas competências que devem ser aprendidas e desaprendidas para manutenção ou elevação do desempenho, principalmente em contextos globalizados e dinâmicos. A abordagem das Capacidades Dinâmicas, por sua vez, proposta por TEECE; PISANO e SHUEN (1997) atualiza a VBR, considerando que as organizações precisam desenvolver, integrar e reconfigurar suas competências internas e externas para competir eficazmente.

A fim de facilitar a compreensão e a adoção da abordagem das capacidades dinâmicas, WANG e AHMED (2007) apresenta três categorias de capacidade: adaptativa, absortiva e de inovação. Essas três perspectivas consideram, respectivamente: (i) a habilidade na identificação e aproveitamento das oportunidades inexploradas do mercado; (ii) a habilidade em reconhecer o valor de novas informações externas, assimilando-as e utilizando-as em seu valor; (iii) a habilidade em desenvolver novos produtos e mercados alinhados com as necessidades estratégicas da organização e com os mercados-alvo.

As empresas digitais pioneiras são muitas vezes construídas sobre novos modelos de negócios que os diferenciam de seus concorrentes (GUPTA; BOSE, 2019). Portanto, as empresas (digitais e tradicionais) estabelecidas precisam buscar a adaptação de seus modelos de negócios e estruturas de inovação para competir por meio de inovações radicais e tecnologias disruptivas (CHRISTENSEN, 2013; HIRTE; ROTH, 2018). A fim de implementar projetos de crescimento, expansão e internacionalização, a reconfiguração das capacidades torna-se mais necessária, aproveitando-se do fato dos modelos de negócios digitais serem mais escaláveis (WITTKOP; ZULAUF; WAGNER, 2017).

Os modelos de negócio são concebidos e operados por empresas dotadas de capacidades e recursos que, por sua vez, estão inseridas em ecossistemas, que integra investidores, incubadoras e aceleradoras, dentre outras partes interessadas. A despeito da importância desses atores, a (i) capacidade do empreendedor, dos (ii) times e a (iii) capacidade de inovação são elementos preponderantes para o sucesso (KHONG-KHAI; WU, 2018). Ainda que a literatura enfatize que as interações entre as entidades bióticas (o indivíduo) e abióticas (o ambiente institucional) são fundamentais para os ecossistemas empresariais (TORRES; GODINHO, 2021), o empreendedor, que está no cerne desta

engrenagem, é o ator essencial na criação de oportunidades de negócios de sucesso (AHAMAT; CHONG, 2014).

Dentre os fatores que encorajam os empreendedores, AZMI; HAIRI; LEE e FAUZIAH (2012) destacam o desejo de alcançar a liberdade e a satisfação, apoiar a família, tornar-se rico e evitar as flutuações e incertezas do trabalho assalariado. Esses elementos alimentam, portanto, a prévia intenção de empreender. Dentre os recursos pré-existentes, estão a capacidade de assumir riscos, paixão, autoconfiança e *locus* de controle (ALROAIA; BAHARUN, 2018).

A palavra “intenção” deriva do latim *intentio* que significa “aquilo que se pretende fazer; o que se almeja”, ou ainda “pensamento secreto e reservado”. A **intenção empreendedora** pode ser definida como a convicção autorreconhecida por uma pessoa de que pretende criar um empreendimento e conscientemente planeja fazê-lo em algum momento no futuro (THOMPSON, 2009).

Além das características pessoais, é necessário destacar as percepções, valores, crenças, variáveis sócio demográficas e ambientais para favorecimento das intenções empreendedoras (KRUEGER JR; BRAZEAL, 1994). Dada a relevância do tema “empreendedorismo”, a previsão das intenções empreendedoras tem sido pesquisada em variados contextos sociais e culturais. É uma unidade de análise fundamental para apoiar a compreensão do surgimento de novos negócios (THOMPSON, 2009).

A pesquisa científica tem utilizado modelos teóricos para aumentar a capacidade de prever a atividade empreendedora (KRUEGER JR; REILLY; CARSRUD, 2000). Dois modelos são amplamente utilizados em pesquisas: (i) o Modelo de Evento Empresarial (MEE) de SHAPERO e SOKOL (1982) e (ii) a Teoria do Comportamento Planejado (TCP) de AJZEN (1991). AJZEN (1991) defende que as intenções dependem de 3 fatores: (i) atitudes, (ii) normas sociais e (iii) controle do comportamento percebido.

SHAPERO e SOKOL (1982) considera como fatores indutores da intenção empreendedora: a (i) expectativa de conseguir um emprego, a (ii) viabilidade de ocorrência disto (análise de oportunidades) e a (iii) propensão para agir nessa direção (comportamento orientado para objetivos). O modelo de AJZEN (1991) contribui com o avanço dos modelos de predição, pois propõe capturar os aspectos individuais, e não tanto as atitudes gerais de coletivos sociais. Se esses coletivos tendem a agir segundo determinados princípios e premissas, isso não significa que fazer parte desses grupos influenciará, decisivamente, os comportamentos específicos em determinadas situações, nem a intenção empreendedora propriamente dita (AJZEN, 1991).

O desenho das pesquisas identificadas utilizam a TCP para previsão de intenções empreendedoras de grupos sociais diversos, tais como estudantes de graduação (BEN YOUSSEF; BOUBAKER; DEDAJ; CARABREGU-VOKSHI, 2021; DOANH, 2021; YOUNIS; KATSIOLOUDES; BAKRI, 2020), pós-graduação em negócios (AHMED; KHATTAK; ANWAR, 2020), gerentes de empresas digitais (TAJPOUR; HOSSEINI, 2021) e funcionários de empresas públicas e privadas (NGUYEN; DINH; LUU; CHOO, 2020). Ou seja, as pesquisas concentram-se em avaliar de que modo o pertencimento a certos grupos sociais influencia na presença e na formação dos fatores da TCP: atitudes, normas subjetivas e o controle do comportamento percebido, como por exemplo, é o caso dos empreendedores imigrantes (MELNIKOVA; GRUNWALD; AHRENS; ZASCERINSKA, 2018), que tem maior propensão ao empreendedorismo e à internacionalização de seus negócios (BOLZANI, 2019). O ineditismo de estudos que utilizam a TCP para prever as intenções empreendedoras de grupos sociais (à luz dos fatores) é observado tanto quando a amostra é extraída de uma população diferente, ou quando novos constructos são adicionados ao modelo de AJZEN (1991).

O capital social, integrado por relações e vínculos de confiança, não promovem apenas as intenções empreendedoras, mas quaisquer oportunidades profissionais (DOANH, 2021). HOONG; QURESHI; SAJILAN e AL HALBUSI (2019) verificaram que a criação de novos negócios não é, necessariamente, facilitado pelo capital social. Esses empreendimentos parecem depender mais de aspectos relativos à paixão e desejo de impactar positivamente a realidade de pessoas e comunidades.

A junção do capital social *offline* - decorrente de interações presenciais - e do capital social *online* - decorrente da mídia digital social - pode influenciar positivamente os empreendedores nascentes (empreendimentos com até 42 meses de existência, segundo a terminologia do *Global Entrepreneurship Monitor)* (HILL; IONESCU-SOMERS; CODURAS; GUERRERO *et al.*, 2022). A falta de contato físico requer confiança mais alta, normas de reciprocidade e identificação (PÉREZ-MACÍAS, N.; FERNÁNDEZ-FERNÁNDEZ, J. L.; VIEITES, A. R., 2018).

Os comportamentos empresariais são desenvolvidos por meio das faculdades psicológicas, incluindo emoção e cognição (CAI; GU; WU, 2021). Os resultados apresentados por LIU e WANG (2021) indicam que o medo do fracasso é uma forte barreira psicológica para o comportamento empresarial e o mais forte gatilho para a emoção negativa. As emoções positivas tem influência positiva sobre as intenções empreendedoras

(LUONG; LEE, 2021). VAMVAKA; STOFOROS; PALASKAS e BOTSARIS (2020) conclui que a atitude afetiva é um forte preditor da intenção empreendedora.

A economia digital é composta por uma grande diversidade de atores, tais como governos, parques tecnológicos, incubadoras, e aceleradoras, que formam uma engrenagem delicada que visa aumentar as taxas de sucesso de novos negócios (ERDOGAN; KOOHBORFARDHAGHIGHI, 2019; FONT COT; LARA NAVARRA; SERRADELL-LÓPEZ, 2021). Muito dos esforços dispendidos para a criação de negócios de sucesso acaba sendo desperdiçado em inumeráveis ciclos de nascimento e morte de negócios. Sendo assim, a promoção de pesquisas científicas que investiguem as causas do alto crescimento digital justifica-se, já que esses estudos podem apoiar governos, empresas e profissionais no desenho de políticas públicas, estratégias e práticas de empreendedorismo e de capacitação, aprimorando os ambientes de negócios e gerando resultados econômicos e sociais. As empresas de alto crescimento – incluindo as digitais – tem imensa capacidade de geração de retornos econômicos e sociais, promovendo a qualidade de vida das pessoas (AZZAM; SAMI; KHALIL, 2016). Além de oferecer produtos e serviços inovadores e criar empregos (SANTISTEBAN; MAURICIO; CACHAY, 2021), as empresas de alto crescimento podem apoiar nações de crescimento de baixo custo a tornarem-se economias baseadas em modelos inovadores de alto valor agregado (ROWLEY; OH, 2020). Essas reflexões justificam os estudos sobre alto crescimento empresarial, motivando a formulação das duas primeiras questões de pesquisa (QP):

QP 1: Quais são as discussões, teorias e metodologias empregadas nos estudos sobre o alto crescimento digital?
QP 2: Quais são os fatores e desafios principais enfrentados pelo mais rápido unicórnio brasileiro?

A criação de empreendimentos de alto crescimento depende de vários atores, dentre os quais, o empreendedor digital (BATTISTI; AGARWAL; BREM, 2022). A investigação das variáveis e elementos que induzem a intenção de um indivíduo em empreender é importante para a compreensão da dinâmica do alto crescimento. Conforme já exposto, o Capital Social e as Emoções Antecipadas possuem relevante papel nas interações profissionais, e os estudos não avaliaram a influência combinada desses construtos nas intenções empreendedoras. Desse modo, na presente pesquisa de tese, uma terceira questão de pesquisa foi formulada (QP):

QP 3: Qual é o impacto da capital social e das emoções antecipadas nas intenções empreendedoras digitais?

O objetivo da tese é investigar o tema negócios digitais, (i) propondo um *framework* de capacidades essenciais e uma agenda de pesquisa sobre o empreendedorismo digital de alto crescimento (artigo 1); (ii) compreendendo os fatores que levaram uma empresa digital a um crescimento exponencial, levando-a à categoria de unicórnio (artigo 2); e (iii) avaliando a influência do capital social e das emoções (positivas e negativas) antecipadas nas intenções empreendedoras digitais de jovens graduandos (artigo 3).

Foram selecionadas e abordadas três unidades de análise: (i) o ciclo de vida; (ii) o empreendedor; e (iii) a empresa, haja vista serem consideradas como essenciais para o estudo aprofundado sobre o tema. As pesquisas utilizaram as estratégias apresentadas na tabela 1. A Revisão Sistemática de Literatura foi adotada nas três pesquisas, a fim de aumentar a robustez dos portfólios utilizados nos estudos.

Artigo	Tema	Unidade de análise	Desenho da pesquisa	Teoria	Método utilizado
01	Negócios digitais de alto crescimento	Ciclo de vida	Ensaio teórico	Diversas teorias	- Revisão Sistemática de Literatura; - Análise Bibliométrica.
02	Empresa unicórnio	Empresa	Estudo de caso	Visão Baseada em Recursos	- Revisão Sistemática de Literatura; - Entrevistas Qualitativas; - Análise de Conteúdo.
03	Intenção empreendedora	Empreendedor	Estudo empírico	Teoria do Comportamento Planejado	- Revisão Sistemática de Literatura; - Análise Bibliométrica; - *Survey*; - Modelagem de Equações Estruturais.

Tabela 1: Artigos gerados pela pesquisa de tese

O artigo 1 desenvolveu um ensaio teórico sobre o empreendedorismo digital de alto crescimento. O estudo explorou as pesquisas desenvolvidas sobre o tema, oferecendo uma visão de conjunto sobre os artigos por meio da análise bibliométrica. No final, é apresentado um *framework* das capacidades essenciais para um negócio digital de alto crescimento, organizadas em 5 dimensões (estratégia, captação de investimentos, competências em gestão, inovação e gestão do capital humano), ao longo do ciclo de vida de uma empresa digital em 3 estágios (inicialização, crescimento e aceleração). Além disto, é apresentada uma agenda de pesquisa, a partir das lacunas observadas pela análise do portfólio bibliográfico.

O artigo 2 investiga os fatores de sucesso e desafios da Companhia A (nome fictício de uma *proptech*, como são conhecidas as *startups* do ramo imobiliário), na visão de seus gerentes e técnicos, para uma *startup* atingir o status de unicórnio. A Companhia A atingiu o status de unicórnio em menor tempo no Brasil, em fevereiro/2022, quando foi superada por duas empresas, sendo uma *fintech* e a outra atuante no ramo de entregas *online*.. Para a coleta de dados, foi utilizado um questionário semiestruturado de 13 perguntas. As 7 lições sobre o caso da Companhia A identificadas e analisadas no estudo, foram confrontadas com a Visão Baseada em Recursos (BARNEY, 1991), utilizada como teoria de base do estudo. As conclusões são que a empresa estudada atende aos requisitos propostos pelo próprio BARNEY (1991), no *framework* VRIO para geração de vantagem competitiva sustentável, ou seja: (i) valor; (ii) raridade; (iii) dificuldade de imitar e (iv) dificuldade para substituir. A Companhia A se destaca ao apresentar um modelo de negócio num setor tradicional com demanda reprimida e pouca disposição para inovar, aplicando tecnologias de *data science* para desenvolvimento de soluções inovadoras, visando atendimento às necessidades dos stakeholders (clientes e corretores).

O artigo 3 avalia o impacto do capital social e das emoções positivas e negativas na intenção de empreender digitalmente de graduandos de cursos superiores de gestão e tecnologia de instituições paulistas. O modelo é baseado em 7 hipóteses baseadas na Teoria do Comportamento Planejado (AJZEN, 1991; 2001; 2002; 2011; AJZEN; FISHBEIN, 1977) e no portfólio bibliográfico gerado a partir de uma Revisão Sistemática de Literatura. A análise é realizada utilizando a modelagem de equações estruturais (PLS-SEM).

Esta tese está estruturada no formato de três artigos científicos, uma das modalidades de texto previstas no PPGA FCA/Unicamp, conforme a deliberação CPG/FCA 005/2020 (instrução normativa CPG–Administração nº 03). A estratégia de três artigos é adotada nesta tese, pois permite investigar o fenômeno selecionado sob perspectivas diferentes.

Além deste capítulo 1 de introdução, a tese inclui o capítulo 2, que debate o alto crescimento de negócios digitais; o capítulo 3, que aborda as empresas-unicórnio, por meio de um estudo de caso; o capítulo 4, que trata das relações entre intenção empreendedora, capital social e emoções; por fim, o capítulo 5, que apresenta as conclusões finais e as limitações identificadas na pesquisa, propondo estudos e desdobramentos futuros, visando aprofundar o entendimento sobre o tema.

CAPÍTULO 2: NEGÓCIOS DIGITAIS DE ALTO CRESCIMENTO

No seu trabalho seminal, PENROSE (1959) enfatiza a alocação ótima de recursos como um objetivo organizacional essencial, e destaca entre as capacidades centrais para o crescimento organizacional, a (i) versatilidade; (ii) a habilidade em mobilizar recursos financeiros; (iii) a ambição e (iv) o tino empresarial (capacidade decisória) dos gestores, além da (v) criação de novos serviços produtivos. Ao tratar das estratégias de expansão, PENROSE (1959), ressalta que organizações podem recorrer às vantagens competitivas baseadas na escala (economia ou estratégia baseada no tamanho) e da capacidade de atuar em novos mercados (economia ou estratégia de diversificação); a autora trata, ainda, de como o papel da concorrência pode gerar benefícios e dos desafios em responder às flutuações de demanda, característica de alguns setores de atuação.

CHAMBERLIN (1933) e PENROSE (1959) apresentam visões diferentes, e até certo ponto, contrapostas, às abordagens dedicadas a explicar o sucesso organizacional majoritariamente baseadas em fatores externos à organização. Dessa contraposição, nasceu a Visão Baseada em Recursos (VBR) (BARNEY, 1991; 1996), que também considera a empresa como um conjunto de recursos. Para criar vantagem competitiva sustentável que a diferenciem da concorrência, a organização precisa identificar os recursos que possuam quatro características: (i) valor, (ii) raridade, (iii) dificuldade de imitar e (iv) dificuldade para substituir, permitindo a exploração de oportunidades e mitigação de ameaças.

A teoria das capacidades dinâmicas (TEECE; PISANO; SHUEN, 1997) amplia a VBR, explorando as vantagens competitivas sustentáveis e a habilidade organizacional de integrar, construir e reconfigurar competências internas e externas para lidar com ambientes em rápida mudança, tratando, a um só tempo, de eficácia (fazer as coisas certas) e de eficiência (fazer certo as coisas). Nessa abordagem, a empresa desenvolve capacidades visando a realização da estratégia sem perder de vista a alocação ótima de recursos, evitando desperdícios e esforços que não agregam valor ao *stakeholders*.

Com a retomada da importância e, consequentemente, dos estudos dos fatores exógenos do empreendedorismo, o conceito de ecossistema de inovação emergiu e vem adquirindo maturidade e relevância. É cada vez mais usado para descrever coletivos de atores organizacionais heterogêneos (THOMAS; AUTIO, 2019), o que não significa que seja uma reunião casual de pessoas e empresas. Com a sua crescente maturidade, os

ecossistemas de inovação têm sido cada vez mais relevantes para a indução de organizações de alto crescimento, facilitando o acesso a recursos técnicos, materiais e financeiros. Os ecossistemas nacionais de empreendedorismo têm sido estudados e fomentados como parte das estratégias de desenvolvimento econômico de países, e visam reunir forças e recursos para promover o empreendedorismo (ACS; AUTIO; SZERB, 2014).

O ensaio teórico desenvolvido no capítulo 1 realizou uma revisão sistemática da literatura sobre o tema, que identificou a existência de estudos utilizando variados desenhos de pesquisa e estratégias de coleta e análise de dados. O estudo apresenta uma síntese das capacidades essenciais a serem desenvolvidas **pelos negócios digitais de alto crescimento**, ao longo de ciclo de vida em três estágios e 5 dimensões. A seguir, apresentamos o artigo referente a este assunto.

O artigo, no idioma português, foi submetido e aprovado no Encontro Anual da ANPAD 2022 (ENANPAD), no primeiro semestre de 2022 (vide comprovante no anexo 1); uma versão aperfeiçoada, no idioma inglês, foi submetida e aprovada no *28th International Association for Management of Technology* (IAMOT) (vide comprovante no anexo 2) e submetido ao periódico *International Journal of Entrepreneurship and Innovation Management* (IJEIM), no segundo semestre de 2022 (vide comprovante no anexo 3). As considerações dos pareceristas do referido Congresso foram analisadas e incorporadas. A próxima seção apresenta o texto aperfeiçoado e no idioma inglês.

ARTIGO 1 – HIGH DIGITAL GROWTH: ESSENTIAL CAPABILITIES AND THE RESEARCH AGENDA

Abstract: High-growth companies are crucial to leveraging economic development. This study investigates the essential capabilities for high digital growth. A systematic literature review was conducted in which we analyze where we are in this field, proposing a summary table (as a contribution) with the identified core capabilities for each stage (launch, growth, and accelerate), and a research agenda on high-growth digital businesses. Results suggest that companies should develop these capabilities to meet the challenges of each stage, adapting to each new leap of maturity and size. We identified the 28 core capabilities in a novel framework, considering stage (launch, growth and accelerate) versus dimensions (strategy, fundraising, governance and management, innovation and human capital). Given the changing and incremental nature of capabilities, promotion of digital entrepreneurship

must consider the particularities and challenges of each stage. We also raised four new research questions to keep on track the study of high-growth entrepreneurship.

Keywords: Entrepreneurship. Digital business. High growth. Startup; Essential capabilities. Critical success factors.

1. Introduction

Entrepreneurship plays an essential role in the economic growth and development of countries and their sub-regions (CANTNER; WOLF, 2018; KUMAR; KARTHIK; HARSHIDA, 2018). In this scenario, high-growth companies stand out as the chiefly responsible for strengthening economies (ACS, 2011). Nonetheless, recent studies show continued high mortality rates for companies, especially in the early stages (FONT COT; LARA NAVARRA; SERRADELL-LÓPEZ, 2021; MORALES-GUALDRÓN; ZAPATA; URBANO, 2014). This article will not address this mortality.

Recent research efforts have analyzed the determinants of success or failure of digital businesses (ALLEGRETTI; SEIDENSTRICKER; KASSECKERT, 2018; ALROAIA; BAHARUN, 2018; AZMI; HAIRI; LEE; FAUZIAH, 2012; DO CARMO; RANGEL, 2020; FEINDT; JEFFCOATE; CHAPPELL, 2002; GERHARDT; DOS SANTOS; RUBIN; NEUENFELDT *et al.*, 2021; KUMAR; MAHESHWARI; KUMAR, 2004; NALINTIPPAYAWONG; WAIYAWATPATTARAKUL; CHOTIPANT, 2018; NURCAHYO; PUTRA, 2021; SANTISTEBAN; MAURICIO, 2017). These studies evaluate, among other aspects, the role of the entrepreneur, the business model, and the ecosystem to induce high growth. These factors must be aligned to foster the discovery and creation of business opportunities (AHAMAT; CHONG, 2014).

In PORTER (1997) view, corporate performance depends on the managers' competence in seeking a favorable position in their competitive environment, that is, in relation to customers, suppliers, and competitors. This beneficial position occurs when the business model manages to create, deliver, and capture value (OSTERWALDER, 2004).

According to the Resource-Based View (RBV), the company must develop valuable, rare, inimitable, and non-substitutable skills and resources (BARNEY, 1991). GREWAL e SLOTEGRAAF (2007) argues that leaders and managers may have difficulty understanding how (and which) organizational capabilities affect competitive advantage. If this occurs, the model design and necessary adaptations are compromised, creating difficulties, especially

for a business with high growth potential. Established high growth companies can fail if they do not continuously promote innovation in their business models. If they focus excessively on incremental improvements, they may open space for competitors with more entrepreneurial and innovative proposals, adopting disruptive technologies (CHRISTENSEN, 2013).

"What are essential capabilities for generating value and sustaining high growth?" is the question that is literally worth US$1 billion. On the answer to this question, business survival and high growth depend. Since today's capabilities do not guarantee tomorrow's success, this study proposes to investigate the premises for high growth.

Initially, a literature review was conducted, exploring the concepts and definitions related to high-growth digital businesses. Section 3 presents the methodology used to answer the proposed questions. Section 4 presents (i) the bibliometric analysis of the selected papers; (ii) the summary table of the main capabilities; and (iii) the research agenda on high-growth digital businesses, as pointed out. Finally, Section 5 discusses the results, as well as their theoretical implications.

2. Theoretical Background

2.1 High digital growth

Growth and evolution are desired goals by most organizational leaders and managers. At the same time, companies need to expand their ability to generate revenue, profitability and wealth (AZMI; HAIRI; LEE; FAUZIAH, 2012), entering new markets, formalizing processes, attracting and retaining talent (CADORIN; KLOFSTEN; LOFSTEN, 2021).

According to GERHARDT; DOS SANTOS; RUBIN; NEUENFELDT *et al.* (2021), high digital growth develops based on the following elements: (i) adoption of a lean structure from the beginning; (ii) scalability; (iii) replicability of processes, products, and services; (iv) innovation; (v) ability to act in an uncertain environment; (vi) development of favorable relations with relevant actors and agents; (vii) effective adoption of Industry 4.0 technologies; (viii) communication; and (ix) ability to use venture capital. Fostering knowledge is critical for any business venture, but “it especially so for startup companies which expect high growth rates” (MATRICANO, 2010). AHMADI e ERSHADI (2021) point to 4.0 technologies and innovation as sources of competitive advantage (SINGH; BHOWMICK; EESLEY; SINDHAV, 2021). Institutional support favors the emergence of companies with the potential to achieve

higher growth levels (AHAMAT; CHONG, 2014) by developing organizational, technological, financial, and human resources (SOMSUK; LAOSIRIHONGTHONG, 2014).

Training entrepreneurs capable of creating exponential businesses is a crucial effort to develop national economies (BATTISTI; AGARWAL; BREM, 2022). Like other human capital factors, entrepreneurial skills can be acquired (SASTRE; DEL MAR BENAVIDES-ESPINOSA; RIBEIRO-SORIANO, 2021b), and entrepreneurial education programs have increased significantly (JARDIM; BÁRTOLO; PINHO, 2021), including as a way to combat unemployment (MARIANO; AYAVIRI-PANOZO; ROCHA, 2018). Proactivity, self-efficacy, ability to take risks (KOE; KRISHNAN; ALIAS, 2021; RUSLI; ROZMI, 2015), as well as mastery of technology skills (ALKHOORI; SEDIK; AL-SHAMI, 2021) , are the competencies needed by digital entrepreneurs.

When discussing the *blitzscaling* process, KURATKO; HOLT e NEUBERT (2020) most opportunely present six principles (Table 1) which point to the following desirable entrepreneurial attitudes: the ability to (i) prospect new markets, (ii) set realistic expectations, (iii) proactively (and prudently) act in attracting investments, (iv) promote the health of organizational culture, (v) develop processes, and (iv) understand customer expectations.

Principle 1 (Table 1) highlights the importance of taking part in entrepreneurship ecosystems (EE) for exponential growth. EE are spaces for innovation, connections and alliances, critical for articulating governments, universities and companies for economic development (KHONG-KHAI; WU, 2018; LEVINSON, 2010), whose success depends on the harmonious and effective collaboration between actors (CADORIN; KLOFSTEN; LOFSTEN, 2021; CONDOM-VILÀ, 2020; DE CASTRO; DE ARAUJO; FRAGOSO; TROPIANO, 2021; DO CARMO; RANGEL, 2020; SILVA; RAMPASSO; ANHOLON; COOPER ORDOÑEZ *et al.*, 2018).

Despite the numerous opportunities to be explored by digital entrepreneurs—it is important to resist the temptation of presenting unrealistic and overly optimistic expectations of future growth that surround digital enterprises (RUSLI; ROZMI, 2015), as stated by Principle 2 (Table 1).

ID	Principle
01	Expansion to environments that allow *blitzscaling*
02	Setting realistic expectations and reasonable goals
03	Raising sufficient funds to mitigate *blitzscaling* errors, with caution against overfunding
04	Maintenance of a healthy organizational culture
05	Ensuring a structure that can support growth
06	Understanding customer expectations

Table 1: Principles of blitzscaling. Source: (KURATKO; HOLT; NEUBERT, 2020)

Besides the ability to set realistic goals, KURATKO; HOLT e NEUBERT (2020) emphasize, in Principle 3, the ability to attract investments in adequate volume to meet growth needs (ISE; MARSHALL; TIPPETT, 2008; NIJKAMP; GULDEMOND; TEELEN, 2004; O'CONNOR; CHOI; WINKLER, 2016). Principle 4 argues the benefits of a healthy organizational culture (KUMAR; MAHESHWARI; KUMAR, 2004). Principle 5 addresses the development of an organizational structure (RUSNJAK, 2009). Finally, Principle 6 discusses understanding customer expectations, which, for MORALES-GUALDRÓN; ZAPATA e URBANO (2014), consists of developing processes for strategic service design and using marketing techniques.

2.2. Organizational capabilities

New venture failures are often associated with companies' difficulty in acquiring key resources (HATTON, 2008) for the realization of its objectives. But even if an organization is successful in acquiring its essential resources, this will not always be the result of systematic activity. To be capable of something is to have a generally reliable ability to accomplish that thing as a result of intentional action (DOSI; NELSON; WINTER, 2000).

One of the most important intangible resources are organizational capabilities (BARNEY, 1991), which can be defined as attributes that allow the organization to coordinate and utilize its resources (BARNEY, 1997). These are habitual postures, which are part of the modus operandi of the business and promote sustainable organizational growth. The organization must know how to use its limited resources to build organizational capabilities (GREWAL; SLOTEGRAAF, 2007) that are decisive for high growth (SANTISTEBAN; MAURICIO, 2017). Awareness of which capabilities are essential for competitive advantage helps in prioritizing initiatives so that the implementation of changes

does not generate disruptions that could compromise organizational processes and culture and, consequently, the results and the very survival of the company. In addition, it indicates mastery and knowledge of managers about the relevant aspects of the business, and is crucial for attracting investments (KAKATI, 2003). In this way, success (and failure), which for many companies is accidental and unexpected, can become conscious and predictable, even though risk and uncertainty are part of the very essence of entrepreneurship (REA, 1989).

In high-growth companies (and increasingly in all types of companies) it is essential to be able to promote the integration, building and reconfiguration of competencies to deal with rapidly changing environments, as defined by TEECE; PISANO e SHUEN (1997) in the dynamic capabilities approach. Since they are not fixed and inert characteristics (TEECE; PISANO; SHUEN, 1997), requires constant adaptations throughout the business life cycle (AHMADI; ERSHADI, 2021), and is enhanced by organizational learning (DE MENESES; DE MIRANDA RIBEIRO; ZAGO, 2006). Combinative capabilities have an emphasis on the company's ability to recombine existing capabilities, in addition to creating new ones (KOGUT; ZANDER, 1992), as mentioned above.

The learning and the incorporation of capabilities occurs, including through the interaction with the competitive environment (GREWAL; SLOTEGRAAF, 2007), intensifying the exchange of tacit and explicit knowledge and, consequently, the mutual growth of those involved. The concept of organizational capability is often used as a synonym for core competence (HAMEL; PRAHALAD, 1990), which is pointed out as the key to value creation and competitive advantage (KAY, 1995). Core competencies are socially constructed, through the interactions and experiences of organizational members (HOWARD-GRENVILLE; RERUP; LANGLEY; TSOUKAS, 2016).

In the new economy, organizations must be able, for example, to realize the economic value of their knowledge assets (LINDSEY, 2002). The organization must distinguish the organizational capabilities that can be enabled by acquiring, converting, applying, and protecting information (GOLD; MALHOTRA; SEGARS, 2001).

Among other benefits of knowledge management, the firm can avoid dependence on attributes that belong only to the entrepreneur and the team. Thus, the departure of key employees is less likely to generate discontinuities and compromise the good performance and even the survival of the business. However, companies cannot ignore the importance of the aggregation and retention of talented employees (ALKHOORI; SEDIK; AL-SHAMI,

2021), who enhance the chances of success in implementing and maintaining competitive advantages through organizational capabilities.

2.3. Defining terminology associated with the dictionary of high-growth entrepreneurship

In the “fauna of high-growth entrepreneurship” (especially digital businesses), one must discuss three prominent ‘animals’: gazelles, unicorns, and dragons, which compose a taxonomy widely adopted in the literature.

2.3.1. Gazelles

In an investigative study on business participation in the U.S. economic growth, BIRCH (1987) introduces the concept of gazelle companies, which he later updated (BIRCH; MEDOFF, 1994). Gazelles are young companies, less than five years old, that employ more than ten workers and show annual growth of more than 20% per year, over a period of at least three years (OECD, 2007; 2008; 2011a; b; 2013). These businesses generally have a higher long-term survivability (DE OLIVEIRA, 2019; FERREIRA, 2016) and job creation capacity (FEINDT; JEFFCOATE; CHAPPELL, 2002).

2.3.2. Unicorns and dragons

Unicorns, companies that are valued at more than US$ 1 billion in market value, also stand out on the topic of high growth (LEE, 2013). More than 1,000 companies reached this level in February 2022 (CBINSIGHTS, 2022). Unicorn companies make up a sector of the entrepreneurial ecosystem called “ambitious entrepreneurship” (STAM; SPIGEL, 2016). These companies explore opportunities for new goods and services aiming for maximum added value, with accelerated growth and market value. Which leads to a higher chance of achieving growth, innovation, and internationalization.

Among the most critical factors for success, especially in the startup phase, are the founder’s skills and the ability to attract and retain talent, aiming at building performance teams and innovation skills (KHONG-KHAI; WU, 2018), including those related to prospection and assimilation of new Industry 4.0 technologies (BRUNET-THORNTON; MARTINEZ, 2018).

INTRAMA; SOOKBANJUNG; SANTAWEE e TEERASAWAD (2017) state that creativity is an important but insufficient factor for business startups. Planned and systematic creativity, of the entrepreneur and the team, must be fostered in an environment of exchange

of ideas, offset by an attitude focused on problem solving. New service and product launches are one of the most challenging missions for any digital company, new or established, due to the associated high unpredictability and uncertainty.

To succeed in developing and launching services and products, project managers, team members, and authorized people must have a good understanding and plan for properly executing innovation projects that use these technologies (THUETHONGCHAI; TAIPHAPOON; CHANDRACHAI; TRIUKOSE, 2020). Development of innovative solutions is significantly determined by the cohesion of the teams involved, which can be negatively affected by various problems, such as different intentions and expectations, inadequate leadership, ineffective communication, lack of engagement, poor team structuring (DIAKANASTASI; KARAGIANNAKI; PRAMATARI, 2018). Adoption of technology must, at the same time, enhance business performance and balance environmental efficiency, avoiding the paradox that can generate risks to the company's image (LEENDERTSE; VAN RIJNSOEVER; EVELEENS, 2021).

Unicorn companies must explore the balance between challenging goals and promoting a stimulating and rewarding environment (ERDOGAN; KOOHBORFARDHAGHIGHI, 2019; THUETHONGCHAI; TAIPHAPOON; CHANDRACHAI; TRIUKOSE, 2020). With the acceleration of supply chain digitization, and the adoption of work from home, social networking technologies have been massively used to increase organizational agility by intensifying team collaboration (AHMADI; ERSHADI, 2021). To establish such a balance, companies must innovate their customer-oriented solutions, but not lose sight of management and process innovation (MÁTYÁS; LOWY; SALGADO, 2019).

Knowledge management favors innovation in organizations, and is essential for high-growth companies, allowing them to offer more adequate solutions to their customers (BRUNET-THORNTON; MARTINEZ, 2018), especially when it develops and promotes the organization's collaborative skills (AHMADI; ERSHADI, 2021; ALKHOORI; SEDIK; AL-SHAMI, 2021). Analytics solutions (Business Intelligence, Big Data, and Data Science) are of great value to support processes and make evidence-based decision-making more efficient (ALEXANDER; LYYTINEN, 2019).

Dragon companies are companies that have a high potential for growth and success in the marketplace. The term "dragon" is often used to describe companies that are leaders in their sector, with rapid growth and a significant impact on the economy. Dragons are extremely profitable companies, not necessarily valued at more than US$1 billion, but with the ability to return all invested capital—that is, "fund raiser" (TRUMAN; LOCKE, 2016). The

use of the term "dragon" to refer to high-growth companies can vary and has no specific reference point of origin. It is possible that the term was adopted based on the association of the dragon with powerful and dominant creatures in the mythology and cultures of different regions of the world.

3. Methodological Procedures

3.1. Bibliographic portfolio

To build the bibliographic portfolio, we conducted an systematic literature review of articles retrieved from the Scopus and Web of Science databases. Table 2 presents the terms and search strategies used for document extraction.

Added Terms	Excluded terms	Database	Search strategy
Critical success factors; digital business; digital entrepreneurship; technological business; tech entrepreneurship; entrepreneurship; startup; start-up; unicorn; scale-up; scaleup	Small; Médium	Scopus	TITLE-ABS-KEY (critical AND success AND factors) AND TITLE-ABS-KEY ((digital AND business) OR (digital AND entrepreneurship) OR (technological AND business) OR (tech AND entrepreneurship) OR (entrepreneurship) OR (startup) OR (start-up) OR (unicorn) OR (scale-up) OR (scaleup)) AND NOT TITLE-ABS-KEY (small AND medium)
		Web of Science	TS = (critical success factors) AND (TS = (Growth-oriented entrepreneurship) OR TS = (digital business) OR TS = (digital entrepreneurship) OR TS = (technological business) OR TS = (tech entrepreneurship) OR TS = (entrepreneurship) OR TS = (startup) OR TS = (start-up) OR TS = (unicorn) OR TS = (scale-up) OR TS = (scaleup) NOT TS = (small AND medium))

Table 2: Terms and search strategies used for article extraction in the Scopus Web of Science databases

Initial extraction returned 1,290 articles. Using this database and assisted by the Endnote reference management software, we performed a 5-stage integrative literature review (COOPER, 1998): (i) problem formulation; (ii) literature search on the Scopus and Web of Science databases; (iii) removal of duplicates; (iv) exclusion of articles with missing information (year, author, and title); (v) thematic analysis to verify the pertinence to the research objectives, conducted from December 20, 2021 to February 8, 2022. Figure 1 presents the results of each stage. Given the eminently theoretical objective of the study, we chose to use varied terms in the search strategy, which generated a vast number of articles.

If this strategy required a greater effort of alignment analysis on our part, on the other hand, it minimized the risk of not including relevant articles in the bibliographic portfolio.

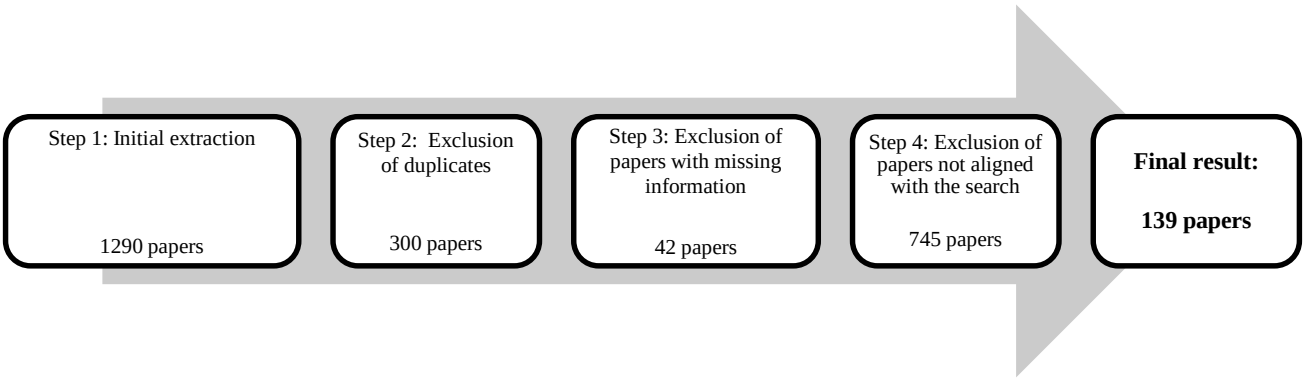

Figure 1: Results of article extraction

In the end, we selected a total of 139 articles to compose the bibliographic portfolio and serve as the basis for the literature review and analyses. A thorough reading of these articles was conducted. Using the snowball technique, we added three other documents (CBINSIGHTS, 2022; LAASONEN; NYMAN; FORNARO; LÄHTEENMÄKI-SMITH *et al.*, 2022; ROCHA; AUDRETSCH, 2022), considered relevant by the authors, and seven seminal articles on the topic (ACS; AUTIO; SZERB, 2014; MALECKI, 2018; MOHAMAD; MUSTAPA; RAZAK, 2021; SPIGEL, 2017; SPIGEL; KITAGAWA; MASON, 2020; STAM; SPIGEL, 2016). Results were analyzed using bibliometrics (FERREIRA; FERNANDES; FERREIRA, 2019), applying descriptive statistical tools to identify relevant patterns in the literature on high digital growth, including: (i) productivity over time and the most productive countries (MERIGÓ; PEDRYCZ; WEBER; DE LA SOTTA, 2018; SAKATA; SASAKI; AKIYAMA; SAWATANI *et al.*, 2013) and (ii) the most relevant journals (BRADFORD, 1934).

4. Results

4.1. Bibliographic portfolio analysis

The literature portfolio was the input used to support us in analyzing the evolution of the topic. Figure 2 presents the number of articles published over the years. We can observe a significant increase in the publishing numbers in 2017, resumed in 2021–2022. The year 2020 may have been affected by the COVID-19 pandemic. The progressive interest in the topic allows us to infer that high digital growth should gradually receive attention from researchers, given the relevance of digital entrepreneurship for economic development.

Figure 2: Evolution of scientific publications

Table 3 shows the quantitative evolution by country, considering the first author's position. Only countries with more than two articles were included (73% of the total). When considering the numbers by country, the USA, Brazil, Germany, India, and Malaysia lead the ranking, totaling 41.7% of the published articles on high-growth entrepreneurship. It is necessary to emphasize that the US is the country that holds the most significant portion of the articles dealing with high-growth digital companies. Brazil, which faces challenges to promote the maturation of its business environment, stands out in the second position in the quantity of studies.

Country	**Number of articles**	**%**
USA	29	20.9%
Brazil	10	7.2%
Germany	7	5.0%
India	6	4.3%
Malaysia	6	4.3%
Spain	6	4.3%
Thailand	6	4.3%
China	4	2.9%
Indonesia	4	2.9%
Iran	4	2.9%
United Arab Emirates	4	2.9%
France	3	2.2%

Italy	3	2.2%
Netherlands	3	2.2%
Peru	3	2.2%
United Kingdom	3	2.2%
Subtotal	***101***	***73%***
Other	***38***	***27%***
Total	***139***	***100%***

Table 3: Geographic coverage

Table 4 presents the journals with at least two articles published on the subject (n=10). The numbers indicate low concentration of papers, and the 1st ranking journal (*Technological Forecasting and Social Change*) published five articles on the topic: one in 2022, two in 2021, one in 2019, and one in 2014. The 2nd ranking journal (*Journal of Business Venturing*) published one article in 1998, one in 1989, and two in 1987. Table 4 also shows the subtotals of articles published in congress annals (39) and in other journals, books, and book sections (72), making up the total of 139 articles included in the bibliographic portfolio.

Journal	**Number of articles**	**%**
Technological Forecasting and Social Change	**5**	4%
Journal of Business Venturing	**4**	3%
Small Business Economics	**3**	2%
International Journal of Entrepreneurial Behaviour and Research	**3**	2%
Entrepreneurship and Regional Development	**3**	2%
Technovation	**2**	1%
International Journal of Entrepreneurship and Innovation Management	**2**	1%
Industry and Higher Education	**2**	1%
Espacios	**2**	1%
Academy of Entrepreneurship Journal	**2**	1%
Subtotal (Journals)	***28***	***20%***
Subtotal (Congresses)	***39***	***28%***
Subtotal (Other)	***72***	***52%***
Total	***139***	***100%***

Table 4: Journals with the most publications

To measure the impact of the bibliographic portfolio we categorized the journals by quartile. Table 5 indicates that 23.7% of the papers were published by journals belonging to

the 1st quartile (representing 25% of the high-impact publications), according to the Science Journal Rankings (SJR).

Quartile	Number of articles	%
Q1	33	23.7%
Q2	12	8.6%
Q3	21	15.1%
Q4	6	4.3%
Other	67	48.2%
No quartile	*24*	*17.3%*
Annals of Congress	*39*	*28.1%*
Books	*4*	*2.9%*
Total	***139***	***100%***

Table 5: Ranking of the main academic journals (by SJR)

Table 6 summarizes the methodologies used by the studies. Most papers conducted a literature review to identify critical success factors and competencies for creating and maintaining ecosystems, organizations, and entrepreneurs in a high-performance context. Still according to Table 6, 58% of the studies employ qualitative methods, particularly interviews, to identify the perception of sector experts. Quantitative studies usually employ univariate and multivariate techniques (regression analysis, structural equation modeling, multi-criteria decision analysis, neural networks, fuzzy logic, hypothesis testing, factor analysis, cluster analysis, and analysis of variance – ANOVA). The concentration of studies categorized as "literature review" and "qualitative methods" may indicate researchers' restrictions in accessing large-scale data, facilitating the employment of quantatitative methods and testing of theories through empirical approaches.

Methods	Number of articles	%
Literature review	89	64%
Case study	19	14%
Theory	14	10%
Model development	17	12%
Total	***139***	***100%***
Qualitative methods	80	58%
Quantitative methods	51	37%
Mixed methods	8	6%
Total	***139***	***100%***

Table 6: Applied methodologies

Figure 3 presents a graph generated by VOS Viewer software, used to construct and visualize bibliometric networks. Clusters are formed based on affinity/proximity, showing the connection between terms (co-occurrence networks). The analysis identified 41 keywords organized into two clusters (represented by yellow, red, blue, and green). Words written in warmer colors (yellow and red) and centered on the diagram have a higher incidence.

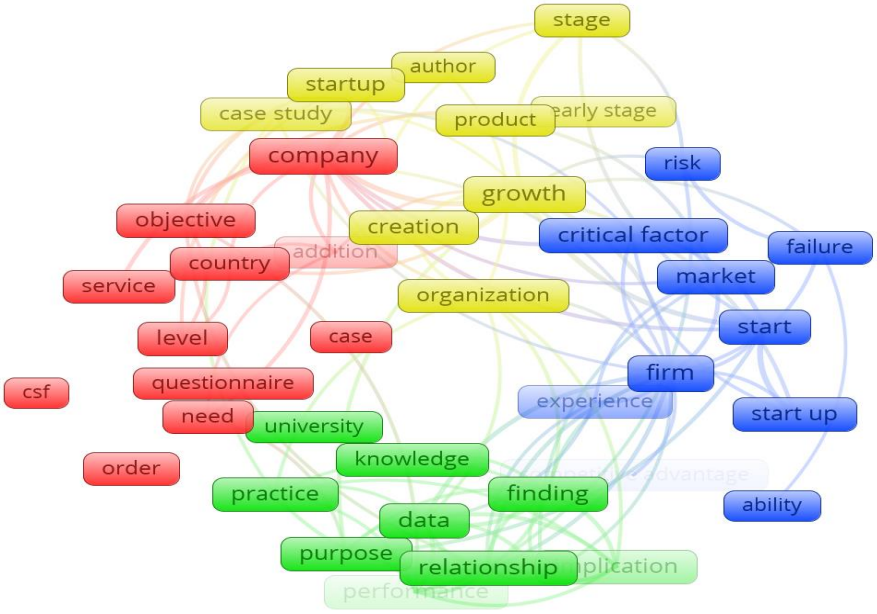

Figure 3: Co-occurrence map of the main keywords (network visualization). 41 keywords with a minimum of 10 occurrences

Table 7 shows the keywords with the highest number of occurrences (per cluster). The largest cluster (yellow) revolves around the term “growth” (35 occurrences); the red around “company’ (34 occurrences); the blue around “firm” (33 occurrences); and the green around “purpose” (22 occurrences).

Cluster	Keyword	Occurrences
Yellow	Growth	35
	Startup	23
Red	Company	34
	Service	18
Blue	Firm	33
	critical fator	26
Green	Purpose	22
	University	14

Table 7: Keywords with the highest number of occurrences (per cluster)

Next, we present the synthesis of the literature analysis from the perspective of “dimensions” versus “stages” (life cycle adopted, as discussed in Section 2).

4.2 Discussion of stages versus dimensions

Table 8 presents the articles included in the bibliographic portfolio organized by dimensiond and staged (rows and columns, respectively). The stage categories are based on AHMED e KOUBAA (2013)’s proposal, to which we added the category “all stages” to classify papers that did not fall into any of the specific stages. Dimensions categories were defined by the researchers, considering central themes/functions of organizational management. In launch stage, it is the moment when the company presents its product/service to the market; growth stage is the company's expansion phase, and accelerate stage is when the company seeks to improve it position, usually with investments in technology and marketing, launching new products or services, or acquiring other companies. Table 8 is also a contribution of the present research.

Dimensions → Stages ↓	**Strategy**	**Fundraising**	**Governance and Management**	**Innovation**	**Human Capital**	***Total***	***%***
Launch	*26*	*9*	*8*	*15*	*30*	*88*	*63*
Growth	*14*	*1*	*5*	*8*	*4*	*32*	*23*
Accelerate	*3*	*0*	*0*	*1*	*0*	*4*	*3*
All stages	*7*	*0*	*4*	*0*	*4*	*15*	*11*
Total	***28***	***12***	***21***	***13***	***23***	***139***	***00%***

Table 8: Articles organized by dimension x stage

Most studies focused on the launch stage (63%), investigating the causes of success and failure of companies (KHONG-KHAI; WU, 2018; MANUEL; ALEJANDRO; ADELA, 2017; NIA; GELARD, 2016; ONG; HABIDIN; SALLEH; FUZI, 2021; PUTRA; NURCAHYO; FARIZAL, 2021; SANTISTEBAN; INCHE; MAURICIO, 2021; SANTISTEBAN; MAURICIO; CACHAY, 2021; SEBORA; LEE; SUKASAME, 2009), incubators (BOSE; KIRAN; GOYAL, 2018; DO CARMO; RANGEL, 2020; FONT COT; LARA NAVARRA; SERRADELL-LÓPEZ, 2021; KAKATI, 2003; ROSTAROVA; JANAC, 2017; SELIG, 2014; SILVA; FERNÁNDEZ-ROBIN; YÁÑEZ; ROMANÍ, 2021), and science and technology parks (ENTRINGER; DA SILVA, 2020), at a stage in the life cycle where businesses show greater history of failure.

Access to funding is a significant bottleneck for new ventures (BI; SUN, 2010), given the level of uncertainty in the early stages (REA, 1989). Investors often contribute in many ways to the growth and profitability of early-stage companies (GANTENBEIN; ENGELHARDT, 2012). In the early stages of business, venture investors strive to identify ventures with high value and growth potential (MUNEMO, 2018; ZHANG; ZHONG; YUAN; XIONG, 2021).

At the growth stage (23% of the studies), studies investigate aspects inherent to the challenges faced by businesses that must seek cooperation with other organizations (CHEN; KARAMI, 2010), responsible use of technology (CHOREV; ANDERSON, 2006) and established practices such as the Balanced Scorecard to measure strategy (KUMAR; MAHESHWARI; KUMAR, 2004) and promote sustained growth. Venture capital is adopted (NIJKAMP; GULDEMOND; TEELEN, 2004) to structure research and development initiatives and processes (ZHANG; CAO, 2006), especially in strongly competitive markets (MATRICANO, 2010). “Ambidextrous” skills - related to innovation and operational excellence - are essential in the growth stage (LIAO; LIU; ZHANG, 2018).

As for the accelerate stage, the literature review identified only five (3%) papers (ERDOGAN; KOOHBORFARDHAGHIGHI, 2019; IAMRATANAKUL; HERNANDEZ; CASTILLA; MILOZEVIC, 2007; OFER; NAAMATI, 2019; OLIVA; TEBERGA; TESTI; KOTABE *et al.*, 2022), which emphasized good internationalization practices (OLIVA; TEBERGA; TESTI; KOTABE *et al.*, 2022), mergers and acquisitions (ERDOGAN; KOOHBORFARDHAGHIGHI, 2019; OFER; NAAMATI, 2019), and competitive advantages arising from the alignment between projects and new product innovation (IAMRATANAKUL; HERNANDEZ; CASTILLA; MILOZEVIC, 2007).

4.3. Core capabilities

4.3.1. Summary Table

The bibliographic portfolio generated from the systematic review and the other references added by the authors to the research made it possible to identify and list 28 capabilities essential for high digital growth. The references are presented in Table 9.

Capability	Reference(s)
Purpose and direction	(CHOREV e ANDERSON (2006); KASAYU; HIDAYANTO e SANDHYADUHITA (2017))
Committed founders	(CHEN; GREENE e CRICK (1998); SPIEGEL; ABBASSI; ZYLKA; SCHLAGWEIN *et al.* (2016))

Seizing opportunities in incubation and acceleration environments	(AL-MUBARAKI e BUSLER (2014); GEIBEL e MANICKAM (2016); HIRTE; MUNCH e DROST (2018); LIOW e WONG (2021); TRACHANA; DIAKANASTASI; KARAGIANNAKI e PRAMATARI (2017))
Founders' profile	(CHEN; GREENE e CRICK (1998); SEBORA; LEE e SUKASAME (2009); SPIEGEL; ABBASSI; ZYLKA; SCHLAGWEIN *et al.* (2016))
Value proposition	(ALHAZZA; BOURINI; ZUBAIDAH e BT SELAMAT (2019); CHOREV e ANDERSON (2006); LASCH; LE ROY e YAMI (2007); RIES (2011))
Growth potential	(LASCH; LE ROY e YAMI (2007); RIES (2011))
Business model design	(ALLEGRETTI; SEIDENSTRICKER e KASSECKERT (2018); NALINTIPPAYAWONG; WAIYAWATPATTARAKUL e CHOTIPANT (2018); ROSTAROVA e JANAC (2017))
Performance measured by indicators and metrics	KUMAR; MAHESHWARI e KUMAR (2004)
Rapid design and adjustments to the MVP	(ALLEGRETTI; SEIDENSTRICKER e KASSECKERT (2018); THUETHONGCHAI; TAIPHAPOON; CHANDRACHAI e TRIUKOSE (2020))
Continuous learning	(D'CRUZ e O'NEAL (2003); SANTISTEBAN; INCHE; MAURICIO, 2021)
Aggregator leaders	(ALROAIA e BAHARUN (2018); HOLT (2018); KUMAR; KARTHIK e HARSHIDA (2018))
Cohesive and fluid vertical and horizontal communication	CHEN e KARAMI (2010)
Result-oriented performance management	SANTISTEBAN; MAURICIO e CACHAY (2021)
Corporate Social Responsibility	VANDERKRUIK e MCPHERSON (2017)
Creation and development of partnerships and alliances	TRACHANA; DIAKANASTASI; KARAGIANNAKI e PRAMATARI (2017)
Team with notorious competence in financial management	(MUNEMO (2018); YURYNETS; YURYNETS e DENYSENKO (2022))
Efficient IPO process	(KURNIAWAN e DACHYAR (2021); YADAV e GOYAL (2022))
Active participation of a Board of Directors	GANTENBEIN e ENGELHARDT (2012)
Business Process Management	(ANTONUCCI; FORTUNE e KIRCHMER (2021); GRISOLD; VOM BROCKE; GROSS; MENDLING *et al.* (2021))
Agile product and service development	(SONG; SONG e DI BENEDETTO (2011); TOLFO; WAZLAWICK; FERREIRA e FORCELLINI (2018))
Aggregation and maintenance of professionals with managerial profile	(BOSE; KIRAN e GOYAL (2018); RUHNKA e YOUNG (1987); WASSERMAN (2003))
Conflict management	KHELIL; SMIDA e ZOUAOUI (2018)
Internationalization	OLIVA; TEBERGA; TESTI; KOTABE *et al.* (2022)
Cultural adaptation	TOLFO; WAZLAWICK; FERREIRA e FORCELLINI (2018)
Constant improvement of capital structure	YURYNETS; YURYNETS e DENYSENKO (2022)

Management of image and supply chain risks	(KORPYSA e HALICKI (2022); SHARMA; DESHMUKH e OJHA (2022))
Open innovation	TRACHANA; DIAKANASTASI; KARAGIANNAKI e PRAMATARI (2017)
Capability to assimilate the strengths of acquired companies	OFER e NAAMATI (2019)

Table 9: Capabilities and authors

The table 9 was prepared based on an in-depth analysis of the 139 articles in the bibliographic portfolio. The objective of the research analysis was to identify the critical success factors in the three (3) stages considered: (i) launch, (ii) growth and (iii) accelerate.

4.3.2. Summary Table

Figure 4 summarizes the 28 core capabilities (organizational competencies or attributes required for high digital growth) identified by the literature review.

Stages → Dimensions ↓	**Launch**	**Growth**	**Accelerate**
Strategy	(1) Purpose and direction; (2) Committed founders; (3) Seizing opportunities in incubation and acceleration environments.	(14) Corporate Social Responsibility; (15) Creation and development of partnerships and alliances.	(23) Internationalization; (24) Cultural adaptation.
Fundraising	(4) Founder's profile; (5) Value proposition; (6) Growth potential.	(16) Team with notorious competence in financial management; (17) Efficient IPO process.	(25) Constant improvement of capital structure.
Governance and Management	(7) Business model design; (8) Performance measured by indicators and metrics.	(18) Active participation of a Board of Directors; (19) Business Process Management.	(26) Management of image and supply chain risks.
Innovation	(9) Rapid design and adjustments to the MVP; (10) Continuous learning.	(20) Agile product and service development.	(27) Open innovation.
Human Capital	(11) Aggregator leaders; (12) Cohesive and fluid vertical and horizontal communication; (13) Result-oriented performance management.	(21) Aggregation and maintenance of professionals with managerial profile; (22) Conflict management.	(28) Capability to assimilate the strengths of acquired companies.

Figure 4: High-growth digital business capabilities framework (stage x dimensions)

Note: numbers of each capability presented here are showed and discussed in the following sections

In the next subsections, the core capabilities are presented in connection with each other.

4.3.1. Launch

A new digital business upheld by a clear sense of purpose and direction (1), with committed founders (2) aware of the capacity of their organizations' economic, environmental, and social impact in the future. Entrepreneurs, in high-growth digital businesses or otherwise, have great importance. Entrepreneurial self-efficacy plays a key role among entrepreneurial skills (CHEN; GREENE; CRICK, 1998).

Having a determined mind is not enough to make a successful entrepreneur, but the support of investments (KUMAR; KARTHIK; HARSHIDA, 2018) and services provided by accelerators and incubators (GANTENBEIN; ENGELHARDT, 2012) can ease the way (3). These actors will consider the proponents' profile (4) and a proposal with value (5) and growth potential (6) (RIES, 2011), materialized in a consistent business model (7). To reduce uncertainty when launching new products and services, high-growth applicants should adopt practices implementing the "build-measure-learn" feedback loop, measuring organizational strategy by indicators and metrics (8), allowing rapid design and adjustments to the minimum valuable product (MVP) (9) through a continuous learning process (10) about the market and customers. In this initial phase, one must have aggregator leaders (11) who combine the capabilities of inspiring, developing teams, promoting vertical and horizontal communication (12), and managing result-oriented performance (13).

4.3.2. Growth

In the growth stage, adoption of systematic strategies of corporate social responsibility (14) and creation of partnerships and alliances (15) are capabilities put at the service of strengthening the institutional brand. Adopting financial management processes (16) and public listing (17) are essential for attracting investments. In business with high exponential growth, transparency and operational excellence are competitive advantages, enabled by the adoption and active participation of a Board of Directors (18) and the philosophy and practices of Business Process Management (19), besides the inclusion and maintenance of professionals with a managerial profile (21). As revenues mature and eventually decline, improving agile practices for product and service development (20) can generate new cycles of prosperity. Communication noises generated by increasingly complex activities can

benefit from the capability to manage conflicts (22), promoting the discussion of difficult issues and improving processes.

4.3.3. Accelerate

International expansion of high-growth digital businesses (23) is a capability intrinsically dependent on cultural adaptation (24). Improving the capital structure (25), matching debt to desired levels by industry and shareholder expectations and managing image and supply chain risks (26), given the exposure of a business that has become “big,” are the capabilities that make up the accelerate stage. Open innovation capability (27) makes room for collaboration with other companies and institutions, accelerating the inclusion of practices and technologies. Mergers and acquisitions processes can increase the organization’s collaborative capability, as long as its managers and leaders have the necessary competence to assimilate the strengths of the acquired companies (28). Leaders must harmonize the virtues that led to exponential growth with the virtues of “being big”, maintaining agility even in an environment where resource allocation decisions and communication become more complex.

4.4. Research agenda

Our list of proposals for future studies does not intend to be exhaustive; rather, it presents issues that, in our perspective, have not yet been adequately addressed by the literature. They are: (i) the differences in the culture of entrepreneurship in different economic contexts (emerging and developed countries); (ii) the profile of high-growth business founders; (iii) critical failure factors of businesses that lose traction after overcoming the first stages of development; and (iv) the decision-making process on business internationalization as a scaling factor (Table 10).

Stage	Q	Research question	Insightful thoughts from
Launch	**01**	What are the differences in the high-growth digital entrepreneurship culture of emerging and developed economies?	(DE CASTRO; DE ARAUJO; FRAGOSO; TROPIANO, 2021; DE SOUZA; ANTONIO MOLINA PALMA, 2010; SILVA; CORREA; VALE; GIGLIO, 2020; SOMSUK; LAOSIRIHONGTHONG, 2014)
	02	What is the profile of founders of high-growth digital businesses?	(CHEN, 2019; NIA; GELARD, 2016; RUSLI; ROZMI, 2015; SEBORA; LEE; SUKASAME, 2009)

Growth	**03**	What are the critical factors determining the failure of digital businesses that lose traction after the first investment rounds?	(FONT COT; LARA NAVARRA; SERRADELL-LÓPEZ, 2021; KHELIL; SMIDA; ZOUAOUI, 2018; NALINTIPPAYAWONG; WAIYAWATPATTARAKUL; CHOTIPANT, 2018; SANTISTEBAN; INCHE; MAURICIO, 2021; SENGUPTA; NARAYANAMURTHY; HOTA; SARKER *et al.*, 2021)
Accelerate	**04**	What desires, intentions, and decisions were/are present in the internationalization strategies of high-growth digital businesses that managed to expand their operations to other countries?	(MÁTYÁS; LOWY; SALGADO, 2019)

Table 10: Proposals for future research

In the next section, the discussions about the results are presented.

5. Discussion

High-growth digital entrepreneurship seems to depend on an entrepreneur-company-environment triad. In the launch phase, the value proposition and the ability to generate revenues depend on the skills of the founders of the future digital company. To prevent this "dependency" from proliferating, knowledge management needs to be promoted in the Organization (MATRICANO, 2010), and managers need to have an understanding of what the drivers of business performance are, to make better decisions about which capabilities should be incorporated (GREWAL; SLOTEGRAAF, 2007).

With financing being one of the biggest bottlenecks to new venture development (BI; SUN, 2010), this knowledge (of capabilities) can even improve investors' perception of the business' potential for value generation and growth. Product and service innovation capabilities are often overestimated (RUSLI; ROZMI, 2015), to the detriment of experience in developing a consistent business model (ALHAZZA; BOURINI; ZUBAIDAH; BT SELAMAT, 2019) and understanding stakeholder needs and perceptions (GERHARDT; DOS SANTOS; RUBIN; NEUENFELDT *et al.*, 2021). This seems to suggest that understanding competitive advantage-creating capabilities can support founders and investors to detect the 10% of ideas with exponential growth capabilities (ERDOGAN; KOOHBORFARDHAGHIGHI, 2019).

In the growth phase, managers' skills are reflected in their ability to maintain effectiveness (doing the right things and doing things right), manage conflicts and establish alliances, promote new leaps in prosperity with the launch of new products and services (FLOREK-PASZKOWSKA; UJWARY-GIL; GODLEWSKA-DZIOBON, 2021), and innovate

in the business model (ALLEGRETTI; SEIDENSTRICKER; KASSECKERT, 2018). This can lessen the negative impact caused by agile competitors with innovative proposals (CHRISTENSEN, 2013).

Finally, in the acceleration phase, one must highlight the challenges arising from both internationalization via organic growth and assimilation of acquired companies (OFER; NAAMATI, 2019), in which knowledge transfer and understanding of the acquired company's culture is essential. It is also essential to establish cooperation (CHEN; KARAMI, 2010), to intensify open innovation, aiming at overcoming process failures and increasing the launch rate of new products and services, in order to minimize diminishing returns (ZHANG; DENG, 2008).

6. Conclusions

Specialized literature on digital business entrepreneurship has advanced significantly and has made a relevant contribution to understanding this topic. Following recognition of the 1,000th unicorn company, the present research sought to investigate these studies, analyzing such literature to identify the capabilities needed to stimulate high growth in organizations.

Hence, we developed a summary table (Figure 4), which offers an organized view in 3 stages and 5 dimensions. In this holistic perspective, we considered the incremental assimilation of capabilities, as moving to the next stage does not require abandoning previous capacities. On the contrary, at each stage advance, high-growth companies are challenged to deepen and adapt the capabilities already acquired according to the organizational environment, reducing the risks of failure.

The study can be improved by developing and applying techniques to empirically verify the validity of the summary table and the presence—or absence—of the mapped capabilities. To support future research, we proposed 4 questions (Table 9) which address the 3 discussed stages: the phenomenon of high growth involves the ecosystem, the entrepreneur, and the organization at various stages of the life cycle. Our analysis is intended as a starting point, supporting researchers in developing approaches and perspectives for elaborating a theory of high growth.

Of the 139 articles in the bibliographic portfolio, 43 were cited in Section 2 (literature review). The remaining 96 articles were referenced in Section 7, identified with a “*”, since

they supported the construction of tables and graphs, as well as the conclusions. The article has 50 citations added by the researchers, making a total of 196 references.

7. References

* ABADÍA, A. (2021). Study on Leadership and Innovation: Clues for Success in Technology-related Startups. *Cuadernos de Gestion, 21*(2), 109-118. doi: 10.5295/cdg.191140aa
* ABHARI, K., WILLIAMS, D., PAWAR, P., & PANJWANI, K. (2021) Smart Entrepreneurial Systems: An Application of Deep Reinforcement Learning in Improving Entrepreneurship Mentorship. *Vol. 1364 AISC. Future of Information and Communication Conference, FICC 2021* (pp. 462-476): Springer Science and Business Media Deutschland GmbH.
ACS, Z. J. (2011). High-impact firms: gazelles revisited *Handbook of research on entrepreneurship and regional development*: Edward Elgar Publishing.
ACS, Z. J., AUTIO, E., & SZERB, L. (2014). National systems of entrepreneurship: Measurement issues and policy implications. *Research Policy, 43*(3), 476-494.
AHAMAT, A., & CHONG, S. C. (2014). *Assessment of the factors influencing entrepreneurs on the biotechnology business venture.* Paper presented at the 24th International Business Information Management Association Conference - Crafting Global Competitive Economies: 2020 Vision Strategic Planning and Smart Implementation.
AHMADI, S., & ERSHADI, M. J. (2021). Investigating the role of social networking technology on the organizational agility: a structural equation modeling approach. *Journal of Advances in Management Research, 18*(4), 568-584. doi: 10.1108/JAMR-04-2020-0052
AHMED, S. Z. F., & KOUBAA, M. B. (2013). Core competencies and phases of the organizational life cycle. *International Journal of Business and Management Studies, 5*(1), 461-473.
* AL-MUBARAKI, H. M., & BUSLER, M. (2014, Sep 18-19). *Beyond Incubators Mechanisms: Innovation, Economic Development and Entrepreneurship.* Paper presented at the 9th European Conference on Innovation and Entrepreneurship (ECIE), Univ Ulster Business Sch, Sch Social Enterprises Ireland, Belfast, IRELAND.
* AL-QIRIM, N. A. Y. (2003, May 18-21). *Critical factors for mobile business success.* Paper presented at the International Conference of the Information-Resources-Management-Association, Philadelphia, PA.
ALEXANDER, D. T., & LYYTINEN, K. (2019). *Organizing around big data: Organizational analytic capabilities for improved performance.* Paper presented at the 40th International Conference on Information Systems, ICIS 2019.
* ALHAZZA, M. H. F., BOURINI, I. F., ZUBAIDAH, M. H., & BT SELAMAT, N. (2019). *Success Factor in New Product Development for Startup Companies Using Fuzzy Logic Approach.* Paper presented at the 2019 International Conference on Electrical and Computing Technologies and Applications, ICECTA 2019.
ALKHOORI, A. A., SEDIK, S., & AL-SHAMI, S. A. (2021). The Measurement Items of Leadership Factors toward Successful Technopreneur in UAE. *Webology, 18*(Special Issue 04), 164-181. doi: 10.14704/WEB/V18SI04/WEB18121
ALLEGRETTI, S., SEIDENSTRICKER, S., & KASSECKERT, A. (2018). *Economic growth through business model innovation and technological entrepreneurship.* Paper presented at the 2018 Portland International Conference on Management of Engineering and Technology, PICMET 2018.
* ALROAIA, Y. V., & BAHARUN, R. B. (2018). Identification and prioritizing influential factors on entrepreneurial success: A case study of SMES in Iran and Malaysia. *Polish Journal of Management Studies, 17*(2), 31-40. doi: 10.17512/pjms.2018.17.2.03

* AMMIRATO, S., SOFO, F., FELICETTI, A. M., HELANDER, N., & ARAMO-IMMONEN, H. (2020). A new typology to characterize Italian digital entrepreneurs. *International Journal of Entrepreneurial Behaviour and Research, 26*(2), 224-245. doi: 10.1108/IJEBR-02-2019-0105
* ANDRAZ, G., TORRECILLA-GARCÍA, J. A., & SKOTNICKA, A. G. (2018). Critical sucess factors measurement of new tecnology-based firms. *Espacios, 39*(45).
ANTONUCCI, Y. L., FORTUNE, A., & KIRCHMER, M. (2021). An examination of associations between business process management capabilities and the benefits of digitalization: all capabilities are not equal. *Business Process Management Journal, 27*(1), 124-144.
* AVALLONE, D., & MARASSO, L. (2016). How to bring innovation to the market? *Mondo Digitale, 15*(66).
* AZMI, A. M., HAIRI, O. N., LEE, K. Y., & FAUZIAH, I. (2012). Entreprenuers success in business: Some critical factors. *International Business Management, 6*(3), 369-373. doi: 10.3923/ibm.2012.369.373
* AZZAM, M., SAMI, N., & KHALIL, T. (2016). *Utilization of appropriate technologies for a real "competitive Egypt".* Paper presented at the 25th International Association for Management of Technology Conference, IAMOT 2016.
* BAGHERI, A., & PIHIE, Z. A. L. (2012, Sep 20-21). *Entrepreneurial Leadership Learning: The Critical Role of Involvement.* Paper presented at the 7th European Conference on Innovation and Entrepreneurship (ECIE), Inst Politecnico Santarem, Escola Super Gestao & Tecnologia, PORTUGAL.
BARNEY, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99-120.
BARNEY, J. B. (1997). Gaining and sustaining competitive advantage.
* BARRETT, H., BALLOUN, J. L., & WEINSTEIN, A. (2012). Creative climate: A critical success factor for 21st century organisations. *International Journal of Business Innovation and Research, 6*(2), 202-219. doi: 10.1504/IJBIR.2012.045637
BATTISTI, S., AGARWAL, N., & BREM, A. (2022). Creating new tech entrepreneurs with digital platforms: Meta-organizations for shared value in data-driven retail ecosystems. *Technological Forecasting and Social Change, 175*, 12. doi: 10.1016/j.techfore.2021.121392
* BELITSKI, M., & HERON, K. (2017). Expanding entrepreneurship education ecosystems. *Journal of Management Development, 36*(2), 163-177. doi: 10.1108/JMD-06-2016-0121
* BI, L. Y., & SUN, J. (2010, Aug 20-23). *Financing of New Venture- A Research Based on the Internal Factors.* Paper presented at the 5th International Conference on Management of Technology, Taiyuan City, PEOPLES R CHINA.
BIRCH, D., & MEDOFF, J. (1994). Gazelles.
BIRCH, D. G. (1987). Job creation in America: How our smallest companies put the most people to work. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.
* BOSE, S. C., KIRAN, R., & GOYAL, D. (2018). Critical success factors of agri-business incubators and their impact on business. *Custos E Agronegocio on Line, 14*(4), 350-376.
Bradford, S. C. (1934). Sources of information on scientific subjects. *Engineering, vol. 26*, 85-86. doi: doi.org/10.1177/016555158501000407
* BRINCKMANN, J., DEW, N., READ, S., MAYER-HAUG, K., & GRICHNIK, D. (2019). Of those who plan: A meta-analysis of the relationship between human capital and business planning. *Long Range Planning, 52*(2), 173-188. doi: 10.1016/j.lrp.2018.01.003
BRUNET-THORNTON, R., & MARTINEZ, F. (2018). *Analyzing the impacts of industry 4.0 in modern business environments*: IGI Global.

CADORIN, E., KLOFSTEN, M., & LOFSTEN, H. (2021). Science Parks, talent attraction and stakeholder involvement: an international study. *Journal of Technology Transfer, 46*(1), 1-28. doi: 10.1007/s10961-019-09753-w

CANTNER, U., & WOLF, T. (2018) The Selective Nature of Innovator Networks: From the Nascent to the Early Growth Phase of the Organizational Life Cycle. *Studies on Entrepreneurship, Structural Change and Industrial Dynamics* (pp. 175-204): Springer Nature.

CBINSIGHTS. (2022). Global unicorn club market map: CB Insights.

* CHATARD, E., & VIAN, D. (2004, Oct 27-29). *Coaching high-growth start-ups: Integrating online intelligence solutions and in-depth support.* Paper presented at the eChallenges e-2004 Conference, Vienna, AUSTRIA.

* CHEN, C. C., GREENE, P. G., & CRICK, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing, 13*(4), 295-316. doi: 10.1016/S0883-9026(97)00029-3

* CHEN, D., & KARAMI, A. (2010). Critical success factors for inter-firm technological cooperation: An empirical study of high-tech SMEs in China. *International Journal of Technology Management, 51*(2-4), 282-299. doi: 10.1504/IJTM.2010.033806

CHEN, Y. S. (2019). Sustainable development through franchise innovation in the digital economy *Improving business performance through innovation in the digital economy* (pp. 39-57): IGI Global.

* CHOREV, S., & ANDERSON, A. R. (2006). Success in Israeli high-tech start-ups; Critical factors and process. *Synthesis and Modifications of Nano-Structures Materials by Energetic Ion Beams Proceedings on the Indo German Workshop on synthesis, 26*(2), 162-174. doi: 10.1016/j.technovation.2005.06.014

CHRISTENSEN, C. M. (2013). *The innovator's dilemma: when new technologies cause great firms to fail*: Harvard Business Review Press.

CONDOM-VILÀ, P. (2020). How technology evolution and disruption are defining the world's entrepreneurial ecosystems: The case of barcelona's startup ecosystem. *Journal of Evolutionary Studies in Business, 5*(1), 14-51. doi: 10.1344/JESB2020.1.j067

COOPER, H. M. (1998). *Synthesizing research: A guide for literature reviews* (Vol. 2): Sage.

* D'CRUZ, C., BRAGDON, C., KULONDA, D., & PORTS, K. (2006). *Technopolis creation - A survey of best practices from around the world.* Paper presented at the 113th Annual ASEE Conference and Exposition, 2006, Chicago, IL.

* D'CRUZ, C., & O'NEAL, T. (2003). *Integration of Technology Incubator Programs with Academic Entrepreneurship Curriculum.* Paper presented at the Technology Management For Reshaping The World.

DE CASTRO, L. N., DE ARAUJO, R. M., FRAGOSO, N. D., & TROPIANO, L. (2021). An entrepreneurial maturity level assessment methodology: a case study in the business incubator of Mackenzie Presbysterian University. *International Journal of Innovation, 9*(2), 295-321. doi: 10.5585/iji.v9i2.18840

DE MENESES, M. D. F. T., DE MIRANDA RIBEIRO, K. L. L., & ZAGO, C. C. (2006). Aprendizagem organizacional e competências organizacionais: duas faces da mesma moeda? *Revista Ciências Administrativas, 12*(1), 54-61.

DE OLIVEIRA, M. P. B. (2019). *Empresas-Gazela: Crescimento, Empreendedorismo e Performatividade.* Universidade de Lisboa (Portugal).

* DE OLIVIERI, M. A. C. (2011). Phases and critical factors in the evolution of a new technology-based firm (NTBF): The case of Movil+ C.A. *Argos, 28*(54), 1.

DE SOUZA, N. M. S. S., & ANTONIO MOLINA PALMA, M. (2010). Ivory tower or entrepreneurial university: Critical factors in the innovation processes in an university context. *Revista Brasileira de Gestao e Desenvolvimento Regional, 6*(2), 130-156.

* DHEWANTO, W., LANTU, D. C., HERLIANA, S., & ANGGADWITA, G. (2015). The innovation cluster of ICT start-up companies in developing countries: Case of Bandung, Indonesia. *International Journal of Learning and Intellectual Capital, 12*(1), 32-46. doi: 10.1504/IJLIC.2015.067829

DIAKANASTASI, E., KARAGIANNAKI, A., & PRAMATARI, K. (2018). Entrepreneurial Team Dynamics and New Venture Creation Process: An Exploratory Study Within a Start-Up Incubator. *SAGE Open, 8*(2). doi: 10.1177/2158244018781446

DO CARMO, J. P., & RANGEL, R. D. (2020). Critical success factors of the incubation network of enterprises of the IFES. *International Journal of Innovation, 8*(2), 150-175. doi: 10.5585/iji.v8i2.17390

DOSI, G., NELSON, R. R., & WINTER, S. G. (2000). *The nature and dynamics of organizational capabilities*: Oxford university press.

* ENTRINGER, T. C., & DA SILVA, L. L. (2020). Critical success factors in science and technology parks: a bibliographic review and analysis. *Independent Journal of Management & Production, 11*(2), 343-359. doi: 10.14807/ijmp.v11i2.1050

ERDOGAN, E., & KOOHBORFARDHAGHIGHI, S. (2019) Delivering a systematic framework for the selection and evaluation of startups. *Vol. 11113 LNCS. 15th International Conference on the Economics of Grids, Clouds, Systems, and Services, GECON 2018* (pp. 151-159): Springer Verlag.

* FADELELMOULA, A. A. (2020). Factors Influencing the Realization of Competitive Advantage in the Private Portals Context. *International Journal of Innovation and Technology Management, 17*(4), 30. doi: 10.1142/s0219877020500285

FEINDT, S., JEFFCOATE, J., & CHAPPELL, C. (2002). Identifying success factors for rapid growth in SME E-commerce. *Small Business Economics, 19*(1), 51-62. doi: 10.1023/A:1016165825476

FERREIRA, C. M. (2016). *Gazelle Entrepreneurs.* Universidade de Lisboa (Portugal).

FERREIRA, J. J. M., FERNANDES, C. I., & FERREIRA, F. A. F. (2019). To be or not to be digital, that is the question: Firm innovation and performance. *Journal of Business Research, 101*, 583-590. doi: 10.1016/j.jbusres.2018.11.013

* FLOREK-PASZKOWSKA, A., UJWARY-GIL, A., & GODLEWSKA-DZIOBON, B. (2021). Business innovation and critical success factors in the era of digital transformation and turbulent times. *Journal of Entrepreneurship Management and Innovation, 17*(4), 7-28. doi: 10.7341/20211741

FONT COT, F., LARA NAVARRA, P., & SERRADELL-LÓPEZ, E. (2021). *An Integrative Framework for Startups at Early Stage: Promoting Evidence-Based Design and Evaluation in Early Stage Startups.* Paper presented at the International Research and Innovation Forum, RIIFORUM 2020.

* FRANK, H., PLASCHKA, G., & ROESSL, D. (1989). Planning behaviour of successful and non-successful founders of new ventures. *Entrepreneurship and Regional Development, 1*(2), 191-206. doi: 10.1080/08985628900000017

* GANTENBEIN, P., & ENGELHARDT, J. (2012). The role of investors for early-stage companies. *International Journal of Entrepreneurial Venturing, 4*(3), 276-289. doi: 10.1504/IJEV.2012.048601

* GEIBEL, R. C., & MANICKAM, M. (2016, Apr 20-22). *Analysis of Start-Up Ecosystems in Germany and in the USA.* Paper presented at the International Conference on Leadership, Innovation and Entrepreneurship (ICLIE), Canadian Univ Dubai, Dubai, U ARAB EMIRATES.

GERHARDT, V., DOS SANTOS, J., RUBIN, E., NEUENFELDT, A., & SILUK, J. C. M. (2021). Stakeholders´ perception to characterize the start-ups success. *Journal of Technology Management and Innovation, 16*(1), 38-50.

GOLD, A. H., MALHOTRA, A., & SEGARS, A. H. (2001). Knowledge Management: An Organizational Capabilities Perspective. *Journal of Management Information Systems, 18*(1), 185-214. doi: 10.1080/07421222.2001.11045669
GREWAL, R., & SLOTEGRAAF, R. J. (2007). Embeddedness of organizational capabilities. *Decision Sciences, 38*(3), 451-488.
GRISOLD, T., VOM BROCKE, J., GROSS, S., MENDLING, J., RÖGLINGER, M., & STELZL, K. (2021). Digital innovation and business process management: opportunities and challenges as perceived by practitioners. *Communications of the Association for Information Systems, 49*(1), 27.
HAMEL, G., & PRAHALAD, C. (1990). Strategic intent. *Mckinsey quarterly*(1), 36-61.
* HARPER, M., & CITKOWSKI, R. (2007). *Strategies for intellectual property protection.* Paper presented at the Materials Science and Technology Conference and Exhibition, MS and T'07 - "Exploring Structure, Processing, and Applications Across Multiple Materials Systems", Detroit, MI.
* HATTON, L. (2008). *E-business and new venture strategies that impact firm performance.* Paper presented at the 8th International Conference on Electronic Business, ICEB 2008, Waikoloa, HI.
* HIRTE, R., MUNCH, J., & DROST, L. (2018). *Incubators in multinational corporations: Development of a corporate incubator operator model.* Paper presented at the 23rd International Conference on Engineering, Technology and Innovation, ICE/ITMC 2017.
* HOLT, H. L. (2018) A practitioner review of technological firms' success in corporate innovation. *Vol. 28. Advances in the Study of Entrepreneurship, Innovation, and Economic Growth* (pp. 163-181): Emerald Group Publishing Ltd.
HOWARD-GRENVILLE, J., RERUP, C., LANGLEY, A., & TSOUKAS, H. (2016). *Organizational routines: How they are created, maintained, and changed* (Vol. 5): Oxford University Press.
* IAMRATANAKUL, S., HERNANDEZ, I. P., CASTILLA, C., & MILOZEVIC, D. Z. (2007). *Innovation and factors affecting the success of NPD projects: Literature explorations and descriptions.* Paper presented at the 2007 IEEE International Conference on Industrial Engineering and Engineering Management, IEEM 2007.
* IGBARIA, M., KASSICIEH, S. K., & SILVER, M. (1999). Career orientations and career success among research, and development and engineering professionals. *Journal of Engineering and Technology Management - JET-M, 16*(1), 29-54. doi: 10.1016/S0923-4748(98)00027-7
INTRAMA, V., SOOKBANJUNG, S., SANTAWEE, K., & TEERASAWAD, P. (2017) Path of creativity in entrepreneur: Basic concept of creative economy development. *Vol. 498. International Conference on Human Factors, Business Management and Society, AHFE 2016* (pp. 263-272): Springer Verlag.
* ISE, C. A., MARSHALL, G. C., & TIPPETT, D. D. (2008). *Critical success factors for NASA small business innovation research, a proposal.* Paper presented at the 29th Annual National Conference of the American Society for Engineering Management 2008, ASEM 2008, West Point, NY.
JARDIM, J., BÁRTOLO, A., & PINHO, A. (2021). Towards a global entrepreneurial culture: A systematic review of the effectiveness of entrepreneurship education programs. *Education Sciences, 11*(8). doi: 10.3390/educsci11080398
* KAKATI, M. (2003). Success criteria in high-tech new ventures. *Technovation, 23*(5), 447-457. doi: 10.1016/s0166-4972(02)00014-7
* KARIV, D. (2011). *Entrepreneurship: An international introduction*: Taylor and Francis.

* KASANAGOTTU, S., & BHATTACHARYA, S. (2017). Analysis of the significant dimensional factors impacting entrepreneurship performance. *Journal of Advanced Research in Dynamical and Control Systems, 9*(Special issue 14), 229-240.
* KASAYU, R. N., HIDAYANTO, A. N., & SANDHYADUHITA, P. I. (2017). Critical success factors of software development projects using analytic hierarchy process: A case of Indonesia. *International Journal of Innovation and Learning, 22*(1), 1-22. doi: 10.1504/IJIL.2017.085245
KAY, J. (1995). *Foundations of corporate success: how business strategies add value*: Oxford Paperbacks.
* KHARABSHEH, R., & MAGABLEH, I. (2010). Obstacles of Success of Technology Parks: The Case of Jordan. *11th European Conference on Knowledge Management, ECKM 2010*, 546-553.
KHELIL, N., SMIDA, A., & ZOUAOUI, M. (2018). What does "to fail" in entrepreneurship mean? Critical rereading of the literature. *Revue Internationale Pme, 31*(3-4), 35-66. doi: 10.7202/1054418ar
KHONG-KHAI, S., & WU, H. Y. (2018). Analysis of critical success factors of startups in Thailand. *Indian Journal of Public Health Research and Development, 9*(11), 1262-1268. doi: 10.5958/0976-5506.2018.01630.3
* KLAASA, P., & THAWESAENGSKULTHAI, N. (2018). *Incubation framework for a new startup: A case study in Thailand.* Paper presented at the 8th International Conference on Industrial Engineering and Operations Management, IEOM 2018.
KOE, W. L., KRISHNAN, R., & ALIAS, N. E. (2021). The Influence of Self-Efficacy and Individual Entrepreneurial Orientation on Technopreneurial Intention among Bumiputra Undergraduate Students. *Asian Journal of University Education, 17*(4), 490-497.
KOGUT, B., & ZANDER, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization science, 3*(3), 383-397.
* KONRAD, E. D. (2018) Entrepreneurial behavior and financing structures in the German creative industries: A survey of start-ups and young growing firms. *FGF Studies in Small Business and Entrepreneurship* (pp. 25-43): Springer.
KORPYSA, J., & HALICKI, M. (2022). *Project supply chain management and fintech startups - relationship.* Paper presented at the 26th International Conference on Knowledge-Based and Intelligent Information and Engineering Systems, KES 2022.
* KRNETA, M., UMIHANIC, B., DONLAGIC, S., & ALFIREVIC, A. M. (2016, Jun 02-04). *The critical start-up enterprise success factors: development of a research model.* Paper presented at the 5th International Scientific Symposium on Economy of Eastern Croatia - Vision and Development, Osijek, CROATIA.
KUMAR, R., KARTHIK, S., & HARSHIDA, K. S. (2018). Rudseti – a catalyst towards growth of small scale manufacturing industries. *International Journal of Mechanical Engineering and Technology, 9*(1), 1053-1060.
KUMAR, U., MAHESHWARI, M., & KUMAR, V. (2004). A Framework for Achieving E-Business Success. *Industry and Higher Education, 18*(1), 47-51. doi: 10.5367/000000004773040960
KURATKO, D. F., HOLT, H. L., & NEUBERT, E. (2020). Blitzscaling: The good, the bad, and the ugly. *Business Horizons, 63*(1), 109-119.
KURNIAWAN, A., & DACHYAR, M. (2021). *Tech-Startup Digital Business Strategy Utilizing Structural Equation Modeling (SEM).* Paper presented at the 4th European International Conference on Industrial Engineering and Operations Management, IEOM 2021.
LAASONEN, V., NYMAN, J., FORNARO, P., LÄHTEENMÄKI-SMITH, K., KOLEHMAINEN, J., KOSKI, H., & RANTA, T. (2022). Impacts and indicators of Innovation Ecosystems: A Framework for Analysis.

* LAI, C., DENTONI, D., CHAN, C., & NEYRA, E. M. (2017). Adapting the measurement of youth entrepreneurship potential in a marginalised context: the case of Mindanao, Philippines. *Journal for International Business and Entrepreneurship Development, 10*(3), 273-297. doi: 10.1504/jibed.2017.085509
* LASCH, F., LE ROY, F., & YAMI, S. (2007). Critical growth factors of ICT start-ups. *Management Decision, 45*(1), 62-75. doi: 10.1108/00251740710718962
* LASRADO, F. (2017). Critical success factors of innovation and creativity for global entrepreneurs *Global Entrepreneurship and New Venture Creation in the Sharing Economy* (pp. 75-91): IGI Global.
LEE, A. (2013). Welcome to the unicorn club: Learning from billion-dollar startups. *Cowboy Ventures (blog)*.
LEENDERTSE, J., VAN RIJNSOEVER, F. J., & EVELEENS, C. P. (2021). The sustainable start-up paradox: Predicting the business and climate performance of start-ups. *Business Strategy and the Environment, 30*(2), 1019-1036. doi: 10.1002/bse.2667
LEVINSON, N. S. (2010). Innovation in cross-national alliance ecosystems. *International Journal of Entrepreneurship and Innovation Management, 11*(3), 258-263. doi: 10.1504/IJEIM.2010.031900
* LIAO, S., LIU, Z., & ZHANG, S. (2018). Technology innovation ambidexterity, business model ambidexterity, and firm performance in Chinese high-tech firms. *Asian Journal of Technology Innovation, 26*(3), 325-345. doi: 10.1080/19761597.2018.1549954
* LIN, C. Y., & WANG, Y. H. (2021). Evaluating the optimal external equity financing strategy and critical factors for the startup of lending company in taiwan: An application of expert network decision model. *Mathematics, 9*(18). doi: 10.3390/math9182239
LINDSEY, K. (2002). Measuring knowledge management effectiveness: A task-contingent organizational capabilities perspective. *AMCIS 2002 Proceedings*, 285.
* LIOW, G. E., & WONG, H. M. (2021). Exploring the role of malaysian research university based incubators in facilitating the entrepreneurial process. *International Journal of Innovation, 9*(2), 239-266. doi: 10.5585/iji.v9i2.18578
* LITTUNEN, H., STORHAMMAR, E., & NENONEN, T. (1998). The survival of firms over the critical first 3 years and the local environment. *Entrepreneurship and Regional Development, 10*(3), 189-202. doi: 10.1080/08985629800000011
* MAHMOUD-JOUINI, S. B., DUVERT, C., & ESQUIROL, M. (2018). Key Factors in Building a Corporate Accelerator Capability: Developing an effective corporate accelerator requires close attention to the relationships between startups and the sponsoring company. *Research Technology Management, 61*(4), 26-34. doi: 10.1080/08956308.2018.1471274
MALECKI, E. J. (2018). Entrepreneurship and entrepreneurial ecosystems. *Geography compass, 12*(3), e12359.
* MANUEL, M. P., ALEJANDRO, H. G., & ADELA, M. V. R. (2017). Critical success factors for the development of a company in its early stages of development. *Espacios, 38*(18), 1-17.
MARIANO, A. M., AYAVIRI-PANOZO, A., & ROCHA, M. (2018). *Adaptation of the curriculum to the entrepreneurial intention: A study through the analysis of the performance-importance map (IPMA).* Paper presented at the 10th International Symposium on Project Approaches in Engineering Education, PAEE 2018 and 15th Active Learning in Engineering Education Workshop, ALE 2018.
* MARTENS, C. D. P., FRANKLIN, J. M., MAURO, L. M., SILVA, F., & DE FREITAS, H. M. R. (2018). Linking entrepreneurial orientation to project success. *International Journal of Project Management, 36*(2), 255-266. doi: 10.1016/j.ijproman.2017.10.005
* MASINOVA, V., & SVANDOVA, Z. (2014, Sep 18-19). *Factors Defining Satisfaction and Loyalty of the Online Shopping Customers Within e-Commerce and Cyber Entrepreneurship.*

Paper presented at the 9th European Conference on Innovation and Entrepreneurship (ECIE), Univ Ulster Business Sch, Sch Social Enterprises Ireland, Belfast, IRELAND.
* MATRICANO, D. (2010). Achieving and Sustaining New Knowledge Development in High-Expectation Start-ups. *Industry and Higher Education, 24*(1), 47-53. doi: 10.5367/000000010790877380
* MÁTYÁS, B., LOWY, D. A., & SALGADO, J. P. (2019). A measure of enterprises' innovative activity for microfirms and startups. *Academy of Strategic Management Journal, 18*(6), 1-12.
MERIGÓ, J. M., PEDRYCZ, W., WEBER, R., & DE LA SOTTA, C. (2018). Fifty years of Information Sciences: A bibliometric overview. *Information Sciences, 432*, 245-268.
MOHAMAD, A., MUSTAPA, A. N., & RAZAK, H. A. (2021). An Overview of Malaysian Small and Medium Enterprises: Contributions, Issues, and Challenges. *Modeling Economic Growth in Contemporary Malaysia*.
MORALES-GUALDRÓN, S. T., ZAPATA, U. P., & URBANO, J. E. D. (2014). Service and entrepreneurial profile factors that affect the survival of businesses: A critical revision. *Revista Lasallista de Investigacion, 11*(2), 181-194.
* MUKHTAROVA, K. S., KOZHAKHMETOVA, A. K., BELGOZHAKYZY, M., DOSMBEK, A., & BARZHAKSYYEVA, A. (2019). High-tech entrepreneurship in developing countries: Way to success. *Academy of Entrepreneurship Journal, 25*(1).
* MUNEMO, J. (2018). Entrepreneurial success in Africa: How relevant are foreign direct investment and financial development? *African Development Review, 30*(4), 372-385. doi: 10.1111/1467-8268.12345
NALINTIPPAYAWONG, S., WAIYAWATPATTARAKUL, N., & CHOTIPANT, S. (2018). *Examining the critical success factors of startup in Thailand using structural equation model.* Paper presented at the 10th International Conference on Information Technology and Electrical Engineering, ICITEE 2018.
* NIA, M. B., & GELARD, P. (2016, Apr 28-29). *E-Entrepreneur Critical Success Factors for e-Entrepreneurship in the Virtual World.* Paper presented at the 4th International Conference on Innovation and Entrepreneurship (ICIE), Ryerson Univ, Ted Rogers Sch Management, Toronto, CANADA.
* NIJKAMP, P., GULDEMOND, C., & TEELEN, H. (2004). The importance of venture capital for high-tech development experiences from The Netherlands and Israel. *International Journal of Entrepreneurship and Innovation Management, 4*(1), 41-49. doi: 10.1504/IJEIM.2004.004500
NURCAHYO, R., & PUTRA, P. A. (2021). Critical Factors in Indonesia's E-Commerce Collaboration. *Journal of Theoretical and Applied Electronic Commerce Research, 16*(6), 2458-2469. doi: 10.3390/jtaer16060135
* O'CONNOR, J. T., CHOI, J. O., & WINKLER, M. (2016). Critical Success Factors for Commissioning and Start-Up of Capital Projects. *Journal of Construction Engineering and Management, 142*(11). doi: 10.1061/(ASCE)CO.1943-7862.0001179
OECD. (2007). OECD-Eurostat Manual on Business Demography Statistics.
OECD. (2008). Measuring entrepreneurship: A digest of indicators: OECD Paris.
OECD. (2011a). Financing high-growth firms: The role of angel investors. *Available at SSRN 1983115*.
OECD. (2011b). High-Growth Enterprises: What governments can do to make a difference. *Paris: A study by the OECD Working Party on SMEs and Entrepreneurship*.
OECD. (2013). An international benchmarking analysis of public programmes for high growth firms: Paris: OECD Local Economic and Employment Development Programme. Available ….
* OFER, Z., & NAAMATI, S. L. (2019, Sep 18-20). *Does it take two to tango? Aquirer's management behaviour and acquired employees' attitudes in explaining start-up acquisition*

performance. Paper presented at the 12th Annual Conference of the EuroMed-Academy-of-Business, Thessaloniki, GREECE.
* OKEREMI, A., AMOAKO-GYAMPAH, K., & CAESAR, L. D. (2021). Exploring the antecedents of entrepreneurship success in information technology firms in Nigeria. *Africa Journal of Management, 7*(2), 286-313. doi: 10.1080/23322373.2021.1902210
OLIVA, F. L., TEBERGA, P. M. F., TESTI, L. I. O., KOTABE, M., GIUDICE, M. D., KELLE, P., & CUNHA, M. P. (2022). Risks and critical success factors in the internationalization of born global startups of industry 4.0: A social, environmental, economic, and institutional analysis. *Technological Forecasting and Social Change, 175*. doi: 10.1016/j.techfore.2021.121346
* ONG, S. Y. Y., HABIDIN, N. F., SALLEH, M. I., & FUZI, N. M. (2021). Critical success factors of women entrepreneurship practice for women entrepreneurs in Malaysia. *World Review of Entrepreneurship, Management and Sustainable Development, 17*(4), 481-496. doi: 10.1504/WREMSD.2021.116664
OSTERWALDER, A. (2004). *The business model ontology a proposition in a design science approach.* Université de Lausanne, Faculté des hautes études commerciales.
* PENA, I. (2004). Business incubation centers and new firm growth in the Basque Country. *Small Business Economics, 22*(3-4), 223-236. doi: 10.1023/b:sbej.0000022221.03667.82
* PÕDER, A., LEMSALU, K., NURMET, M., & LEHTSAAR, J. (2019). Entrepreneurship education, entrepreneurship competencies and entrepreneurial activities of alumni: A comparison between the engineering and other graduates of estonian university of life sciences. *Agronomy Research, 17*(6), 2399-2416. doi: 10.15159/AR.19.218
PORTER, M. E. (1997). Competitive strategy. *Measuring Business Excellence, 1*(2), 12-17.
PUTRA, P. A., Nurcahyo, R., & Farizal. (2021). *Critical success factors of e-commerce collaboration in indonesia.* Paper presented at the 11th Annual International Conference on Industrial Engineering and Operations Management, IEOM 2021.
* RATINHO, T., & HENRIQUES, E. (2010). The role of science parks and business incubators in converging countries: Evidence from Portugal. *Technovation, 30*(4), 278-290. doi: 10.1016/j.technovation.2009.09.002
* RAUHOFER, M., & FRENTZ, M. P. (2006). Start-up in lieu of an industry career: Insights from a start-up incubator for innovative corporations. *Elektrotechnik und Informationstechnik, 123*(11), 503-506. doi: 10.1007/s00502-006-0390-7
* REA, R. H. (1989). Factors affecting success and failure of seed capital/start-up negotiations. *Journal of Business Venturing, 4*(2), 149-158. doi: 10.1016/0883-9026(89)90028-1
RIES, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*: Currency.
ROCHA, H., & AUDRETSCH, D. B. (2022). Entrepreneurial ecosystems, regional clusters, and industrial districts: Historical transformations or rhetorical devices? *The Journal of Technology Transfer*, 1-24.
ROSTAROVA, M., & JANAC, J. (2017, Jun 29-30). *Critical success factors of startup accelerators.* Paper presented at the 22nd International Scientific Conference on Economic and Social Development (ESD) - The Legal Challenges of Modern World, Split, CROATIA.
* RUHNKA, J. C., & YOUNG, J. E. (1987). A venture capital model of the development process for new ventures. *Journal of Business Venturing, 2*(2), 167-184. doi: 10.1016/0883-9026(87)90006-1
RUSLI, M. H. B. M., & ROZMI, A. N. A. (2015). *Redefining the university science park model in UniKL BMI academic setting: A conceptual study on economic growth through Tech Entrepreneurship, innovation and commercialization.* Paper presented at the 2014 4th International Conference on Engineering Technology and Technopreneuship, ICE2T 2014.

RUSNJAK, A. (2009). *Modelling critical success factors in mCommerce-Programs.* Paper presented at the Business Process, Services Computing and Intelligent Service Management, BPSC 2009, Leipzig.

SAKATA, I., SASAKI, H., AKIYAMA, M., SAWATANI, Y., SHIBATA, N., & KAJIKAWA, Y. (2013). Bibliometric analysis of service innovation research: Identifying knowledge domain and global network of knowledge. *Technological Forecasting and Social Change, 80*(6), 1085-1093.

* SANDBERG, W. R., & HOFER, C. W. (1987). Improving new venture performance: The role of strategy, industry structure, and the entrepreneur. *Journal of Business Venturing, 2*(1), 5-28. doi: 10.1016/0883-9026(87)90016-4

* SANTISTEBAN, J., INCHE, J., & MAURICIO, D. (2021). Critical success factors throughout the life cycle of information technology start-ups. *Entrepreneurship and Sustainability Issues, 8*(4), 446-466. doi: 10.9770/jesi.2021.8.4(27)

SANTISTEBAN, J., & MAURICIO, D. (2017). Systematic literature review of critical success factors of Information Technology startups. *Academy of Entrepreneurship Journal, 23*(2), 1-23.

SANTISTEBAN, J., MAURICIO, D., & CACHAY, O. (2021). Critical success factors for technology-based startups. *International Journal of Entrepreneurship and Small Business, 42*(4), 397-421. doi: 10.1504/IJESB.2021.114266

SASTRE, C. G., DEL MAR BENAVIDES-ESPINOSA, M., & RIBEIRO-SORIANO, D. (2021). When intentions turn into action: pathways to successful firm performance. *International Entrepreneurship and Management Journal, 18*(2), 733-751. doi: 10.1007/s11365-021-00782-2

SEBORA, T. C., LEE, S. M., & SUKASAME, N. (2009). Critical success factors for e-commerce entrepreneurship: An empirical study of Thailand. *Small Business Economics, 32*(3), 303-316. doi: 10.1007/s11187-007-9091-9

* SELIG, G. (2014). *Critical success factors for winning entrepreneurs and the role of an incubator in accelerating the growth of start-ups and early stage companies.* Paper presented at the 2014 Zone 1 Conference of the American Society for Engineering Education, ASEE Zone 1 2014, Bridgeport, CT.

SENGUPTA, T., NARAYANAMURTHY, G., HOTA, P. K., SARKER, T., & DEY, S. (2021). Conditional acceptance of digitized business model innovation at the BoP: A stakeholder analysis of eKutir in India. *Technological Forecasting and Social Change, 170*. doi: 10.1016/j.techfore.2021.120857

SHARMA, A., DESHMUKH, S. S., & OJHA, A. (2022). Business Model Innovation to Address Vegetable Supply Chain Issues: A Case Study of an Indian Startup. *International Journal of Innovation and Technology Management, 20*(2). doi: 10.1142/S0219877023500086

* SHEKHAR, P., HUANG-SAAD, A., LIBARKIN, J., & OSTROWSKI, A. K. (2018). *'Is someone in your family an entrepreneur?': Examining the influence of family role models on students' entrepreneurial self-efficacy and its variation across gender.* Paper presented at the 125th ASEE Annual Conference and Exposition.

* SIDDOO, V., SAWATTAWEE, J., JANCHAI, W., & THINNUKOOL, O. (2019). An exploratory study of digital workforce competency in Thailand. *Heliyon, 5*(5), 12. doi: 10.1016/j.heliyon.2019.e01723

SILVA, M. C. D., RAMPASSO, I. S., ANHOLON, R., COOPER ORDOÑEZ, R. E., QUELHAS, O. L. G., & SILVA, D. D. (2018). Critical Success Factors of Brazilian Business Incubators. *Latin American Business Review, 19*(3-4), 197-217. doi: 10.1080/10978526.2018.1534545

SILVA, N., FERNÁNDEZ-ROBIN, C., YÁÑEZ, D., & ROMANÍ, G. (2021). Influence of educational programs oriented toward entrepreneurship on the entrepreneurial intention of

university students: the case of Chile. *Academia Revista Latinoamericana de Administracion, 34*(3), 445-463. doi: 10.1108/ARLA-06-2020-0146
SILVA, T. A. D., CORREA, V. S., VALE, G. M. V., & GIGLIO, E. M. (2020). Influence of social capital offline and online on early-stage entrepreneurs. *Rege-Revista De Gestao, 27*(4), 393-408. doi: 10.1108/rege-10-2019-0103
* SINGH, S. H., BHOWMICK, B., EESLEY, D., & SINDHAV, B. (2021). Grassroots innovation and entrepreneurial success: Is entrepreneurial orientation a missing link? *Technological Forecasting and Social Change, 164*. doi: 10.1016/j.techfore.2019.02.002
SOMSUK, N., & LAOSIRIHONGTHONG, T. (2014). A fuzzy AHP to prioritize enabling factors for strategic management of university business incubators: Resource-based view. *Technological Forecasting and Social Change, 85*, 198-210. doi: 10.1016/j.techfore.2013.08.007
* SONG, L. Z., SONG, M., & DI BENEDETTO, C. A. (2011). Resources, supplier investment, product launch advantages, and first product performance. *Journal of Operations Management, 29*(1-2), 86-104. doi: 10.1016/j.jom.2010.07.003
* SPIEGEL, O., ABBASSI, P., ZYLKA, M. P., SCHLAGWEIN, D., FISCHBACH, K., & SCHODER, D. (2016). Business model development, founders' social capital and the success of early stage internet start-ups: a mixed-method study. *Information Systems Journal, 26*(5), 421-449. doi: 10.1111/isj.12073
SPIGEL, B. (2017). The relational organization of entrepreneurial ecosystems. *Entrepreneurship theory and practice, 41*(1), 49-72.
SPIGEL, B., KITAGAWA, F., & MASON, C. (2020). A manifesto for researching entrepreneurial ecosystems. *Local Economy, 35*(5), 482-495.
STAM, E., & SPIGEL, B. (2016). Entrepreneurial ecosystems: USE Discussion paper series.
* TAM, S., LEE, W. B., & CHUNG, W. W. C. (2001). Growth of a small manufacturing enterprise and critical factors for success. *International Journal of Manufacturing Technology and Management, 3*(4-5), 444-455. doi: 10.1504/ijmtm.2001.001422
TEECE, D. J., PISANO, G., & SHUEN, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal, 18*(7), 509-533.
THUETHONGCHAI, N., TAIPHAPOON, T., CHANDRACHAI, A., & TRIUKOSE, S. (2020). *The critical success factors for new service development in digital service.* Paper presented at the 3rd International Conference on Computers in Management and Business, ICCMB 2020.
* TIPU, S. A. A., & ARAIN, F. M. (2011). Managing success factors in entrepreneurial ventures: A behavioral approach. *International Journal of Entrepreneurial Behaviour and Research, 17*(5), 534-560. doi: 10.1108/13552551111158844
* TOLFO, C., WAZLAWICK, R. S., FERREIRA, M. G. G., & FORCELLINI, F. A. (2018). Agile practices and the promotion of entrepreneurial skills in software development. *Journal of Software-Evolution and Process, 30*(9), 23. doi: 10.1002/smr.1945
* TRACHANA, T., DIAKANASTASI, E., KARAGIANNAKI, A., & PRAMATARI, K. (2017). *Industry accelerator linkage: The critical success factors in open innovation programs.* Paper presented at the 12th European Conference on Innovation and Entrepreneurship, ECIE 2017.
TRUMAN, R., & LOCKE, C. J. (2016). Gazelles, unicorns, and dragons battle cancer through the Nanotechnology Startup Challenge (Vol. 7, pp. 1-4): Springer.
* TUAN, N. A., HA, D. T. H., THAO, V. T. B., ANH, D. K., & LONG, N. H. (2019). Factors affecting entrepreneurial intentions among youths in Vietnam. *Children and Youth Services Review, 99*, 186-193. doi: 10.1016/j.childyouth.2019.01.039

* VAN TRANG, T., QUANG VINH, N., & HUNG DO, Q. (2019). Application of fuzzy analytic hierarchy process in prioritizing and ranking critical success factors of innovation startups. *WSEAS Transactions on Business and Economics, 16*, 261-270.
* VANDERKRUIK, R., & MCPHERSON, M. E. (2017). A Contextual Factors Framework to Inform Implementation and Evaluation of Public Health Initiatives. *American Journal of Evaluation, 38*(3), 348-359. doi: 10.1177/1098214016670029
* VOZIKIS, G. S., & MESCON, T. S. (2010). Developing International Interdisciplinary Programs in Management and Technology Entrepreneurship in Eastern Europe: The Critical Success Factors for Developing “Entrepreneurial Courage”. *Journal of Small Business and Entrepreneurship, 23*(sup1), 785-796. doi: 10.1080/08276331.2010.10593517
* WASSERMAN, N. (2003). Founder-CEO succession and the paradox of entrepreneurial success. *Organization science, 14*(2), 149-172. doi: 10.1287/orsc.14.2.149.14995
* WHITE, D. E., & PATTON, J. R. (2000). *Technology and strategic management by projects.* Paper presented at the IEEE Engineering Management Society, EMS 2000.
* WILLIAMS MIDDLETON, K., & Nowell, P. (2018). Team trust and control in new venture emergence. *International Journal of Entrepreneurial Behaviour and Research, 24*(4), 882-910. doi: 10.1108/IJEBR-01-2017-0048
* WONG, W. K., CHEUNG, H. M., & VENUVINOD, P. K. (2005). Individual entrepreneurial characteristics and entrepreneurial success potential. *International Journal of Innovation and Technology Management, 2*(3), 277-292. doi: 10.1142/S0219877005000502
* XIAO, L., & North, D. (2018). The role of Technological Business Incubators in supporting business innovation in China: a case of regional adaptability? *Entrepreneurship and Regional Development, 30*(1-2), 29-57. doi: 10.1080/08985626.2017.1364789
YADAV, N., & Goyal, S. (2022). Regaining partner trust in the food delivery business: case of Zomato. *Emerald Emerging Markets Case Studies*.
* YIM, D., Cho, H. H., & Kim, E. (2015, Aug 02-06). *Revisit the Concept and Usefulness of Science and Technology Park and Implication for the Regional Innovation Policy: Cases of Seoul and Gyeonggi Province in Korea.* Paper presented at the Portland International Conference on Management of Engineering and Technology (PICMET), Portland, OR.
YURYNETS, R., YURYNETS, Z., & DENYSENKO, M. (2022). *Development of Information Technology Organizations for Financial and Strategic Management of Startup Projects.* Paper presented at the 6th International Conference on Computational Linguistics and Intelligent Systems, COLINS 2022 - Volume I: Main.
* ZAHEER, H., BREYER, Y., & DUMAY, J. (2019). Digital entrepreneurship: An interdisciplinary structured literature review and research agenda. *Technological Forecasting and Social Change, 148*, 20. doi: 10.1016/j.techfore.2019.119735
* ZHANG, H. P., & CAO, Q. (2006). *A social networks approach to R&D strategy of entrepreneurial firms.* Paper presented at the 13th International Conference on Industrial Engineering and Engineering Management, Shandong Univ, Weihai, PEOPLES R CHINA.
ZHANG, P. Y., & DENG, L. (2008, Dec 10-11). *Index System for Performance Evaluation of Enterprise Based on Life Cycle Theory.* Paper presented at the 5th International Conference on Innovation and Management, Maastricht, NETHERLANDS.
ZHANG, S., ZHONG, H., YUAN, Z., & XIONG, H. (2021). *Scalable Heterogeneous Graph Neural Networks for Predicting High-potential Early-stage Startups.* Paper presented at the 27th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, KDD 2021.

CAPÍTULO 3: UNICÓRNIOS

Com a digitalização dos variados domínios da sociedade contemporânea, e consequente impacto para os governos, empresas e famílias, os estudos sobre negócios digitais tem dedicado esforços para compreender a dinâmica da "nova economia". Desde a crise econômica conhecida como "a bolha das *pontocom*", as empresas digitais vêm enfrentando inúmeros desafios e explorando oportunidades que surgem dia a dia. Prosperidade e longevidade são constantemente buscados em ciclos contínuos de adaptação e estabilização, nos quais muitas ficam pelo caminho.

Dentre as empresas que conseguem passar pelos contínuos testes de aprovação de investidores e clientes, está um grupo seleto de crescimento exponencial composto pelos unicórnios, que ultrapassam o valor de mercado de US$ 1 bilhão. A criação de novos unicórnios ocorre mais frequentemente em países desenvolvidos, que mais comumente apresentam maior vocação pelo empreendedorismo por oportunidade. Nas economias emergentes, os unicórnios são menos frequentes, já que esses países enfrentam maiores desafios políticos, econômicos, sociais e legais, que dificultam o a saúde dos ambientes nos quais essas empresas nascem.

A motivação para esta pesquisa nasceu a partir da consideração de que o aprendizado gerado pelas empresas que chegaram ao sucesso (mais especificamente as que se tornaram unicórnios) é extremamente valioso. O estudo qualitativo foi organizado em duas etapas principais: (i) formação do portfólio bibliográfico, por meio da técnica de revisão sistemática de literatura; e, (ii) a realização de entrevistas semiestruturadas com profissionais que atuam em cargos técnicos e de gestão. Os resultados foram confrontados com a Visão Baseada em Recursos (RBV), que foi escolhida como teoria de base para a pesquisa.

O artigo, no idioma inglês, foi aprovado para publicação no periódico *Innovation and Management Review* (INMR) (anexo 4), em formato *Open Access*. A próxima seção apresenta o texto publicado pela revista em novembro/2021, depois das melhorias incorporadas (link de acesso): https://www.emerald.com/insight/content/doi/10.1108/INMR-05-2021-0070/full/html).

ARTIGO 2 - LESSONS FROM THE FASTEST BRAZILIAN UNICORN

Abstract

Purpose – The purpose of this paper is to analyze the process of why a Brazilian digital startup company reached unicorn status the fastest.

Design/methodology/approach – After the literature review, the authors conducted the questionnaire containing 13 questions used in 18 in-depth interviews conducted in the case study. Saturation point combined with the independent and in-depth analysis of the researchers is used to achieve internal and external validity. The primary data collected underwent an analytical approach, followed by a resource-based view (RBV). RBV does not deal with time. There is a gap in the literature and an opportunity here: to analyze the fastest company to become a unicorn under the RBV lens.

Findings – The case reveals that value can be found in traditional sectors, as is the case of the real estate sector. This is a case of a company in the direct home-buying space.

Practical implications – The contribution of this paper is both practical, with the seven lessons, and theoretical. Resources allocated to a specific context in a specific geographic region shift the attention away from the absolute value of resources to the timing of aggregating them. Thus, the contribution accounting for time is new to the RBV.

Originality/value – The originality lies in the analysis of the dynamics of digital businesses with exponential growth.

Keywords: Digital entrepreneurship. Innovation. Case study. Startup. Unicorns. RBV.

1. Introduction

Digitalization, with the accelerated adoption of technologies in all areas of human life – work, study, entertainment and relationships – is a path of no return and the most important force of entrepreneurship and innovation (BERGER; VON BRIEL; DAVIDSSON; KUCKERTZ, 2019). Individuals, companies and governments strive to get a hold of the fast-changing environment and somehow understand its compatibility with their principles, values and practices (ARLOTT; HENIKE; HÖLZLE, 2019). However, studies about the dynamics of digital entrepreneurship in emerging economies are still scarce (AL-KHATEEB, 2019). Contemporary entrepreneurship is driven by digital entrepreneurship, especially in innovation-driven countries (HART; BONNER; PRASHAR; RI *et al.*, 2020). The digital ecosystem includes big techs (such as Apple, Microsoft, Amazon and Alphabet, among

others) and startups of different sizes and sectors of activity, considering that digital entrepreneurship is defined as the process of the entrepreneurial venture to create value in digital streams (SAHUT; IANDOLI; TEULON, 2019). Businesses that reach the unicorn status have been growing significantly, but discussions remain rare in the literature, representing an opportunity: to explore unicorn companies and unveil their inner characteristics. There are over 800 unicorn companies worldwide. Such companies are predominantly located in the US (370 companies or 51.2%) and China (210 or 29%). Brazil is the 8th country in the total number of unicorns, with 12 (CBINSIGHTS, 2022). To encourage research on such companies, this paper seeks to analyze the characteristics of the startup that reached unicorn status the fastest in Brazil (and one of the fastest in the world), within only 16 months of operation. Given this context, this study seeks to answer the following research question: What makes a startup achieve unicorn status in the fastest way? According to ZAHRA (2021), future resource-based view (BARNEY, 1991) research must consider time. ZAHRA (2021) states that startup companies offer an environment where resource combinations are likely to emerge, emphasizing that time is required to learn and decipher how to convert resources into commercial applications. However, current RBV studies do not deal with time, thus representing a gap in the literature as well as an opportunity: to analyze the fastest company to become a unicorn under RBV lens. The contribution of this study lies in its analysis of how fast a company became a unicorn. We start from a literature review, presenting the concepts related to digital economy, digital ecosystems, and unicorn companies. Next, we explain the methodology and the questions that emerged from the literature review. Next, a case study protocol is presented with data collection and analysis. We then offer a discussion from the questions raised, structuring the results with theoretical implications. Finally, we conclude by presenting seven lessons learned as a practical contribution and presenting the theoretical contribution.

2. Literature review

2.1 Digital economy and digital business

The digital economy that was enabled and enhanced by technological discoveries since the 1960s has been transforming the business world. After continuous improvements in hardware and software, we must mention the maturation and popularization of the technology used by people from all social classes (MET; UYSAL; ÖZKAYA; ORÇ, 2020). This led to organizations applying digital business paradigms (DREW, 2003; GHOSH, 2002). The migration process to the economic order dictated by digital business models has already

shown trends that became organizations' paradigms: declining transaction costs, broader supply of information via the internet, and instability of business models (WHITLEY; DARKING, 2006). Customer service and the creation of superior and exclusive value propositions should be at the heart of strategy and innovation initiatives (BEI; JIN; IEEE, 2005). Despite the antiquity of the studies, these premises remain true. Technology offers great opportunities and also great threats (MET; UYSAL; ÖZKAYA; ORÇ, 2020). One of the essential characteristics of digital business models is their constant evolution (BABER; OJALA; MARTINEZ, 2019), both in modern service-based economies (BYGSTAD; AANBY; IDEN, 2017; HIRTE; MUNCH; DROST, 2018) (PETER; KRAFT; LINDEQUE, 2020; PIN, 2014) and in emerging economies (BOOJIHAWON; NGOASONG, 2018; GRABRA; MANOLE, 2017; MAHMUD, 2020; MCADAM; CROWLEY; HARRISON, 2018). In this new paradigm, "digitality" plays a central role as a means of generating value for the client (RANTALA; UKKO; SAUNILA; PUOLAKOSKI *et al.*, 2019), especially when leaders are aware of, and committed to, the process of digital transformation (BYGSTAD; AANBY; IDEN, 2017; RAVARINI; LOCORO; MARTINEZ, 2020). Modularity, open innovation and platforms are characteristic elements of digital business models (STURGEON, 2021). WIESBÖCK e HESS (2020) stress that, in addition to using technology to provide new solutions for customers, it is necessary to consider the mechanisms that support the facilitation of digital innovation and the governance of processes and activities. The latter, far from limiting the generation of solutions, organizes and directs solutions for the company to prioritize the launch of innovations that meet customers' needs, minimize the risks of failure, and increase the chances of sustained future growth (RIES, 2011). Sustainable growth also depends on the company's ability to collect, analyze and use the information obtained, leveraging improvements in the value chain and developing new business ideas (TOHANEAN; WEISS, 2019). PETER; KRAFT e LINDEQUE (2020) contribute significantly to the understanding of digital transformation drivers, namely (1) process engineering; (2) new technologies and digital business development, supported by digital leadership and culture; (3) cloud and data; (4) customer focus; and (5) digital marketing. The success of digital business models depends, among other factors, on the skills acquired and developed by the organization's leaders (RAVARINI; LOCORO; MARTINEZ, 2020; SOUSA; ROCHA, 2019). RATZINGER; AMESS; GREENMAN e MOSEY (2018) assessed the impact of formal partner education on the ability to attract investments. Their research highlights that companies with partners with a higher degree in management and technical education are more likely to attract foreign investment. The startups, choosing the path of experimentation, learning, and rapid

adaptations of products and services, aim to convince, at the same time, (1) potential customers often suspicious of the world of digital consumption (KONYA-BAUMBACH; SCHUHMACHER; KUESTER; KUHAREV, 2019) and (2) investors, eager for businesses that offer value and growth drivers (CAVALLO; GHEZZI; DELL'ERA; PELLIZZONI, 2019; KÖNIG; UNGERER; BALTES; TERZIDIS, 2019; PANDA, 2019).

2.2 Digital ecosystems and digital entrepreneurship

Although lacking a more objective conceptualization (SUSSAN; ACS, 2017), digital ecosystems present observable characteristics, among which (1) stimulus to collaboration between the university, public agencies, and companies; (2) management practices that allow rapid experimentation of new products and services; and, as WHITE (2012) points out, (3) the adoption of digital workplaces, seeking to stimulate team´s productivity. The digital entrepreneur differentiates himself by seeking solutions and business models feasibility based on the internet and current technologies (NGOASONG, 2018). In addition, emerging economies play a relevant role in offering solutions to fill institutional voids that lead to inequality and the weakening of the social fabric (MARTINEZ DY, 2019; MCADAM; CROWLEY; HARRISON, 2019). At the heart of entrepreneurial and digital ecosystems are agile practices, which help to revolutionize creating and managing a business. This movement, which has roots in the Japanese movement of Total Quality and in software development practices popularized in the 1990s and 2000s, is called Lean Startup Approach, LSA (CARROLL; CASSELMAN, 2019; GHEZZI, 2019; GHEZZI; CAVALLO, 2020; SANASI; GHEZZI; CAVALLO; RANGONE, 2019). These practices have been influencing a new generation of digital entrepreneurs (REMANE; HANELT; NICKERSON; KOLBE, 2017; TANGOUR; GEBAUER; FISCHER; WINKLER, 2019) the creation of new products and services, and the improvement of the value chain and organizational processes. The economic relevance of the digital industry giants that have been successful in creating ecosystems around them (VALDEZ-DE-LEON, 2019), as in the successful experience of digital transaction platforms (marketplaces) (HÄNNINEN, 2019), demonstrates the seriousness of the theme. However, even considering the value that many digital businesses generate for their customers, a broader approach should also consider how traditional businesses are affected by the new digitality paradigm (RANTALA; UKKO; SAUNILA; PUOLAKOSKI *et al.*, 2019). The resistance of actors who feel harmed by the generated innovations can cause institutional turbulence, limiting the economic opportunities of digital entrepreneurship (GEISSINGER; LAURELL; SANDSTRÖM; ERIKSSON *et al.*,

2019). Furthermore, according to (RODRIGUES; DE NORONHA, 2021), the digital business model adopted by startups can support traditional businesses facing systemic crises. Analyzing the context of the COVID-19 pandemic, the authors list three main actions, namely (1) the adoption of new digital platforms; (2) strategies to increase the network of partners; and (3) adaptations in the provision of payment services. Access to financial resources for developing digital entrepreneurs is vital to leverage the digital innovation process, especially in emerging markets (BALODI; JAIN; DAS, 2021; TANRıKULU; ERMIŞ, 2021).

2.3 Unicorns

Unicorns are companies whose value exceeds US$1 billion. The term “unicorn” was coined by Aileen Lee, founder of VC fund Cowboy Ventures in 2013 (LEE, 2013). In Lee’s paper (2013), she states that the process of becoming a unicorn is not a sprint race but a marathon. Observing 39 companies in her studied published in 2013, she stated it takes seven years on average for the company´s value to exceed US$ 1 billion. Lee’s paper (2013) also pointed out the founder´s background is from well-known universities with technical degrees. Lee stated that unicorns tend to raise a lot of capital over time (beyond Series A). Additional series seed funding of a startup may go further to Series B, C, D, or E (series are new cycles of raising investments, depending on the potential of the business and the market’s expansion possibility. The amount of capital-raising on each series is not defined previously). Unicorns play an essential role as catalysts of innovation and often impact regional economies (ACS; STAM; AUDRETSCH; O'CONNOR, 2017). JINZHI e CARRICK (2019) conducted a two-stage case study involving 68 Chinese unicorns, followed by a deeper analysis of two of them.

The authors identified three main catalysts: strategic alliances, strong government relations, and founders with appropriate experience and skills. CHILLAKURI; VANKA e MOGILI (2020) point out the difficulty of Indian startups, usually lacking elements found in sustainable ecosystems, such as government support, elimination of red tape, access to investment, and mentoring programs. COWDEN; BENDICKSON; BUNGCAYAO e WOMACK (2020) argue that unicorn leaders must operate in an environment that balances corporate governance mechanisms because unicorns are organizations that operate in environments of extreme uncertainty, where experimentation and learning are present more often than in traditional businesses (RIES, 2011). Finally, studying the challenge of creating startups that become sustainable unicorns, AU-YONG-OLIVEIRA; COSTA; GONÇALVES e BRANCO (2018) proposed a theoretical framework. The relevance of their study lies in the

identification of the fact that unicorns, when facing the pains of growth, must acquire and enhance four capabilities: (1) constant reformulation, (2) efficient anticipation, (3) profit generation, and (4) valuation control. Moreover, the digitalization of the value chain is also a challenge when the organization considers internationalization (VADANA; TORKKELI; KUIVALAINEN; SAARENKETO, 2019). In the next section, we define the path taken to analyze Company A (the case study of this paper).

3. Methodology

3.1 Bibliographic portfolio

The papers used in this research were extracted from the Scopus and Web of Science databases. The databases were consulted in two phases, aiming to extract papers containing (1) documents on the topic “digital business” and (2) on the topic “unicorns,” as explained in detail next.

3.1.1 Phase I

Avoiding the potential loss of relevant papers, generic search terms were chosen (1) “digital business” and (2) “digital entrepreneurship”, on both bases. The queries used at phase I are shown in Table 1. The complete process is presented in Figure 1. In the first rounds of extraction, we use the terms “startup” and “startup”. However, the term “digital business” proved to be more appropriate, as it returned more complete results. Next, we use the term “unicorn”, which allowed new papers to be added to the base. Thus, 307 documents were found, downloaded, and incorporated into the portfolio.

3.1.2 Phase II

Papers on the topic “unicorns” were extracted according to the parameters presented in Table 2. The complete process is presented in Figure 2. Thus, 26 documents were found, downloaded, and incorporated into the total portfolio. Using the software VOS Viewer (Figure 3), a heat map was built containing the occurrences of the keywords of the papers (Phases I and II). The highest occurrence of words is concentrated in the middle. The small distance between the clusters formed demonstrates the homogeneity of the portfolio used in the research.

3.2 Single case study

Despite the lack of consensus on the appropriate criteria for evaluating qualitative studies, methodological consistency (DIXON-WOODS; SHAW; AGARWAL; SMITH, 2004) and rigor in interpreting results (LINCOLN; LYNHAM; GUBA, 2011) are often considered to analyze the research design. In addition, problems regarding the validation of the qualitative study are mitigated through appropriate techniques, such as the triangulation between research and theories (LEUNG, 2015; MARIOTTO; ZANNI; MORAES, 2014). The approach used to study this case is exploratory (YIN, 2009), identifying objective and subjective elements present in the narrative of interviewees. From this step, we then conducted the analytical approach from the primary data collected and then confronted the results with existing theories. Finally, following (EISENHARDT, 1989), we took enfolding literature comparison with conflicting literature. It is worth mentioning that case studies typically combine data collection methods such as interviews, questionnaires and observations. Company A was founded in 2018 in Sao Paulo, the biggest Brazilian city (both in the gross domestic product (GDP) and population), and operates in the real estate sector (in what has also been called proptech). The company has been exploring opportunities in a traditional sector that usually offers little space and willingness for innovation. Even so, the company became a unicorn in Brazil faster than any other: in only 16 months.

The first Brazilian unicorn was created in 2012 in Sao Paulo and surpassed US$1 billion in market value in 2018 (six years later). Company A's main digital competitor in Brazil was founded in 2013 and became a unicorn as late as 2019. Company A's business model is called online direct home-buying. This business model is unique in Brazil and consists of purchasing a home from its owner, improving it with technology and other methods, and rapidly listing it on the market. The company gains from the appreciation and protects itself by charging a fee from the owner, which protects the company from depreciation. This model is attractive because it allows sellers to sell their homes immediately. For the buyer, the transaction costs are reduced due to the online direct home-buying model. However, the properties must comply with specific characteristics defined by geographical region, size and materials used in the construction. RBV emphasizes the analysis from the perspective of resources and not from products and services generated (Wernerfelt, 1984). Thus, we consider it to be adequate for the context of this research. According to RBV, economic value is created by co-specialization by either increasing the willingness of customers to pay for products or services or reducing other costs (BARNEY; KETCHEN JR; WRIGHT, 2021). In 2019 and 2020, acquisitions were made to improve new fronts (Table 3). After two years of operation, the growth made the company reach the number of 700 employees (of which 200

were hired during the pandemic of COVID-19). This hiring was also due to the expansion of operations to Rio de Janeiro, the second largest Brazilian city.

Baseline	Parameter
Scopus	TITLE-ABS-KEY ("digital business" OR "digital entrepreneurship") ** all years; * all themes*
Web of Science	TOPIC: ("digital business" OR "digital entrepreneurship") Refined by: WEB OF SCIENCE CATEGORIES: (MANAGEMENT OR BUSINESS) Timespan: All years. Indexes: SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI.

Table 1: Queries used in Phase I

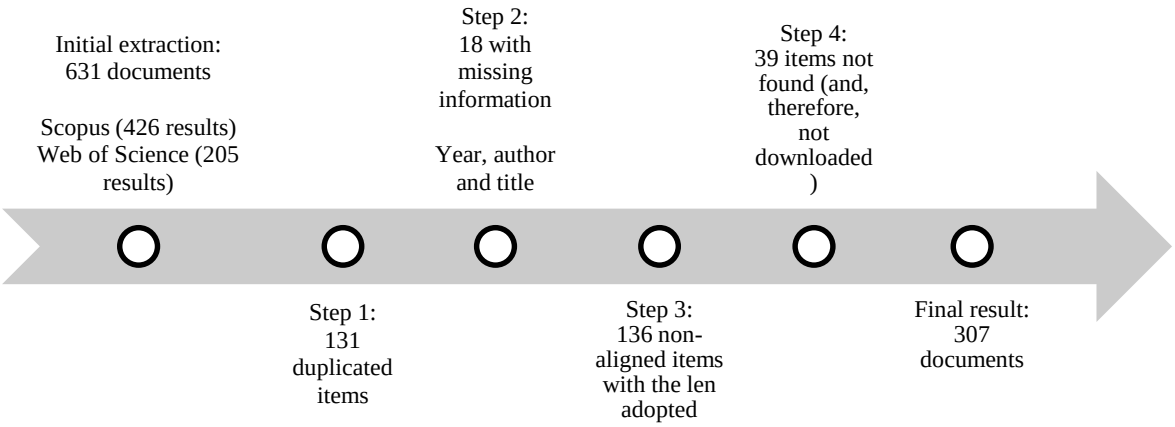

Figure 1: Results of paper extraction (Phase 1)

Baseline	Parameter
Scopus	TITLE-ABS-KEY ("unicorn" AND "entrepreneurship") ** all years; * all themes*
Web of Science	TOPIC: (entrepreneurship) AND TOPIC: (unicorn) Timespan: All years. Databases: WOS, DIIDW, KJD, RSCI, SCIELO. Search language=Auto.

Table 2: Queries used in Phase II

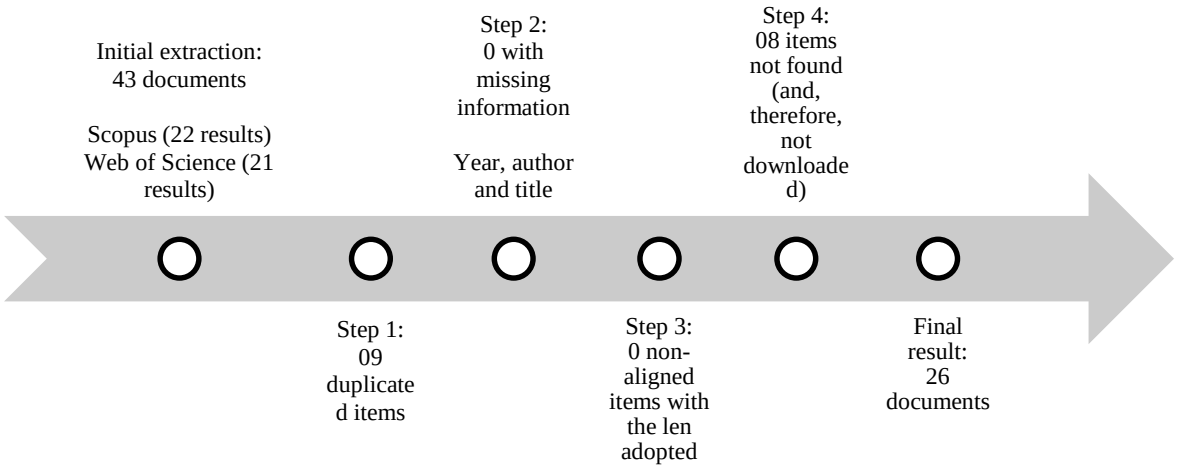

Figure 2: Results of the paper extraction (Phase 2)

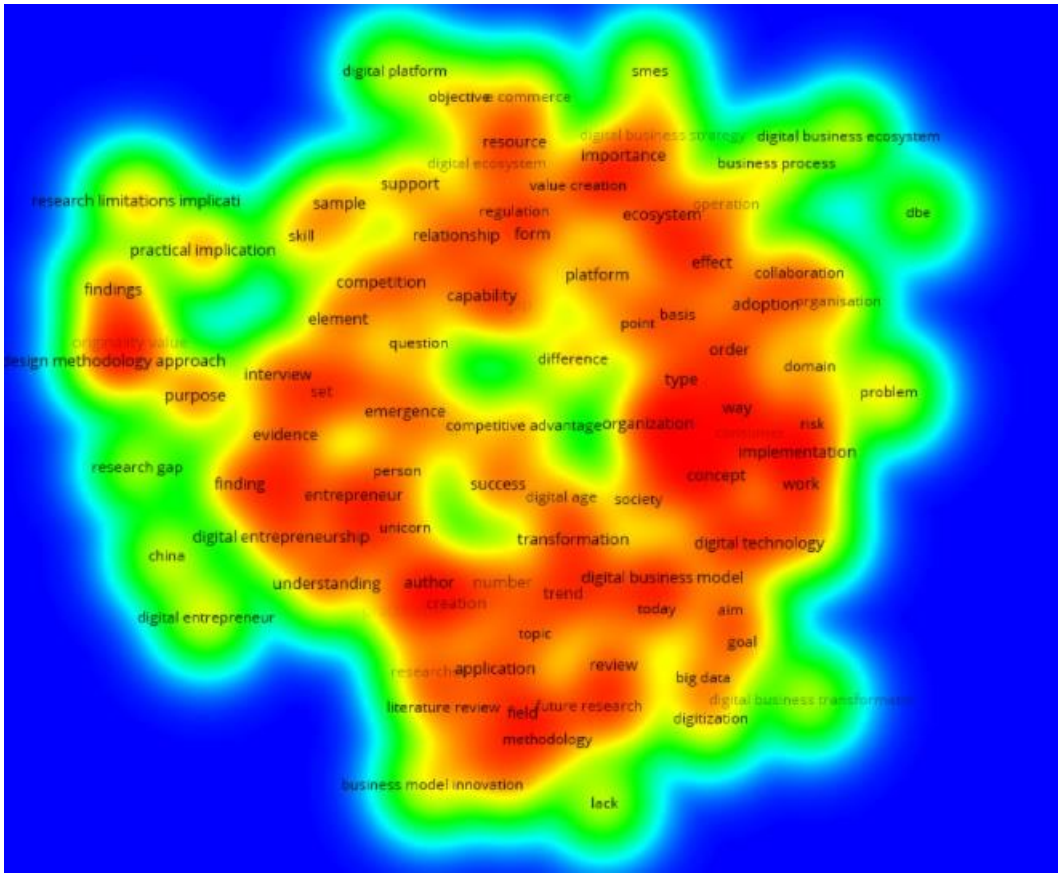

Figure 3: Analysis of the portfolio of papers (Phase I and Phase II) using the VOS Viewer

3.3 Data collection

The researchers conducted the interviews in the period between July and November 2020. The recordings of the interviews were transcribed into text. The sample selection in qualitative research considers the sample representativeness (Table 2 shows the profile of

the professionals interviewed). Methods such as triangulation with the researchers were employed to increase internal validity. The 20-h recorded file of interviews can be tracked and audited. We adopted the snowball sampling technique in which respondents are asked to encourage the participation of other people (belonging to the target audience) in the research (ALAM; BILAL; SABIR; KALEEM, 2020; CUNNINGHAM; CARMICHAEL, 2017). To define the ideal sampling, the technique takes into account the authors' judgment in order to verify the saturation point of the data collection (BHATTACHARYYA, 2020; IZADFAR; SHARIFIFAR; MOHAMMADKAZEMI, 2020; MARTINS; NUNES, 2016).

The authors asked respondents to nominate other professionals from key areas in the company to collaborate with the research. As a result, the saturation point of the 13 questions was reached after 18 interviews (Table 4). At the end of each round, we checked the answers. When the repetition of responses in each question was detected more than three times, it was considered that the saturation point had been reached for the given question (Table 5). When this happened with all questions, the interviews were terminated. Saturation, combined with the independent and in-depth analysis of the three researchers (authors of this paper), contributes to improving the research's internal validity and the research protocol.

3.3.1 Questions

The papers used in the literature review allowed us the identification of key themes that should be addressed. The questions used in the interviews are supported by the systematic literature review conducted by this research (Table 6).

3.4 Data analysis

Discourse analysis seeks to understand the meaning of narratives, considering language not only as a communication system but also as a tool to express ideas, feelings, and views of individuals about the reality contemplated (BROWN; BROWN; BROWN; YULE *et al.*, 1983; EISENHARDT, 1989; JOHNSTONE, 2017).

Company	Field of activity	Acquisition in
B	Property reform	November/2019
C	Data analysis	February/2020
D	Coliving	April/2020
E	Rentals and short stays	July/2020
F	Credit	September/2020

Table 3: Companies acquired by Company A

Identification	Organizational role	Position
Interviewee_01	Commercial	Technician
Interviewee_02	Analytics	Technician
Interviewee_03	Channels	Management
Interviewee_04	Channels	Technician
Interviewee_05	Technology	Technician
Interviewee_06	Product	Technician
Interviewee_07	Marketing	Technician
Interviewee_08	Marketing	Technician
Interviewee_09	Finance	Technician
Interviewee_10	Finance	Technician
Interviewee_11	Analytics	Management
Interviewee_12	Legal	Management
Interviewee_13	Human resources	Technician
Interviewee_14	Human resources	Technician
Interviewee_15	Human resources	Technician
Interviewee_16	Technology	Technician
Interviewee_17	Technology	Technician
Interviewee_18	Legal	Management

Table 4: Interviewee's data

Questions	Saturation point reached in the following interview
Q_01	8th
Q_02	11th
Q_03	18th
Q_04	14th
Q_05	6th
Q_06	18th
Q_07	12th
Q_08	18th
Q_09	18th
Q_10	18th
Q_11	12th
Q_12	12th
Q_13	14th

Table 5: Saturation point

The technique was used in the effort to analyze the audio recorded interviews, guiding the authors in understanding the interviewees' speeches from their social context, which may impact their perception of reality. For example, a company's collaborative and social aspects and the actors that compose it (including managers and employees) often generate subjective and contradictory perceptions regarding the relevant issues and themes of professional daily life. The authors analyzed the transcript of the 18 interviews, identifying the critical elements exposed by the professionals interviewed. The authors were guided by the main objective of the paper, each of the questions used in the interviews, and the knowledge of the organization that was progressively acquired. This allowed them to fill gaps and align conflicting views observed during the interviews. When necessary, the

interviewees were consulted afterward to clarify points that were not entirely understood in the analysis of the transcriptions.

ID	Question	References
Q01	What elements were predominant for the choice of the real estate sector by the partners?	CARROLL & CASSELMAN, 2019; KONYA-BAUMBACH; SCHUHMACHER; KUESTER E KUHAREV (2019)
Q02	How does the company track and incorporate changes in its customers and user´s profile?	KONYA-BAUMBACH; SCHUHMACHER; KUESTER E KUHAREV (2019); KÖNIG; UNGERER; BALTES E TERZIDIS (2019); PANDA (2019)
Q03	What strategies does the company use to deal with copycats of its products and services?	AVERSA; HERVAS-DRANE E EVENOU (2019)
Q04	What are the most relevant stakeholders?	LLEWELLYN (2020); SUSSAN E ACS (2017); WHITE (2012); HOFMANN E GIONES (2019)
Q05	How does the presence/absence in a digital ecosystem enhance the competitiveness of the company?	GHOSH (2002); BELIAEVA; FERASSO; KRAUS E DAMKE (2019)
Q06	Are the employees encouraged to act like entrepreneurs?	LOCORO & RAVARINI (2019); SOUSA E ROCHA (2019)
Q07	How are the new ideas and projects from employee evaluated? And how are successful solutions rewarded?	LOCORO & RAVARINI (2019); SOUSA E ROCHA (2019)
Q08	What leadership and management skills are most needed to maintain the company's growth?	LOCORO & RAVARINI (2019); SOUSA E ROCHA (2019)
Q09	What individual contribution skills are most demanded by the company?	STOIAN E TOHANEAN (2019)
Q10	How does the company deal with the pains of organizational growth?	VADANA; TORKKELI; KUIVALAINEN E SAARENKETO (2019)
Q11	What are the main strengths and weaknesses of the Brazilian business environment, as an emergent economy? How do they positively and negatively affect digital businesses?	VALDEZ-DE-LEON (2019); PIN (2014) (BOTH AUTHORS ANALYZE EMERGENT ECONOMIES)
Q12	How can digital companies contribute to overcoming the weaknesses observed?	VALDEZ-DE-LEON (2019); PIN (2014)
Q13	How the theme of sustainability – environmental and social – is addressed in the organization's daily life?	RANTALA; UKKO; SAUNILA; PUOLAKOSKI *ET AL.* (2019)

Table 6: Questions and sources

4. Results and discussion

In this section, we analyze the transcriptions of the 18 interviews and the corresponding literature. The organization follows the same sequence used in the interview questions. The company adds value in a traditional sector and explores the RBV through its VRIO analysis,

as valuable (V), rare (R), inimitable (I), and organizationally (O) embedded at the beginning (BARNEY, 1991; 1996). All session is analyzed through VRIO framework.

Addressing the potential of innovative new businesses, RIES (2011) argues that a successful business should offer exponential value and growth over time. Housing is a topic of great social relevance due to chronic deficiencies often observed in emerging countries (MARTINEZ DY, 2019; MCADAM; CROWLEY; HARRISON, 2019), and “it is a sector historically marked by inefficiency, bureaucracy, and customer experience below expectations, and not keen to accelerating changes through technology” (Interviewee_01). Here, we apprehend lesson one: efficient investment attraction in a market with a backlog of demand.

The experience accumulated by one of the partners, a company focused on Sao Paulo prime neighborhoods, contributed significantly to the sector selection. “In this period, it worked primarily with an elderly population – supposedly averse to technology – which was a challenge” (Interviewee_08) and a rare occurrence (R) that, incidentally, is highlighted by KONYA-BAUMBACH; SCHUHMACHER; KUESTER e KUHAREV (2019), when they point out that operational excellence is the basis of user experience by gradually acquiring the confidence to using technology. “The company is concerned with strengthening its brand by means of establishing trustworthy relationships to increase growth” (Interviewee_09), primarily through electronic word-of-mouth (MIHARDJO; SASMOKO; ALAMSJAH; ELIDJEN, 2019). “The company conducts tests of products and services aimed at customers and brokers, collecting feedback and adopting solutions according to the response of these audiences” (Interviewee_01). “The acquired know-how materializes in the business rules” (Interviewee_16) and “applications developed to support internal teams” (Interviewee_18). The company growth is due to applying the Lean Startup Approach (LSA), as GHEZZI (2019) pointed out, although the author did not consider the real estate company in its original work. Here, we apprehend lesson two: rapid experimentation of new products and services.

Among the techniques used and commented on during the interviews is the persona. “It is helpful to understand the current and new niches of action” (Interviewee_07) for accelerating the experimentation of new solutions (WHITE, 2012). This can often prevent one from considering the (digital) business model only from the technology aspect (SLYWOTZKY; MORRISON, 2001), as if technical innovation was, by itself, a guarantee of customer satisfaction. This is valuable (V) and organizationally (O) embedded at the beginning.

In addition, the entry into the credit market, through the acquisition of a fintech company, and the exploitation of a residential real estate fund offer constituted differential ingredients for company A. “The company’s business model has significant entry barriers, including the large volume of capital required to operate” (Interviewee_01). Another important aspect is the company’s use of resources as data technology and digital innovation. Data science dealing requires a team of highly well-trained people (Interviewee_01; Interviewee_11). Besides, establishing trustworthy relationships with brokers is also regarded as an essential competitive advantage (Interviewee_01; Interviewee_04; Interviewee_08), which is in line with the findings of KONYA-BAUMBACH; SCHUHMACHER; KUESTER e KUHAREV (2019). The authors argued that positive customer ratings might serve as a trustworthiness signal for digital innovations. This is inimitable (I) at the beginning. Substitutability (BARNEY, 1991) is not easy to have in this context due to the innovativeness of the solutions. Here is lesson three: use of data and digital innovation as tech resources.

The generated relationship networks are among the potential competitive advantages for digital companies born and raised with the support of university innovation agencies (THOMAS; AUTIO, 2020). “The company was not incubated in an innovation agency, but the fact that experienced partners founded it facilitated the business designing and establishment” (Interviewee_02). The development of these relationships considered, from the beginning, that real estate brokerage is often regarded as a low added value activity. “Indirectly, the company has been helping to rescue the dignity and confidence of the realtor profession” (Interviewee_04). The establishment of key partnerships is valuable (V), and it confirms the findings of AL-MAMARY; ABDULRAB; ALWAHEEB e ALSHAMMARI (2020). Then comes lesson four: improvement in communication and relationship with brokers through digital platforms.

“The company was benefited from its partners’ experience” (Interviewee_03). “This fact also contributed to the attraction of venture capital investments to bear the costs of real estate operation and acquisition” (Interviewee_01), as mentioned earlier. The fact that the fastestgrowing startup company in Brazilian history does not come from an incubator is a finding that collides with other authors (CARAYANNIS; VON ZEDTWITZ, 2005; HATAKEYAMA; DE MELO PINTO, 2020; TSCHANZ; CRISTO; DELGADO; HIROZ *et al.*, 2020).

“Company A has become a hub of important actors in the real estate sector” (Interviewee_09), predicting that, in the future, the company itself could be the chain’s strong

link, stimulating the launch of new businesses (HOFMANN; GIONES, 2019). It is valuable (V) and opportunity-driven. Here comes lesson five: design of a consistent innovation strategy and partnerships.

The company's fast growth follows CAVALLO; GHEZZI; DELL'ERA e PELLIZZONI (2019) findings that show the role played by venture capital funds in the scaleup phase. Our own work confirms this finding. The fast INMR attraction of the investors is related to a business model that has thrived in California (Open Door Labs), then being replicated for the first time in an emerging economy and a traditional sector of a dynamic city. "These ingredients seem the proper combination for the fast growing startup" (Interviewee_02). Inimitable (I) and organizationally (O) embedded at the beginning. Then, lesson six is connection with startups (matchmaking) to solve company demands.

In Series A, the company was able to raise about 20 million dollars. In Series B, it raised approximately 70 million, and in Series C, 175 million. In addition, the company participates in some real estate funds in Brazil, in which over 100 million dollars are available to execute their operation. With all these investments, in January 2020, the company reached the market value of 1 billion dollars and became the fastest unicorn in Brazilian history (Interviewee_02). Contrary to CHILLAKURI; VANKA e MOGILI (2020), who stressed the difficulty of a startup to attract investors in emerging economies, company A was able to attract investors until Series D.

In addition, the attitude of business owners is part of a startup's very essence (RIES, 2011). This is corroborated by the professionals (Interviewee_16; Interviewee_17) and is regarded as extremely valuable (Interviewee_02; Interviewee_03; Interviewee_05; Interviewee_06; Interviewee_13).

"Although there is no formal program for the submission of ideas, employees have, within the limits considered in the OKRs (Objectives and Key Results), autonomy to test proposals that contribute to activity improvement" (Interviewee_14). In cases where greater responsibility is involved, leaders, CDO (Chief Digital Officer), and CIO (Chief Information Officer) evaluate proposals from the employees, which confirms the high quality of human resources. Thus, it is possible to see that analytical skills are essential but not sufficient for forming high-performance teams (STOIAN; TOHANEAN, 2019). Without the commitment of the leaders (BYGSTAD; AANBY; IDEN, 2017; LOCORO; RAVARINI, 2019), the competences lose their vigor. This resource is also valuable (V).

Interviewee 2 stresses out that one founder is graduated from Harvard and the other from Wharton. The founders' skills are in tune with the findings of SOUSA e ROCHA (2019)

and RATZINGER; AMESS; GREENMAN e MOSEY (2018). Founders' higher education plays a significant role in the probability of receiving funding (RATZINGER; AMESS; GREENMAN; MOSEY, 2018). This is also in tune with Lee's assumption (LEE, 2013) that the founders of unicorns come from well-known universities and hold technical degrees, and with JINZHI e CARRICK (2019), who emphasize the appropriate skills and experience of the founders. According to BARNEY; KETCHEN JR e WRIGHT (2021), managers and entrepreneurs can be essential to value creation in aggregating resources and capabilities. It is valuable (V) and signals lesson seven: capable employees (CDO, CIO) and teams as human resources.

Regarding the sustainability practices, the company helps, through a partnership with a social program, the renovation of properties for people living in poor communities in Sao Paulo (Interviewee_03). Internally, the company has been discussing topics such as racial and gender diversity (Interviewee_02; Interviewee_03; Interviewee_04; Interviewee_10). "The recruitment process does not consider the school attended by a candidate nor his English fluency, but his achievements and results and his projected potential" (Interviewee_15). Thus, digital businesses can accelerate the adoption of sustainable practices using technology (CHEN, 2019) and promote financial performance by improving management skills (UKKO; NASIRI; SAUNILA; RANTALA, 2019).

Conversely, various interviewees mentioned some of the chronic deficiencies of the Brazilian environment (and other emerging economies), such as (1) excessive taxes, (2) bureaucracy, (3) very plastered labor laws and (4) lack of transparency. In their view, some of the company's internal practices can mitigate the impact of such deficiencies, valuing results more than compliance with schedules (Interviewee_10; Interviewee_04), and "the search for solutions and establishment of transparent relationships with clients, transcending bureaucracy" (Interviewee_04).

"The historical falling of the interest rate in Brazil can bring many financing opportunities" (Interviewee_02). A major limitation for the area is that there is no standard interest table for the real estate sector; therefore, "pricing remains a significant challenge" (Interviewee_08). Overcoming this and other chronic problems generated by institutional voids (ALEIDI; CHANDRAN, 2018; MCADAM, 2020; MCADAM; CROWLEY; HARRISON, 2019) can be achieved with cooperation between players in the sector. It is valuable (V). According to BARNEY (1991), when the competitive advantages are based on complex social phenomena, the probability of other firms' imitating is significantly lower.

5. Final remarks

From our study, we apprehended seven lessons, namely (1) efficient investment capture in a market with a backlog of demand, confirming the findings of CAVALLO; GHEZZI; DELL'ERA e PELLIZZONI (2019); (2) rapid experimentation of new products and services and assimilation of lessons learned, as pointed out by RIES (2011) and GHEZZI (2019); (3) use of data and digital innovation as technological resources, according to KONYA-BAUMBACH; SCHUHMACHER; KUESTER e KUHAREV (2019); (4) improvement in communication and relationship with brokers through digital platforms, what is in tune to the finding of LE DINH; VU e AYAYI (2018); (5) design of a consistent innovation strategy and partnerships, according to BELIAEVA; FERASSO; KRAUS e DAMKE (2019) and BARNEY (1996); (6) connection with startups (matchmaking) to solve company demands; and finally (7) capable employees (CDO, CIO) and teams as human resources, as we find in LOCORO e RAVARINI (2019) and RODRIGUES e DE NORONHA (2021). These lessons are according to the VRIO framework; nonetheless, we emphasize that the lessons identified by this research are not exhaustive.

Resources are significant justification for the fast-growing performance of unicorns. According to RBV, investors will be where they can appropriate the most economic value, and a firm’s resources and capabilities used to create such economic value must be rare (BARNEY; KETCHEN JR; WRIGHT, 2021). Company A did present a rare and inimitable (at least temporarily) online direct home buying model, associated with the massive use of apps and 4G internet since 2013 in Sao Paulo.

According to ZAHRA (2021), financial resources are not enough since synchronization between intangible resources – such as the quality of the firm’s human capital – and the quality and experience of its founders/managers, is required. This observation fits well Company A. The positive reputation of the founders, associated with their relationships and networking, was also a fundamental process of attracting investments and a potential source of competitive advantage (BARNEY, 1991).

Uniting value and growth prospects in the long term, the company facilitated investors’ attraction and supported partners, managers, and teams in the ever-deeper knowledge of the needs and desires of owners, buyers and brokers. Value and growth are two aspects that should be present in a digital business with high potential for future results (RIES, 2011). The case studied reveals that value can be found in traditional sectors with pent-up demand, as real estate. Even though in GHEZZI (2019) work, none of the companies was from the

real estate sector, our work extends and corroborates his findings and confronts LEE (2013) assumption, since Company A did become a unicorn in a sprint run, not in a marathon.

The company realized the possibility of using research in data science technologies (artificial intelligence, machine learning, big data, cloud computing) as resources to simplify the purchase and sale of real estate, thus developing solutions and improving the relationship with brokers, realtors, sellers, and buyers. BARNEY; KETCHEN JR e WRIGHT (2021) state that research capabilities can sometimes generate innovative technological ideas, and according to ZAHRA (2021), the value of resources such as knowledge is defined by a combination with other resources and not only by the relation supply-demand.

Macroeconomic factors have also played a significant role in Company A's market. After a severe political and economic crisis during the period of 2014–2017 in Brazil, there has been a slow economic recovery. The basic interest rate of the Brazilian economy (SELIC) has reached INMR the lowest levels in its history: from August/2016 to August/2020, SELIC fell from 14.25 to 2% (BACEN, 2020). With the more generous supply of credit, competition among the major banks for credit demanders and low real estate prices have created the ideal conditions for generating opportunities in the real estate sector.

The answer for the research question "What makes a startup achieve unicorn status in the fastest way?" regards that is the efficient anticipation (AU-YONG-OLIVEIRA; COSTA; GONÇALVES; BRANCO, 2018) in a market with chronic deficiencies as often observed in emerging countries is vital to understand one of the fastest companies to reach unicorn status in the whole world. In addition, the exploration of valuable opportunities in a traditional sector that usually observed little space and willingness for innovation (MARTINEZ DY, 2019; MCADAM; CROWLEY; HARRISON, 2019) is also necessary. Resources allocated to a specific context in a specific geographic region shift the attention away from their absolute value to the timing of aggregating them. This time issue is new to the RBV (it is noteworthy that time was understood in this study as the speed to become a unicorn).

Despite the research method chosen to avoid misinterpretation of the questions and bias, this paper shows as a limitation the data collected from a single case study in a specific sector. Therefore, future studies should analyze the relationship between the founders and the institutional approach, such as the role played by incubators, accelerators, and other aspects present in the innovation ecosystems, considering different unicorn categories.

5. References

ACS, Z. J.; STAM, E.; AUDRETSCH, D. B.; O'CONNOR, A. The lineages of the entrepreneurial ecosystem approach. **Small Business Economics**, 49, n. 1, p. 1-10, Jun 2017.

AL-KHATEEB, B. A. A. The conceptual framework for the examination of a successful digital entrepreneurship in 21st century. Advances in E-Business Research Series. : IGI Global**:** 126-141 p. 2019.

AL-MAMARY, Y. H. S.; ABDULRAB, M.; ALWAHEEB, M. A.; ALSHAMMARI, N. G. M. Factors impacting entrepreneurial intentions among university students in Saudi Arabia: testing an integrated model of TPB and EO. **Education and Training**, 62, n. 7-8, p. 779-803, 2020. Article.

ALAM, M. Z.; BILAL, A. R.; SABIR, S.; KALEEM, M. A. Role of engineering major in entrepreneurial intentions of engineering students: a case of Pakistan. **Education and Training**, 62, n. 7-8, p. 965-978, 2020. Article.

ALEIDI, A.; CHANDRAN, D., 2018, English, **Budding female IT entrepreneurs in Saudi Arabia: Impact of IT and institutional environment**. Association for Information Systems. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054271319&partnerID=40&md5=7041761b14f9d8ebac3c54a92a9cae85. Acesso em: 16 August 2018 through 18 August 2018.

ARLOTT, A.; HENIKE, T.; HÖLZLE, K. Digital Entrepreneurship and Value Beyond: Why to Not Purely Play Online. FGF Studies in Small Business and Entrepreneurship. : Springer**:** 1-22 p. 2019.

AU-YONG-OLIVEIRA, M.; COSTA, J. P.; GONÇALVES, R.; BRANCO, F. The rise of the unicorn: Shedding light on the creation of technological enterprises with exponential valuations. 6th World Conference on Information Systems and Technologies, WorldCIST 2018. ROCHA, A.;REIS, L. P.*, et al*. : Springer Verlag. 745**:** 967-977 p. 2018.

AVERSA, P.; HERVAS-DRANE, A.; EVENOU, M. Business model responses to digital piracy. **California Management Review**, 61, n. 2, p. 30-58, 2019. Article.

BABER, W. W.; OJALA, A.; MARTINEZ, R. Effectuation logic in digital business model transformation: Insights from Japanese high-tech innovators. **Journal of Small Business and Enterprise Development**, 26, n. 6-7, p. 811-830, 2019. Article.

BALODI, K. C.; JAIN, R.; DAS, R. Strategy, business model, and innovation at Rivigo: Is Relay-as-a-Service the way forward? **Journal of Information Technology Teaching Cases**, 2021. Article.

BARNEY, J. B. Firm resources and sustained competitive advantage. **Journal of management**, 17, n. 1, p. 99-120, 1991.

BARNEY, J. B. The resource-based theory of the firm. **Organization science**, 7, n. 5, p. 469-469, 1996.

BARNEY, J. B.; KETCHEN JR, D. J.; WRIGHT, M. Resource-Based Theory and the Value Creation Framework. **Journal of Management**, p. 01492063211021655, 2021.

BEI, W.; JIN, C.; IEEE. **E-innovation: A new innovation platform based on the Internet**. New York: Ieee, 2005. 519-523 p. (2005 IEEE International Engineering Management Conference, Vols 1 and 2. 0-7803-9139-X.

BELIAEVA, T.; FERASSO, M.; KRAUS, S.; DAMKE, E. J. Dynamics of digital entrepreneurship and the innovation ecosystem: A multilevel perspective. **International Journal of Entrepreneurial Behaviour and Research**, 26, n. 2, p. 266-284, 2019. Article.

BERGER, E. S. C.; VON BRIEL, F.; DAVIDSSON, P.; KUCKERTZ, A. Digital or not – The future of entrepreneurship and innovation: Introduction to the special issue. **Journal of Business Research**, 2019. Editorial.

BHATTACHARYYA, S. S. Explicating firm international corporate social responsibility initiatives. **Review of International Business and Strategy**, 2020.
BOOJIHAWON, D. K.; NGOASONG, Z. M. Emerging digital business models in developing economies: The case of Cameroon. **Strategic Change**, 27, n. 2, p. 129-137, 2018. Article.
BROWN, G.; BROWN, G. D.; BROWN, G. R.; YULE, G. *et al.* **Discourse analysis**. Cambridge university press, 1983. 0521284759.
BYGSTAD, B.; AANBY, H. P.; IDEN, J. Leading digital transformation: The Scandinavian way. 8th Scandinavian Conference on Information Systems, SCIS 2017. STIGBERG, S.;KARLSEN, J.*, et al*. : Springer Verlag. 294**:** 1-14 p. 2017.
CARAYANNIS, E. G.; VON ZEDTWITZ, M. Architecting gloCal (global–local), real-virtual incubator networks (G-RVINs) as catalysts and accelerators of entrepreneurship in transitioning and developing economies: lessons learned and best practices from current development and business incubation practices. **Technovation**, 25, n. 2, p. 95-110, 2005.
CARROLL, R.; CASSELMAN, R. M. The Lean Discovery Process: the case of raiserve. **Journal of Small Business and Enterprise Development**, 26, n. 6-7, p. 765-782, 2019. Article.
CAVALLO, A.; GHEZZI, A.; DELL'ERA, C.; PELLIZZONI, E. Fostering digital entrepreneurship from startup to scaleup: The role of venture capital funds and angel groups. **Technological Forecasting and Social Change**, 145, p. 24-35, 2019. Article.
CBINSIGHTS. **Global unicorn club market map**. CB Insights: 2022/03/29. 2022.
CHEN, Y. S. Sustainable development through franchise innovation in the digital economy. *In*: **Improving business performance through innovation in the digital economy**: IGI Global, 2019. p. 39-57.
CHILLAKURI, B.; VANKA, S.; MOGILI, R. Linking sustainable development to startup ecosystem in India - A conceptual framework. **International Journal of Business and Globalisation**, 25, n. 2, p. 139-153, 2020. Article.
COWDEN, B. J.; BENDICKSON, J. S.; BUNGCAYAO, J.; WOMACK, S. Unicorns and agency theory: Agreeable moral hazard? **Journal of Small Business Strategy**, 30, n. 2, p. 17-25, 2020.
CUNNINGHAM, N.; CARMICHAEL, T., 2017, **Sampling, interviewing and coding: Lessons from a constructivist grounded theory study**. Academic Conferences International Limited. 78-85.
DIXON-WOODS, M.; SHAW, R. L.; AGARWAL, S.; SMITH, J. A. The problem of appraising qualitative research. **BMJ Quality & Safety**, 13, n. 3, p. 223-225, 2004.
DREW, S. Strategic uses of e-commerce by SMEs in the east of England. **European Management Journal**, 21, n. 1, p. 79-88, 2003. Article.
EISENHARDT, K. M. Building theories from case study research. **Academy of management review**, 14, n. 4, p. 532-550, 1989.
GEISSINGER, A.; LAURELL, C.; SANDSTRÖM, C.; ERIKSSON, K. *et al.* Digital entrepreneurship and field conditions for institutional change– Investigating the enabling role of cities. **Technological Forecasting and Social Change**, 146, p. 877-886, 2019. Article.
GHEZZI, A. Digital startups and the adoption and implementation of Lean Startup Approaches: Effectuation, Bricolage and Opportunity Creation in practice. **Technological Forecasting and Social Change**, 146, p. 945-960, 2019. Article.
GHEZZI, A.; CAVALLO, A. Agile Business Model Innovation in Digital Entrepreneurship: Lean Startup Approaches. **Journal of Business Research**, 110, p. 519-537, 2020. Article.
GHOSH, P. The Advent of Information Industrials. **Journal of Business Strategy**, 23, n. 5, p. 43-47, 2002. Review.
GRABRA, I.; MANOLE, A. L. Assessment of progressiveness of Polish and Romanian enterprises. **Polish Journal of Management Studies**, 16, n. 1, p. 41-54, 2017. Article.

HÄNNINEN, M. Review of studies on digital transaction platforms in marketing journals. **International Review of Retail, Distribution and Consumer Research**, 2019. Article.
HART, M.; BONNER, K.; PRASHAR, N.; RI, A. *et al.* Global Entrepreneurship Monitor: United Kingdom 2019 Monitoring Report. 2020.
HATAKEYAMA, K.; DE MELO PINTO, N., 2020, English, **The innovation system in the brazilian scenario**. University of Pretoria. 795-806. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85092643221&partnerID=40&md5=67c88b66fdaec4082e1495813155bbd4. Acesso em: 13 September 2020 through 17 September 2020.
HIRTE, R.; MUNCH, J.; DROST, L., 2018, English, **Incubators in multinational corporations: Development of a corporate incubator operator model**. Institute of Electrical and Electronics Engineers Inc. 195-202. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85047533313&doi=10.1109%2fICE.2017.8279889&partnerID=40&md5=800778aa0a898d544b220fe9289d8d39. Acesso em: 27 June 2017 through 29 June 2017.
HOFMANN, M.; GIONES, F. Entrepreneurship as an Innovation Driver in an Industrial Ecosystem. FGF Studies in Small Business and Entrepreneurship. : Springer**:** 99-121 p. 2019.
IZADFAR, V.; SHARIFIFAR, F.; MOHAMMADKAZEMI, R. The Business Model of Sports Academies with an Emphasis on Value Proposition and Customer Segments. **Annals of Applied Sport Science**, 8, n. 4, 2020.
JINZHI, Z.; CARRICK, J. The Rise of the Chinese Unicorn: An Exploratory Study of Unicorn Companies in China. **Emerging Markets Finance and Trade**, 55, n. 15, p. 3371-3385, 2019. Article.
JOHNSTONE, B. **Discourse analysis**. John Wiley & Sons, 2017. 1119257700.
KÖNIG, M.; UNGERER, C.; BALTES, G.; TERZIDIS, O. Different patterns in the evolution of digital and non-digital ventures' business models. **Technological Forecasting and Social Change**, 146, p. 844-852, 2019. Article.
KONYA-BAUMBACH, E.; SCHUHMACHER, M. C.; KUESTER, S.; KUHAREV, V. Making a first impression as a start-up: Strategies to overcome low initial trust perceptions in digital innovation adoption. **International Journal of Research in Marketing**, 36, n. 3, p. 385-399, 2019. Article.
LE DINH, T.; VU, M. C.; AYAYI, A. Towards a living lab for promoting the digital entrepreneurship process. **International Journal of Entrepreneurship**, 22, n. 1, 2018. Article.
LEE, A. Welcome to the unicorn club: Learning from billion-dollar startups. **Cowboy Ventures (blog)**, 2013.
LEUNG, L. Validity, reliability, and generalizability in qualitative research. **Journal of family medicine and primary care**, 4, n. 3, p. 324, 2015.
LINCOLN, Y. S.; LYNHAM, S. A.; GUBA, E. G. Paradigmatic controversies, contradictions, and emerging confluences, revisited. **The Sage handbook of qualitative research**, 4, n. 2, p. 97-128, 2011.
LLEWELLYN, A., Erick. Innovation ecosystems in management: An organizing typology. **Oxford Research Encyclopaedia of Business and Management**, 2020.
LOCORO, A.; RAVARINI, A. The CIO and CDO Socio-technical Roles in the age of digital business transformation: An interpretive study. **Lecture Notes in Information Systems and Organisation**, 28, p. 235-245, 2019. Book Chapter.
MAHMUD, M. Impact analysis of digital transformations on entrepreneurial ecosystem in the eastern province of Saudi Arabia. **Journal of Entrepreneurship Education**, 23, n. 1, 2020. Article.

MARIOTTO, F. L.; ZANNI, P. P.; MORAES, G. H. S. What is the use of a single-case study in management research? **Revista de Administração de Empresas**, 54, n. 4, p. 358-369, 2014.
MARTINEZ DY, A. Levelling the playing field? Towards a critical-social perspective on digital entrepreneurship. **Futures**, 2019. Article.
MARTINS, J.; NUNES, M. B. The temporal properties of e-learning: an exploratory study of academics' conceptions. **International Journal of Educational Management**, 2016.
MCADAM, M. Digital girl: cyberfeminism and the emancipatory potential of digital entrepreneurship in emerging economies. **Small Business Economics**, 2020. Article.
MCADAM, M.; CROWLEY, C.; HARRISON, R. T., 2018, English, **Institutional voids and the emancipatory potential of digital entrepreneurship: Evidence from Saudi Arabia**. Academy of Management. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054571272&doi=10.5465%2fAMBPP.2018.58&partnerID=40&md5=5f2ef226bfd14f1ca57a0fb9cf7a5720. Acesso em: 10 August 2018 through 14 August 2018.
MCADAM, M.; CROWLEY, C.; HARRISON, R. T. “To boldly go where no [man] has gone before” - Institutional voids and the development of women's digital entrepreneurship. **Technological Forecasting and Social Change**, 146, p. 912-922, 2019. Article.
MET, İ.; UYSAL, E. U.; ÖZKAYA, K. S.; ORÇ, E. Key Success Factors for Strategic Management in Digital Business. Contributions to Management Science. : Springer**:** 283-304 p. 2020.
MIHARDJO, L. W. W.; SASMOKO; ALAMSJAH, F.; ELIDJEN. The influence of digital customer experience and electronic word of mouth on brand image and supply chain sustainable performance. **Uncertain Supply Chain Management**, 7, n. 4, p. 691-702, 2019. Article.
NGOASONG, M. Z. Digital entrepreneurship in a resource-scarce context: A focus on entrepreneurial digital competencies. **Journal of Small Business and Enterprise Development**, 25, n. 3, p. 483-500, 2018. Article.
PANDA, B. K. Application of business model innovation for new enterprises: A case study of digital business using a freemium business model. **Journal of Management Development**, 2019. Article.
PETER, M. K.; KRAFT, C.; LINDEQUE, J. Strategic action fields of digital transformation: An exploration of the strategic action fields of Swiss SMEs and large enterprises. **Journal of Strategy and Management**, 13, n. 1, p. 160-180, 2020. Article.
PIN, C. Cluster policies and digital entrepreneurship in Ile-de-France (France) and in Lombardy (Italy). **Innovations**, 44, n. 2, p. 79-104, 2014. Article.
RANTALA, T.; UKKO, J.; SAUNILA, M.; PUOLAKOSKI, H. *et al.* Creating sustainable customer value through digitality. **World Journal of Entrepreneurship, Management and Sustainable Development**, 15, n. 4, p. 325-340, 2019. Article.
RATZINGER, D.; AMESS, K.; GREENMAN, A.; MOSEY, S. The impact of digital start-up founders’ higher education on reaching equity investment milestones. **The Journal of Technology Transfer**, 43, n. 3, p. 760-778, 2018.
RAVARINI, A.; LOCORO, A.; MARTINEZ, M., 2020, English, **Digital transformation projects maturity and managerial competences: A model and its preliminary assessment**. Springer Heidelberg. 261-272. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070599892&doi=10.1007%2f978-3-030-23665-6_19&partnerID=40&md5=dcb25407c8104167706c560a2f671fed. Acesso em: 12 October 2018 through 13 October 2018.

REMANE, G.; HANELT, A.; NICKERSON, R. C.; KOLBE, L. M. Discovering digital business models in traditional industries. **Journal of Business Strategy**, 38, n. 2, p. 41-51, 2017. Article.

RIES, E. **The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses**. Currency, 2011. 0307887898.

RODRIGUES, C. D.; DE NORONHA, M. E. S. What companies can learn from unicorn startups to overcome the COVID-19 crisis. **Innovation & Management Review**, 2021.

SAHUT, J. M.; IANDOLI, L.; TEULON, F. The age of digital entrepreneurship. **Small Business Economics**, 2019. Article.

SANASI, S.; GHEZZI, A.; CAVALLO, A.; RANGONE, A., 2019, English, **Enacting business model change in digital startups: An exploratory multiple-case study**. Academic Conferences and Publishing International Limited. 936-942. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073339760&doi=10.34190%2fECIE.19.102&partnerID=40&md5=efb13cabffe389f6b36eea34f5e2bde5. Acesso em: 19 September 2019 through 20 September 2019.

SLYWOTZKY, A.; MORRISON, D. Becoming a digital business: it's not about technology. **Strategy & Leadership**, 29, n. 2, p. 4-9, 2001. Article.

SOUSA, M. J.; ROCHA, A. Skills for disruptive digital business. **Journal of Business Research**, 94, p. 257-263, Jan 2019. Article.

STOIAN, C. A.; TOHANEAN, D., 2019, English, **BMI in the digital era: Competitive advantage through human capital analytics**. Academic Conferences and Publishing International Limited. 366-373. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85077515740&doi=10.34190%2fMLG.19.075&partnerID=40&md5=0201db7f04119d2697e1ddfe3f20ea51. Acesso em: 14 November 2019 through 15 November 2019.

STURGEON, T. J. Upgrading strategies for the digital economy. **Global Strategy Journal**, 11, n. 1, p. 34-57, 2021.

SUSSAN, F.; ACS, Z. J. The digital entrepreneurial ecosystem. **Small Business Economics**, 49, n. 1, p. 55-73, 2017. Article.

TANGOUR, C.; GEBAUER, M.; FISCHER, L.; WINKLER, H. H. Digital Business Model Patterns of Big Pharmaceutical Companies - A Cluster Analysis. 4th International Conference on Digital Economy, ICDEc 2019. JALLOULI, R.;BACH TOBJI, M. A.*, et al*. : Springer. 358**:** 397-412 p. 2019.

TANRıKULU, F.; ERMIŞ, M. Technology Entrepreneurship and Access to Financial Resources in Turkey. Contributions to Management Science. : Springer Science and Business Media Deutschland GmbH**:** 107-120 p. 2021.

THOMAS, L. D.; AUTIO, E. **Innovation ecosystems in management: An organizing typology**. Oxford: Oxford University Press, 2020. (Oxford Research Encyclopedia of Business and Management.

TOHANEAN, D.; WEISS, P. Digital entrepreneurship and green business model innovation: Lean startup approaches. **Quality - Access to Success**, 20, n. S2, p. 630-634, 2019. Article.

TSCHANZ, R.; CRISTO, S.; DELGADO, L.; HIROZ, V. *et al.* " No Innovation Without Cooperation"–How Switzerland Innovation Promotes Cooperation Between Industry, Research and Startups. **CHIMIA International Journal for Chemistry**, 74, n. 10, p. 755-757, 2020.

UKKO, J.; NASIRI, M.; SAUNILA, M.; RANTALA, T. Sustainability strategy as a moderator in the relationship between digital business strategy and financial performance. **Journal of Cleaner Production**, 236, 2019. Article.

VADANA, I. I.; TORKKELI, L.; KUIVALAINEN, O.; SAARENKETO, S. Digitalization of companies in international entrepreneurship and marketing. **International Marketing Review**, 2019. Article.

VALDEZ-DE-LEON, O. How to Develop a Digital Ecosystem: a Practical Framework. **Technology Innovation Management Review**, 9, n. 8, p. 43-54, Aug 2019.

WHITE, M. Digital workplaces: Vision and reality. **Business Information Review**, 29, n. 4, p. 205-214, 2012. Article.

WHITLEY, E. A.; DARKING, M. Object lessons and invisible technologies. **Journal of Information Technology**, 21, n. 3, p. 176-184, 2006. Article.

WIESBÖCK, F.; HESS, T. Digital innovations: Embedding in organizations. **Electronic Markets**, 30, n. 1, p. 75-86, 2020. Article.

YIN, R. K. **Case study research: Design and methods**. sage, 2009. 1412960991.

ZAHRA, S. A. The resource-based view, resourcefulness, and resource management in startup firms: A proposed research agenda. **Journal of Management**, 47, n. 7, p. 1841-1860, 2021.

CAPÍTULO 4: Intenções empreendedoras, capital social e emoções

Apesar da complexidade das relações e diversidade de papeis existentes nos ecossistemas empreendedores atuais, a compreensão do papel do empreendedor no nascimento de novos negócios continua sendo essencial para os estudos sobre empreendedorismo. Neste capítulo, vamos abordar o subtema “intenção empreendedora”, discorrendo sobre as causas e fatores que induzem o “nascimento” de novos empreendedores.

Este é um um tema maduro de pesquisa, conforme a proposta de artigo deste capítulo. No modelo teórico e nas hipóteses apresentados, investigamos as relações das emoções positivas e negativas e do capital social adquirido, ainda não verificadas formalmente pela literatura científica. Adotamos a Teoria do Comportamento Planejado (TCP), proposta inicialmente por AJZEN (1991) como teoria de base da pesquisa.

O artigo, no idioma português, foi submetido para o periódico BASE – Revista Brasileiro de Administração e Contabilidade da Unisinos (vide comprovante de submissão no anexo 5).

ARTIGO 3 – AVALIANDO A INTENÇÃO EMPREENDEDORA DIGITAL DE JOVENS UNIVERSITÁRIOS

Contexto – O empreendedorismo digital desperta a atenção de governos, investidores e pesquisadores, que direcionam esforços e recursos para investigar as causas de seu desempenho. Os fatores que colaboram positivamente com as intenções empreendedoras são objeto de variados estudos, sendo a Teoria do Comportamento Planejado (TCP) de AJZEN (1991) a mais citada. Contudo, as relações dos três fatores da TCP com as emoções e o capital social adquirido pelo futuro empreendedor digital ainda não foram exploradas.

Objetivo – Avaliar o impacto do capital social e das emoções antecipadas (positivas e negativas) nas intenções de empreender digitalmente de jovens graduandos de instituições de ensino superior (IES) do Brasil.

Metodologia – Foram propostas 7 hipóteses. A coleta de dados foi realizada por meio de um questionário enviado a estudantes de cursos de **Administração, Engenharias e Tecnologia da Informação** de Instituições de Ensino Superior. A coleta obteve 1.110 respostas. A análise dos dados foi realizada com o auxílio da técnica de Modelagem de Equações Estruturais por Mínimos Quadrados Parciais (MEE-MQP).

Resultados – Das 7 hipóteses propostas, 4 não foram rejeitadas. Dos três subfatores da TCP, foi verificado que a Atitude é impactada de modo significativo pelo capital social e tem impacto nas intenções empreendedoras digitais. Foi verificado, ainda, que o controle do comportamento percebido exerce impacto relevante e as normas subjetivas, por sua vez, não exercem papel significante sobre as intenções empreendedoras digitais. Os resultados apontam que o capital social, por si só, não influencia as intenções empreendedoras digitais de modo significativo. As emoções antecipadas negativas não exercem poder de moderação relevante entre o capital social e as intenções empreendedoras digitais.
Conclusões – O estudo concluiu que asvivências sociais benéficas e as emoções positivas nos ambientes que frequentam podem promover o empreendedorismo. As Instituições de Ensino Superior (IES) podem ser atores desse processo, proporcionando interações reais do ambiente acadêmico com a comunidade, principalmente em ações de ensino e extensão.
Implicações práticas – O estudo espera contribuir com formuladores de políticas públicas, instituições e gestores envolvidos com o fomento de iniciativas empreendedoras, sobretudo, em países emergentes e nos ambientes acadêmicos.
Originalidade – O estudo aborda, de modo inédito, as relações dos subfatores da TCP com o capital social e as emoções antecipadas.

Palavras-chave: Empreendedorismo. Negócios digitais. Teoria do comportamento planejado. Intenção empreendedora. Emoções. Capital social.

1. Introdução

O empreendedorismo contemporâneo é, a um só tempo, tentador e desafiante. Tentador, pois, atualmente, profissionais de todas as idades recebem estímulos objetivos e subjetivos para criar novos negócios; e desafiante, pois a competitividade atual exige confiança na proposta de valor (LAGOUDAS; YOON; BOEHM; ASBELL, 2020), capacidades de gestão e adaptação, a fim de identificar e explorar oportunidades que, frequentemente, estão ocultas (SANTOSO; SOH; LARSO; CHEN, 2020). A atividade empreendedora é uma das forças mais relevantes que sustentará as economias (SUBRAMANIAN; SUBRAMANIAN; AL-HAZIAZI; SHERIMON, 2017). O empreendedorismo, tem sido instrumento fundamental para promoção da capacidade competitiva de países e para a contenção da concorrência de outras nações (PASSARO; SCANDURRA; THOMAS, 2017).

Tendo isso em vista, agentes públicos e privados tem buscado favorecer o empreendedorismo, sobretudo em setores de inovação e alta tecnologia (PASSARO; SCANDURRA; THOMAS, 2017; TRIVEDI, 2016). Dentre os desafios que envolvam a promoção do empreendedorismo, estão a criação e fomento dos ecossistemas (CAVALLO; GHEZZI; ROSSI-LAMASTRA, 2021; HUDEK; TOMINC; SIREC, 2021; NAMBISAN; BARON, 2021; PRASHANTHAM, 2021), de empresas (FAN; SCHWAB; GENG, 2021) e da criação de condições para o surgimento de novos empreendedores (HADDOUD; ONJEWU; NOWINSKI; ALAMMARI, 2022; HUANG, 2021; KAMINSKY; YERESHKO; KYRYCHENKO; TULCHINSKIY, 2021; KOWANG; APANDI; HEE; FEI *et al.*, 2021; SANSONE; UGHETTO; LANDONI, 2021).

O empreendedorismo muitas vezes assume a condição de estilo de vida, ou ainda de projeto pessoal, estimulando a autonomia e reduzindo o desemprego (IGLESIAS-SÁNCHEZ; JAMBRINO-MALDONADO; VELASCO; KOKASH, 2016; MAWSON; KASEM, 2019). STANIEWSKI e AWRUK (2016) considera a capacidade de identificar e resolver problemas como vital na ação empreendedora e citam a crença nas próprias habilidades para resolvê-los de modo criativo e efetivo. Traços de personalidade, habilidades, autogerenciamento (SLOGAR; STANIC; JERIN, 2021) e o contexto social (SHAHID; AHSEN, 2021) influenciam de modo decisivo as intenções empreendedoras.

AJZEN (1991) investigou o comportamento humano preditivo, esforçando-se por compreender como recursos psicológicos específicos – as atitudes, as normas subjetivas e o controle do comportamento percebido – podem influenciar, ou até mesmo determinar, a intenção prévia (ou planejada) de um indivíduo em agir de determinada forma, tendo em vista um objetivo. O modelo desenvolvido pelo autor é conhecido como Teoria do Comportamento Planejado (TCP).

A TCP tem sido amplamente utilizada em pesquisas sobre intenção empreendedora em países emergentes (AKINWALE; ABABTAIN; ALARAIFI, 2019; ARAFAT; SALEEM; DWIVEDI, 2020; BOGATYREVA; SHIROKOVA, 2017; DOANH, 2021; JOSHI; JOSHI; PATHAK, 2020; MAHMOOD; AL MAMUN; BIN AHMAD; IBRAHIM, 2019; SHER; ABBAS; MAZHAR; LIN, 2020; SUBRAMANIAN; SUBRAMANIAN; AL-HAZIAZI; SHERIMON, 2017; TRAN; BUI; NGUYEN; MAI, 2018; TRIVEDI, 2016), incluindo o contexto brasileiro (DA CRUZ; ALVARO, 2013; GUERRERO; URBANO; GAJÓN, 2014; LASSO; MAINARDES; MOTOKI, 2019; LASSO; MAINARDES; MOTOKI, 2018; WEGNER; THOMAS; TEIXEIRA; MAEHLER, 2020).

O método preferencial dos pesquisadores que investigam o tema é a MEE-MQP (Modelagem de Equações Estruturais por Mínimos Quadrados Parciais). Apesar da profusão de estudos, foi identificada uma oportunidade de desenvolvimento da TCP de AJZEN (1991), adicionando subfatores ainda não explorados conjuntamente pela literatura: (i) Capital Social; (ii) Emoções Positivas Antecipadas e (iii) Emoções Negativas Antecipadas, dado que essa influência combinada não foi explorada em pesquisas anteriores. Desse modo, o objetivo do artigo é investigar como a interação entre o capital social e as emoções antecipadas (negativas e positivas) influenciam as intenções de empreender digitalmente. A relevância da pesquisa fica mais explícita ao considerar que faculdades, cujos estudantes comporão a amostra do estudo, abrigam os estudantes de Administração e áreas tecnológicas, potenciais empreendedores.

Esta pesquisa apresenta, além desta introdução, a seção 2, contendo a revisão de literatura (baseado em artigos identificados na RSL realizada) sobre os temas (i) Teoria do Comportamento Planejado e Intenção Empreendedora e (ii) MEE-MQP (analisando os estudos que utilizam este método); em seguida, na seção 3, a metodologia; na seção 4 são apresentados resultados, com a discussão e análise dos dados. Na seção 5, são apresentadas as conclusões do estudo.

2. Revisão de literatura

2.1. Teoria do Comportamento Planejado

O pressuposto da teoria do comportamento planejado (AJZEN, 1991) é que os indivíduos tomam suas decisões de forma eminentemente racional, utilizando sistematicamente as informações que estão disponíveis, considerando as implicações de suas ações antes de decidirem se devem ou não comportar-se de determinada forma. Segundo esta teoria, os fatores responsáveis pela variação no comportamento relacionam a atitude pessoal, as normas subjetivas e o controle comportamental percebido (AJZEN, 1991). PENG; LI; ZHOU e SADOWSKI (2021) concluem que estes fatores podem ser moderados pela experiência, que pode contribuir para que o futuro empreendedor pese riscos e compreenda as próprias habilidades de modo mais real (IGLESIAS-SÁNCHEZ; JAMBRINO-MALDONADO; VELASCO; KOKASH, 2016). A lacuna intenção-ação é um fenômeno ocorrido quando o desejo de estabelecer uma empresa não se torna realidade (BOGATYREVA; SHIROKOVA, 2017).

A intenção empreendedora pode permanecer adormecida, mas é estável ao longo do tempo (JOENSUU-SALO; VARAMÄKI; VILJAMAA, 2015). A família (HADJIMANOLIS,

2016; TING; MOHD ROSDI; ABIDIN, 2020; VRACHEVA; ABU-RAHMA; JACQUES, 2019) e o ambiente universitário afetam a IE por meio das normas subjetivas (VRACHEVA; ABU-RAHMA; JACQUES, 2019). A confiança de empreendedores potenciais é afetada positivamente, inclusive, pela qualidade das instituições financeiras e jurídicas (SHIROKOVA; OSIYEVSKYY; BOGATYREVA; EDELMAN *et al.*, 2020).

2.1.1. Os três subfatores de AJZEN (1991)

A *atitude* é destacada por AKINWALE; ABABTAIN e ALARAIFI (2019) como fator mais importante para a intenção empreendedora. O conhecimento empreendedor contribui para as crenças empreendedoras do empreendedor e os conteúdos dos cursos são relevantes para a atitude (KAKOURIS; MOLINA; LIARGOVAS, 2020). Ao verificar quais traços característicos de personalidade são relevantes para a intenção empreendedora, AHMED; KLOBAS e RAMAYAH (2021) destacam a consciência como mediadora entre a aversão ao risco e as intenções empreendedoras. A atitude pode ser compreendida como a expectativa que o indivíduo tem de que o sucesso e resultados positivos dependem, majoritariamente, de seus esforços. Pesquisas indicam a importância da atitude na intenção empreendedora (ARAFAT; SALEEM e DWIVEDI (2020); MAHMOOD; AL MAMUN; BIN AHMAD; IBRAHIM, 2019; PASSARO; SCANDURRA; THOMAS, 2017; VRACHEVA; ABU-RAHMA; JACQUES, 2019).

Dentre os componentes das *normas subjetivas*, a confiança generalizada, a amplitude de associações organizacionais formais e o engajamento cívico são apontados por AMINI SEDEH; ABOOTORABI e ZHANG (2021) como facilitadores da intenção empreendedora. Porém, KRUEGER JR; REILLY e CARSRUD (2000) indicam que as normas subjetivas não influenciam decisivamente a intenção empreendedora, o que é sugerido por ARAFAT; SALEEM e DWIVEDI (2020) numa pesquisa feita com universitários indianos.

O terceiro fator é o *controle do comportamento percebido* – que se refere à percepção que alguém possui sobre a facilidade ou dificuldade de realizar o comportamento de seu próprio interesse (AJZEN, 1991). Se traduz, conforme AHMED; KLOBAS e RAMAYAH (2021), em subfatores como propensão ao risco e a tolerância ao estresse.

2.2. Capital Social

O *capital social* é um construto multidimensional (ZHENG; LI; WU; XU, 2014), e gera impactos positivos na capacidade empresarial, considerando três aspectos principais (confiança generalizada, amplitude de associações organizacionais formais e engajamento

cívico) (AMINI SEDEH; ABOOTORABI; ZHANG, 2021). A influência familiar pode apoiar de modo determinante a intenção empreendedora (AYALEW; ZELEKE, 2018; EDELMAN; MANOLOVA; SHIROKOVA; TSUKANOVA, 2016; GUBIK; FARKAS, 2016; HOANG; LE, 2021), por meio de exemplos e referências positivas (ZAMPETAKIS; LERAKIS; KAFETSIOS; MOUSTAKIS, 2016), moldando emoções e atitudes em relação ao esforço e ao trabalho. Desse modo, adolescentes e jovens podem mais facilmente se engajar em redes de convivência mais amplas, no período formativo em escolas e universidades (GUBIK; FARKAS, 2016; HULSINK; KOEK, 2014), na atuação em negócios familiares (BOGATYREVA; SHIROKOVA, 2017) e outros grupos sociais (SCHWARZ; WDOWIAK; ALMER-JARZ; BREITENECKER, 2009), aumentando as relações e a troca de experiências sociais relevantes. Isso poderá contribuir para a criação de novos negócios (TING; MOHD ROSDI; ABIDIN, 2020).

Apesar das oportunidades de aprimoramento intelectual e técnico estimularem a intenção empreendedora, jovens de baixa renda podem ser induzidos a atuar como empreendedores sociais, a fim de preencher certos vazios institucionais que afetam o seu bairro, cidade ou país, com estímulo e apoio familiar (MANOLOVA; EDELMAN; SHIROKOVA; TSUKANOVA, 2019), incluindo o acesso a recursos financeiros, ainda que modestos (RAIJMAN, 2001).

Os ambientes universitários ajudam na criação de vínculos sociais e, consequentemente, na formação de atitudes essenciais ao empreendedorismo (MUSCIO; SHIBAYAMA; RAMACIOTTI, 2021). Dentre estas atitudes, estão a tolerância e a gestão eficiente do estresse (AHMED; KLOBAS; RAMAYAH, 2021) e a disposição para assumir riscos (CHANG; MEMILI; CHRISMAN; KELLERMANNS *et al.*, 2009) e lidar com o fracasso (WANG; HUANG, 2020). Ainda que a educação empreendedora seja abordada no currículo universitário (ALAM; BILAL; SABIR; KALEEM, 2020; MASON; ANDERSON; KESSL; HRUSKOVA, 2020), alguns estudos sugerem que é essencial que o tema seja tratado, inclusive, antes do ingresso no ensino superior (DO PAÇO; FERREIRA; RAPOSO; RODRIGUES *et al.*, 2011; HOI, 2020; JOHANSEN, 2013; JONES; COLWILL, 2013).

JAYAWARNA; JONES e MACPHERSON (2014) comenta a tendência de superestimar a aquisição de conhecimento, ao mesmo tempo em que se ignora a relevância do capital social para o sucesso das iniciativas empreendedoras. As normas subjetivas adquiridas já durante a infância são essenciais para que o jovem assimile posturas positiva e proativa ao lidar nas situações da vida e da profissão, ampliando habilidades como

criatividade, capacidade analítica e resolução de problemas (CARR; SEQUEIRA, 2007; JAYAWARNA; JONES; MACPHERSON, 2014).

As redes sociais têm papel importante na criação do capital social, aumentando as chances de sobrevivência do negócio (PÉREZ-FERNÁNDEZ; MARTÍN-CRUZ; DELGADO-GARCÍA; RODRÍGUEZ-ESCUDERO, 2020; PUGALIA; PRAKASH SAI; CETINDAMAR, 2020), sobretudo nas suas fases iniciais. VAN DER WESTHUIZEN e GOYAYI (2020) consideram que a aquisição de habilidades tecnológicas pode aumentar a capacidade de buscar informações e relações, aumentando a autoconfiança (AYALEW; ZELEKE, 2018), de modo que os potenciais empreendedores considerem que a criação de um novo negócio depende mais dos aspectos internos do que externos (HADJIMANOLIS, 2016). Porém, é preciso citar a influência sempre relevante de um ambiente institucional propício, que pode estimular a intenção empreendedora (SMITH; BEASLEY, 2011).

2.3. Emoções

Com relação às *emoções*, LIU e WANG (2021) argumentam que o medo do fracasso é a mais forte barreira psicológica para a realização dos intentos do empreendedor, diminuindo a percepção de existência de recursos financeiros e apoio social. Emoções e desejos têm relação estreita e impactam de modo substancial a intenção empreendedora (LONDONO; WILSON; OSORIO-TINOCO, 2021; LUONG; LEE, 2021). As redes sociais podem gerar impactos positivos na afetividade e disposição empreendedora (PEREZ-FERNANDEZ; MARTIN-CRUZ; DELGADO-GARCIA; RODRIGUEZ-ESCUDERO, 2020). O aperfeiçoamento de mecanismos psicológicos, incluindo a emoção e cognição, é essencial para o desenvolvimento do comportamento empreendedor (CAI; GU; WU, 2021). As emoções positivas, apesar de estimularem a intenção empreendedora, precisam ser equilibradas pela cognição (CHEN; YUAN; YIN; WU, 2021; ZOLLO; RIALTI; TRON; CIAPPEI, 2021), que pode ser realizado por meio de programas educacionais com o intuito de desenvolver a resiliência (ELSHAER; SAAD, 2021), importante para a intenção de iniciar um negócio (RENKO; BULLOUGH; SAEED, 2021), permitindo que os empresários superem as situações críticas e as crises mais fortes do que antes (DUCHEK, 2018).

3. Metodologia

3.1. Formação do portfólio bibliográfico

Os trabalhos acadêmicos utilizados nesta pesquisa foram extraídos das bases *Scopus* e *Web of Science*, em duas fases, sendo a primeira realizada em dez/2021 e a segunda em fev/2022. O processo é detalhado nos tópicos seguintes.

3.1.1. Fase 1

A fase 1 teve como objetivo identificar os artigos que tratam dos temas “negócios digitais”, “mentalidade digital”, “capital social” e “teoria do comportamento planejado”. Os termos e as consultas utilizadas na 1ª fase da extração são apresentados na tabela 1.

Termos adicionados	Base	Consulta
Digital business; Digital entrepreneurship; Technological business; Tech entrepreneurship; Entrepreneurship Startup; start-up; Entrepreneurial intention; Entrepreneurial digital mindset; Entrepreneurial attitude Theory of planned behavior; social capital	*Scopus*	TITLE-ABS-KEY ((digital AND business) OR (digital AND entrepreneurship) OR (technological AND business) OR (tech AND entrepreneurship) OR (entrepreneurship) OR (startup) OR (start-up)) AND (“entrepreneurial AND intention” OR “entrepreneurial AND digital mindset” OR “entrepreneurial AND attitude” OR “theory of planned behavior” OR “theory AND of AND planned AND behavior”) AND (“TPB” OR “theory AND of AND planned AND behavior (TPB)”) OR (social AND capital AND digital AND entrepreneur OR digital AND entrepreneurship)
	Web of Science	TS = (digital AND business) OR (digital AND entrepreneurship) OR (technological AND business) OR (tech AND entrepreneurship) OR (entrepreneurship) OR (startup) OR (start-up) AND TS = (entrepreneurial AND intention OR entrepreneurial AND digital mindset OR entrepreneurial AND attitude OR theory of planned behavior OR theory AND of AND planned AND behavior) AND TS = (TPB OR theory AND of AND planned AND behavior (TPB)) OR (social AND capital AND digital AND entrepreneur OR digital AND entrepreneurship)

Tabela 1: Termos e consultas utilizadas para a extração nas bases Scopus e na Web of Science na fase 1

Depois, foi realizada uma 2ª extração, detalhada no próximo tópico.

3.1.2. Fase 2

A fase 2 teve como objetivo identificar os artigos que tratam dos temas “emoções” e “intenção empreendedora”. Os termos e as consultas utilizadas na 1ª fase da extração são apresentados na tabela 2.

Termos Adicionados	Base	Consulta
Emotions; Entrepreneurial intention	*Scopus*	TITLE-ABS-KEY (“emotions” AND “entrepreneurial intention”)
	Web of Science	TS = (emotions) AND TS = (entrepreneurial intention)

Tabela 2: Termos e consultas utilizadas para a extração nas bases Scopus e na Web of Science na fase 2

Para efetuar o refinamento do portfólio, os arquivos extraídos das bases *Scopus* foram importados para o software *Endnote*. Após a extração inicial, o refinamento foi realizado com a execução das seguintes etapas (de remoção dos documentos): (i) duplicados; (ii) com informações faltantes (ano, título ou autor) e (iii) sem alinhamento com a pesquisa pretendida. Os resultados de cada fase/etapa são apresentados na tabela 3.

Base	Etapa 1: Extração inicial	Etapa 2: Itens duplicados	Etapa 3: Sem informações	Etapa 4: Itens não alinhados	Resultado final
Fase 1	1985	25	90	1205	665
Fase 2	70	23	1	0	46
Total	**2055**	**48**	**91**	**1205**	**711**

Tabela 3: Resultados da extração de documentos nas fases 1 e 2

O portfólio de artigos utilizado na pesquisa contém 711 documentos. O portfólio serviu de base para a revisão de literatura e a formulação das hipóteses, apresentados na próxima seção.

3.2. Hipóteses

3.2.1. Hipóteses existentes

As hipóteses já abordadas pelos estudos identificados durante a análise do portfólio bibliográfico, bem como os autores, são apresentadas na tabela 4.

ID	Hipótese	Autores
H1	O Capital Social influencia positivamente as Atitudes.	(DOANH, 2021; HENLEY, ANDREW; CONTRERAS, FRANCOISE; ESPINOSA, JUAN C e BARBOSA, DAVID (2017); MAO; YE, 2021; POPESCU; BOSTAN; ROBU; MAXIM, 2016).
H2	O Capital Social influencia positivamente as Intenções Empreendedoras Digitais.	(HOONG; QURESHI; SAJILAN; AL HALBUSI, 2019); (PÉREZ-MACÍAS, NOEMÍ; FERNÁNDEZ-FERNÁNDEZ, JOSÉ LUIS; VIEITES, ANTONIO RUA, 2018; SULTANA; IM; IM, 2019).
H3	As Atitudes influenciam positivamente as Intenções Empreendedoras Digitais.	Adaptado de (AJZEN, 1991; 2002; 2011).
H4	As Normas Subjetivas influenciam positivamente as Intenções Empreendedoras Digitais.	Adaptado de (AJZEN, 1991; 2002; 2011).
H5	O Controle do Comportamento Percebido influencia positivamente as Intenções Empreendedoras Digitais.	Adaptado de (AJZEN, 1991; 2002; 2011).

Tabela 4: Hipóteses desenvolvidas por estudos anteriores pelo estudo

3.2.1. Novas hipóteses

As duas novas hipóteses formuladas e exploradas no estudo, bem como os autores, são apresentadas nesta seção. As hipóteses da tabela 5 exploram o poder de moderação das emoções negativas e positivas antecipadas entre o capital social e as intenções empreendedoras digitais. Emoções e desejos têm relação estreita e impactam de modo substancial a intenção empreendedora (LONDONO; WILSON; OSORIO-TINOCO, 2021; LUONG; LEE, 2021).

As redes sociais podem gerar impactos positivos na afetividade e disposição empreendedora (PEREZ-FERNANDEZ; MARTIN-CRUZ; DELGADO-GARCIA; RODRIGUEZ-ESCUDERO, 2020). As emoções positivas, apesar de estimularem a intenção empreendedora, precisam ser equilibradas pela cognição (CHEN; YUAN; YIN; WU, 2021). A resiliência é uma característica citada por ELSHAER e SAAD (2021). A educação empresarial e o capital social promovem comportamentos empreendedores (LEE; CORTES; JOO, 2021), sendo necessário o seu desenvolvimento por meio de mecanismos psicológicos, incluindo emoção e cognição (CAI; GU; WU, 2021).

ID	Hipótese
H6	As Emoções Negativas Antecipadas moderam negativamente a relação entre o Capital Social e as Intenções Empreendedoras Digitais.

H7	As Emoções Positivas Antecipadas moderam positivamente a relação entre o Capital Social e as Intenções Empreendedoras Digitais.

Tabela 5: Novas hipóteses propostas pelo estudo (emoções positivas e negativas antecipadas)

O modelo desenvolvido para atender aos objetivos da pesquisa é apresentado no próximo tópico.

3.3. Modelo de intenções empreendedoras digitais, capital social e emoções

O modelo proposto na pesquisa possui 7 construtos. Para facilitar a compreensão dos conceitos expostos nas seções seguintes, o código, a descrição e a categoria (mediadora e moderadora) destes construtos são apresentados na tabela 6.

Identificador	Construto	Independente?	Mediadora?	Moderadora?	Dependente?
CAPS	Capital Social	Sim			
ATIT	Atitude		Sim		
NORS	Normas Subjetivas	Sim			
COCP	Controle do Comportamento Percebido	Sim			
EMNA	Emoções Negativas Antecipadas			Sim	
EMPA	Emoções Positivas Antecipadas			Sim	
INTE	Intenções Empreendedoras Digitais				Sim

Tabela 6: Código e descrição dos construtos que compõem o modelo

O modelo concebido pela pesquisa é apresentado na figura 1. Ele é baseado nas hipóteses apresentadas na seção anterior e propostas com base no portfólio bibliográfico. Os construtos adicionados ao modelo de AJZEN (1991) estão grafados na cor cinza. O código utilizado para identificação dos indicadores é formado pelas quatro letras que identificam o construto (mencionado na tabela 6), seguido do número sequencial do indicador.

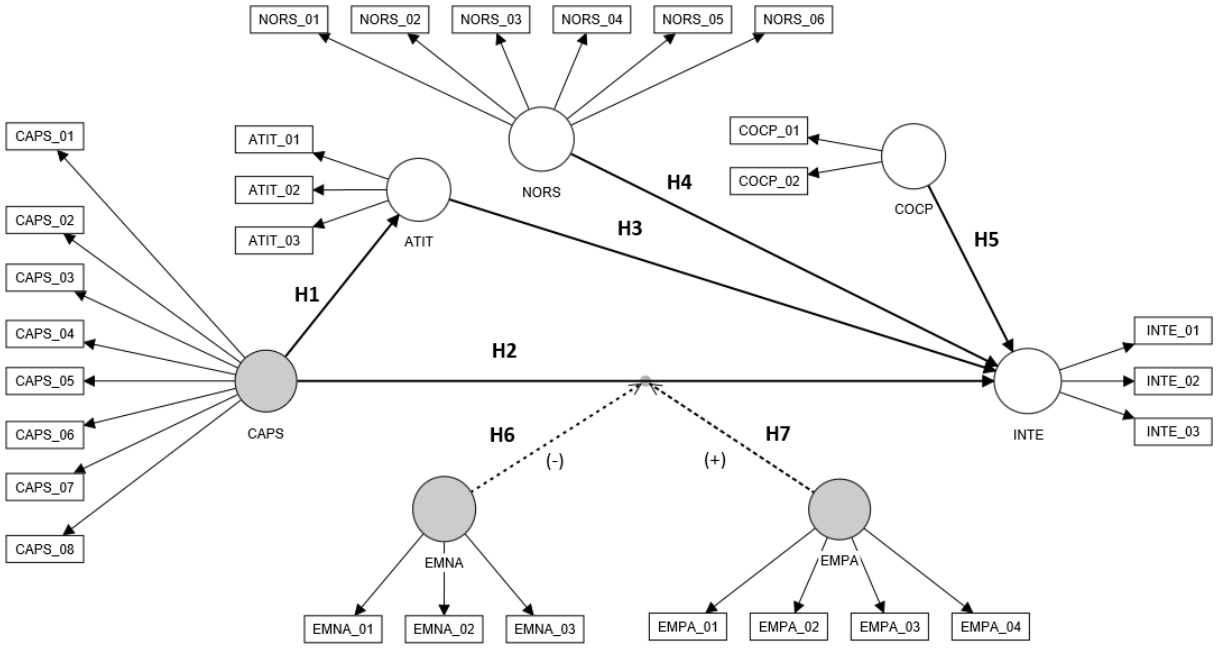

Figura 1: Modelo de intenção empreendedora (Elaborado pelos autores)[1]

A tabela 7 apresenta a relação entre os construtos indicadores e autores utilizados para elaboração das questões. Os construtos que compõem a TCP (ATIT, COCP, NORS e INTE) são apresentados primeiramente, seguidos dos construtos adicionados no modelo proposto pela pesquisa (CAPS, EMNA e EMPA).

Construto	Indicador	Descrição do indicador	ID da questão	Referência
ATIT	ATIT_01	Convicção de achar uma solução viável ao lidar com novos problemas.	17	MURUGESAN e DOMINIC (2014)
	ATIT_02	Convicção de achar uma solução viável ao lidar com novas oportunidades.	18	MURUGESAN e DOMINIC (2014)
	ATIT_03	Convicção de achar uma solução viável ao enfrentar novos desafios a partir de recursos existentes.	19	MURUGESAN e DOMINIC (2014)
COCP	COCP_01	Percepção de possuir conhecimentos e habilidades para iniciar um negócio digital.	21	LIÑÁN e CHEN (2009)
	COCP_02	Receio de fracasso diminuído diante do desejo de criar um negócio digital.	26	LIÑÁN e CHEN (2009)
NORS	NORS_01	Confiança aumentada na realização de tarefas baseada nos conselhos dos membros da família.	04	MOUSSA e KERKENI (2021)
	NORS_02	Confiança aumentada no atingimento de resultados baseada nos conselhos dos membros da família.	05	MOUSSA e KERKENI (2021)
	NORS_03	Confiança aumentada na realização de tarefas baseada nos exemplos dos membros da família.	06	MOUSSA e KERKENI (2021)
	NORS_04	Confiança aumentada no atingimento de resultados baseada nos exemplos dos membros da família.	07	MOUSSA e KERKENI (2021)

[1] Os construtos adicionados pela pesquisa à TCP (CAPS, EMNA e EMPA) estão grafados na cor cinza.

	NORS_05	Aprovação da família quanto à decisão de criar um negócio digital.	15	LIÑÁN e CHEN (2009)
	NORS_06	Aprovação dos amigos quanto à decisão de criar um negócio digital.	16	LIÑÁN e CHEN (2009)
INTE	INTE_01	Propensão à criação de um negócio digital dada a disponibilidade de oportunidade e recursos.	20	LIÑÁN e CHEN (2009)
	INTE_02	Capacidade de desenvolver e lidar com os desafios de um negócio digital.	22	LIÑÁN e CHEN (2009)
	INTE_03	Confiança na capacidade de criação de um negócio digital à medida que aumenta esse desejo.	27	SALAMZADEH; SANGOSANYA; SALAMZADEH e BRAGA (2022)
CAPS	CAPS_01	Confiança aumentada na realização de tarefas baseada nos conselhos das relações de fora da família.	08	LUO; HUANG e GAO (2022)
	CAPS_02	Confiança aumentada no atingimento de resultados baseada nos conselhos das relações de fora da família.	09	LUO; HUANG e GAO (2022)
	CAPS_03	Estímulo a comportamentos positivos pela influência das relações de fora da família.	10	SALAMZADEH; SANGOSANYA; SALAMZADEH e BRAGA (2022)
	CAPS_04	Confiança aumentada na capacidade de criar um negócio digital bem-sucedido baseado nos conselhos dos membros da família.	11	MOUSSA e KERKENI (2021)
	CAPS_05	Confiança aumentada na capacidade de criar um negócio digital bem-sucedido baseado nos exemplos dos membros da família.	12	MOUSSA e KERKENI (2021)
	CAPS_06	Confiança aumentada na capacidade de criar um negócio digital bem-sucedido baseado nos conselhos das relações de fora da família.	13	BAUGHN; CAO; LE; LIM *et al.* (2006)
	CAPS_07	Confiança aumentada na capacidade de criar um negócio digital bem-sucedido baseado nos exemplos das relações de fora da família.	14	BAUGHN; CAO; LE; LIM *et al.* (2006)
	CAPS_08	Aumento das relações sociais a partir dos estudos sobre negócios digitais.	25	ZHU; FAN e ZHAO (2019)
EMNA	EMNA_01	Receio de decepcionar os membros da família.	01	IZARD e IZARD (1977)
	EMNA_02	Receio de fracassar profissionalmente.	02	IZARD e IZARD (1977)
	EMNA_03	Receio de decepcionar as relações de fora da família.	03	IZARD e IZARD (1977)
EMPA	EMPA_01	Suporte emocional positivo das relações sociais.	23	IZARD e IZARD (1977)
	EMPA_02	Preparação prévia para os conflitos emocionais diários.	24	GOLEMAN (1995)
	EMPA_03	Evitar maus comportamentos por causa do desejo de criar um negócio digital.	28	KANONUHWA; RUNGANI e CHIMUCHEKA (2018)
	EMPA_04	Promoção de bons comportamentos por causa do desejo de criar um negócio digital.	29	KANONUHWA; RUNGANI e CHIMUCHEKA (2018)

Tabela 7: Informações sobre os construtos e itens do modelo

No próximo tópico, são apresentados os critérios para seleção da amostra e técnicas de coleta de dados.

3.4. Seleção da amostra e coleta de dados

A coleta de dados foi realizada por meio de um questionário enviado a estudantes de cursos de Administração, Engenharias e Tecnologia da Informação de instituições públicas paulistas com idade igual ou superior a 18 anos. O critério de escolha das instituições se deve ao fato dos pesquisadores atuarem, majoritariamente, em São Paulo, o estado economicamente mais desenvolvido do Brasil. Os estudantes pertencem a cursos com forte vocação empreendedora e numa idade no qual o estudante já goza de certa maturidade. O cálculo da amostra mínima resultou em 103 respondentes, e foi realizado com o apoio do software *GPower 3.1*. Foram seguidas as recomendações de COHEN (1988) (parâmetros: f ² = 0,15; power = 0,80). A pesquisa foi aprovada pelo Comitê de Ética em Pesquisa em Ciências Humanas e Sociais (CEP-CHS), com o registro CAAE nº 58711822.6.0000.8142. O questionário aplicado possui 29 questões e utiliza uma escala Likert de 5 pontos, e pode ser visualizado no Anexo 1.

3.5. Análise de dados

A análise de dados utilizou a Modelagem de Equações Estruturais por Mínimos Quadrados Parciais (MEE-MQP). A qualidade considera a validade do conteúdo (convergente e discriminante). Enquanto a validade convergente considera a capacidade de indicadores de medirem o construto proposto, a validade discriminante mede o quão representativos e distintos são os indicadores que medem o construto (HAIR, 2014).

A MEE-MQP é frequentemente utilizada para explicar as relações entre múltiplas variáveis (HAIR; RISHER; SARSTEDT; RINGLE, 2019) e adequada em testes de *frameworks* teóricos (HAIR; RISHER; SARSTEDT; RINGLE, 2019). Nesta etapa, foram utilizados o *MS Excel* para tabulação dos dados e o *SmartPLS* 4 para execução do algoritmo *PLS-SEM*. A avaliação do modelo de mensuração mede a qualidade do conjunto de indicadores componentes.

4. Resultados

4.1. Descrição da amostra

Ao considerar sete preditores, com nível de significância de 5%, poder estatístico de 8% e com o tamanho do efeito médio ($f^2 = 0.15$, equivalente a um $R^2 = 13\%$) teve-se, como sugestão, a priori, uma amostra com 103 observações. O questionário foi aplicado nos formatos online e presencial, durante o mês de outubro/2022. No final do processo, foram obtidas 1.110 respostas.

4.2. Estatística descritiva

Na amostra contendo 1.110 respondentes, 58,1% são do gênero masculino e 41,89% são do gênero feminino. Além disso, 57,30% cursam alguma habilitação em Engenharia, 32,87% cursam graduação na área de Administração e 10,63% são estudantes de cursos de Tecnologia da Informação (Ciência da Computação, Sistemas de Informação, Engenharia de Software etc.), conforme apresentado na tabela 8.

Características		**Frequência (%)**
Gênero	Masculino	58,11
	Feminino	41,89
Curso	Engenharias	57,30
	Administração	32,07
	TI	10,63

Tabela 8: Descrição da amostra

Nas próximas seções, são apresentados os cálculos relativos à (i) verificação da validade e confiabilidade do modelo e à (ii) valoração do modelo estrutural.

4.3. Modelo de mensuração

Conforme já mencionado, a verificação da validade e confiabilidade do modelo considera a (i) validade convergente e a (ii) validade discriminante. Após analisar os resultados gerados pelo SmartPLS 4, o modelo foi ajustado com a remoção de 5 dos 29 indicadores propostos inicialmente: CAPS_01, CAPS_02, CAPS_03, EMPA_01 e INTE_01. Ou seja, foram mantidos 24 indicadores

A análise da tabela 9 apresenta os valores de Fornell-Larcker, do Alfa de Cronbach, da Confiabilidade Composta e da Variância Média Extraída (VME) calculados com o apoio do SmartPLS 4. Os valores das raízes quadradas da VME (que aparecem na diagonal hachurada da tabela 11) devem ser maiores que as correlações dos respectivos construtos. É possível verificar que o alfa de Cronbach de NORS está abaixo de 0.7; porém, a Confiabilidade Composta de todos os construtos são iguais ou maiores a 0.7 (HAIR, 2014). Além disso, com exceção de NORS, os valores da VME são maiores que 0.5. Portanto, o modelo pode ser considerado ajustado.

Construto	ATIT	CAPS	COCP	EMNA	EMPA	INTE	NORS
ATIT	**0.825**						
CAPS	0.235	**0.719**					
COCP	0.365	0.548	**0.828**				
EMNA	-0.161	-0.046	-0.162	**0.778**			
EMPA	0.243	0.565	0.698	-0.080	**0.779**		
INTE	0.297	0.514	0.719	-0.136	0.789	**0.810**	
NORS	0.215	0.392	0.247	0.001	0.229	0.211	**0.627**
Alfa de *Cronbach*	0.765	0.786	0.546	0.725	0.679	0.492	0.743
Confiabilidade Composta	0.765	0.835	0.565	1.164	0.748	0.552	0.736
Variância Média Extraída	0.681	0.517	0.686	0.605	0.607	0.656	0.393

Tabela 9: Valores de Fornell-Larcker, Alfa de Cronbach, Confiabilidade Composta e Variância Média Extraída

Superada a etapa de validação do modelo de medição, são apresentadas, no próximo tópico, as análises do modelo estrutural.

4.4. Modelo estrutural

4.4.1. Análise do modelo

A tabela 10 apresenta os coeficientes de Cohen (f^2), Pearson (r^2) e Stone-Geisser (Q^2), calculados para as variáveis dependentes (ATIT e INTE) a partir da variável independente (CAPS). Os três coeficientes indicam o poder de explicação do modelo. O tamanho do efeito (f^2) apresentado na tabela 11 foi analisado segundo o proposto por COHEN (1988), que considera os valores de 0.02, 0.15 e 0.35, elencados como (i) baixo, (ii) médio e (iii) moderado, respectivamente. O coeficiente de determinação (r^2) mede a correlação entre duas variáveis, sendo que, nas ciências sociais e comportamentais, os valores de 0.02, 0.13 e 0.26 são elencados como alto, médio e baixo (COHEN, 1988).

Construto	f^2	r^2	Q^2
ATIT	.058	.055	0.052
INTE	.002	.683	0.675

Tabela 10: Valores do modelo estrutural

A validade preditiva do modelo depende dos valores de Q^2 superiores a zero (HAIR, 2014), o que é verdadeiro para a análise em questão, conforme pode-se observar na referida tabela (ATIT → 0.052 e INTE → 0.675).

4.4.2. Modelo resultante

A figura 2 apresenta o modelo completo resultante com os respectivos coeficientes de caminhos. Na análise dos R² apresentados, é possível observar que o construto “Intenção Empreendedora” (INTE) tem 68,3% da sua variância explicada pelos construtos atitude (ATIT), controle do comportamento percebido (COCP), normas subjetivas (NORS) e capital social (CAPS). O construto mais relevante do modelo é o controle do comportamento percebido, que responde por 29,4%. CAPS é moderado pelos construtos emoções negativas antecipadas (EMNA) e emoções positivas antecipadas (EMPA), que apresentam valores de baixa significância (4% e 1,9%), respectivamente.

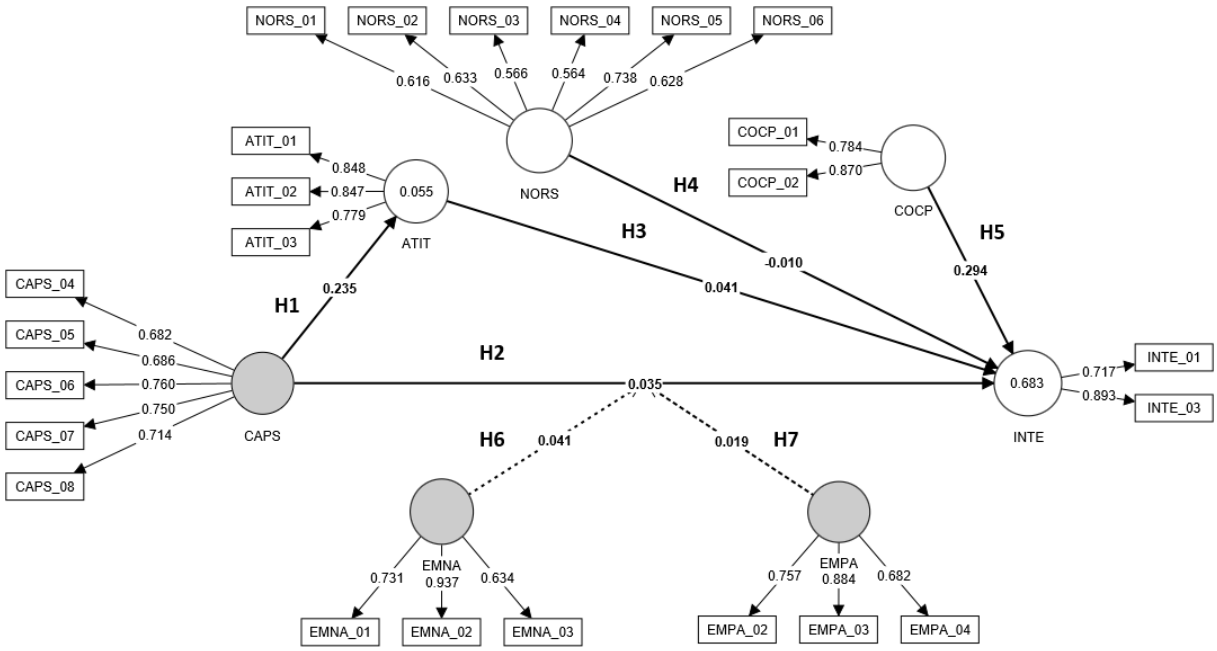

Figura 2: Modelo final ajustado

A seguir, é apresentado o resultado do teste das hipóteses propostas pela presente pesquisa.

4.5. Teste de hipóteses

Por fim, a tabela 11 apresenta o resultado do teste de hipóteses. Para calcular a Estatística t e o p-valor, foi utilizado o SmartPLS 4 (função *bootstrapping*, utilizando como parâmetros 10.000 subamostras e nível de significância de 5%). Conforme apresentado na referida tabela, as hipóteses não suportadas são H2 (CAPS → INTE), H4 (NORS → INTE)

e H7 (EMPA x CAPS → INTE). As demais hipóteses não foram rejeitadas, já que tem p-valor menor que 0.05.

Hipótese	Relacionamento	Estatística t	p-valor	Suportada?
H1	CAPS → ATIT	7.678	< 0.001	**Sim**
H2	CAPS → INTE	1.287	0.198	Não
H3	ATIT → INTE	2.025	0.043	**Sim**
H4	NORS → INTE	0.533	0.594	Não
H5	COCP → INTE	8.407	< 0.001	**Sim**
H6	EMNA x CAPS → INTE	2.234	0.026	**Sim**
H7	EMPA x CAPS → INTE	1.338	0.181	Não

Tabela 11: Resultados do teste de hipóteses do modelo estrutural

Na próxima seção, é apresentada a discussão dos resultados verificados no teste das hipóteses apresentadas no estudo.

4.6. Discussão dos resultados

De acordo com o estudo, o capital social influencia as atitudes, haja vista que as vivências do ambiente universitário podem estimular os graduandos a adquirirem hábitos positivos que aumentem as chances de realização de suas aspirações profissionais. Essas aspirações não se limitam à atuação num empreendedor digital, mas envolvem, também, as inúmeras funções exercidas em instituições públicas, privadas e sociais. A pesquisa aponta que o capital social não está diretamente relacionado à intenção de se tornar um empreendedor digital, conforme sugerido por DOANH (2021) e por HOONG; QURESHI; SAJILAN e AL HALBUSI (2019).

As relações sociais familiares também não são suficientes para induzir, por si só, as intenções empreendedoras, por mais genuínas e verdadeiras que sejam, de acordo com HENLEY, A.; CONTRERAS, F.; ESPINOSA, J. C. e BARBOSA, D. (2017). O capital social que incentiva a intenção empreendedora é aquele oriundo dos laços sociais criados pelos frequentadores dos ambientes de ecossistemas empresariais (CAI; GU; WU, 2021; MAMABOLO; LEKOKO, 2021), não bastando (para o fomento das intenções empreendedoras) a criação e manutenção de relações sociais genéricas. MAO e YE (2021) aborda que oportunidades de vivências culturais variadas são essenciais para a criação de redes sociais e encorajamento para a atuação como empreendedor.

A capacidade cognitiva é afetada pela educação. VALENCIA-ARIAS e RESTREPO (2020) conclui que a educação empresarial pode fomentar a confiança dos estudantes nas

próprias capacidades, já que apoia o entendimento de contextos e a visualização de oportunidades e riscos, além de ajudar no autoconhecimento. Para isso, mesmo autor sugere que os programas de capacitação devem apresentar práticas e meios para busca de oportunidades de negócios e identificação de mecanismos para apoio financeiro. A educação empresarial pode ajudar a desenvolver as atitudes empreendedoras dos estudantes (BAZKIAEI; HENG; KHAN; SAUFI *et al.*, 2020; LAGUÍA; MORIANO; GORGIEVSKI, 2019), aumentando a propensão dos estudantes em assumir riscos (YOUNIS; KATSIOLOUDES; BAKRI, 2020). Apesar da relação positiva entre a aprendizagem empresarial e a intenção empresarial, ela é, significativamente, mediada pelos fatores da TPB, sobretudo pela atitude (ZHANG; WEI; SUN; TUNG, 2019), que indica que a promoção do empreendedorismo nos ambientes de ensino através da educação é essencial.

As variáveis endógenas – atitude e controle do comportamento percebido – são essenciais na explicação das intenções empreendedoras (BLAESE; LIEBIG, 2021; YU; KHALID; AHMED, 2021), já que motivam o indivíduo a pensar e agir de modo racional, independentemente de um ambiente externo desfavorável. AL-MAMARY; ABDULRAB; ALWAHEEB e ALSHAMMARI (2020) ressalta que, dentre as atitudes de maior destaque, estão as relacionadas ao comportamento, como a autoeficácia, a autonomia, a propensão a assumir riscos, a proatividade e certa agressividade competitiva.

De acordo com o presente estudo, as normas subjetivas não são um fator que induz a intenção empreendedora digital dos estudantes. KRUEGER JR; REILLY e CARSRUD (2000), TURUK; HORVATINOVIC e SUDARIC (2020), ARAFAT; SALEEM e DWIVEDI (2020) e HENDIEH; AOUN e OSTA (2019) avaliam que as normas subjetivas, em sim mesmas, não são promotoras das intenções empreendedoras, o que coincide com os achados da presente pesquisa. DOANH e VAN MUNAWAR (2019) sustentam que as normas subjetivas tem efeito indireto sobre as intenções de empreender, favorecendo – ou não - as atitudes, principalmente, por meio dos hábitos assimilados por meio do ambiente cultural (FARRUKH; LEE; SAJID; WAHEED, 2019).

A família pode ser tanto uma fonte de crenças e hábitos positivos quanto de crenças limitantes e hábitos que prejudicam, não apenas a vida profissional, mas outras dimensões da vida. Contudo, SHRIVASTAVA e ACHARYA (2020), comentam que a influência e o apoio familiar são essenciais para o estímulo da vocação empreendedora de jovens desfavorecidos economicamente. Desse modo, práticas que apoiem a compreensão de pessoas circundantes (família e amigos, por exemplo) e modelos de referência (religiosos

e sociais) podem ser eficazes para inspirar as intenções empreendedoras dos jovens (BAHARUDDIN; AB RAHMAN, 2021).

O presente estudo mostrou que as emoções antecipadas positivas e negativas não exercem efeito moderador decisivo entre o capital social e as intenções empreendedoras digitais. Apesar disso, as emoções positivas antecipadas parecem ser condição *sine qua non* para o desejo de empreender, sobretudo na promoção da autoeficácia (AMORIM NETO; RODRIGUES; STEWART; XIAO *et al.*, 2018; KOE; KRISHNAN; ALIAS, 2021). Por outro lado, as emoções negativas antecipadas podem minar qualquer iniciativa pessoal ou profissional, haja visto que diminuem o desejo de conquista e de realização do indivíduo, sendo que os comportamentos empresariais devem ser desenvolvidos por meio de mecanismos psicológicos, incluindo a emoção e a cognição, resultado que está de acordo com o exposto em CAI; GU e WU (2021).

Na visão de MUSIIWA; KHAOLA e RAMBE (2019), os envolvidos com a promoção do empreendedorismo devem atentar para as emoções dos estudantes, para influenciar positivamente as suas escolhas profissionais. BAHARUDDIN e AB RAHMAN (2021) enfatiza que conhecer o caráter potencial dos estudantes que se tornam empresários pode colaborar com a formulação de políticas mais efetivas de estímulo ao empreendedorismo, o que coincide com o público-alvo analisado neste trabalho de pesquisa.

5. Conclusões

Esta pesquisa visou a avaliação do impacto do capital social e das emoções positivas e negativas antecipadas nas intenções empreendedoras digitais de jovens graduandos dos cursos de Engenharia, Administração e Tecnologia da Informação de instituições de ensino superior. Para isso, foi realizada uma Revisão Sistemática de Literatura para desenvolvimento do modelo. Os dados coletados foram analisados utilizando a técnica de MEE-MQP.

O capital social cultivado em ambientes de discussão e vivências empreendedoras pode promover as intenções empreendedoras digitais. Contudo, no ambiente universitário, as aspirações profissionais são variadas, e não se restringem, somente, à intenção de empreender digitalmente. Porém, o capital social tem influência positiva sobre as atitudes do estudante que pretende empreender. Desse modo, as instituições de ensino poderão influenciar positivamente a formação do capital social e indução de atitudes positivas por meio das atividades de ensino, extensão, pesquisa e internacionalização adequadas.

Ainda que dependa, também, da genética e das vivências na infância e na adolescência, o estado emocional do ser humano é (também) influenciado pelo ambiente. Os ambientes sociais atuais são caracterizados por competitividade e busca por resultados. As empresas e profissionais nem sempre estão preparados para lidar com as exigências e cobranças desse contexto econômico complexo. A isso, somam-se os efeitos da COVID-19, dentre os quais o adoecimento e a diminuição da capacidade emocional e cognitiva. Essas consequências devem ser abordadas de modo sistemático (HERNÁNDEZ-SÁNCHEZ; CARDELLA; SÁNCHEZ-GARCÍA, 2020; RUIZ-ROSA; GUTIÉRREZ-TAÑO; GARCÍA-RODRÍGUEZ, 2020). No contexto local, as escolas e Instituições de Ensino Superior podem criar comitês e alocar recursos para abordar eficazmente os desafios impostos aos ambientes familiares, empresariais e estudantis (GODSWILL AGU; OKWARA; OKOCHA; MADICHIE, 2021).

Apesar de todos os problemas e prejuízos que a pandemia de COVID-19 causou, o empreendedorismo digital cresceu significativamente, exigindo que um grande número de empresas e profissionais, revissem suas estratégias, objetivos e meios para atuação no ambiente digital. É provável que, apenas depois de certo tempo, será possível avaliar de modo mais profundo o “legado” da pandemia de COVID-19 para o empreendedorismo digital. O fim do isolamento social e a consequente normalização da vida e das relações econômicas podem arrefecer o desempenho altamente positivo das empresas digitais nos anos de 2020 e 2021.

O modelo proposto nessa pesquisa pode ser replicado em outros países, visando comparar a percepção de estudantes de outras culturas com a realidade brasileira, exposta no presente estudo e em outras regiões do território nacional. Além de estudantes de nível superior, outros grupos significativos, tais como estudantes de nível médio e profissionais com propensão a empreender podem ser explorados, não havendo restrição teórica ou prática para utilização do modelo nesses contextos.

A pesquisa avaliou o construto emoções antecipadas, que possuem tendência a mudanças significativas ao longo do tempo. Esta pesquisa pode ser futuramente aplicada utilizando dados em painel, para acompanhamento do fenômeno ao longo de um período significativo. Os dados foram coletados no período pós-pandemia, pouco tempo depois da reabertura dos ambientes presenciais e o restabelecimento das atividades normais. Por motivos de exequibilidade, a pesquisa se concentrou em cursos nos quais há maior incidência de atividade empreendedora digital. Pela mesma razão, escolheu-se o ambiente de ensino superior de São Paulo, o que limita a capacidade de extrapolar os resultados.

Pesquisas futuras poderão avaliar aspectos fisiológicos que podem exercer um papel moderador nas emoções antecipadas, tais como o temperamento e os hábitos cultivados na vida pessoal, tais como alimentação, atividade física, hábitos de leitura, busca de conhecimentoe outras. Além disso, contextos culturais diferentes podem ser investigados, para obter parâmetros de comparação que esclareçam cada vez mais as variáveis envolvidas, assim como o efeito moderador dos programas de ensino, dos programas e atividades de saúde mental voltados aos estudantes.

6. Referências

AHMED, T., KLOBAS, J. E., & RAMAYAH, T. (2021). Personality Traits, Demographic Factors and Entrepreneurial Intentions: Improved Understanding from a Moderated Mediation Study. *Entrepreneurship Research Journal, 11*(4). doi: 10.1515/erj-2017-0062

AJZEN, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes, 50*(2), 179-211.

AJZEN, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. *Journal of applied social psychology, 32*(4), 665-683.

AJZEN, I. (2011). The theory of planned behaviour: Reactions and reflections (Vol. 26, pp. 1113-1127): Taylor & Francis.

AKINWALE, Y. O., ABABTAIN, A. K., & ALARAIFI, A. A. (2019). Structural equation model analysis of factors influencing entrepreneurial interest among university students in Saudi Arabia. *Journal of Entrepreneurship Education, 22*(4), 1-14.

AL-MAMARY, Y. H. S., ABDULRAB, M., ALWAHEEB, M. A., & ALSHAMMARI, N. G. M. (2020). Factors impacting entrepreneurial intentions among university students in Saudi Arabia: testing an integrated model of TPB and EO. *Education and Training, 62*(7-8), 779-803. doi: 10.1108/ET-04-2020-0096

ALAM, M. Z., BILAL, A. R., SABIR, S., & KALEEM, M. A. (2020). Role of engineering major in entrepreneurial intentions of engineering students: a case of Pakistan. *Education and Training, 62*(7-8), 965-978. doi: 10.1108/ET-06-2019-0134

AMINI SEDEH, A., ABOOTORABI, H., & ZHANG, J. (2021). National social capital, perceived entrepreneurial ability and entrepreneurial intentions. *International Journal of Entrepreneurial Behaviour and Research, 27*(2), 334-355. doi: 10.1108/IJEBR-10-2019-0616

AMORIM NETO, R. D. C., RODRIGUES, V. P., STEWART, D., XIAO, A., & SNYDER, J. (2018). The influence of self-efficacy on entrepreneurial behavior among K-12 teachers. *Teaching and Teacher Education, 72*, 44-53. doi: 10.1016/j.tate.2018.02.012

ARAFAT, M. Y., SALEEM, I., & DWIVEDI, A. K. (2020). Understanding entrepreneurial intention among Indian youth aspiring for self-employment. *International Journal of Knowledge and Learning, 13*(3), 185-200. doi: 10.1504/IJKL.2020.109882

AYALEW, M. M., & ZELEKE, S. A. (2018). Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia. *Journal of Innovation and Entrepreneurship, 7*(1). doi: 10.1186/s13731-018-0088-1

BAHARUDDIN, G., & AB RAHMAN, A. (2021). What is the most effective antecedent for developing entrepreneurial intention among muslim youth in indonesia? *Entrepreneurial Business and Economics Review, 9*(1), 75-88. doi: 10.15678/EBER.2021.090105

BAUGHN, C. C., CAO, J. S., LE, L. T. M., LIM, V. A., & NEUPERT, K. E. (2006). Normative, social and cognitive predictors of entrepreneurial interest in China, Vietnam and the Philippines. *Journal of Developmental Entrepreneurship, 11*(01), 57-77.

BAZKIAEI, H. A., HENG, L. H., KHAN, N. U., SAUFI, R. B. A., & KASIM, R. S. R. (2020). Do entrepreneurial education and big-five personality traits predict entrepreneurial intention among universities students? *Cogent Business and Management, 7*(1). doi: 10.1080/23311975.2020.1801217

BLAESE, R., & LIEBIG, B. (2021). From a deliberative to an implementing mindset a process-oriented view of the formation of academic entrepreneurial intention. *Open Psychology Journal, 14*(1), 134-149. doi: 10.2174/1874350102114010134

BOGATYREVA, K., & SHIROKOVA, G. (2017). From entrepreneurial aspirations to founding a business: The case of Russian students. *Foresight and STI Governance, 11*(3), 25-36. doi: 10.17323/2500-2597.2017.3.25.36

CAI, W. J., GU, J. B., & WU, J. L. (2021). How Entrepreneurship Education and Social Capital Promote Nascent Entrepreneurial Behaviours: The Mediating Roles of Entrepreneurial Passion and Self-Efficacy. *Sustainability, 13*(20), 11. doi: 10.3390/su132011158

CARR, J. C., & SEQUEIRA, J. M. (2007). Prior family business exposure as intergenerational influence and entrepreneurial intent: A Theory of Planned Behavior approach. *Journal of Business Research, 60*(10), 1090-1098. doi: 10.1016/j.jbusres.2006.12.016

CAVALLO, A., GHEZZI, A., & ROSSI-LAMASTRA, C. (2021). Small-medium enterprises and innovative startups in entrepreneurial ecosystems: exploring an under-remarked relation. *International Entrepreneurship and Management Journal, 17*(4), 1843-1866. doi: 10.1007/s11365-020-00698-3

CHANG, E. P. C., MEMILI, E., CHRISMAN, J. J., KELLERMANNS, F. W., & CHUA, J. H. (2009). Family social capital, venture preparedness, and start-up decisions: A study of hispanic entrepreneurs in new England. *Family Business Review, 22*(3), 279-292. doi: 10.1177/0894486509332327

CHEN, B. S., YUAN, C. H., YIN, B., & WU, X. Z. (2021). Positive Emotions and Entrepreneurial Intention: The Mediating Role of Entrepreneurial Cognition. *Frontiers in Psychology, 12*. doi: 10.3389/fpsyg.2021.760328

COHEN, J. (1988). *Statistical power analysis for the behavioral sciences*: Routledge.

DA CRUZ, E. F. Z., & ALVARO, A. (2013). *Introduction of entrepreneurship and innovation subjects in a computer science course in Brazil.* Paper presented at the 2013 IEEE Frontiers in Education Conference (FIE).

DE REZENDE PINTO, M. (2007). A Teoria do Comportamento Planejado (TCP) e o Índice de Disposição de Adoção de Produtos e Serviços Baseados em Tecnologia (TRI): Uma Interface Possível? *Revista Gestão & Tecnologia, 7*(2).

DO PAÇO, A., FERREIRA, J., RAPOSO, M., RODRIGUES, R. G., & DINIS, A. (2011). Entrepreneurial intention among secondary students: Findings from Portugal. *International Journal of Entrepreneurship and Small Business, 13*(1), 92-106. doi: 10.1504/IJESB.2011.040418

DOANH, D. C. (2021). The role of contextual factors on predicting entrepreneurial intention among Vietnamese students. *Entrepreneurial Business and Economics Review, 9*(1), 169-188.

DOANH, D. C., & van Munawar, T. (2019). Entrepreneurial self-efficacy and intention among Vietnamese students: A meta-analytic path analysis based on the theory of planned behaviour. *Management Science Letters, 9*(11), 1847-1862. doi: 10.5267/j.msl.2019.6.007

DUCHEK, S. (2018). Entrepreneurial resilience: a biographical analysis of successful entrepreneurs. *International Entrepreneurship and Management Journal, 14*(2), 429-455. doi: 10.1007/s11365-017-0467-2

EDELMAN, L. F., MANOLOVA, T., SHIROKOVA, G., & TSUKANOVA, T. (2016). The impact of family support on young entrepreneurs' start-up activities. *Journal of Business Venturing, 31*(4), 428-448. doi: 10.1016/j.jbusvent.2016.04.003

ELSHAER, I. A., & SAAD, S. K. (2021). Entrepreneurial resilience and business continuity in the tourism and hospitality industry: the role of adaptive performance and institutional orientation. *Tourism Review*, 20. doi: 10.1108/tr-04-2021-0171

FAN, T., SCHWAB, A., & GENG, X. S. (2021). Habitual entrepreneurship in digital platform ecosystems: A time-contingent model of learning from prior software project experiences. *Journal of Business Venturing, 36*(5), 20. doi: 10.1016/j.jbusvent.2021.106140

FARRUKH, M., LEE, J. W. C., SAJID, M., & WAHEED, A. (2019). Entrepreneurial intentions: The role of individualism and collectivism in perspective of theory of planned behaviour. *Education and Training, 61*(7-8), 984-1000. doi: 10.1108/ET-09-2018-0194

GODSWILL AGU, A., OKWARA, O. O., OKOCHA, E. R., & MADICHIE, N. O. (2021). COVID-19 pandemic and entrepreneurial intention among university students: a contextualisation of the Igbo Traditional Business School. *African Journal of Economic and Management Studies*. doi: 10.1108/AJEMS-05-2021-0227

GOLEMAN, D. (1995). *Emotional Intelligence*: Bantam Books.

GUBIK, A. S., & FARKAS, S. (2016). Student entrepreneurship in Hungary: Selected results based on GUESSS survey. *Entrepreneurial Business and Economics Review, 4*(4), 123-139. doi: 10.15678/EBER.2016.040408

GUERRERO, M., URBANO, D., & GAJÓN, E. (2014) The internal pathways that condition university entrepreneurship in latin america: An institutional approach. *Vol. 24. Advances in the Study of Entrepreneurship, Innovation, and Economic Growth* (pp. 89-118): JAI Press.

HADDOUD, M. Y., ONJEWU, A. K. E., NOWINSKI, W., & ALAMMARI, K. (2022). Assessing the role of entrepreneurship education in regulating emotions and fostering implementation intention: evidence from Nigerian universities. *Studies in Higher Education, 47*(2), 450-468. doi: 10.1080/03075079.2020.1758652

HADJIMANOLIS, A. (2016). Perceptions of the institutional environment and entrepreneurial intentions in a small peripheral country. *International Journal of Entrepreneurship and Small Business, 28*(1), 20-35. doi: 10.1504/IJESB.2016.075680

HAIR, J. F. (2014). A Primer on Partial Least Squares Structural Equations Modeling (PLS-SEM) SAGE. *Newcastle upon Tyne, UK*.

HAIR, J. F., RISHER, J. J., SARSTEDT, M., & RINGLE, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*.

HENDIEH, J., AOUN, D., & OSTA, A. (2019). Students' attitudes toward entrepreneurship at the Arab Open University-Lebanon. *Journal of Entrepreneurship Education, 22*(2).

HENLEY, A., CONTRERAS, F., ESPINOSA, J. C., & BARBOSA, D. (2017). Entrepreneurial intentions of Colombian business students: Planned behaviour, leadership skills and social capital. *International Journal of Entrepreneurial Behaviour and Research, 23*(6), 1017-1032. doi: 10.1108/IJEBR-01-2017-0031

HENLEY, A., CONTRERAS, F., ESPINOSA, J. C., & BARBOSA, D. (2017). Entrepreneurial intentions of Colombian business students: Planned behaviour, leadership skills and social capital. *International Journal of Entrepreneurial Behavior & Research*.

HERNÁNDEZ-SÁNCHEZ, B. R., CARDELLA, G. M., & SÁNCHEZ-GARCÍA, J. C. (2020). Psychological factors that lessen the impact of covid-19 on the self-employment intention of business administration and economics' students from latin america. *International Journal of Environmental Research and Public Health, 17*(15), 1-22. doi: 10.3390/ijerph17155293

HOANG, T. H., & LE, Q. H. (2021). Factors affecting youth entrepreneurial intention and suggestions for policymaking: The case of Vinh Long Province *Recent Developments In Vietnamese Business And Finance* (pp. 723-743): World Scientific Publishing Co.
HOI, H. T. (2020). “Start Up” Spirit of University Students in Vietnam. *Journal of Advanced Research in Dynamical and Control Systems, 12*(7 Special Issue), 1368-1372. doi: 10.5373/JARDCS/V12SP7/20202237
HOONG, C. W., QURESHI, Z. H., SAJILAN, S., & AL HALBUSI, H. (2019). *A study on the factors influencing social entrepreneurial intention among undergraduates.* Paper presented at the 2019 13th International Conference on Mathematics, Actuarial Science, Computer Science and Statistics (MACS).
HUANG, G. J. (2021). Social capital and financial capital acquisition: creating gaming ventures in Shanghai's entrepreneurial ecosystem. *Chinese Journal of Communication, 14*(1), 5-23. doi: 10.1080/17544750.2020.1762686
HUDEK, I., TOMINC, P., & SIREC, K. (2021). The Impact of Social and Cultural Norms, Government Programs and Digitalization as Entrepreneurial Environment Factors on Job and Career Satisfaction of Freelancers. *Sustainability, 13*(2), 20. doi: 10.3390/su13020779
HULSINK, W., & KOEK, D. (2014). The young, the fast and the furious: A study about the triggers and impediments of youth entrepreneurship. *International Journal of Entrepreneurship and Innovation Management, 18*(2-3), 182-209. doi: 10.1504/IJEIM.2014.062876
IGLESIAS-SÁNCHEZ, P. P., JAMBRINO-MALDONADO, C., VELASCO, A. P., & KOKASH, H. (2016). Impact of entrepreneurship programmes on university students. *Education and Training, 58*(2), 209-228. doi: 10.1108/ET-01-2015-0004
IZARD, C. E., & IZARD, C. E. (1977). Differential emotions theory. *Human emotions*, 43-66.
JAYAWARNA, D., JONES, O., & MACPHERSON, A. (2014). Entrepreneurial potential: The role of human and cultural capitals. *International Small Business Journal: Researching Entrepreneurship, 32*(8), 918-943. doi: 10.1177/0266242614525795
JOENSUU-SALO, S., VARAMÄKI, E., & VILJAMAA, A. (2015). Beyond intentions – what makes a student start a firm? *Education and Training, 57*(8-9), 853-873.
JOHANSEN, V. (2013). Entrepreneurship education and start-up activity: A gender perspective. *International Journal of Gender and Entrepreneurship, 5*(2), 216-231. doi: 10.1108/17566261311328864
JONES, P., & COLWILL, A. (2013). Entrepreneurship education: An evaluation of the Young Enterprise Wales initiative. *Education and Training, 55*(8-9), 911-925. doi: 10.1108/ET-04-2013-0052
JOSHI, M., JOSHI, G., & PATHAK, S. (2020). Awareness, entrepreneurial event theory and theory of planned behaviour as antecedents of student entrepreneurial intentions: An indian perspective. *International Journal of Business and Globalisation, 25*(2), 170-184.
KAKOURIS, A., MOLINA, V., & LIARGOVAS, P. (2020). *Assessing the impact of entrepreneurship education on entrepreneurial beliefs and conceptualizations.* Paper presented at the 15th European Conference on Innovation and Entrepreneurship, ECIE 2020.
KAMINSKY, O. Y., YERESHKO, Y. O., KYRYCHENKO, S. O., & TULCHINSKIY, R. V. (2021). Training in digital entrepreneurship as a basis for forming the intellectual capital of nation. *Information Technologies and Learning Tools, 81*(1), 210-221. doi: 10.33407/itlt.v81i1.3899
KANONUHWA, M., RUNGANI, E. C., & CHIMUCHEKA, T. (2018). The association between emotional intelligence and entrepreneurship as a career choice: A study on university students in South Africa. *SA Journal of Human Resource Management, 16*. doi: 10.4102/sajhrm.v16i0.907

KOE, W. L., KRISHNAN, R., & ALIAS, N. E. (2021). The Influence of Self-Efficacy and Individual Entrepreneurial Orientation on Technopreneurial Intention among Bumiputra Undergraduate Students. *Asian Journal of University Education, 17*(4), 490-497.

KOWANG, T. O., APANDI, S. Z. B. A., HEE, O. C., FEI, G. C., SAADON, M. S. I., & OTHMAN, M. R. (2021). Undergraduates entrepreneurial intention: Holistic determinants matter. *International Journal of Evaluation and Research in Education, 10*(1), 57-64. doi: 10.11591/ijere.v10i1.20733

KRUEGER JR, N. F., REILLY, M. D., & CARSRUD, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing, 15*(5), 411-432. doi: 10.1016/S0883-9026(98)00033-0

LAGOUDAS, M. Z., YOON, S. Y., BOEHM, R., & ASBELL, S. (2020). *Impact of an I-corps site program on engineering students at a large southwestern university: Year 3.* Paper presented at the 2020 ASEE Virtual Annual Conference, ASEE 2020.

LAGUÍA, A., MORIANO, J. A., & GORGIEVSKI, M. J. (2019). A psychosocial study of self-perceived creativity and entrepreneurial intentions in a sample of university students. *Thinking Skills and Creativity, 31*, 44-57. doi: 10.1016/j.tsc.2018.11.004

LASSO, S., MAINARDES, E., & MOTOKI, F. (2019). Why do entrepreneurs open tech startups? A comparative study between Brazilian and foreign enterprises. *International Entrepreneurship and Management Journal, 15*(1), 233-255. doi: 10.1007/s11365-017-0445-8

LASSO, S. V., MAINARDES, E. W., & MOTOKI, F. Y. S. (2018). Types of Technological Entrepreneurs: a Study in a Large Emerging Economy. *Journal of the Knowledge Economy, 9*(2), 378-401. doi: 10.1007/s13132-017-0470-4

LEE, Y. G., CORTES, A. F., & JOO, M. (2021). Entrepreneurship Education and Founding Passion: The Moderating Role of Entrepreneurial Family Background. *Frontiers in Psychology, 12*, 10. doi: 10.3389/fpsyg.2021.743672

LIÑÁN, F., & CHEN, Y. W. (2009). Development and cross–cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship theory and practice, 33*(3), 593-617.

LIU, L. L., & WANG, Y. J. (2021). Innovation and Entrepreneurship Practice Education Mode of Animation Digital Media Major Based on Intelligent Information Collection. *Mobile Information Systems, 2021*, 11. doi: 10.1155/2021/3787018

LONDONO, J. C., WILSON, B., & OSORIO-TINOCO, F. (2021). Understanding the entrepreneurial intentions of youth: a PLS multi-group and FIMIX analysis using the model of goal-directed behavior. *Journal of Entrepreneurship in Emerging Economies, 13*(3), 301-326. doi: 10.1108/jeee-07-2019-0090

LUO, Y.-F., HUANG, J., & GAO, S. (2022). Relationship Between Proactive Personality and Entrepreneurial Intentions in College Students: Mediation Effects of Social Capital and Human Capital. *Frontiers in Psychology, 13*, 861447.

LUONG, A., & LEE, C. (2021). The Influence of Entrepreneurial Desires and Self-Efficacy on the Entrepreneurial Intentions of New Zealand Tourism and Hospitality Students. *Journal of Hospitality and Tourism Education*. doi: 10.1080/10963758.2021.1963751

MAHMOOD, T. M. A. T., AL MAMUN, A., BIN AHMAD, G., & IBRAHIM, M. D. (2019). Predicting entrepreneurial intentions and pre-start-up behaviour among Asnaf millennials. *Sustainability (Switzerland), 11*(18). doi: 10.3390/su11184939

MAMABOLO, A., & LEKOKO, R. (2021). Entrepreneurial ecosystems created by woman entrepreneurs in Botswana. *South African Journal of Business Management, 52*(1), 13. doi: 10.4102/sajbm.v52i1.2228

MANOLOVA, T. S., EDELMAN, L. F., SHIROKOVA, G., & TSUKANOVA, T. (2019). Youth entrepreneurship in emerging economies: can family support help navigate institutional

voids? *Journal of East-West Business, 25*(4), 363-395. doi: 10.1080/10669868.2019.1624672
MAO, Y., & YE, Y. (2021). Specific antecedents of entrepreneurial intention among newly returned chinese international students. *Frontiers in Psychology, 12*.
MASON, C., ANDERSON, M., KESSL, T., & HRUSKOVA, M. (2020). Promoting student enterprise: Reflections on a university start-up programme. *Local Economy, 35*(1), 68-79. doi: 10.1177/0269094219894907
MAWSON, S., & KASEM, L. (2019). Exploring the entrepreneurial intentions of Syrian refugees in the UK. *International Journal of Entrepreneurial Behaviour and Research, 25*(5), 1128-1146. doi: 10.1108/IJEBR-02-2018-0103
MOUSSA, N. B., & KERKENI, S. (2021). The role of family environment in developing the entrepreneurial intention of young Tunisian students. *Entrepreneurial Business and Economics Review, 9*(1), 31-46.
MURUGESAN, R., & DOMINIC, P. D. D. (2014). Socio, economic and psychological determinants of entrepreneurial intentions: A structural equation model. *Global Business and Economics Review, 16*(4), 396-415. doi: 10.1504/GBER.2014.065363
MUSCIO, A., SHIBAYAMA, S., & RAMACIOTTI, L. (2021). Universities and start-up creation by Ph.D. graduates: the role of scientific and social capital of academic laboratories. *Journal of Technology Transfer*. doi: 10.1007/s10961-020-09841-2
MUSIIWA, D., KHAOLA, P., & RAMBE, P. (2019). Effects of emotions on the entrepreneurial attitudes, selfefficacy and intentions of university students. *African Journal of Hospitality, Tourism and Leisure, 8*(SpecialEdition), 1-23.
NAMBISAN, S., & BARON, R. A. (2021). On the costs of digital entrepreneurship: Role conflict, stress, and venture performance in digital platform-based ecosystems. *Journal of Business Research, 125*, 520-532. doi: 10.1016/j.jbusres.2019.06.037
PASSARO, R., SCANDURRA, G., & THOMAS, A. (2017). The emergence of innovative entrepreneurship: Beyond the intention - Investigating the participants in an academic SUC. *International Journal of Innovation and Technology Management, 14*(5). doi: 10.1142/S0219877017500250
PENG, H., LI, B., ZHOU, C., & SADOWSKI, M. (2021). How does the appeal of environmental values influence sustainable entrepreneurial intention? *International Journal of Environmental Research and Public Health, 18*(3), 1-25. doi: 10.3390/ijerph18031070
PEREZ-FERNANDEZ, H., MARTIN-CRUZ, N., DELGADO-GARCIA, J. B., & RODRIGUEZ-ESCUDERO, A. I. (2020). Online and Face-to-Face Social Networks and Dispositional Affectivity. How to Promote Entrepreneurial Intention in Higher Education Environments to Achieve Disruptive Innovations? *Frontiers in Psychology, 11*, 15. doi: 10.3389/fpsyg.2020.588634
PÉREZ-FERNÁNDEZ, H., MARTÍN-CRUZ, N., DELGADO-GARCÍA, J. B., & RODRÍGUEZ-ESCUDERO, A. I. (2020). Online and Face-to-Face Social Networks and Dispositional Affectivity. How to Promote Entrepreneurial Intention in Higher Education Environments to Achieve Disruptive Innovations? *Frontiers in Psychology, 11*. doi: 10.3389/fpsyg.2020.588634
PÉREZ-MACÍAS, N., FERNÁNDEZ-FERNÁNDEZ, J. L., & VIEITES, A. R. (2018). *Relational social capital dimension and entrepreneurial intentions in online environments.* Paper presented at the International Conference on Innovation and Entrepreneurship.
POPESCU, C. C., BOSTAN, I., ROBU, I.-B., & MAXIM, A. (2016). An analysis of the determinants of entrepreneurial intentions among students: a Romanian case study. *Sustainability (Switzerland), 8*(8), 771.
PRASHANTHAM, S. (2021). New ventures as value cocreators in digital ecosystems. *Industrial Management & Data Systems, 121*(1), 111-122. doi: 10.1108/imds-07-2020-0414

PUGALIA, S., PRAKASH SAI, L., & CETINDAMAR, D. K. (2020). Personal Networks' Influence on Student Entrepreneurs: A Qualitative Study. *International Journal of Innovation and Technology Management, 17*(5). doi: 10.1142/S0219877020500376

RAIJMAN, R. (2001). Determinants of entrepreneurial intentions: Mexican immigrants in Chicago. *Journal of Socio-Economics, 30*(5), 393-411. doi: 10.1016/S1053-5357(01)00101-9

RENKO, M., BULLOUGH, A., & SAEED, S. (2021). How do resilience and self-efficacy relate to entrepreneurial intentions in countries with varying degrees of fragility? A six-country study. *International Small Business Journal-Researching Entrepreneurship, 39*(2), 130-156. doi: 10.1177/0266242620960456

RUIZ-ROSA, I., GUTIÉRREZ-TAÑO, D., & GARCÍA-RODRÍGUEZ, F. J. (2020). Social entrepreneurial intention and the impact of COVID-19 pandemic: A structural model. *Sustainability (Switzerland), 12*(17). doi: 10.3390/SU12176970

SALAMZADEH, Y., SANGOSANYA, T. A., SALAMZADEH, A., & BRAGA, V. (2022). Entrepreneurial universities and social capital: The moderating role of entrepreneurial intention in the Malaysian context. *The International Journal of Management Education, 20*(1), 100609.

SANSONE, G., UGHETTO, E., & LANDONI, P. (2021). Entrepreneurial intention: An analysis of the role of Student-Led Entrepreneurial Organizations. *Journal of International Entrepreneurship, 19*(3), 399-433. doi: 10.1007/s10843-021-00288-6

SANTOSO, A. S., SOH, P.-H., LARSO, D., & CHEN, J. (2020). Strategic entrepreneurship in a VUCA environment: Perspectives from Asian emerging economies. *Int. J. Entrepreneurial Venturing, 12*(4), 343.

SCHWARZ, E. J., WDOWIAK, M. A., ALMER-JARZ, D. A., & BREITENECKER, R. J. (2009). The effects of attitudes and perceived environment conditions on students' entrepreneurial intent: An Austrian perspective. *Education and Training, 51*(4), 272-291. doi: 10.1108/00400910910964566

SHAHID, M. S., & AHSEN, S. R. (2021). Linking entrepreneurship education and entrepreneurial intentions: An interactive effect of social and personal factors. *International Journal of Learning and Change, 13*(1), 14-33. doi: 10.1504/IJLC.2021.111670

SHER, A., ABBAS, A., MAZHAR, S., & LIN, G. (2020). Fostering sustainable ventures: Drivers of sustainable start-up intentions among aspiring university students in Pakistan. *Journal of Cleaner Production, 262*. doi: 10.1016/j.jclepro.2020.121269

SHIROKOVA, G., OSIYEVSKYY, O., BOGATYREVA, K., EDELMAN, L. F., & MANOLOVA, T. S. (2020). Moving from Intentions to Actions in Youth Entrepreneurship: An Institutional Perspective. *Entrepreneurship Research Journal*. doi: 10.1515/erj-2019-0201

SHRIVASTAVA, U., & ACHARYA, S. R. (2020). Entrepreneurship education intention and entrepreneurial intention amongst disadvantaged students: an empirical study. *Journal of Enterprising Communities, 15*(3), 313-333. doi: 10.1108/JEC-04-2020-0072

SLOGAR, H., STANIC, N., & JERIN, K. (2021). Self-assessment of entrepreneurial competencies of students of higher education. *Zbornik Veleucilista U Rijeci-Journal of the Polytechnics of Rijeka, 9*(1), 79-95. doi: 10.31784/zvr.9.1.5

SMITH, K., & BEASLEY, M. (2011). Graduate entrepreneurs: Intentions, barriers and solutions. *Education and Training, 53*(8), 722-740. doi: 10.1108/00400911111185044

STANIEWSKI, M., & AWRUK, K. (2016). Start-up intentions of potential entrepreneurs – The contribution of hope to success. *Economic Research-Ekonomska Istrazivanja, 29*(1), 233-249. doi: 10.1080/1331677X.2016.1166345

SUBRAMANIAN, M., SUBRAMANIAN, K., AL-HAZIAZI, M., & SHERIMON, P. C. S. (2017). *Entrepreneurial intent of prospective graduates in Sultanate of Oman.* Paper presented at the 12th European Conference on Innovation and Entrepreneurship, ECIE 2017.

SULTANA, R., IM, I., & IM, K. S. (2019). Do IT freelancers increase their entrepreneurial behavior and performance by using IT self-efficacy and social capital? Evidence from Bangladesh. *Information & Management, 56*(6), 103133.

TING, C. L. W., MOHD ROSDI, S. A., & ABIDIN, R. (2020). The influence of personal attributes and family support towards intention to start-up online business. *International Journal of Advanced Science and Technology, 29*(6), 243-248.

TRAN, D. G. T., BUI, T. Q., NGUYEN, H. T., & MAI, M. T. T. (2018). *The antecedents of entrepreneurial intention a study among graduate students in Ho Chi Minh City.* Paper presented at the 6th International Conference on the Development of Biomedical Engineering in Vietnam, BME 2016.

TRIVEDI, R. (2016). Does university play significant role in shaping entrepreneurial intention? A cross-country comparative analysis. *Journal of Small Business and Enterprise Development, 23*(3), 790-811. doi: 10.1108/JSBED-10-2015-0149

TURUK, M., HORVATINOVIC, T., & SUDARIC, Ž. (2020). Examining the causes of entrepreneurial intentions and their moderating effects. *International Journal of Economics and Business Research, 20*(4), 425-441. doi: 10.1504/IJEBR.2020.111099

VALENCIA-ARIAS, A., & RESTREPO, L. A. M. (2020). Entrepreneurial intentions among engineering students: Applying a theory of planned behavior perspective. *Periodica Polytechnica Social and Management Sciences, 28*(1), 59-69. doi: 10.3311/PPso.12731

VAN DER WESTHUIZEN, T., & GOYAYI, M. J. (2020). The influence of technology on entrepreneurial self-efficacy development for online business start-up in developing nations. *International Journal of Entrepreneurship and Innovation, 21*(3), 168-177. doi: 10.1177/1465750319889224

VRACHEVA, V. P., ABU-RAHMA, A., & JACQUES, P. (2019). Effects of context on the entrepreneurial intent of female students from the United Arab Emirates. *Education and Training, 61*(6), 700-717. doi: 10.1108/ET-01-2018-0014

WANG, P., & HUANG, Y. (2020). Give Me What I Want: Identifying the Support Needs of College Student Entrepreneurs. *Frontiers in Psychology, 11*. doi: 10.3389/fpsyg.2020.01428

WEGNER, D., THOMAS, E., TEIXEIRA, E. K., & MAEHLER, A. E. (2020). University entrepreneurial push strategy and students' entrepreneurial intention. *International Journal of Entrepreneurial Behaviour and Research, 26*(2), 307-325. doi: 10.1108/IJEBR-10-2018-0648

YOUNIS, H., KATSIOLOUDES, M., & BAKRI, A. A. (2020). Digital entrepreneurship intentions of Qatar university students motivational factors identification: Digital entrepreneurship intentions. *International Journal of E-Entrepreneurship and Innovation, 10*(1), 56-74. doi: 10.4018/IJEEI.2020010105

YU, T., KHALID, N., & AHMED, U. (2021). Factors influencing entrepreneurial intention among foreigners in Kazakhstan. *Sustainability (Switzerland), 13*(13). doi: 10.3390/su13137066

ZAMPETAKIS, L. A., LERAKIS, M., KAFETSIOS, K., & MOUSTAKIS, V. (2016). Anticipated emotions towards new venture creation: A latent profile analysis of early stage career starters. *International Journal of Management Education, 14*(1), 28-38. doi: 10.1016/j.ijme.2015.11.004

ZHANG, F., WEI, L., SUN, H., & TUNG, L. C. (2019). How entrepreneurial learning impacts one's intention towards entrepreneurship: A planned behavior approach. *Chinese Management Studies, 13*(1), 146-170. doi: 10.1108/CMS-06-2018-0556

ZHENG, H., LI, D., WU, J., & XU, Y. (2014). The role of multidimensional social capital in crowdfunding: A comparative study in China and US. *Information & Management, 51*(4), 488-496.

ZHU, F., FAN, S. X. J., & ZHAO, L. (2019). Having Entrepreneurial Friends and Following Them? The Role of Friends' Displayed Emotions in Students' Career Choice Intentions. *Journal of Enterprising Culture, 27*(4), 445-470. doi: 10.1142/s021849581950016x

ZOLLO, L., RIALTI, R., TRON, A., & CIAPPEI, C. (2021). Entrepreneurial passion, orientation and behavior: the moderating role of linear and nonlinear thinking styles. *Management Decision, 59*(5), 973-994. doi: 10.1108/md-10-2019-1500

APÊNDICE A - QUESTIONÁRIO DE COLETA DE DADOS (ARTIGO 3)

Este questionário visa apoiar a investigação de uma tese de doutorado em Administração, realizada na Universidade Estadual de Campinas (UNICAMP). O nosso objetivo é avaliar o impacto das emoções e do capital social na intenção empreendedora digital de jovens universitários paulistas. O estudo espera contribuir com formuladores de políticas públicas, instituições e gestores envolvidos com o fomento de iniciativas empreendedoras, principalmente, em países emergentes. A pesquisa foi autorizada pelo Comitê de Ética em Pesquisa em Ciências Humanas e Sociais (CEP-CHS) (número CAAE: 58711822.6.0000.81420). Os resultados obtidos serão utilizados exclusivamente para fins acadêmicos, sendo realçado que as respostas dos inquiridos representam apenas uma opinião individual, as quais preservarão o anonimato do respondente. Agradecemos a sua colaboração!

Pesquisador: André Luiz Tavares Damasceno
Orientador: Prof. Dr. Cristiano Morini
Coorientador: Prof Dr. Edmundo Inácio Jr

PARA OS FINS DESTA PESQUISA, CONSIDERA-SE QUE VOCÊ CURSA UMA GRADUAÇÃO NAS ÁREAS DE ENGENHARIA, TI OU ADMINISTRAÇÃO E TEM MAIS DE 18 ANOS.

Sobre você, assinale:

Gênero:	( )	Masculino	( ) Feminino	( ) Prefiro não dizer	
Idade:	( )	Maior de idade (>=18)	( ) Menor de idade (< 18)		
Instituição:	( )	1	( ) 2	( ) 3	( ) 4
Curso:	( )	Gestão (Administração, Administração Pública ou tecnólogos da área de gestão)			
	( )	Cursos de TI (Ciência da Computação, Sistemas de Informação, Engenharia de Software ou outros)			
	( )	Engenharias (incluindo Engenharia da Computação)			

PARA CADA AFIRMAÇÃO A SEGUIR, ASSINALE APENAS UMA ALTERNATIVA DE 1 "DISCORDO TOTALMENTE" A 5 "CONCORDO TOTALMENTE".

1 - Discordo totalmente	2 - Discordo	3 - Indiferente	4 - Concordo	**5 - Concordo totalmente**

Q	Pergunta	Escala				
1	Tenho receio de decepcionar os membros da minha família.					
2	Tenho receio de fracassar profissionalmente.					
3	Tenho receio de decepcionar as pessoas com quem me relaciono (fora da família).					
4	Os conselhos dos membros da minha família aumentam a confiança na minha capacidade de realizar tarefas.					
5	Os conselhos dos membros da minha família aumentam a confiança na minha capacidade de atingir resultados.					
6	Os exemplos dos membros da minha família aumentam a confiança na minha capacidade de realizar tarefas.					
7	Os exemplos dos membros da minha família aumentam a confiança na minha capacidade de atingir resultados.					
8	As pessoas com quem me relaciono (fora da família) aumentam a confiança na minha capacidade de realizar tarefas.					
9	As pessoas com quem me relaciono (fora da família) aumentam a confiança na minha capacidade de atingir resultados.					
10	A influência das pessoas com quem me relaciono (dentro ou fora da família) me estimula a comportar-me de modo positivo.					
11	Os conselhos dos membros da minha família aumentam a minha convicção de que sou capaz de criar um negócio digital bem-sucedido.					
12	Os exemplos dos membros da minha família aumentam a minha convicção de que sou capaz de criar um negócio digital bem-sucedido.					
13	Os conselhos das pessoas com quem me relaciono (fora da família) aumentam a minha convicção de que sou capaz de criar um negócio digital bem-sucedido.					
14	Os exemplos das pessoas com quem me relaciono (fora da família) aumentam a minha convicção de que sou capaz de criar um negócio digital bem-sucedido.					
15	Minha família imediata aprovaria minha decisão de abrir um negócio digital.					

16	Meus amigos aprovariam a minha decisão de abrir um negócio digital.					
17	Quando eu lido com novos problemas, eu imediatamente tenho a convicção que vou achar uma solução viável.					
18	Quando eu lido com novas oportunidades, eu imediatamente tenho a convicção que vou achar uma solução viável.					
19	Quando eu enfrento novos desafios, eu consigo achar soluções viáveis a partir dos recursos que já tenho.					
20	Se eu tiver a oportunidade e os recursos, gostaria de iniciar um negócio digital.					
21	Eu tenho conhecimentos e habilidades suficientes para iniciar um negócio digital.					
22	Sou capaz de desenvolver ou lidar com os desafios de um negócio digital.					
23	As minhas relações sociais me ajudam quando me relaciono com os outros.					
24	Como tenho me preparado para os conflitos emocionais diários, minhas relações sociais tem sido impactadas positivamente.					
25	Minhas relações sociais aumentaram desde que comecei a estudar mais sobre negócios digitais.					
26	À medida que sinto desejo de criar um negócio digital, o meu receio de fracassar diminui.					
27	À medida que aumenta o meu desejo de criar um negócio digital, tenho mais confiança na minha capacidade de realizar esse objetivo.					
28	À medida que aumenta o meu desejo de criar um negócio digital, tenho evitado maus comportamentos com mais frequência.					
29	À medida que aumenta o meu desejo de criar um negócio digital, tenho promovido bons comportamentos com mais frequência.					

CAPÍTULO 5: CONCLUSÕES

Esta seção visa resumir os principais temas e questões tratados na tese, em três seções. A 1ª apresenta e discute os principais resultados e evidências encontradas à luz das questões de pesquisa que motivaram esta tese e que aparecem na introdução. A 2ª seção resume algumas das contribuições da pesquisa. A 3ª seção apresenta as limitações da pesquisa e as implicações para pesquisas posteriores.

5.1 Resumo dos principais resultados

O 1º capítulo tratou do alto crescimento de negócios digitais, gerando um portfólio bibliográfico a partir da Revisão Sistemática de Literatura de 139 artigos extraídos das bases *Scopus* e *Web of Science.* O portfólio bibliográfico serviu de base para o desenvolvimento de um *framework* composto por 28 capacidades essenciais (organizado em 3 estágios e 5 dimensões) e de uma agenda de pesquisa, contendo 4 questões, visando subsidiar estudos futuros sobre o tema. Os 139 artigos analisados compreendem o período de 1987 a 2022. A análise do portfólio bibliográfico releva que os Estados Unidos (20.9%), Brasil (7.2%) e Alemanha (5.0%) são os países que mais publicaram mais artigos. Quase ¼ dos artigos (23.7%) foram publicados em periódicos classificados no 1º quartil (de acordo com o índice SJR). Ao analisar os métodos empregados, estão a revisão de literatura (64%) e estudo de caso (14%), utilizando técnicas qualitativas de análise (58%). Por fim, a análise verificou que o estágio de inicialização (*startup*) é majoritário nas pesquisas (63% dos estudos), potencialmente justificado pelas altas taxas de falha dos negócios digitais, que supera 90% nos três primeiros anos.

O *framework* teórico proposto consolida e apresenta 28 capacidades essenciais ao longo de três estágios (inicialização, crescimento e aceleração) e categorizados por recursos (estratégia, levantamento de investimentos, governança e gestão, inovação e capital humano). A agenda de pesquisa também é baseada no portfólio bibliográfico gerado a partir da Revisão Sistemática de Literatura.

As questões foram elaboradas após a constatação do autor de que não foram abordados nos documentos analisados. No estágio inicialização, foram formuladas duas questões, propondo estudos que abordem (i) as diferenças essenciais na cultura digital de países emergentes e desenvolvidos e o (ii) o perfil dos fundadores de empresas digitais de alto crescimento. No estágio crescimento, é proposta a realização de pesquisas para

esclarecer os fatores críticos que determinam o fracasso de negócios digitais que perdem tração após as primeiras rodadas de investimento. E finalmente, no estágio de aceleração, a agenda sugere estudos que investiguem padrões existentes nos desejos, intenções e decisões envolvidos nas estratégias de internacionalização de negócios digitais bem-sucedidos.

O 2º capítulo da tese aborda o caso da Companhia A, empresa digital que mais rapidamente chegou ao status de unicórnio (tendo sido superada após a publicação de artigo, no final de 2021). Após a realização da Revisão Sistemática de Literatura sobre o tema, foram coletados os dados por meio de entrevistas em profundidade com gestores e técnicos da empresa. A análise foi realizada à luz da Visão Baseada em Recursos (VBR). A Companhia A atua em um setor marcado por muita ineficiência e pouca inovação, e obteve, a partir da experiência de seus fundadores, acesso a recursos e competências essenciais para o sucesso exponencial do negócio. Os negócios digitais precisam adaptar constantemente suas práticas empresariais, melhorando, paulatinamente, o seu entendimento sobre a necessidade dos clientes atuais e futuros. Esse caráter adaptativo ao longo do ciclo de vida (a variável tempo) não é abordado diretamente pela proposição inicial da VBR.

O 3º capítulo da tese aborda a influência do Capital Social e das Emoções Antecipadas (positivas e negativas) nas intenções empreendedoras de jovens graduandos dos cursos de Engenharia, Administração e Tecnologia. A relevância do papel do empreendedor na dinâmica do alto crescimento justifica a pesquisa realizada. Já que o ambiente acadêmico é propício para identificar e promover a criação de negócios com potencial de alto crescimento, é essencial suscitar a discussão e a proposição de políticas e projetos orientados para o corpo discente. Essas iniciativas deveriam visar, a qualidade de vida individual e o estímulo de relações socialmente positivas, de modo concomitante ao papel de disseminação dos conhecimentos técnicos e científicos.

Os resultados apontam que o Capital Social influencia as Atitudes (hipótese 1), mas não tem influência decisiva sobre Intenções Empreendedoras Digitais (hipótese 2). Sobre os três subfatores da TCP no modelo, o estudo verificou que as Atitudes têm influência sobre as Intenções Empreendedoras digitais (hipótese 3); as Normas Subjetivas não exercem papel significante sobre as Intenções Empreendedoras Digitais (hipótese 4); e o Controle do Comportamento Percebido exerce influência sobre as Intenções Empreendedoras digitais (hipótese 5). Sobre o poder de moderação das Emoções Antecipadas nas relações entre o Capital Social e as Intenções, o estudo confirmou que as

Emoções Negativas são significantes (hipótese 6) e as Emoções Positivas não são significantes (hipótese 7) na relação (entre Capital Social e Intenções Empreendedoras Digitais).

O Capital Social, avaliado de modo amplo e genérico, tem impacto positivo nas aspirações profissionais, sejam elas quais forem, já que dependem da qualidade e das características das relações sociais estabelecidas e cultivadas. Um momento de ruptura, na qual as empresas digitais vivenciaram uma situação atípica foi a pandemia de COVID-19 (2020-2022), na qual muitas contabilizaram crescimento exponencial nesse período.

Com certa normalização da vida social, muitas big-techs e empresas-unicórnio (sem contar outras empresas digitais menores) anunciaram demissões em massa (*lay-offs*). O retorno à vida normal parece não ter sido planejada adequadamente. A Companhia A também realizou demissões em massa no último mês de 2022 e primeiro bimestre de 2023. Algo essencial para os empreendimentos de alto crescimento – e aqueles que não são – é a obrigatoriedade do planejamento das etapas seguintes.

O processo decisório deve considerar cenários de ascensão e declínio. Tanto bons como maus resultados podem gerar consequências negativas, caso as boas oportunidades não sejam aproveitadas para gerar o próximo estágio de crescimento. Por outro lado, resultados negativos podem ocasionar em decisões temerárias, evitando que modelos de negócios promissores tenham tempo de amadurecer e gerar o ciclo de crescimento desejado pelos *shareholders*. Desse modo, o *framework* de capacidades essenciais (capítulo 1) pode sugerir a importância de um mapa de atributos que devem ser desenvolvidos pela gestão do negócio. Ao estudar o caso da Companhia A (capítulo 2), ficou claro que a organização teve dificuldades com a necessária preparação para o enfrentamento dos desafios futuros (intitulado, na pesquisa, como “dores de crescimento”). O aumento da equipe de colaboradores em curto período de tempo gerou ruídos significativos de comunicação e mudanças frequentes na priorização dos projetos. Isso exigiu que a empresa adotasse processos padronizados, ocasionando um necessário período de adaptação.

É um desafio, para todas as organizações (e para aquelas que perseguem alto crescimento) conhecer, adquirir e manter vantagens competitivas sustentáveis, num ciclo incremental e evolutivo. Talvez a Companhia A não tenha investido tempo para conhecer, efetivamente, as vantagens competitivas indutoras do alto crescimento, o que pode ter minado a objetividade das decisões. Conforme já comentado, a empresa demitiu, eliminando, concomitantemente, muitos setores técnicos que eram, num primeiro momento,

considerados estratégicos. Ainda que não pretenda ser exaustivo e completo, a compilação das capacidades essenciais do artigo 1 oferece um guia para facilitar o processo decisório da alta gestão, na medida que recursos escassos devem ser alocados da forma mais efetiva possível.

Ao falar de ajustes e aperfeiçoamentos, é preciso considerar que demissões e falências são rupturas que geram distúrbios e desequilíbrios, tanto para fundadores, como para funcionários e, por que não dizer, para investidores. Se a vida corporativa é frequentemente associada à pressão por resultados e desejo por equilíbrio das demandas pessoal e profissional, a qualidade nas relações e estado emocional positivo são fatores determinantes para esse equilíbrio. Como ficou exposto na pesquisa, a forma como esses fatores influenciam as atitudes e as intenções empreendedoras pode ajudar a elucidar o impacto de ambientes socialmente tóxicos na saúde e, consequentemente, na felicidade das pessoas. Felicidade esta que depende, também, do êxito profissional, não apenas de jovens e adultos competentes que pretendem empreender, mas também daqueles que decidem por outros caminhos na carreira.

5.2 Discussões

Como dito anteriormente, foi identificada uma quantidade majoritária de artigos relacionados à fase de inicialização, que é uma fase crucial do processo empreendedor (tradicional ou digital), sendo críticas as etapas de reconhecimento de oportunidades e processos de criação de produtos e serviços (AHAMAT; CHONG, 2014), a fim de captar e alocar eficaz e eficientemente os investimentos (LIN; WANG, 2021; ZHANG; ZHONG; YUAN; XIONG, 2021). O crescimento e expansão de empresas (incluindo as digitais) são tema de discussão de teorias consagradas (BARNEY, 1991; COASE, 1937; PENROSE, 1959; TEECE; PISANO; SHUEN, 1997). Essas teorias seguem oferecendo novos *insights*, apoiando os esforços para compreensão da dinâmica dos negócios – também – na era digital.

A visão de contexto oferecida na pesquisa sobre os artigos publicados permite a compreensão sobre a evolução do tema. Na análise do portfólio bibliográfico que subsidiou a pesquisa do capítulo 2, foram observadas tanto estudos de caso (DO CARMO; RANGEL, 2020; LIN; WANG, 2021; LIOW; WONG, 2021; OLIVA; TEBERGA; TESTI; KOTABE *et al.*, 2022; SENGUPTA; NARAYANAMURTHY; HOTA; SARKER *et al.*, 2021) como discussões teóricas (AMMIRATO; SOFO; FELICETTI; HELANDER *et al.*, 2020; BRUNET-THORNTON;

MARTINEZ, 2018; DIAKANASTASI; KARAGIANNAKI; PRAMATARI, 2018; ENTRINGER; DA SILVA, 2020; FLOREK-PASZKOWSKA; UJWARY-GIL; GODLEWSKA-DZIOBON, 2021).

A tese abordou o tema por meio de 3 objetivos específicos, tratando de alto crescimento nos artigos 1 e 2 e de intenções empreendedoras digitais no artigo 3. A organização da pesquisa considera que o alto crescimento continuado, conforme já exposto, baseia-se no conhecimento, aquisição e manutenção de vantagens competitivas sustentáveis, e se materializa nos casos de estudo das empresas-unicórnio. O desenvolvimento de *frameworks* e metodologias são, por sua vez, meios para a aplicação dos conceitos, práticas e técnicas por profissionais de mercado.

A essa altura, é necessário analisar e discutir integradamente os três objetivos da pesquisa, a fim de fornecer uma visão de conjunto. O ato de empreender é desafiante e arriscado, independente do modelo de negócios, quer no ambiente tradicional ou digital. O nível de risco é variável, e pode aumentar ou diminuir, devido, dentre outros fatores, às incertezas sobre a estrutura e características do setor de atividade e o investimento alocado. Nos ambientes tradicionais, verifica-se mais comumente a replicação de modelos de negócio existentes, com pouca ou quase nenhuma inovação que gere valor para os clientes. Porém, parece que o empreendedorismo digital oferece mais espaço para a experimentação, por basear-se, frequentemente, em modelos de negócio composto por elementos mais flexíveis do que ocorre no tradicional.

Além disso, existe certo encanto que envolve o empreendedorismo digital, e expectativas de retornos exponenciais em menor prazo quando comparado com o empreendedorismo tradicional. São expectativas, por vezes, exageradas. Contudo, é possível afirmar que o empreendedorismo digital é mais acessível e, portanto, a propensão dos jovens a empreender digitalmente parece ser maior do que empreender em negócios tradicionais.

O estudo de caso do capítulo 3 oferece algumas discussões importantes. A visão dos fundadores é destacada por TRACHANA; DIAKANASTASI; KARAGIANNAKI e PRAMATARI (2017) como essencial para o sucesso do negócio. A experiência e competência dos fundadores é uma vantagem competitiva explorada desde os momentos iniciais da empresa, facilitando o acesso a recursos financeiros que viabilizaram o seu modelo de negócios. A Companhia A tratou como essencial o desenvolvimento das relações de confiança (MASINOVA; SVANDOVA, 2014) estabelecida com os proprietários e corretores, cuja proximidade é essencial para a criação de uma cultura orientada ao cliente.

A manutenção da cultura ágil, mais propensa à assunção de riscos e experimentação de novos produtos e serviços (TRACHANA; DIAKANASTASI; KARAGIANNAKI; PRAMATARI, 2017) é um desafio para as empresas de crescimento exponencial, pois as “dores do crescimento” podem fragmentar a comunicação interna e externa.

No capítulo 4, a pesquisa propôs 7 hipóteses. Após analisar os resultados do modelo proposto utilizando a MEE-MQP e realizando o teste de hipóteses, conclui-se que o Capital Social tem influência sobre as Atitudes (23,5%), mas não influencia significativamente as Intenções Empreendedoras Digitais (3,5%). As Emoções Antecipadas Negativas têm efeito moderador nas relações entre o Capital Social e as intenções de empreender digitalmente (4%). As Emoções Positivas Antecipadas, por outro lado, não afetam as relações entre as variáveis supracitadas (1,9%). Dos três subfatores da TCP, as Normas Subjetivas não influenciam as Intenções Empreendedoras Digitais (1%); porém, as Atitudes (4,1%), assim como o Controle do Comportamento Percebido (29,4%), exercem influência.

Ainda assim, a família e os demais grupos de convivência são elementos determinantes para a formação do caráter e as aspirações do indivíduo, dentre as quais, as pertinentes ao domínio profissional, incluindo as intenções empreendedoras. Isso destaca a relevância do empreendedorismo familiar (ou geracional), trata da dinâmica empreendedora assimilada e vivenciada no seio família, seja por meio de empresas estabelecidas (CRUZ; NORDQVIST, 2012) ou pelo contato com assuntos sobre economia e gestão.

Apesar das emoções antecipadas negativas e positivas não terem apresentado resultados significativamente relevantes, é sabido que elas aumentam ou diminuem a probabilidade de realizar projetos profissionais, quer seja empreender, quer seja trabalhar numa organização, privada ou pública. Isso pode estimular a reflexão sobre a necessidade de conceber e projetar cursos que potencializem a rede de relações dos seus alunos com pessoas e empresas, sobretudo para a criação de novos negócios digitais e, de modo mais amplo, a carreira dos alunos, seja qual for a decisão profissional que tenham tomado.

Na 1ª questão de pesquisa foi proposta a investigação de quais são as discussões, teorias e metodologias empregadas nos estudos sobre o alto crescimento digital. O objetivo foi atingido com a análise do portfólio bibliográfico e a proposição de *framework* teórico proposto, organizado por estágios (inicialização, crescimento e aceleração) e recursos (estratégia, levantamento de investimentos, governança e gestão, inovação e capital humano). O *framework* pode, com os desenvolvimentos necessários, orientar a reflexão sobre quais capacidades devem ser implementadas a cada novo estágio do

empreendimento digital. Além disso, pode contribuir com outros instrumentos de gestão, em temas, como, por exemplo, níveis de maturidade e auditoria, que são frequentemente utilizados por consultorias contratadas por empresas para melhoria de desempenho e reorientação do negócio. Além disso, foi elaborada uma agenda de pesquisa, contendo 4 questões sugeridas para avançar na compreensão do tema de alto crescimento digital.

A 2ª questão de pesquisa orientou o entendimento dos fatores de sucesso e desafios enfrentados pelo mais rápido unicórnio brasileiro. Os estudos de caso únicos e múltiplos oferecem uma visão menos abrangente sobre a realidade considerada, são úteis para avaliar o teste das teorias consagradas, e adicionar contribuições para a compreensão progressiva sobre tema, identificando, inclusive, lacunas e pontos a serem esclarecidos.

Finalmente, a 3ª questão de pesquisa propôs investigar, de modo inédito, o impacto combinado da capital social e das emoções antecipadas nas intenções empreendedoras digitais. Das 7 hipóteses propostas, 4 foram não foram rejeitadas (ou seja, apresentaram p-valor menor do que 0.05), conforme já exposto. Como o empreendedor ocupa papel central para o empreendedorismo de alto crescimento, é relevante conduzir pesquisas que investiguem as características que antecedem a fundação do negócio. E essas características (causas de sucesso), são frequentemente, subjetivas e complexas, já que nem sempre estão associadas à oferta de meios materiais e oportunidades de aprendizado.

5.3 Limitações da pesquisa

O artigo 1 foi baseado numa Revisão Sistemática de Literatura. Sendo um trabalho com finalidade teórica, carece de avaliação da consistência dos achados, averiguando a presença/ausência das capacidades essenciais na realidade cotidiana das empresas digitais de alto crescimento.

No artigo 2, que analisou o estudo de caso da Companhia A, buscou-se robustecer a pesquisa por meio de uma Revisão Sistemática de Literatura, visando confrontar os resultados com a VBR de (BARNEY, 1991). É necessário, porém, considerar a evolução da própria VBR ao longo do tempo, e a consolidação dos avançados teóricos que culminaram na teoria das Capacidades Dinâmicas (TEECE; PISANO; SHUEN, 1997), que aborda a necessidade de adaptação das empresas de acordo com o contexto. Futuramente, podem ser realizadas investigações baseadas em estudos longitudinais, visando acompanhar as adaptações na estratégia e no modelo de negócio das gazelas, unicórnios e dragões, como

forma de responder às mudanças ambientais ao longo do tempo, quer se refiram às novas demandas dos clientes, quer ao surgimento de novos concorrentes.

O artigo 3 também realizou uma Revisão Sistemática de Literatura abrangente, e elegeu 3 constructos (capital social, emoções antecipadas positivas e emoções antecipadas negativas) que motivaram o desenvolvimento do modelo baseado na TPB de (AJZEN, 1991). Apesar de ter considerado um contexto geográfico relevante para avaliar o constructo “intenção empreendedora”, a pesquisa pode ser replicada em outros centros empreendedores do Brasil e outros países emergentes, com a ampliação da amostra para fins de comparação dos resultados. Isso poderia ajudar no entendimento regionalizado das necessidades de criação e redesenho de serviços a serem ofertados por universidades e instituições que compõem os ecossistemas empreendedores (incluindo, por exemplo, apoio psicológico e educação empresarial).

5.4 Implicações para pesquisas posteriores

Um dos grandes desafios das pesquisas sobre alto crescimento e negócios digitais é a falta – compreensível – de dados que viabilizem estudos longitudinais, facilitando a compreensão mais objetiva e detalhada das empresas durante o ciclo de vida. Existe certa resistência das empresas – também compreensível – em disponibilizar informações sobre a estratégia, operações e finanças que permitam aos pesquisadores realizar inferências.

Com a leitura sistemática dos trabalhos que colaboraram com esta pesquisa de tese, observa-se a adoção frequente da estratégia de estudo de caso, como é o caso do tema ‘intenções empreendedoras’, abordado no 3º capítulo. O ponto fraco dessa abordagem é que a visão de conjunto fica prejudicada e fragmentada. Nesse caso, a aplicação de técnicas de meta-análise pode apoiar a agregação de estudos independentes e relevantes sobre o mesmo tema, oferecendo uma visão combinada dos resultados, atribuindo o peso adequado a cada pesquisa.

O desenho de pesquisa do 2º capítulo, “empresas-unicórnio”, utilizou entrevistas em profundidade para compreensão das causas do crescimento exponencial observados pela Companhia A. Futuras pesquisas poderão aplicar o questionário em profundidade com profissionais de outras empresas-unicórnio, no próprio Brasil e em outros países emergentes, a fim de aperfeiçoar os achados na Companhia A. Pesquisas poderão, ainda, ampliar a visão dos achados, por meio da aplicação de *surveys* para captar as visões e impressões de profissionais de outras empresas-unicórnio. A coleta de dados em painel,

visando identificar mudanças nas estratégias e modelos de negócio ao longo do ciclo de vida das empresas pode auxiliar na compreensão da dinâmica do crescimento digital, conforme dito anteriormente.

É possível que o quebra-cabeça do alto crescimento digital nunca seja respondido satisfatoriamente, como ocorreu com Édipo, que venceu a esfinge de Tebas (dando a solução do enigma “decifra-me ou te devoro”). Será que podemos afirmar que a resposta ao nosso enigma seja o mesmo dado pelo herói grego: o homem, com a sua capacidade criadora e inventiva de criar organizações de alto crescimento nesse novo mundo digital? É possível. Porém, a ciência não se satisfaz com soluções tão evasivas e subjetivas. A busca pela resposta ao enigma continuará. Mas é certo que as pessoas, agindo individual ou coletivamente, são os principais realizadores de empreendimentos, desenvolvendo as capacidades necessárias ao negócio, seja qual for o estágio do ciclo de vida no qual se encontrem.

REFERÊNCIAS

ABADÍA, A. Study on Leadership and Innovation: Clues for Success in Technology-related Startups. **Cuadernos de Gestion**, 21, n. 2, p. 109-118, 2021. Article.

ABHARI, K.; WILLIAMS, D.; PAWAR, P.; PANJWANI, K. Smart Entrepreneurial Systems: An Application of Deep Reinforcement Learning in Improving Entrepreneurship Mentorship. Future of Information and Communication Conference, FICC 2021. ARAI, K. : Springer Science and Business Media Deutschland GmbH. 1364 AISC**:** 462-476 p. 2021.

ACS, Z. J. High-impact firms: gazelles revisited. *In*: **Handbook of research on entrepreneurship and regional development**: Edward Elgar Publishing, 2011.

ACS, Z. J.; AUTIO, E.; SZERB, L. National systems of entrepreneurship: Measurement issues and policy implications. **Research policy**, 43, n. 3, p. 476-494, 2014.

AHAMAT, A.; CHONG, S. C., 2014, English, **Assessment of the factors influencing entrepreneurs on the biotechnology business venture**. International Business Information Management Association, IBIMA. 2171-2177. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84926166918&partnerID=40&md5=87dd5eafadf5d7ca3fab5230553067f0. Acesso em: 6 November 2014 through 7 November 2014.

AHMADI, S.; ERSHADI, M. J. Investigating the role of social networking technology on the organizational agility: a structural equation modeling approach. **Journal of Advances in Management Research**, 18, n. 4, p. 568-584, 2021. Article.

AHMED, M. A.; KHATTAK, M. S.; ANWAR, M. Personality traits and entrepreneurial intention: The mediating role of risk aversion. **Journal of Public Affairs**, 2020. Article.

AHMED, S. Z. F.; KOUBAA, M. B. Core competencies and phases of the organizational life cycle. **International Journal of Business and Management Studies**, 5, n. 1, p. 461-473, 2013.

AHMED, T.; KLOBAS, J. E.; RAMAYAH, T. Personality Traits, Demographic Factors and Entrepreneurial Intentions: Improved Understanding from a Moderated Mediation Study. **Entrepreneurship Research Journal**, 11, n. 4, 2021. Article.

AJZEN, I. The theory of planned behavior. **Organizational behavior and human decision processes**, 50, n. 2, p. 179-211, 1991.

AJZEN, I. Nature and operation of attitudes. **Annual review of psychology**, 52, n. 1, p. 27-58, 2001.

AJZEN, I. Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. **Journal of applied social psychology**, 32, n. 4, p. 665-683, 2002.

AJZEN, I. The theory of planned behaviour: Reactions and reflections. : Taylor & Francis. 26**:** 1113-1127 p. 2011.

AJZEN, I.; FISHBEIN, M. Attitude-behavior relations: A theoretical analysis and review of empirical research. **Psychological bulletin**, 84, n. 5, p. 888, 1977.

AKINWALE, Y. O.; ABABTAIN, A. K.; ALARAIFI, A. A. Structural equation model analysis of factors influencing entrepreneurial interest among university students in Saudi Arabia. **Journal of Entrepreneurship Education**, 22, n. 4, p. 1-14, 2019. Article.

AL-MAMARY, Y. H. S.; ABDULRAB, M.; ALWAHEEB, M. A.; ALSHAMMARI, N. G. M. Factors impacting entrepreneurial intentions among university students in Saudi Arabia: testing an integrated model of TPB and EO. **Education and Training**, 62, n. 7-8, p. 779-803, 2020. Article.

AL-MUBARAKI, H. M.; BUSLER, M., 2014, English, Univ Ulster Business Sch, Sch Social Enterprises Ireland, Belfast, IRELAND. **Beyond Incubators Mechanisms: Innovation, Economic Development and Entrepreneurship**. Acad Conferences Ltd. 18-26. Disponível em: <Go to ISI>://WOS:000351436500003.

AL-QIRIM, N. A. Y., 2003, English, Philadelphia, PA. **Critical factors for mobile business success**. Idea Group Publishing. 10-13. Disponível em: <Go to ISI>://WOS:000189487100003.

ALAM, M. Z.; BILAL, A. R.; SABIR, S.; KALEEM, M. A. Role of engineering major in entrepreneurial intentions of engineering students: a case of Pakistan. **Education and Training**, 62, n. 7-8, p. 965-978, 2020. Article.

ALEXANDER, D. T.; LYYTINEN, K., 2019, English, **Organizing around big data: Organizational analytic capabilities for improved performance**. Association for Information Systems. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85114902363&partnerID=40&md5=20d766285d278073794529dc14bc3988. Acesso em: 15 December 2019 through 18 December 2019.

ALHAZZA, M. H. F.; BOURINI, I. F.; ZUBAIDAH, M. H.; BT SELAMAT, N., 2019, English, **Success Factor in New Product Development for Startup Companies Using Fuzzy Logic Approach**. Institute of Electrical and Electronics Engineers Inc. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85078953013&doi=10.1109%2fICECTA48151.2019.8959574&partnerID=40&md5=622a5814a43d238d72e610965948f58f. Acesso em: 19 November 2019 through 21 November 2019.

ALKHOORI, A. A.; SEDIK, S.; AL-SHAMI, S. A. The Measurement Items of Leadership Factors toward Successful Technopreneur in UAE. **Webology**, 18, n. Special Issue 04, p. 164-181, 2021. Article.

ALLEGRETTI, S.; SEIDENSTRICKER, S.; KASSECKERT, A., 2018, English, **Economic growth through business model innovation and technological entrepreneurship**. Institute of Electrical and Electronics Engineers Inc. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85056450418&doi=10.23919%2fPICMET.2018.8481842&partnerID=40&md5=6deb1e2ee9aae8888c80b950c7fed831. Acesso em: 19 August 2018 through 23 August 2018.

ALROAIA, Y. V.; BAHARUN, R. B. Identification and prioritizing influential factors on entrepreneurial success: A case study of SMES in Iran and Malaysia. **Polish Journal of Management Studies**, 17, n. 2, p. 31-40, 2018. Article.

AMINI SEDEH, A.; ABOOTORABI, H.; ZHANG, J. National social capital, perceived entrepreneurial ability and entrepreneurial intentions. **International Journal of Entrepreneurial Behaviour and Research**, 27, n. 2, p. 334-355, 2021. Article.

AMMIRATO, S.; SOFO, F.; FELICETTI, A. M.; HELANDER, N. *et al.* A new typology to characterize Italian digital entrepreneurs. **International Journal of Entrepreneurial Behaviour and Research**, 26, n. 2, p. 224-245, 2020. Article.

AMORIM NETO, R. D. C.; RODRIGUES, V. P.; STEWART, D.; XIAO, A. *et al.* The influence of self-efficacy on entrepreneurial behavior among K-12 teachers. **Teaching and Teacher Education**, 72, p. 44-53, 2018. Article.

ANAGNOU, M.; HANDRICH, M.; SCHNELLBÄCHER, B.; HEIDENREICH, S. Two sides of the same coin - How the application of effectuation and causation shapes business model elements throughout the development stages of digital start-ups. **International Journal of Entrepreneurial Venturing**, 11, n. 4, p. 309-334, 2019. Article.

ANDRAZ, G.; TORRECILLA-GARCÍA, J. A.; SKOTNICKA, A. G. Critical sucess factors measurement of new tecnology-based firms. **Espacios**, 39, n. 45, 2018. Article.

ANTONUCCI, Y. L.; FORTUNE, A.; KIRCHMER, M. An examination of associations between business process management capabilities and the benefits of digitalization: all capabilities are not equal. **Business Process Management Journal**, 27, n. 1, p. 124-144, 2021.

ARAFAT, M. Y.; SALEEM, I.; DWIVEDI, A. K. Understanding entrepreneurial intention among Indian youth aspiring for self-employment. **International Journal of Knowledge and Learning**, 13, n. 3, p. 185-200, 2020. Article.

ASGHARI, R.; GEDEON, S. Significance and Impact of Internet on the Entrepreneurial Process: E-Entrepreneurship and Completely Digital Entrepreneurship. *In*: **Proceedings of the 5th European Conference on Innovation and Entrepreneurship**, 2010. p. 70-76.

AVALLONE, D.; MARASSO, L. How to bring innovation to the market? **Mondo Digitale**, 15, n. 66, 2016. Article.

AYALEW, M. M.; ZELEKE, S. A. Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia. **Journal of Innovation and Entrepreneurship**, 7, n. 1, 2018. Article.

AZMI, A. M.; HAIRI, O. N.; LEE, K. Y.; FAUZIAH, I. Entreprenuers success in business: Some critical factors. **International Business Management**, 6, n. 3, p. 369-373, 2012. Article.

AZZAM, M.; SAMI, N.; KHALIL, T., 2016, English, **Utilization of appropriate technologies for a real "competitive Egypt"**. International Association for Management of Technology Conference (IAMOT) and the Graduate School of Technology Management, University of Pretoria. 430-449. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84988310644&partnerID=40&md5=725a43de97997c4f7fc4af3caa0a62c1. Acesso em: 15 May 2016 through 19 May 2016.

BAGHERI, A.; PIHIE, Z. A. L., 2012, English, Inst Politecnico Santarem, Escola Super Gestao & Tecnologia, PORTUGAL. **Entrepreneurial Leadership Learning: The Critical Role of Involvement**. Acad Conferences Ltd. 751-758. Disponível em: <Go to ISI>://WOS:000321565500086.

BAHARUDDIN, G.; AB RAHMAN, A. What is the most effective antecedent for developing entrepreneurial intention among muslim youth in indonesia? **Entrepreneurial Business and Economics Review**, 9, n. 1, p. 75-88, 2021. Article.

BARNEY, J. B. Firm resources and sustained competitive advantage. **Journal of management**, 17, n. 1, p. 99-120, 1991.

BARNEY, J. B. The resource-based theory of the firm. **Organization science**, 7, n. 5, p. 469-469, 1996.

BARNEY, J. B. Gaining and sustaining competitive advantage. 1997.

BARRETT, H.; BALLOUN, J. L.; WEINSTEIN, A. Creative climate: A critical success factor for 21st century organisations. **International Journal of Business Innovation and Research**, 6, n. 2, p. 202-219, 2012. Article.

BATTISTI, S.; AGARWAL, N.; BREM, A. Creating new tech entrepreneurs with digital platforms: Meta-organizations for shared value in data-driven retail ecosystems. **Technological Forecasting and Social Change**, 175, p. 12, Feb 2022. Article.

BAUGHN, C. C.; CAO, J. S.; LE, L. T. M.; LIM, V. A. *et al.* Normative, social and cognitive predictors of entrepreneurial interest in China, Vietnam and the Philippines. **Journal of developmental entrepreneurship**, 11, n. 01, p. 57-77, 2006.

BAUMOL, W. J. Entrepreneurship: Productive, unproductive, and destructive. **The Journal of Political Economy**, 98, n. 1, p. 893-921, 1990.

BAZKIAEI, H. A.; HENG, L. H.; KHAN, N. U.; SAUFI, R. B. A. *et al.* Do entrepreneurial education and big-five personality traits predict entrepreneurial intention among universities students? **Cogent Business and Management**, 7, n. 1, 2020. Article.

BELITSKI, M.; HERON, K. Expanding entrepreneurship education ecosystems. **Journal of Management Development**, 36, n. 2, p. 163-177, 2017. Article.

BEN YOUSSEF, A.; BOUBAKER, S.; DEDAJ, B.; CARABREGU-VOKSHI, M. Digitalization of the economy and entrepreneurship intention. **Technological Forecasting and Social Change**, 164, 2021. Article.

BENNING, L.; FLATTEN, T. C. How do new technology ventures grow? A theory of planned behaviour based assessment of inorganic growth. **International Journal of Globalisation and Small Business**, 11, n. 2, p. 200-223, 2020. Article.

BI, L. Y.; SUN, J., 2010, English, Taiyuan City, PEOPLES R CHINA. **Financing of New Venture- A Research Based on the Internal Factors**. Aussino Acad Publ House. 23-+. Disponível em: <Go to ISI>://WOS:000291328700005.

BIRCH, D.; MEDOFF, J. Gazelles. 1994.

BIRCH, D. G. Job creation in America: How our smallest companies put the most people to work. **University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship**, 1987.

BLAESE, R.; LIEBIG, B. From a deliberative to an implementing mindset a process-oriented view of the formation of academic entrepreneurial intention. **Open Psychology Journal**, 14, n. 1, p. 134-149, 2021. Article.

BLASCHKE, M.; CIGAINA, M.; RISS, U. V.; SHOSHAN, I. Designing business models for the digital economy. *In*: **Shaping the Digital Enterprise: Trends and Use Cases in Digital Innovation and Transformation**: Springer International Publishing, 2016. p. 121-136.

BOGATYREVA, K.; SHIROKOVA, G. From entrepreneurial aspirations to founding a business: The case of Russian students. **Foresight and STI Governance**, 11, n. 3, p. 25-36, 2017. Article.

BOLZANI, D. Internationalization Intentions in Domestic New Technology-Based Firms: A Comparison Between Immigrant and Non-immigrant Entrepreneurs. Contributions to Management Science. : Springer**:** 423-447 p. 2019.

BOSE, S. C.; KIRAN, R.; GOYAL, D. Critical success factors of agri-business incubators and their impact on business. **Custos E Agronegocio on Line**, 14, n. 4, p. 350-376, Oct-Dec 2018. Article.

BRADFORD, S. C. Sources of information on scientific subjects. **Engineering**, vol. 26, p. 85-86, 1934.

BRINCKMANN, J.; DEW, N.; READ, S.; MAYER-HAUG, K. *et al.* Of those who plan: A meta-analysis of the relationship between human capital and business planning. **Long Range Planning**, 52, n. 2, p. 173-188, Apr 2019. Article.

BRUNET-THORNTON, R.; MARTINEZ, F. **Analyzing the impacts of industry 4.0 in modern business environments**. IGI Global, 2018. 1-410 p. (Analyzing the Impacts of Industry 4.0 in Modern Business Environments, Book. 9781522534693 (ISBN); 1522534687 (ISBN); 9781522534686 (ISBN).

CADORIN, E.; KLOFSTEN, M.; LOFSTEN, H. Science Parks, talent attraction and stakeholder involvement: an international study. **Journal of Technology Transfer**, 46, n. 1, p. 1-28, Feb 2021. Article.

CAI, W. J.; GU, J. B.; WU, J. L. How Entrepreneurship Education and Social Capital Promote Nascent Entrepreneurial Behaviours: The Mediating Roles of Entrepreneurial Passion and Self-Efficacy. **Sustainability**, 13, n. 20, p. 11, Oct 2021. Article.

CANTNER, U.; WOLF, T. The Selective Nature of Innovator Networks: From the Nascent to the Early Growth Phase of the Organizational Life Cycle. Studies on Entrepreneurship, Structural Change and Industrial Dynamics. : Springer Nature**:** 175-204 p. 2018.

CARLAND, J. W.; HOY, F.; BOULTON, W. R.; CARLAND, J. A. C. Differentiating entrepreneurs from small business owners: A conceptualization. **Academy of management review**, 9, n. 2, p. 354-359, 1984.

CARR, J. C.; SEQUEIRA, J. M. Prior family business exposure as intergenerational influence and entrepreneurial intent: A Theory of Planned Behavior approach. **Journal of Business Research**, 60, n. 10, p. 1090-1098, 2007. Article.

CARROLL, R.; CASSELMAN, R. M. The Lean Discovery Process: the case of raiserve. **Journal of Small Business and Enterprise Development**, 26, n. 6-7, p. 765-782, 2019. Article.

CAVALLO, A.; GHEZZI, A.; DELL'ERA, C.; PELLIZZONI, E. Fostering digital entrepreneurship from startup to scaleup: The role of venture capital funds and angel groups. **Technological Forecasting and Social Change**, 145, p. 24-35, 2019. Article.

CAVALLO, A.; GHEZZI, A.; ROSSI-LAMASTRA, C. Small-medium enterprises and innovative startups in entrepreneurial ecosystems: exploring an under-remarked relation. **International Entrepreneurship and Management Journal**, 17, n. 4, p. 1843-1866, Dec 2021. Article.

CBINSIGHTS. **Global unicorn club market map**. CB Insights: 2022/03/29. 2022.

CHAMBERLIN, E. Monopolistic competition and Pareto optimality. **Journal Of Business & Economics Research**, p. 17-28, 1933.

CHANG, E. P. C.; MEMILI, E.; CHRISMAN, J. J.; KELLERMANNS, F. W. *et al.* Family social capital, venture preparedness, and start-up decisions: A study of hispanic entrepreneurs in new England. **Family Business Review**, 22, n. 3, p. 279-292, 2009. Article.

CHATARD, E.; VIAN, D., 2004, English, Vienna, AUSTRIA. **Coaching high-growth start-ups: Integrating online intelligence solutions and in-depth support**. I O S Press. 1604-1610. Disponível em: <Go to ISI>://WOS:000225554600206.

CHEN, B. S.; YUAN, C. H.; YIN, B.; WU, X. Z. Positive Emotions and Entrepreneurial Intention: The Mediating Role of Entrepreneurial Cognition. **Frontiers in Psychology**, 12, 2021. Article.

CHEN, C. C.; GREENE, P. G.; CRICK, A. Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? **Journal of Business Venturing**, 13, n. 4, p. 295-316, 1998. Article.

CHEN, D.; KARAMI, A. Critical success factors for inter-firm technological cooperation: An empirical study of high-tech SMEs in China. **International Journal of Technology Management**, 51, n. 2-4, p. 282-299, 2010. Article.

CHEN, Y. S. Sustainable development through franchise innovation in the digital economy. *In*: **Improving business performance through innovation in the digital economy**: IGI Global, 2019. p. 39-57.

CHOREV, S.; ANDERSON, A. R. Success in Israeli high-tech start-ups; Critical factors and process. **Synthesis and Modifications of Nano-Structures Materials by Energetic Ion Beams Proceedings on the Indo German Workshop on synthesis**, 26, n. 2, p. 162-174, 2006. Conference Paper.

CHRISTENSEN, C. M. **The innovator's dilemma: when new technologies cause great firms to fail**. Harvard Business Review Press, 2013. 1422197581.

CLEMONS, E. K.; MADHANI, N. Regulation of digital businesses with natural monopolies or third-party payment business models: Antitrust lessons from the analysis of google. **Journal of Management Information Systems**, 27, n. 3, p. 43-80, 2010. Article.

COASE, R. H. The nature of the firm. *In*, 1937. p. 37-54.

COHEN, J. **Statistical power analysis for the behavioral sciences**. Routledge, 1988.

CONDOM-VILÀ, P. How technology evolution and disruption are defining the world's entrepreneurial ecosystems: The case of barcelona's startup ecosystem. **Journal of Evolutionary Studies in Business**, 5, n. 1, p. 14-51, 2020. Article.

COOPER, H. M. **Synthesizing research: A guide for literature reviews**. Sage, 1998. 0761913483.

CRUZ, C.; NORDQVIST, M. Entrepreneurial orientation in family firms: A generational perspective. **Small Business Economics**, 38, p. 33-49, 2012.

D'CRUZ, C.; BRAGDON, C.; KULONDA, D.; PORTS, K., 2006, English, Chicago, IL. **Technopolis creation - A survey of best practices from around the world**. American Society for Engineering Education. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85029098154&partnerID=40&md5=efc65f05e2dc8254fce5f62a1b6ac5ff. Acesso em: 18 June 2006 through 21 June 2006.

D'CRUZ, C.; O'NEAL, T., 2003, English, **Integration of Technology Incubator Programs with Academic Entrepreneurship Curriculum**. 327-332. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-1442327913&partnerID=40&md5=afc44f326e6142427964877e732d1676.

DA CRUZ, E. F. Z.; ALVARO, A., 2013, **Introduction of entrepreneurship and innovation subjects in a computer science course in Brazil**. IEEE. 1881-1887.

DE CASTRO, L. N.; DE ARAUJO, R. M.; FRAGOSO, N. D.; TROPIANO, L. An entrepreneurial maturity level assessment methodology: a case study in the business incubator of Mackenzie Presbysterian University. **International Journal of Innovation**, 9, n. 2, p. 295-321, May-Aug 2021. Article.

DE MENESES, M. d. F. T.; DE MIRANDA RIBEIRO, K. L. L.; ZAGO, C. C. Aprendizagem organizacional e competências organizacionais: duas faces da mesma moeda? **Revista Ciências Administrativas**, 12, n. 1, p. 54-61, 2006.

DE OLIVEIRA, M. P. B. **Empresas-Gazela: Crescimento, Empreendedorismo e Performatividade**. 2019. -, Universidade de Lisboa (Portugal).

DE OLIVIERI, M. A. C. Phases and critical factors in the evolution of a new technology-based firm (NTBF): The case of Movil+ C.A. **Argos**, 28, n. 54, p. 1, 2011. Article.

DE REZENDE PINTO, M. A Teoria do Comportamento Planejado (TCP) e o Índice de Disposição de Adoção de Produtos e Serviços Baseados em Tecnologia (TRI): Uma Interface Possível? **Revista Gestão & Tecnologia**, 7, n. 2, 2007.

DE SOUZA, N. M. S. S.; ANTONIO MOLINA PALMA, M. Ivory tower or entrepreneurial university: Critical factors in the innovation processes in an university context. **Revista Brasileira de Gestao e Desenvolvimento Regional**, 6, n. 2, p. 130-156, 2010. Article.

DHEWANTO, W.; LANTU, D. C.; HERLIANA, S.; ANGGADWITA, G. The innovation cluster of ICT start-up companies in developing countries: Case of Bandung, Indonesia. **International Journal of Learning and Intellectual Capital**, 12, n. 1, p. 32-46, 2015. Article.

DIAKANASTASI, E.; KARAGIANNAKI, A.; PRAMATARI, K. Entrepreneurial Team Dynamics and New Venture Creation Process: An Exploratory Study Within a Start-Up Incubator. **SAGE Open**, 8, n. 2, 2018. Article.

DO CARMO, J. P.; RANGEL, R. D. Critical success factors of the incubation network of enterprises of the IFES. **International Journal of Innovation**, 8, n. 2, p. 150-175, May-Aug 2020. Article.

DO PAÇO, A.; FERREIRA, J.; RAPOSO, M.; RODRIGUES, R. G. *et al.* Entrepreneurial intention among secondary students: Findings from Portugal. **International Journal of Entrepreneurship and Small Business**, 13, n. 1, p. 92-106, 2011. Article.

DOANH, D. C. The role of contextual factors on predicting entrepreneurial intention among Vietnamese students. **Entrepreneurial Business and Economics Review**, 9, n. 1, p. 169-188, 2021. Article.

DOANH, D. C.; VAN MUNAWAR, T. Entrepreneurial self-efficacy and intention among Vietnamese students: A meta-analytic path analysis based on the theory of planned behaviour. **Management Science Letters**, 9, n. 11, p. 1847-1862, 2019. Article.

DOSI, G.; NELSON, R. R.; WINTER, S. G. **The nature and dynamics of organizational capabilities**. Oxford university press, 2000. 0198296800.

DUCHEK, S. Entrepreneurial resilience: a biographical analysis of successful entrepreneurs. **International Entrepreneurship and Management Journal**, 14, n. 2, p. 429-455, Jun 2018. Article.

EDELMAN, L. F.; MANOLOVA, T.; SHIROKOVA, G.; TSUKANOVA, T. The impact of family support on young entrepreneurs' start-up activities. **Journal of Business Venturing**, 31, n. 4, p. 428-448, 2016. Article.

EL HILALI, W.; EL MANOUAR, A.; JANATI IDRISSI, M. A. Reaching sustainability during a digital transformation: a PLS approach. **International Journal of Innovation Science**, 2020. Article.

ELIA, G.; MARGHERITA, A.; PASSIANTE, G. Digital entrepreneurship ecosystem: How digital technologies and collective intelligence are reshaping the entrepreneurial process. **Technological Forecasting and Social Change**, 150, 2020. Article.

ELSHAER, I. A.; SAAD, S. K. Entrepreneurial resilience and business continuity in the tourism and hospitality industry: the role of adaptive performance and institutional orientation. **Tourism Review**, p. 20, 2021. Article; Early Access.

ENTRINGER, T. C.; DA SILVA, L. L. Critical success factors in science and technology parks: a bibliographic review and analysis. **Independent Journal of Management & Production**, 11, n. 2, p. 343-359, Mar-Apr 2020. Review.

ERDOGAN, E.; KOOHBORFARDHAGHIGHI, S. Delivering a systematic framework for the selection and evaluation of startups. 15th International Conference on the Economics of Grids, Clouds, Systems, and Services, GECON 2018. BANARES, J. A.;D'AGOSTINO, D.*, et al*. : Springer Verlag. 11113 LNCS**:** 151-159 p. 2019.

FADELELMOULA, A. A. Factors Influencing the Realization of Competitive Advantage in the Private Portals Context. **International Journal of Innovation and Technology Management**, 17, n. 4, p. 30, Jun 2020. Article.

FAN, T.; SCHWAB, A.; GENG, X. S. Habitual entrepreneurship in digital platform ecosystems: A time-contingent model of learning from prior software project experiences. **Journal of Business Venturing**, 36, n. 5, p. 20, Sep 2021. Article.

FARRUKH, M.; LEE, J. W. C.; SAJID, M.; WAHEED, A. Entrepreneurial intentions: The role of individualism and collectivism in perspective of theory of planned behaviour. **Education and Training**, 61, n. 7-8, p. 984-1000, 2019. Article.

FEINDT, S.; JEFFCOATE, J.; CHAPPELL, C. Identifying success factors for rapid growth in SME E-commerce. **Small Business Economics**, 19, n. 1, p. 51-62, 2002. Review.

FERREIRA, C. M. **Gazelle Entrepreneurs**. 2016. -, Universidade de Lisboa (Portugal).

FERREIRA, J. J. M.; FERNANDES, C. I.; FERREIRA, F. A. F. To be or not to be digital, that is the question: Firm innovation and performance. **Journal of Business Research**, 101, p. 583-590, Aug 2019. Article.

FLOREK-PASZKOWSKA, A.; UJWARY-GIL, A.; GODLEWSKA-DZIOBON, B. Business innovation and critical success factors in the era of digital transformation and turbulent times. **Journal of Entrepreneurship Management and Innovation**, 17, n. 4, p. 7-28, 2021. Article.

FONT COT, F.; LARA NAVARRA, P.; SERRADELL-LÓPEZ, E., 2021, English, **An Integrative Framework for Startups at Early Stage: Promoting Evidence-Based Design and Evaluation in Early Stage Startups**. Springer Science and Business Media B.V. 445-458. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85102622886&doi=10.1007%2f978-3-030-62066-0_34&partnerID=40&md5=d86b8794fab420a76bce9b6d957981ae. Acesso em: 15 April 2020 through 17 April 2020.

FRANK, H.; PLASCHKA, G.; ROESSL, D. Planning behaviour of successful and non-successful founders of new ventures. **Entrepreneurship and Regional Development**, 1, n. 2, p. 191-206, 1989. Article.

GANTENBEIN, P.; ENGELHARDT, J. The role of investors for early-stage companies. **International Journal of Entrepreneurial Venturing**, 4, n. 3, p. 276-289, 2012. Article.

GEIBEL, R. C.; MANICKAM, M., 2016, English, Canadian Univ Dubai, Dubai, U ARAB EMIRATES. **Analysis of Start-Up Ecosystems in Germany and in the USA**. Springer International Publishing Ag. 639-649. Disponível em: <Go to ISI>://WOS:000413014600055.

GERHARDT, V.; DOS SANTOS, J.; RUBIN, E.; NEUENFELDT, A. *et al.* Stakeholders´ perception to characterize the start-ups success. **Journal of Technology Management and Innovation**, 16, n. 1, p. 38-50, 2021. Article.

GERINGER, S. National digital taxes–Lessons from Europe. **South African Journal of Accounting Research**, 2020. Article.

GHEZZI, A.; CAVALLO, A. Agile Business Model Innovation in Digital Entrepreneurship: Lean Startup Approaches. **Journal of Business Research**, 110, p. 519-537, 2020. Article.

GODSWILL AGU, A.; OKWARA, O. O.; OKOCHA, E. R.; MADICHIE, N. O. COVID-19 pandemic and entrepreneurial intention among university students: a contextualisation of the Igbo Traditional Business School. **African Journal of Economic and Management Studies**, 2021. Article.

GOLD, A. H.; MALHOTRA, A.; SEGARS, A. H. Knowledge Management: An Organizational Capabilities Perspective. **Journal of Management Information Systems**, 18, n. 1, p. 185-214, 2001/05/31 2001.

GOLEMAN, D. **Emotional Intelligence**. Bantam Books, 1995.

GREWAL, R.; SLOTEGRAAF, R. J. Embeddedness of organizational capabilities. **Decision Sciences**, 38, n. 3, p. 451-488, 2007.

GRISOLD, T.; VOM BROCKE, J.; GROSS, S.; MENDLING, J. *et al.* Digital innovation and business process management: opportunities and challenges as perceived by practitioners. **Communications of the Association for Information Systems**, 49, n. 1, p. 27, 2021.

GUBIK, A. S.; FARKAS, S. Student entrepreneurship in Hungary: Selected results based on GUESSS survey. **Entrepreneurial Business and Economics Review**, 4, n. 4, p. 123-139, 2016. Article.

GUERRERO, M.; URBANO, D.; GAJÓN, E. The internal pathways that condition university entrepreneurship in latin america: An institutional approach. Advances in the Study of Entrepreneurship, Innovation, and Economic Growth. : JAI Press. 24**:** 89-118 p. 2014.

GUPTA, G.; BOSE, I. Strategic learning for digital market pioneering: Examining the transformation of Wishberry's crowdfunding model. **Technological Forecasting and Social Change**, 146, p. 865-876, 2019. Article.

HADDOUD, M. Y.; ONJEWU, A. K. E.; NOWINSKI, W.; ALAMMARI, K. Assessing the role of entrepreneurship education in regulating emotions and fostering implementation intention: evidence from Nigerian universities. **Studies in Higher Education**, 47, n. 2, p. 450-468, 2022. Article.

HADJIMANOLIS, A. Perceptions of the institutional environment and entrepreneurial intentions in a small peripheral country. **International Journal of Entrepreneurship and Small Business**, 28, n. 1, p. 20-35, 2016. Article.

HAIR, J. F. A Primer on Partial Least Squares Structural Equations Modeling (PLS-SEM) SAGE. **Newcastle upon Tyne, UK**, 2014.

HAIR, J. F.; RISHER, J. J.; SARSTEDT, M.; RINGLE, C. M. When to use and how to report the results of PLS-SEM. **European business review**, 2019.

HAMEL, G.; PRAHALAD, C. Strategic intent. **Mckinsey quarterly**, n. 1, p. 36-61, 1990.

HANSEN, B. 'From guanxi to WeChat?': New social networking technologies and digital entrepreneurship in Beijing. **International Journal of Entrepreneurship and Small Business**, 39, n. 3, p. 430-454, 2020. Article.

HARPER, M.; CITKOWSKI, R., 2007, English, Detroit, MI. **Strategies for intellectual property protection**. 3444-3450. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-58349107291&partnerID=40&md5=917641a06e599aeacd7394eb33d9d44d. Acesso em: 16 September 2007 through 20 September 2007.

HASSELBLATT, M.; HUIKKOLA, T.; KOHTAMÄKI, M.; NICKELL, D. Modeling manufacturer's capabilities for the Internet of Things. **Journal of Business and Industrial Marketing**, 33, n. 6, p. 822-836, 2018. Article.

HATTON, L., 2008, English, Waikoloa, HI. **E-business and new venture strategies that impact firm performance**. 139-145. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-

84873449878&partnerID=40&md5=c3e6dcd29b71a691170fc39b2b7f1e9d. Acesso em: 30 September 2008 through 3 October 2008.

HENDIEH, J.; AOUN, D.; OSTA, A. Students' attitudes toward entrepreneurship at the Arab Open University-Lebanon. **Journal of Entrepreneurship Education**, 22, n. 2, 2019. Article.

HENLEY, A.; CONTRERAS, F.; ESPINOSA, J. C.; BARBOSA, D. Entrepreneurial intentions of Colombian business students: Planned behaviour, leadership skills and social capital. **International Journal of Entrepreneurial Behaviour and Research**, 23, n. 6, p. 1017-1032, 2017. Article.

HENLEY, A.; CONTRERAS, F.; ESPINOSA, J. C.; BARBOSA, D. Entrepreneurial intentions of Colombian business students: Planned behaviour, leadership skills and social capital. **International Journal of Entrepreneurial Behavior & Research**, 2017.

HERNÁNDEZ-SÁNCHEZ, B. R.; CARDELLA, G. M.; SÁNCHEZ-GARCÍA, J. C. Psychological factors that lessen the impact of covid-19 on the self-employment intention of business administration and economics' students from latin america. **International Journal of Environmental Research and Public Health**, 17, n. 15, p. 1-22, 2020. Article.

HILL, S.; IONESCU-SOMERS, A.; CODURAS, A.; GUERRERO, M. *et al.*, 2022, **Global entrepreneurship monitor 2021/2022 global report: Opportunity amid disruption**.

HIRTE, R.; MUNCH, J.; DROST, L., 2018, English, **Incubators in multinational corporations: Development of a corporate incubator operator model**. Institute of Electrical and Electronics Engineers Inc. 195-202. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85047533313&doi=10.1109%2fICE.2017.8279889&partnerID=40&md5=800778aa0a898d544b220fe9289d8d39. Acesso em: 27 June 2017 through 29 June 2017.

HIRTE, R.; ROTH, P., 2018, English, **Advanced innovation management: Best practice of German and American corporations in the mobility sector**. Institute of Electrical and Electronics Engineers Inc. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85056486777&doi=10.23919%2fPICMET.2018.8481904&partnerID=40&md5=8e849f84a1a5c64ef2cc57f5d08971cd. Acesso em: 19 August 2018 through 23 August 2018.

HOANG, T. H.; LE, Q. H. Factors affecting youth entrepreneurial intention and suggestions for policymaking: The case of Vinh Long Province. *In*: **Recent Developments In Vietnamese Business And Finance**: World Scientific Publishing Co., 2021. p. 723-743.

HOI, H. T. "Start Up" Spirit of University Students in Vietnam. **Journal of Advanced Research in Dynamical and Control Systems**, 12, n. 7 Special Issue, p. 1368-1372, 2020. Article.

HOLT, H. L. A practitioner review of technological firms' success in corporate innovation. Advances in the Study of Entrepreneurship, Innovation, and Economic Growth. : Emerald Group Publishing Ltd. 28**:** 163-181 p. 2018.

HOONG, C. W.; QURESHI, Z. H.; SAJILAN, S.; AL HALBUSI, H., 2019, **A study on the factors influencing social entrepreneurial intention among undergraduates**. IEEE. 1-7.

HOWARD-GRENVILLE, J.; RERUP, C.; LANGLEY, A.; TSOUKAS, H. **Organizational routines: How they are created, maintained, and changed**. Oxford University Press, 2016. 0198759487.

HUANG, G. J. Social capital and financial capital acquisition: creating gaming ventures in Shanghai's entrepreneurial ecosystem. **Chinese Journal of Communication**, 14, n. 1, p. 5-23, Jan 2021. Article.

HUDEK, I.; TOMINC, P.; SIREC, K. The Impact of Social and Cultural Norms, Government Programs and Digitalization as Entrepreneurial Environment Factors on Job and Career Satisfaction of Freelancers. **Sustainability**, 13, n. 2, p. 20, Jan 2021. Article.

HULSINK, W.; KOEK, D. The young, the fast and the furious: A study about the triggers and impediments of youth entrepreneurship. **International Journal of Entrepreneurship and Innovation Management**, 18, n. 2-3, p. 182-209, 2014. Article.

IAMRATANAKUL, S.; HERNANDEZ, I. P.; CASTILLA, C.; MILOZEVIC, D. Z., 2007, English, **Innovation and factors affecting the success of NPD projects: Literature explorations and descriptions**. 1053-1057. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-40649104359&doi=10.1109%2fIEEM.2007.4419353&partnerID=40&md5=77147d5ac7eb683708c559947274cbd0. Acesso em: 2 December 2007 through 4 December 2007.

IGBARIA, M.; KASSICIEH, S. K.; SILVER, M. Career orientations and career success among research, and development and engineering professionals. **Journal of Engineering and Technology Management - JET-M**, 16, n. 1, p. 29-54, 1999. Article.

IGLESIAS-SÁNCHEZ, P. P.; JAMBRINO-MALDONADO, C.; VELASCO, A. P.; KOKASH, H. Impact of entrepreneurship programmes on university students. **Education and Training**, 58, n. 2, p. 209-228, 2016. Article.

INTRAMA, V.; SOOKBANJUNG, S.; SANTAWEE, K.; TEERASAWAD, P. Path of creativity in entrepreneur: Basic concept of creative economy development. International Conference on Human Factors, Business Management and Society, AHFE 2016. ANDRE, T.;KANTOLA, J. I.*, et al*. : Springer Verlag. 498**:** 263-272 p. 2017.

ISE, C. A.; MARSHALL, G. C.; TIPPETT, D. D., 2008, English, West Point, NY. **Critical success factors for NASA small business innovation research, a proposal**. 360-369. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84880065065&partnerID=40&md5=bd6e0b66531b1bae6657b1cd6207243a. Acesso em: 12 November 2008 through 15 November 2008.

IZARD, C. E.; IZARD, C. E. Differential emotions theory. **Human emotions**, p. 43-66, 1977.

JARDIM, J.; BÁRTOLO, A.; PINHO, A. Towards a global entrepreneurial culture: A systematic review of the effectiveness of entrepreneurship education programs. **Education Sciences**, 11, n. 8, 2021. Review.

JAYAWARNA, D.; JONES, O.; MACPHERSON, A. Entrepreneurial potential: The role of human and cultural capitals. **International Small Business Journal: Researching Entrepreneurship**, 32, n. 8, p. 918-943, 2014. Article.

JOENSUU-SALO, S.; VARAMÄKI, E.; VILJAMAA, A. Beyond intentions – what makes a student start a firm? **Education and Training**, 57, n. 8-9, p. 853-873, 2015. Article.

JOHANSEN, V. Entrepreneurship education and start-up activity: A gender perspective. **International Journal of Gender and Entrepreneurship**, 5, n. 2, p. 216-231, 2013. Article.

JONES, P.; COLWILL, A. Entrepreneurship education: An evaluation of the Young Enterprise Wales initiative. **Education and Training**, 55, n. 8-9, p. 911-925, 2013. Article.

JOSHI, M.; JOSHI, G.; PATHAK, S. Awareness, entrepreneurial event theory and theory of planned behaviour as antecedents of student entrepreneurial intentions: An indian perspective. **International Journal of Business and Globalisation**, 25, n. 2, p. 170-184, 2020. Article.

KAKATI, M. Success criteria in high-tech new ventures. **Technovation**, 23, n. 5, p. 447-457, May 2003. Article.

KAKOURIS, A.; MOLINA, V.; LIARGOVAS, P., 2020, English, **Assessing the impact of entrepreneurship education on entrepreneurial beliefs and conceptualizations**. Academic Conferences and Publishing International Limited. 320-329. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85097529787&doi=10.34190%2fEIE.20.104&partnerID=40&md5=24675 9afe21df967692462097bf79a93. Acesso em: 17 September 2020 through 18 September 2020.

KAMINSKY, O. Y.; YERESHKO, Y. O.; KYRYCHENKO, S. O.; TULCHINSKIY, R. V. Training in digital entrepreneurship as a basis for forming the intellectual capital of nation. **Information Technologies and Learning Tools**, 81, n. 1, p. 210-221, 2021. Article.

KANONUHWA, M.; RUNGANI, E. C.; CHIMUCHEKA, T. The association between emotional intelligence and entrepreneurship as a career choice: A study on university students in South Africa. **SA Journal of Human Resource Management**, 16, 2018. Article.

KARIV, D. **Entrepreneurship: An international introduction**. Taylor and Francis, 2011. 1-316 p. (Entrepreneurship: An International Introduction, Book. 9780203831939 (ISBN).

KASANAGOTTU, S.; BHATTACHARYA, S. Analysis of the significant dimensional factors impacting entrepreneurship performance. **Journal of Advanced Research in Dynamical and Control Systems**, 9, n. Special issue 14, p. 229-240, 2017. Article.

KASAYU, R. N.; HIDAYANTO, A. N.; SANDHYADUHITA, P. I. Critical success factors of software development projects using analytic hierarchy process: A case of Indonesia. **International Journal of Innovation and Learning**, 22, n. 1, p. 1-22, 2017. Article.

KAY, J. **Foundations of corporate success: how business strategies add value**. Oxford Paperbacks, 1995. 019828988X.

KHARABSHEH, R.; MAGABLEH, I. Obstacles of Success of Technology Parks: The Case of Jordan. **11th European Conference on Knowledge Management, ECKM 2010**, p. 546-553, 2010. Article.

KHELIL, N.; SMIDA, A.; ZOUAOUI, M. What does "to fail" in entrepreneurship mean? Critical rereading of the literature. **Revue Internationale Pme**, 31, n. 3-4, p. 35-66, 2018. Article.

KHONG-KHAI, S.; WU, H. Y. Analysis of critical success factors of startups in Thailand. **Indian Journal of Public Health Research and Development**, 9, n. 11, p. 1262-1268, 2018. Article.

KLAASA, P.; THAWESAENGSKULTHAI, N., 2018, English, **Incubation framework for a new startup: A case study in Thailand**. IEOM Society. 1173-1182. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85051559369&partnerID=40&md5=0527986c9540bb7e274d898784bc7c87. Acesso em: 6 March 2018 through 8 March 2018.

KOE, W. L.; KRISHNAN, R.; ALIAS, N. E. The Influence of Self-Efficacy and Individual Entrepreneurial Orientation on Technopreneurial Intention among Bumiputra Undergraduate Students. **Asian Journal of University Education**, 17, n. 4, p. 490-497, 2021.

KOGUT, B.; ZANDER, U. Knowledge of the firm, combinative capabilities, and the replication of technology. **Organization science**, 3, n. 3, p. 383-397, 1992.

KÖNIG, M.; UNGERER, C.; BALTES, G.; TERZIDIS, O. Different patterns in the evolution of digital and non-digital ventures' business models. **Technological Forecasting and Social Change**, 146, p. 844-852, 2019. Article.

KONRAD, E. D. Entrepreneurial behavior and financing structures in the German creative industries: A survey of start-ups and young growing firms. FGF Studies in Small Business and Entrepreneurship. : Springer**:** 25-43 p. 2018.

KONYA-BAUMBACH, E.; SCHUHMACHER, M. C.; KUESTER, S.; KUHAREV, V. Making a first impression as a start-up: Strategies to overcome low initial trust perceptions in digital innovation adoption. **International Journal of Research in Marketing**, 36, n. 3, p. 385-399, 2019. Article.

KORPYSA, J.; HALICKI, M., 2022, English, **Project supply chain management and fintech startups - relationship**. Elsevier B.V. 4419-4427. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85143373453&doi=10.1016%2fj.procs.2022.09.505&partnerID=40&md5=51dc2893ebf3b38b49ff8dfab749a2b0. Acesso em: 7 September 2022 through 9 September 2022.

KOTLER, P.; KELLER, K. L. Administração de Marketing. : São Paulo: Pearson Prentice Hall 2019.

KOWANG, T. O.; APANDI, S. Z. B. A.; HEE, O. C.; FEI, G. C. *et al.* Undergraduates entrepreneurial intention: Holistic determinants matter. **International Journal of Evaluation and Research in Education**, 10, n. 1, p. 57-64, 2021. Article.

KRNETA, M.; UMIHANIC, B.; DONLAGIC, S.; ALFIREVIC, A. M., 2016, English, Osijek, CROATIA. **The critical start-up enterprise success factors: development of a research model**. Ekonomski Fakultet Osijeku-Fac Economics Osijek. 234-242. Disponível em: <Go to ISI>://WOS:000389895600023.

KRUEGER JR, N. F.; BRAZEAL, D. V. Entrepreneurial potential and potential entrepreneurs. **Entrepreneurship theory and practice**, 18, n. 3, p. 91-104, 1994.

KRUEGER JR, N. F.; REILLY, M. D.; CARSRUD, A. L. Competing models of entrepreneurial intentions. **Journal of Business Venturing**, 15, n. 5, p. 411-432, 2000. Article.

KUMAR, R.; KARTHIK, S.; HARSHIDA, K. S. Rudseti – a catalyst towards growth of small scale manufacturing industries. **International Journal of Mechanical Engineering and Technology**, 9, n. 1, p. 1053-1060, 2018. Article.

KUMAR, U.; MAHESHWARI, M.; KUMAR, V. A Framework for Achieving E-Business Success. **Industry and Higher Education**, 18, n. 1, p. 47-51, 2004. Article.

KURATKO, D. F.; HOLT, H. L.; NEUBERT, E. Blitzscaling: The good, the bad, and the ugly. **Business Horizons**, 63, n. 1, p. 109-119, 2020.

KURNIAWAN, A.; DACHYAR, M., 2021, **Tech-Startup Digital Business Strategy Utilizing Structural Equation Modeling (SEM)**. IEOM Society. 2143-2154.

LAASONEN, V.; NYMAN, J.; FORNARO, P.; LÄHTEENMÄKI-SMITH, K. *et al.* Impacts and indicators of Innovation Ecosystems: A Framework for Analysis. 2022.

LAGOUDAS, M. Z.; YOON, S. Y.; BOEHM, R.; ASBELL, S., 2020, English, **Impact of an I-corps site program on engineering students at a large southwestern university: Year 3**. American Society for Engineering Education. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85095748454&partnerID=40&md5=879b7bb8514feede4e1cb954171a33ca. Acesso em: 22 June 2020 through 26 June 2020.

LAGUÍA, A.; MORIANO, J. A.; GORGIEVSKI, M. J. A psychosocial study of self-perceived creativity and entrepreneurial intentions in a sample of university students. **Thinking Skills and Creativity**, 31, p. 44-57, 2019. Article.

LAI, C.; DENTONI, D.; CHAN, C.; NEYRA, E. M. Adapting the measurement of youth entrepreneurship potential in a marginalised context: the case of Mindanao, Philippines. **Journal for International Business and Entrepreneurship Development**, 10, n. 3, p. 273-297, 2017. Article.

LASCH, F.; LE ROY, F.; YAMI, S. Critical growth factors of ICT start-ups. **Management Decision**, 45, n. 1, p. 62-75, 2007. Article.

LASRADO, F. Critical success factors of innovation and creativity for global entrepreneurs. *In*: **Global Entrepreneurship and New Venture Creation in the Sharing Economy**: IGI Global, 2017. p. 75-91.

LASSO, S.; MAINARDES, E.; MOTOKI, F. Why do entrepreneurs open tech startups? A comparative study between Brazilian and foreign enterprises. **International Entrepreneurship and Management Journal**, 15, n. 1, p. 233-255, 2019. Article.

LASSO, S. V.; MAINARDES, E. W.; MOTOKI, F. Y. S. Types of Technological Entrepreneurs: a Study in a Large Emerging Economy. **Journal of the Knowledge Economy**, 9, n. 2, p. 378-401, 2018. Article.

LAURENS, R. **Get fit for digital business: A six-step workout plan to get your organisation in great shape to thrive in a connected commercial world**. Taylor and Francis, 2019. 1-166 p. (Get Fit for Digital Business: A Six-Step Workout Plan to Get Your Organisation in Great Shape to Thrive in a Connected Commercial World, Book. 9780429868801 (ISBN); 9781138616301 (ISBN).

LE, H. V.; SUH, M. H. Changing trends in internet startup value propositions, from the perspective of the customer. **Technological Forecasting and Social Change**, 146, p. 853-864, 2019. Article.

LEE, A. Welcome to the unicorn club: Learning from billion-dollar startups. **Cowboy Ventures (blog)**, 2013.

LEE, M.; IL, N. D. A. E. Unicorn Startups' Investment Duration, Government Policy, Foreign Investors, and Exit Valuation. **Asia-Pacific Journal of Business Venturing and Entrepreneurship**, 15, n. 5, p. 1-11, 2020 2020.

LEE, Y. G.; CORTES, A. F.; JOO, M. Entrepreneurship Education and Founding Passion: The Moderating Role of Entrepreneurial Family Background. **Frontiers in Psychology**, 12, p. 10, Dec 2021. Article.

LEENDERTSE, J.; VAN RIJNSOEVER, F. J.; EVELEENS, C. P. The sustainable start-up paradox: Predicting the business and climate performance of start-ups. **Business Strategy and the Environment**, 30, n. 2, p. 1019-1036, Feb 2021. Article.

LEVINSON, N. S. Innovation in cross-national alliance ecosystems. **International Journal of Entrepreneurship and Innovation Management**, 11, n. 3, p. 258-263, 2010. Article.

LIAO, S.; LIU, Z.; ZHANG, S. Technology innovation ambidexterity, business model ambidexterity, and firm performance in Chinese high-tech firms. **Asian Journal of Technology Innovation**, 26, n. 3, p. 325-345, 2018. Article.

LIN, C. Y.; WANG, Y. H. Evaluating the optimal external equity financing strategy and critical factors for the startup of lending company in taiwan: An application of expert network decision model. **Mathematics**, 9, n. 18, 2021. Article.

LIÑÁN, F.; CHEN, Y. W. Development and cross–cultural application of a specific instrument to measure entrepreneurial intentions. **Entrepreneurship theory and practice**, 33, n. 3, p. 593-617, 2009.

LINDSEY, K. Measuring knowledge management effectiveness: A task-contingent organizational capabilities perspective. **AMCIS 2002 Proceedings**, p. 285, 2002.

LIOW, G. E.; WONG, H. M. Exploring the role of malaysian research university based incubators in facilitating the entrepreneurial process. **International Journal of Innovation**, 9, n. 2, p. 239-266, May-Aug 2021. Article.

LITTUNEN, H.; STORHAMMAR, E.; NENONEN, T. The survival of firms over the critical first 3 years and the local environment. **Entrepreneurship and Regional Development**, 10, n. 3, p. 189-202, 1998. Article.

LIU, L. L.; WANG, Y. J. Innovation and Entrepreneurship Practice Education Mode of Animation Digital Media Major Based on Intelligent Information Collection. **Mobile Information Systems**, 2021, p. 11, Sep 2021. Article.

LONDONO, J. C.; WILSON, B.; OSORIO-TINOCO, F. Understanding the entrepreneurial intentions of youth: a PLS multi-group and FIMIX analysis using the model of goal-directed behavior. **Journal of Entrepreneurship in Emerging Economies**, 13, n. 3, p. 301-326, Jul 2021. Article.

LUO, Y.-F.; HUANG, J.; GAO, S. Relationship Between Proactive Personality and Entrepreneurial Intentions in College Students: Mediation Effects of Social Capital and Human Capital. **Frontiers in Psychology**, 13, p. 861447, 2022.

LUONG, A.; LEE, C. The Influence of Entrepreneurial Desires and Self-Efficacy on the Entrepreneurial Intentions of New Zealand Tourism and Hospitality Students. **Journal of Hospitality and Tourism Education**, 2021. Article.

MAHMOOD, T. M. A. T.; AL MAMUN, A.; BIN AHMAD, G.; IBRAHIM, M. D. Predicting entrepreneurial intentions and pre-start-up behaviour among Asnaf millennials. **Sustainability (Switzerland)**, 11, n. 18, 2019. Article.

MAHMOUD-JOUINI, S. B.; DUVERT, C.; ESQUIROL, M. Key Factors in Building a Corporate Accelerator Capability: Developing an effective corporate accelerator requires close attention to the relationships between startups and the sponsoring company. **Research Technology Management**, 61, n. 4, p. 26-34, 2018. Article.

MAHMUD, M. Impact analysis of digital transformations on entrepreneurial ecosystem in the eastern province of Saudi Arabia. **Journal of Entrepreneurship Education**, 23, n. 1, 2020. Article.

MALECKI, E. J. Entrepreneurship and entrepreneurial ecosystems. **Geography compass**, 12, n. 3, p. e12359, 2018.

MAMABOLO, A.; LEKOKO, R. Entrepreneurial ecosystems created by woman entrepreneurs in Botswana. **South African Journal of Business Management**, 52, n. 1, p. 13, Aug 2021. Article.

MANOLOVA, T. S.; EDELMAN, L. F.; SHIROKOVA, G.; TSUKANOVA, T. Youth entrepreneurship in emerging economies: can family support help navigate institutional voids? **Journal of East-West Business**, 25, n. 4, p. 363-395, 2019. Article.

MANUEL, M. P.; ALEJANDRO, H. G.; ADELA, M. V. R. Critical success factors for the development of a company in its early stages of development. **Espacios**, 38, n. 18, p. 1-17, 2017. Article.

MAO, Y.; YE, Y. Specific antecedents of entrepreneurial intention among newly returned chinese international students. **Frontiers in Psychology**, 12, 2021.

MARIANO, A. M.; AYAVIRI-PANOZO, A.; ROCHA, M., 2018, Portuguese, **Adaptation of the curriculum to the entrepreneurial intention: A study through the analysis of the performance-importance map (IPMA)**. University of Minho. 897-904. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054691025&partnerID=40&md5=401b65abba11a9e95bb90eab082fec27. Acesso em: 28 February 2018 through 2 March 2018.

MARTENS, C. D. P.; FRANKLIN, J. M.; MAURO, L. M.; SILVA, F. *et al.* Linking entrepreneurial orientation to project success. **International Journal of Project Management**, 36, n. 2, p. 255-266, Feb 2018. Article.

MASINOVA, V.; SVANDOVA, Z., 2014, English, Univ Ulster Business Sch, Sch Social Enterprises Ireland, Belfast, IRELAND. **Factors Defining Satisfaction and Loyalty of the Online Shopping Customers Within e-Commerce and Cyber Entrepreneurship**. Acad Conferences Ltd. 539-546. Disponível em: <Go to ISI>://WOS:000351436500065.

MASON, C.; ANDERSON, M.; KESSL, T.; HRUSKOVA, M. Promoting student enterprise: Reflections on a university start-up programme. **Local Economy**, 35, n. 1, p. 68-79, 2020. Article.

MATRICANO, D. Achieving and Sustaining New Knowledge Development in High-Expectation Start-ups. **Industry and Higher Education**, 24, n. 1, p. 47-53, 2010. Article.

MÁTYÁS, B.; LOWY, D. A.; SALGADO, J. P. A measure of enterprises' innovative activity for microfirms and startups. **Academy of Strategic Management Journal**, 18, n. 6, p. 1-12, 2019. Article.

MAWSON, S.; KASEM, L. Exploring the entrepreneurial intentions of Syrian refugees in the UK. **International Journal of Entrepreneurial Behaviour and Research**, 25, n. 5, p. 1128-1146, 2019. Article.

MELNIKOVA, J.; GRUNWALD, N.; AHRENS, A.; ZASCERINSKA, J., 2018, English, Univ Vigo, Fac Econ & Business Adm, Vigo, SPAIN. **Digital Entrepreneurship as a Means of Integration of Immigrants and Asylum Seekers into Labour Market in Baltic Countries**. Univ Wismar. 119-128. Disponível em: <Go to ISI>://WOS:000472641400015.

MERIGÓ, J. M.; PEDRYCZ, W.; WEBER, R.; DE LA SOTTA, C. Fifty years of Information Sciences: A bibliometric overview. **Information Sciences**, 432, p. 245-268, 2018.

MET, İ.; UYSAL, E. U.; ÖZKAYA, K. S.; ORÇ, E. Key Success Factors for Strategic Management in Digital Business. Contributions to Management Science. : Springer**:** 283-304 p. 2020.

MOHAMAD, A.; MUSTAPA, A. N.; RAZAK, H. A. An Overview of Malaysian Small and Medium Enterprises: Contributions, Issues, and Challenges. **Modeling Economic Growth in Contemporary Malaysia**, 2021.

MORALES-GUALDRÓN, S. T.; ZAPATA, U. P.; URBANO, J. E. D. Service and entrepreneurial profile factors that affect the survival of businesses: A critical revision. **Revista Lasallista de Investigacion**, 11, n. 2, p. 181-194, 2014. Article.

MOUSSA, N. B.; KERKENI, S. The role of family environment in developing the entrepreneurial intention of young Tunisian students. **Entrepreneurial Business and Economics Review**, 9, n. 1, p. 31-46, 2021.

MUKHTAROVA, K. S.; KOZHAKHMETOVA, A. K.; BELGOZHAKYZY, M.; DOSMBEK, A. *et al.* High-tech entrepreneurship in developing countries: Way to success. **Academy of Entrepreneurship Journal**, 25, n. 1, 2019. Article.

MUNEMO, J. Entrepreneurial success in Africa: How relevant are foreign direct investment and financial development? **African Development Review**, 30, n. 4, p. 372-385, 2018. Article.

MURUGESAN, R.; DOMINIC, P. D. D. Socio, economic and psychological determinants of entrepreneurial intentions: A structural equation model. **Global Business and Economics Review**, 16, n. 4, p. 396-415, 2014. Article.

MUSCIO, A.; SHIBAYAMA, S.; RAMACIOTTI, L. Universities and start-up creation by Ph.D. graduates: the role of scientific and social capital of academic laboratories. **Journal of Technology Transfer**, 2021. Article.

MUSIIWA, D.; KHAOLA, P.; RAMBE, P. Effects of emotions on the entrepreneurial attitudes, selfefficacy and intentions of university students. **African Journal of Hospitality, Tourism and Leisure**, 8, n. SpecialEdition, p. 1-23, 2019. Article.

NALINTIPPAYAWONG, S.; WAIYAWATPATTARAKUL, N.; CHOTIPANT, S., 2018, English, **Examining the critical success factors of startup in Thailand using structural equation model**. Institute of Electrical and Electronics Engineers Inc. 388-393. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85058377510&doi=10.1109%2fICITEED.2018.8534854&partnerID=40&md5=05f055a31c2f997604088196edc1be6f. Acesso em: 24 July 2018 through 26 July 2018.

NAMBISAN, S.; BARON, R. A. On the costs of digital entrepreneurship: Role conflict, stress, and venture performance in digital platform-based ecosystems. **Journal of Business Research**, 125, p. 520-532, Mar 2021. Article.

NGUYEN, P. M.; DINH, V. T.; LUU, T. M. N.; CHOO, Y. Sociological and theory of planned behaviour approach to understanding entrepreneurship: Comparison of Vietnam and South Korea. **Cogent Business and Management**, 7, n. 1, 2020. Article.

NIA, M. B.; GELARD, P., 2016, English, Ryerson Univ, Ted Rogers Sch Management, Toronto, CANADA. **E-Entrepreneur Critical Success Factors for e-Entrepreneurship in the Virtual World**. Acad Conferences Ltd. 297-306. Disponível em: <Go to ISI>://WOS:000391680700036.

NIJKAMP, P.; GULDEMOND, C.; TEELEN, H. The importance of venture capital for high-tech development experiences from The Netherlands and Israel. **International Journal of Entrepreneurship and Innovation Management**, 4, n. 1, p. 41-49, 2004. Article.

NURCAHYO, R.; PUTRA, P. A. Critical Factors in Indonesia's E-Commerce Collaboration. **Journal of Theoretical and Applied Electronic Commerce Research**, 16, n. 6, p. 2458-2469, Sep 2021. Article.

O'CONNOR, J. T.; CHOI, J. O.; WINKLER, M. Critical Success Factors for Commissioning and Start-Up of Capital Projects. **Journal of Construction Engineering and Management**, 142, n. 11, 2016. Article.

OECD. OECD-Eurostat Manual on Business Demography Statistics. 2007.

OECD. Measuring entrepreneurship: A digest of indicators. : OECD Paris 2008.

OECD. Financing high-growth firms: The role of angel investors. **Available at SSRN 1983115**, 2011a.

OECD. High-Growth Enterprises: What governments can do to make a difference. **Paris: A study by the OECD Working Party on SMEs and Entrepreneurship**, 2011b.

OECD. An international benchmarking analysis of public programmes for high growth firms. : Paris: OECD Local Economic and Employment Development Programme. Available … 2013.

OFER, Z.; NAAMATI, S. L., 2019, English, Thessaloniki, GREECE. **Does it take two to tango? Aquirer's management behaviour and acquired employees' attitudes in explaining start-up acquisition performance**. Euromed Press. 1529-1542. Disponível em: <Go to ISI>://WOS:000548057800110.

OKANO, M. T.; INOUE, P. K.; FADINI, G. O.; SIMÕES, E. *et al.*, 2019, English, **Digital transformation: News ICTs and business model**. Excel India Publishers. 158-169. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85081107602&partnerID=40&md5=3a45e1f02dd3290b939cc8e538419ef1. Acesso em: 7 April 2019 through 11 April 2019.

OKEREMI, A.; AMOAKO-GYAMPAH, K.; CAESAR, L. D. Exploring the antecedents of entrepreneurship success in information technology firms in Nigeria. **Africa Journal of Management**, 7, n. 2, p. 286-313, Apr 2021. Article.

OLIVA, F. L.; TEBERGA, P. M. F.; TESTI, L. I. O.; KOTABE, M. *et al.* Risks and critical success factors in the internationalization of born global startups of industry 4.0: A social, environmental, economic, and institutional analysis. **Technological Forecasting and Social Change**, 175, 2022. Article.

ONG, S. Y. Y.; HABIDIN, N. F.; SALLEH, M. I.; FUZI, N. M. Critical success factors of women entrepreneurship practice for women entrepreneurs in Malaysia. **World Review of Entrepreneurship, Management and Sustainable Development**, 17, n. 4, p. 481-496, 2021. Article.

OSTERWALDER, A. **The business model ontology a proposition in a design science approach**. 2004. -, Université de Lausanne, Faculté des hautes études commerciales.

PASSARO, R.; SCANDURRA, G.; THOMAS, A. The emergence of innovative entrepreneurship: Beyond the intention - Investigating the participants in an academic SUC. **International Journal of Innovation and Technology Management**, 14, n. 5, 2017. Article.

PENA, I. Business incubation centers and new firm growth in the Basque Country. **Small Business Economics**, 22, n. 3-4, p. 223-236, Apr-May 2004. Article; Proceedings Paper.

PENG, H.; LI, B.; ZHOU, C.; SADOWSKI, M. How does the appeal of environmental values influence sustainable entrepreneurial intention? **International Journal of Environmental Research and Public Health**, 18, n. 3, p. 1-25, 2021. Article.

PENROSE, E. **The Theory of the Growth of the Firm**. Oxford university press, 1959. 0199573840.

PEREZ-FERNANDEZ, H.; MARTIN-CRUZ, N.; DELGADO-GARCIA, J. B.; RODRIGUEZ-ESCUDERO, A. I. Online and Face-to-Face Social Networks and Dispositional Affectivity. How to Promote Entrepreneurial Intention in Higher Education Environments to Achieve Disruptive Innovations? **Frontiers in Psychology**, 11, p. 15, Dec 2020. Article.

PÉREZ-FERNÁNDEZ, H.; MARTÍN-CRUZ, N.; DELGADO-GARCÍA, J. B.; RODRÍGUEZ-ESCUDERO, A. I. Online and Face-to-Face Social Networks and Dispositional Affectivity. How to Promote Entrepreneurial Intention in Higher Education Environments to Achieve Disruptive Innovations? **Frontiers in Psychology**, 11, 2020. Article.

PÉREZ-MACÍAS, N.; FERNÁNDEZ-FERNÁNDEZ, J. L.; VIEITES, A. R., 2018, **Relational social capital dimension and entrepreneurial intentions in online environments**. Academic Conferences International Limited. 587-XVIII.

PÉREZ-MACÍAS, N.; FERNÁNDEZ-FERNÁNDEZ, J. L.; VIEITES, A. R., 2018, English, **Relational social capital dimension and entrepreneurial intentions in online environments**. Academic Conferences and Publishing International Limited. 587-595. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85055429030&partnerID=40&md5=f089f28d5e3080ccbcdfcd9650b2e18b. Acesso em: 20 September 2018 through 21 September 2018.

PÕDER, A.; LEMSALU, K.; NURMET, M.; LEHTSAAR, J. Entrepreneurship education, entrepreneurship competencies and entrepreneurial activities of alumni: A comparison between the engineering and other graduates of estonian university of life sciences. **Agronomy Research**, 17, n. 6, p. 2399-2416, 2019. Article.

POPESCU, C. C.; BOSTAN, I.; ROBU, I.-B.; MAXIM, A. An analysis of the determinants of entrepreneurial intentions among students: a Romanian case study. **Sustainability**, 8, n. 8, p. 771, 2016.

PORTER, M. E. Competitive strategy. **Measuring business excellence**, 1, n. 2, p. 12-17, 1997.

PRASHANTHAM, S. New ventures as value cocreators in digital ecosystems. **Industrial Management & Data Systems**, 121, n. 1, p. 111-122, Feb 2021. Article.

PUGALIA, S.; PRAKASH SAI, L.; CETINDAMAR, D. K. Personal Networks' Influence on Student Entrepreneurs: A Qualitative Study. **International Journal of Innovation and Technology Management**, 17, n. 5, 2020. Article.

PUTRA, P. A.; NURCAHYO, R.; FARIZAL, 2021, English, **Critical success factors of e-commerce collaboration in indonesia**. IEOM Society. 676-683. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85114243101&partnerID=40&md5=37b444292a2a4e847bfebb100acb1ea8. Acesso em: 7 March 2021 through 11 March 2021.

RAIJMAN, R. Determinants of entrepreneurial intentions: Mexican immigrants in Chicago. **Journal of Socio-Economics**, 30, n. 5, p. 393-411, 2001. Article.

RANTALA, T.; UKKO, J.; SAUNILA, M.; PUOLAKOSKI, H. *et al.* Creating sustainable customer value through digitality. **World Journal of Entrepreneurship, Management and Sustainable Development**, 15, n. 4, p. 325-340, 2019. Article.

RATINHO, T.; HENRIQUES, E. The role of science parks and business incubators in converging countries: Evidence from Portugal. **Technovation**, 30, n. 4, p. 278-290, 2010. Article.

RAUHOFER, M.; FRENTZ, M. P. Start-up in lieu of an industry career: Insights from a start-up incubator for innovative corporations. **Elektrotechnik und Informationstechnik**, 123, n. 11, p. 503-506, 2006. Article.

RAVARINI, A.; LOCORO, A.; MARTINEZ, M., 2020, English, **Digital transformation projects maturity and managerial competences: A model and its preliminary assessment**. Springer Heidelberg. 261-272. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070599892&doi=10.1007%2f978-3-030-23665-6_19&partnerID=40&md5=dcb25407c8104167706c560a2f671fed. Acesso em: 12 October 2018 through 13 October 2018.

REA, R. H. Factors affecting success and failure of seed capital/start-up negotiations. **Journal of Business Venturing**, 4, n. 2, p. 149-158, 1989. Article.

RENKO, M.; BULLOUGH, A.; SAEED, S. How do resilience and self-efficacy relate to entrepreneurial intentions in countries with varying degrees of fragility? A six-country study. **International Small Business Journal-Researching Entrepreneurship**, 39, n. 2, p. 130-156, Mar 2021. Article.

RIES, E. **The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses**. Currency, 2011. 0307887898.

ROCHA, H.; AUDRETSCH, D. B. Entrepreneurial ecosystems, regional clusters, and industrial districts: Historical transformations or rhetorical devices? **The Journal of Technology Transfer**, p. 1-24, 2022.

ROSTAROVA, M.; JANAC, J., 2017, English, Split, CROATIA. **Critical success factors of startup accelerators**. Varazdin Development & Entrepreneurship Agency. 565-571. Disponível em: <Go to ISI>://WOS:000578596300057.

ROWLEY, C.; OH, I. The enigma of Chinese business: understanding corporate performance through managerial ties. **Asia Pacific Business Review**, 26, n. 5, p. 529-536, Oct 2020. Editorial Material.

RUHNKA, J. C.; YOUNG, J. E. A venture capital model of the development process for new ventures. **Journal of Business Venturing**, 2, n. 2, p. 167-184, 1987. Article.

RUIZ-ROSA, I.; GUTIÉRREZ-TAÑO, D.; GARCÍA-RODRÍGUEZ, F. J. Social entrepreneurial intention and the impact of COVID-19 pandemic: A structural model. **Sustainability (Switzerland)**, 12, n. 17, 2020. Article.

RUSLI, M. H. B. M.; ROZMI, A. N. A., 2015, English, **Redefining the university science park model in UniKL BMI academic setting: A conceptual study on economic growth through Tech Entrepreneurship, innovation and commercialization**. Institute of Electrical and Electronics Engineers Inc. 23-27. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84990990657&doi=10.1109%2fICE2T.2014.7006212&partnerID=40&md5=62691bb7a4464a40c2c4021c9270d913. Acesso em: 27 August 2014 through 29 August 2014.

RUSNJAK, A., 2009, English, Leipzig. **Modelling critical success factors in mCommerce-Programs**. 239-240. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84882958884&partnerID=40&md5=7bbd0763150c87113ee15228e807944a. Acesso em: 23 March 2009 through 25 March 2009.

SAHUT, J. M.; IANDOLI, L.; TEULON, F. The age of digital entrepreneurship. **Small Business Economics**, 56, n. 3, p. 1159-1169, Feb 2021. Article.

SAKATA, I.; SASAKI, H.; AKIYAMA, M.; SAWATANI, Y. *et al.* Bibliometric analysis of service innovation research: Identifying knowledge domain and global network of knowledge. **Technological Forecasting and Social Change**, 80, n. 6, p. 1085-1093, 2013.

SALAMZADEH, Y.; SANGOSANYA, T. A.; SALAMZADEH, A.; BRAGA, V. Entrepreneurial universities and social capital: The moderating role of entrepreneurial intention in the

Malaysian context. **The International Journal of Management Education**, 20, n. 1, p. 100609, 2022.

SANDBERG, W. R.; HOFER, C. W. Improving new venture performance: The role of strategy, industry structure, and the entrepreneur. **Journal of Business Venturing**, 2, n. 1, p. 5-28, 1987. Article.

SANSONE, G.; UGHETTO, E.; LANDONI, P. Entrepreneurial intention: An analysis of the role of Student-Led Entrepreneurial Organizations. **Journal of International Entrepreneurship**, 19, n. 3, p. 399-433, 2021. Article.

SANTISTEBAN, J.; INCHE, J.; MAURICIO, D. Critical success factors throughout the life cycle of information technology start-ups. **Entrepreneurship and Sustainability Issues**, 8, n. 4, p. 446-466, Jun 2021. Article.

SANTISTEBAN, J.; MAURICIO, D. Systematic literature review of critical success factors of Information Technology startups. **Academy of Entrepreneurship Journal**, 23, n. 2, p. 1-23, 2017. Article.

SANTISTEBAN, J.; MAURICIO, D.; CACHAY, O. Critical success factors for technology-based startups. **International Journal of Entrepreneurship and Small Business**, 42, n. 4, p. 397-421, 2021. Article.

SANTOSO, A. S.; SOH, P.-H.; LARSO, D.; CHEN, J. Strategic entrepreneurship in a VUCA environment: Perspectives from Asian emerging economies. **Int. J. Entrepreneurial Venturing**, 12, n. 4, p. 343, 2020.

SASTRE, C. G.; DEL MAR BENAVIDES-ESPINOSA, M.; RIBEIRO-SORIANO, D. When intentions turn into action: pathways to successful firm performance. **International Entrepreneurship and Management Journal**, 2021a. Article.

SASTRE, C. G.; DEL MAR BENAVIDES-ESPINOSA, M.; RIBEIRO-SORIANO, D. When intentions turn into action: pathways to successful firm performance. **International Entrepreneurship and Management Journal**, 18, n. 2, p. 733-751, 2021b. Article.

SCHWARZ, E. J.; WDOWIAK, M. A.; ALMER-JARZ, D. A.; BREITENECKER, R. J. The effects of attitudes and perceived environment conditions on students' entrepreneurial intent: An Austrian perspective. **Education and Training**, 51, n. 4, p. 272-291, 2009. Article.

SEBORA, T. C.; LEE, S. M.; SUKASAME, N. Critical success factors for e-commerce entrepreneurship: An empirical study of Thailand. **Small Business Economics**, 32, n. 3, p. 303-316, 2009. Article.

SELIG, G., 2014, English, Bridgeport, CT. **Critical success factors for winning entrepreneurs and the role of an incubator in accelerating the growth of start-ups and early stage companies**. IEEE Computer Society. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84904497048&doi=10.1109%2fASEEZone1.2014.6820629&partnerID=40&md5=6cc8f5d629d5713127de9f8237929238. Acesso em: 3 April 2014 through 5 April 2014.

SENGE, P. M. The fifth discipline. **Measuring Business Excellence**, 1997.

SENGUPTA, T.; NARAYANAMURTHY, G.; HOTA, P. K.; SARKER, T. *et al.* Conditional acceptance of digitized business model innovation at the BoP: A stakeholder analysis of eKutir in India. **Technological Forecasting and Social Change**, 170, 2021. Article.

SETIA, P.; VENKATESH, V.; JOGLEKAR, S. Leveraging digital technologies: How information quality leads to localized capabilities and customer service performance. **MIS Quarterly: Management Information Systems**, 37, n. 2, p. 565-590, 2013. Article.

SHAHID, M. S.; AHSEN, S. R. Linking entrepreneurship education and entrepreneurial intentions: An interactive effect of social and personal factors. **International Journal of Learning and Change**, 13, n. 1, p. 14-33, 2021. Article.

SHAPERO, A.; SOKOL, L. The social dimensions of entrepreneurship. **University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship**, 1982.

SHARMA, A.; DESHMUKH, S. S.; OJHA, A. Business Model Innovation to Address Vegetable Supply Chain Issues: A Case Study of an Indian Startup. **International Journal of Innovation and Technology Management**, 20, n. 2, 2022. Article.

SHEKHAR, P.; HUANG-SAAD, A.; LIBARKIN, J.; OSTROWSKI, A. K., 2018, English, **'Is someone in your family an entrepreneur?': Examining the influence of family role models on students' entrepreneurial self-efficacy and its variation across gender**. American Society for Engineering Education. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85051171791&partnerID=40&md5=4d023db74b3ce9792b30b7bba18ed965. Acesso em: 23 June 2018 through 27 December 2018.

SHER, A.; ABBAS, A.; MAZHAR, S.; LIN, G. Fostering sustainable ventures: Drivers of sustainable start-up intentions among aspiring university students in Pakistan. **Journal of Cleaner Production**, 262, 2020. Article.

SHIROKOVA, G.; OSIYEVSKYY, O.; BOGATYREVA, K.; EDELMAN, L. F. *et al.* Moving from Intentions to Actions in Youth Entrepreneurship: An Institutional Perspective. **Entrepreneurship Research Journal**, 2020. Article.

SHRIVASTAVA, U.; ACHARYA, S. R. Entrepreneurship education intention and entrepreneurial intention amongst disadvantaged students: an empirical study. **Journal of Enterprising Communities**, 15, n. 3, p. 313-333, 2020. Article.

SIDDOO, V.; SAWATTAWEE, J.; JANCHAI, W.; THINNUKOOL, O. An exploratory study of digital workforce competency in Thailand. **Heliyon**, 5, n. 5, p. 12, May 2019. Article.

SILVA, M. C. D.; RAMPASSO, I. S.; ANHOLON, R.; COOPER ORDOÑEZ, R. E. *et al.* Critical Success Factors of Brazilian Business Incubators. **Latin American Business Review**, 19, n. 3-4, p. 197-217, 2018. Article.

SILVA, N.; FERNÁNDEZ-ROBIN, C.; YÁÑEZ, D.; ROMANÍ, G. Influence of educational programs oriented toward entrepreneurship on the entrepreneurial intention of university students: the case of Chile. **Academia Revista Latinoamericana de Administracion**, 34, n. 3, p. 445-463, 2021. Article.

SILVA, T. A. D.; CORREA, V. S.; VALE, G. M. V.; GIGLIO, E. M. Influence of social capital offline and online on early-stage entrepreneurs. **Rege-Revista De Gestao**, 27, n. 4, p. 393-408, Oct 2020. Article.

SINGH, S. H.; BHOWMICK, B.; EESLEY, D.; SINDHAV, B. Grassroots innovation and entrepreneurial success: Is entrepreneurial orientation a missing link? **Technological Forecasting and Social Change**, 164, 2021. Article.

SLOGAR, H.; STANIC, N.; JERIN, K. Self-assessment of entrepreneurial competencies of students of higher education. **Zbornik Veleucilista U Rijeci-Journal of the Polytechnics of Rijeka**, 9, n. 1, p. 79-95, May 2021. Article.

SMITH, K.; BEASLEY, M. Graduate entrepreneurs: Intentions, barriers and solutions. **Education and Training**, 53, n. 8, p. 722-740, 2011. Article.

SOMSUK, N.; LAOSIRIHONGTHONG, T. A fuzzy AHP to prioritize enabling factors for strategic management of university business incubators: Resource-based view. **Technological Forecasting and Social Change**, 85, p. 198-210, Jun 2014. Article.

SONG, L. Z.; SONG, M.; DI BENEDETTO, C. A. Resources, supplier investment, product launch advantages, and first product performance. **Journal of Operations Management**, 29, n. 1-2, p. 86-104, Jan 2011. Article.

SPIEGEL, O.; ABBASSI, P.; ZYLKA, M. P.; SCHLAGWEIN, D. *et al.* Business model development, founders' social capital and the success of early stage internet start-ups: a mixed-method study. **Information Systems Journal**, 26, n. 5, p. 421-449, 2016. Article.

SPIGEL, B. The relational organization of entrepreneurial ecosystems. **Entrepreneurship theory and practice**, 41, n. 1, p. 49-72, 2017.

SPIGEL, B.; KITAGAWA, F.; MASON, C. A manifesto for researching entrepreneurial ecosystems. **Local Economy**, 35, n. 5, p. 482-495, 2020.

STAM, E.; SPIGEL, B. **Entrepreneurial ecosystems**. USE Discussion paper series. 2016.

STANIEWSKI, M.; AWRUK, K. Start-up intentions of potential entrepreneurs – The contribution of hope to success. **Economic Research-Ekonomska Istrazivanja**, 29, n. 1, p. 233-249, 2016. Article.

SUBRAMANIAN, M.; SUBRAMANIAN, K.; AL-HAZIAZI, M.; SHERIMON, P. C. S., 2017, English, **Entrepreneurial intent of prospective graduates in Sultanate of Oman**. Academic Conferences and Publishing International Limited. 653-661. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054081442&partnerID=40&md5=c0334627074bb48f2e8518b775ece9bd. Acesso em: 21 September 2017 through 22 September 2017.

SULTANA, R.; IM, I.; IM, K. S. Do IT freelancers increase their entrepreneurial behavior and performance by using IT self-efficacy and social capital? Evidence from Bangladesh. **Information & Management**, 56, n. 6, p. 103133, 2019.

TAJPOUR, M.; HOSSEINI, E. Entrepreneurial Intention and the Performance of Digital Startups: The Mediating Role of Social Media. **Journal of Content, Community and Communication**, 13, n. 7, p. 2-15, 2021. Article.

TAM, S.; LEE, W. B.; CHUNG, W. W. C. Growth of a small manufacturing enterprise and critical factors for success. **International Journal of Manufacturing Technology and Management**, 3, n. 4-5, p. 444-455, 2001. Article.

TAMBO, T.; FILTENBORG, J., 2020, English, **IT4IT™ as a management of technology framework: Perspectives, implications and contributions**. International Association for Management of Technology Conference (IAMOT) and the Graduate School of Technology Management, University of Pretoria. 815-828. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85080866177&partnerID=40&md5=3fb9c63367115f14d129a336f82abff9. Acesso em: 14 May 2017 through 18 May 2017.

TEECE, D. J.; PISANO, G.; SHUEN, A. Dynamic capabilities and strategic management. **Strategic management journal**, 18, n. 7, p. 509-533, 1997.

THOMAS, L. D.; AUTIO, E. Innovation ecosystems. **Available at SSRN 3476925**, 2019.

THOMPSON, E. R. Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. **Entrepreneurship theory and practice**, 33, n. 3, p. 669-694, 2009.

THUETHONGCHAI, N.; TAIPHAPOON, T.; CHANDRACHAI, A.; TRIUKOSE, S., 2020, English, **The critical success factors for new service development in digital service**. Association for Computing Machinery. 222-227. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85096038371&doi=10.1145%2f3383845.3383874&partnerID=40&md5=2795f520c7401b95061b4632f0ba89fe. Acesso em: 31 January 2020 through 2 February 2020.

TING, C. L. W.; MOHD ROSDI, S. A.; ABIDIN, R. The influence of personal attributes and family support towards intention to start-up online business. **International Journal of Advanced Science and Technology**, 29, n. 6, p. 243-248, 2020. Article.

TIPU, S. A. A.; ARAIN, F. M. Managing success factors in entrepreneurial ventures: A behavioral approach. **International Journal of Entrepreneurial Behaviour and Research**, 17, n. 5, p. 534-560, 2011. Article.

TOLFO, C.; WAZLAWICK, R. S.; FERREIRA, M. G. G.; FORCELLINI, F. A. Agile practices and the promotion of entrepreneurial skills in software development. **Journal of Software-Evolution and Process**, 30, n. 9, p. 23, Sep 2018. Article.

TORRES, P.; GODINHO, P. Levels of necessity of entrepreneurial ecosystems elements. **Small Business Economics**, 2021. Article.

TRACHANA, T.; DIAKANASTASI, E.; KARAGIANNAKI, A.; PRAMATARI, K., 2017, English, **Industry accelerator linkage: The critical success factors in open innovation programs**. Academic Conferences and Publishing International Limited. 777-785. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054081481&partnerID=40&md5=730946e3381504729b372b8543085067. Acesso em: 21 September 2017 through 22 September 2017.

TRAN, D. G. T.; BUI, T. Q.; NGUYEN, H. T.; MAI, M. T. T., 2018, English, **The antecedents of entrepreneurial intention a study among graduate students in Ho Chi Minh City**. Springer Verlag. 403-410. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85030845591&doi=10.1007%2f978-981-10-4361-1_68&partnerID=40&md5=9e0c43a89c2ebe743e80da51697598b0. Acesso em: 27 June 2016 through 29 June 2016.

TRIVEDI, R. Does university play significant role in shaping entrepreneurial intention? A cross-country comparative analysis. **Journal of Small Business and Enterprise Development**, 23, n. 3, p. 790-811, 2016. Article.

TRUMAN, R.; LOCKE, C. J. Gazelles, unicorns, and dragons battle cancer through the Nanotechnology Startup Challenge. : Springer. 7**:** 1-4 p. 2016.

TSATSOU, P.; ELALUF-CALDERWOOD, S.; LIEBENAU, J. Towards a taxonomy for regulatory issues in a digital business ecosystem in the EU. **Journal of Information Technology**, 25, n. 3, p. 288-307, 2010. Article.

TUAN, N. A.; HA, D. T. H.; THAO, V. T. B.; ANH, D. K. *et al.* Factors affecting entrepreneurial intentions among youths in Vietnam. **Children and Youth Services Review**, 99, p. 186-193, Apr 2019. Article.

TURUK, M.; HORVATINOVIC, T.; SUDARIC, Ž. Examining the causes of entrepreneurial intentions and their moderating effects. **International Journal of Economics and Business Research**, 20, n. 4, p. 425-441, 2020. Article.

VALENCIA-ARIAS, A.; RESTREPO, L. A. M. Entrepreneurial intentions among engineering students: Applying a theory of planned behavior perspective. **Periodica Polytechnica Social and Management Sciences**, 28, n. 1, p. 59-69, 2020. Article.

VAMVAKA, V.; STOFOROS, C.; PALASKAS, T.; BOTSARIS, C. Attitude toward entrepreneurship, perceived behavioral control, and entrepreneurial intention: dimensionality, structural relationships, and gender differences. **Journal of Innovation and Entrepreneurship**, 9, n. 1, 2020. Article.

VAN DER WESTHUIZEN, T.; GOYAYI, M. J. The influence of technology on entrepreneurial self-efficacy development for online business start-up in developing nations. **International Journal of Entrepreneurship and Innovation**, 21, n. 3, p. 168-177, 2020. Article.

VAN TRANG, T.; QUANG VINH, N.; HUNG DO, Q. Application of fuzzy analytic hierarchy process in prioritizing and ranking critical success factors of innovation startups. **WSEAS Transactions on Business and Economics**, 16, p. 261-270, 2019. Article.

VANDERKRUIK, R.; MCPHERSON, M. E. A Contextual Factors Framework to Inform Implementation and Evaluation of Public Health Initiatives. **American Journal of Evaluation**, 38, n. 3, p. 348-359, 2017. Article.

VOZIKIS, G. S.; MESCON, T. S. Developing International Interdisciplinary Programs in Management and Technology Entrepreneurship in Eastern Europe: The Critical Success Factors for Developing "Entrepreneurial Courage". **Journal of Small Business and Entrepreneurship**, 23, n. sup1, p. 785-796, 2010. Article.

VRACHEVA, V. P.; ABU-RAHMA, A.; JACQUES, P. Effects of context on the entrepreneurial intent of female students from the United Arab Emirates. **Education and Training**, 61, n. 6, p. 700-717, 2019. Article.

WANG, C. L.; AHMED, P. K. Dynamic capabilities: A review and research agenda. **International journal of management reviews**, 9, n. 1, p. 31-51, 2007.

WANG, P.; HUANG, Y. Give Me What I Want: Identifying the Support Needs of College Student Entrepreneurs. **Frontiers in Psychology**, 11, 2020. Article.

WASSERMAN, N. Founder-CEO succession and the paradox of entrepreneurial success. **Organization Science**, 14, n. 2, p. 149-172, 2003. Article.

WEGNER, D.; THOMAS, E.; TEIXEIRA, E. K.; MAEHLER, A. E. University entrepreneurial push strategy and students' entrepreneurial intention. **International Journal of Entrepreneurial Behaviour and Research**, 26, n. 2, p. 307-325, 2020. Article.

WEIL, H. B. Turning innovation into value. *In*: **Systemic Management for Intelligent Organizations: Concepts, Models-Based Approaches and Applications**: Springer-Verlag Berlin Heidelberg, 2012. v. 9783642292446, p. 163-178.

WHITE, D. E.; PATTON, J. R., 2000, English, **Technology and strategic management by projects**. Institute of Electrical and Electronics Engineers Inc. 13-18. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84952036980&doi=10.1109%2fEMS.2000.872468&partnerID=40&md5=26833e3dee958a7ee48fe867becd9f1d. Acesso em: 13 August 2000 through 15 August 2000.

WIESBÖCK, F.; HESS, T. Digital innovations: Embedding in organizations. **Electronic Markets**, 30, n. 1, p. 75-86, 2020. Article.

WILLIAMS MIDDLETON, K.; NOWELL, P. Team trust and control in new venture emergence. **International Journal of Entrepreneurial Behaviour and Research**, 24, n. 4, p. 882-910, 2018. Article.

WIßOTZKI, M.; SANDKUHL, K. The digital business architect – Towards method support for digital innovation and transformation. 10th IFIP WG 8.1 Working Conference on the Practice

of Enterprise Modelling, PoEM 2017. SERRAL ASENSIO, E.;SNOECK, M.*, et al*. : Springer Verlag. 305**:** 352-362 p. 2017.

WITTKOP, A. M.; ZULAUF, K.; WAGNER, R. **How Digitalization Changes the Internationalization of Entrepreneurial Firms: Theoretical Considerations and Empirical Evidence**. Bucharest: Tritonic Publ House, 2017. 38-50 p. (Entrepreneurs. Entrepreneurship: Challenges and Opportunities in the 21st Century. 978-606-749-241-5.

WONG, W. K.; CHEUNG, H. M.; VENUVINOD, P. K. Individual entrepreneurial characteristics and entrepreneurial success potential. **International Journal of Innovation and Technology Management**, 2, n. 3, p. 277-292, 2005. Article.

XIAO, L.; NORTH, D. The role of Technological Business Incubators in supporting business innovation in China: a case of regional adaptability? **Entrepreneurship and Regional Development**, 30, n. 1-2, p. 29-57, 2018. Article.

YADAV, N.; GOYAL, S. Regaining partner trust in the food delivery business: case of Zomato. **Emerald Emerging Markets Case Studies**, 2022.

YIM, D.; CHO, H. H.; KIM, E., 2015, English, Portland, OR. **Revisit the Concept and Usefulness of Science and Technology Park and Implication for the Regional Innovation Policy: Cases of Seoul and Gyeonggi Province in Korea**. Ieee. 166-183. Disponível em: <Go to ISI>://WOS:000380611600018.

YOUNIS, H.; KATSIOLOUDES, M.; BAKRI, A. A. Digital entrepreneurship intentions of Qatar university students motivational factors identification: Digital entrepreneurship intentions. **International Journal of E-Entrepreneurship and Innovation**, 10, n. 1, p. 56-74, 2020. Article.

YU, T.; KHALID, N.; AHMED, U. Factors influencing entrepreneurial intention among foreigners in Kazakhstan. **Sustainability (Switzerland)**, 13, n. 13, 2021. Article.

YURYNETS, R.; YURYNETS, Z.; DENYSENKO, M., 2022, English, **Development of Information Technology Organizations for Financial and Strategic Management of Startup Projects**. CEUR-WS. 1308-1320. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85134730495&partnerID=40&md5=12f008ccd5ba73f24f5ec2447d253f3d. Acesso em: 12 May 2022 through 13 May 2022.

ZAHEER, H.; BREYER, Y.; DUMAY, J. Digital entrepreneurship: An interdisciplinary structured literature review and research agenda. **Technological Forecasting and Social Change**, 148, p. 119735, 2019a. Article.

ZAHEER, H.; BREYER, Y.; DUMAY, J. Digital entrepreneurship: An interdisciplinary structured literature review and research agenda. **Technological Forecasting and Social Change**, 148, p. 20, Nov 2019b. Review.

ZAMPETAKIS, L. A.; LERAKIS, M.; KAFETSIOS, K.; MOUSTAKIS, V. Anticipated emotions towards new venture creation: A latent profile analysis of early stage career starters. **International Journal of Management Education**, 14, n. 1, p. 28-38, 2016. Article.

ZHANG, F.; WEI, L.; SUN, H.; TUNG, L. C. How entrepreneurial learning impacts one's intention towards entrepreneurship: A planned behavior approach. **Chinese Management Studies**, 13, n. 1, p. 146-170, 2019. Article.

ZHANG, H. P.; CAO, Q., 2006, English, Shandong Univ, Weihai, PEOPLES R CHINA. **A social networks approach to R&D strategy of entrepreneurial firms**. China Machine Press. 160-165. Disponível em: <Go to ISI>://WOS:000243868800028.

ZHANG, P. Y.; DENG, L., 2008, English, Maastricht, NETHERLANDS. **Index System for Performance Evaluation of Enterprise Based on Life Cycle Theory**. Wuhan Univ Technology Press. 1675-1679. Disponível em: <Go to ISI>://WOS:000263151801008.

ZHANG, S.; ZHONG, H.; YUAN, Z.; XIONG, H., 2021, English, **Scalable Heterogeneous Graph Neural Networks for Predicting High-potential Early-stage Startups**. Association for Computing Machinery. 2202-2211. Disponível em: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85114925295&doi=10.1145%2f3447548.3467383&partnerID=40&md5=5cfeece594d7e2861b21f55a99d01a84. Acesso em: 14 August 2021 through 18 August 2021.

ZHENG, H.; LI, D.; WU, J.; XU, Y. The role of multidimensional social capital in crowdfunding: A comparative study in China and US. **Information & management**, 51, n. 4, p. 488-496, 2014.

ZHU, F.; FAN, S. X. J.; ZHAO, L. Having Entrepreneurial Friends and Following Them? The Role of Friends' Displayed Emotions in Students' Career Choice Intentions. **Journal of Enterprising Culture**, 27, n. 4, p. 445-470, Dec 2019. Article.

ZOLLO, L.; RIALTI, R.; TRON, A.; CIAPPEI, C. Entrepreneurial passion, orientation and behavior: the moderating role of linear and nonlinear thinking styles. **Management Decision**, 59, n. 5, p. 973-994, May 2021. Article.

ANEXOS

ANEXO A - COMPROVANTE DO ARTIGO 1 (PUBLICADO - ENANPAD 2022)

ANPAD <noreply@anpad.org.br> sáb., 23 de abr. 11:58

para mim

Prezado(a) Autor(a),

Informamos que recebemos a submissão do seu artigo. Seguem os dados:

Título: Startups unicórnios: revisão da literatura e agenda de pesquisa
Tema: Temas Emergentes em Empreendedorismo
Resumo: Em fevereiro de 2022, startups do tipo unicórnio atingiram a marca de 1000 empresas. Empresas do tipo unicórnio são definidas por serem digitais e terem atingido o valor de mercado de pelo menos 1 bilhão de dólares. Trata-se de um tipo de empreendedorismo de alto crescimento, ainda pouco investigado. O objetivo desta pesquisa é realizar uma revisão da literatura sobre o tema e propor uma agenda de possibilidades de pesquisa sobre unicórnios e empreendedorismo de alto crescimento. Utilizamos as técnicas de revisão sistemática de literatura e análise bibliométrica. Nossa análise deste universo de empresas sugere que o alto crescimento depende de fatores exógenos e endógenos, sendo fundamental a adoção de uma abordagem sistemática que considere as necessidades particulares de cada um dos estágios do ciclo de vida, desde o lançamento até a expansão do negócio, momento no qual as estratégias adotadas para expansão regional ou internacionalização são o desenvolvimento orgânico ou via fusões e aquisições. A partir dos estudos identificados, levantamos questões de pesquisa e organizamos uma agenda de pesquisa. A contribuição do estudo está focada na análise e síntese da literatura e na proposição de um quadro estruturado dos estudos dedicados a explorar o empreendedorismo de alto crescimento.
Dados dos autores:
#1 - André Luiz Tavares Damasceno - altdamasceno@gmail.com
#2 - Cristiano Morini - cristiano.morini@fca.unicamp.br
#3 - Edmundo Inácio Júnior - edmundo.inacio@fca.unicamp.br

ANEXO B - COMPROVANTE DO ARTIGO 1 (APROVADO - IAMOT 2023)

IAMOT 2023 | Your full paper review Caixa de entrada ×

IAMOT 2023 Organizers <iamot2023@conftool.pro> sex., 10 de mar., 13:08 (há 20 horas)

para mim, cristiano.morini, inaciojr

Dear André Luiz Damasceno,

We are pleased to inform that your paper submitted to the IAMOT 2023 has been **successfully reviewed**. You can view the reviewers' comments at the bottom of this email. Congratulations on your effort so far!

As you know, full papers are being considered for awards, special issues, and fast-tracks opportunities. The review process was meant to not only offer feedback to the authors, which they may use to improve the presentation in the conference, but also to help on giving the Scientific Committee good papers for further decision.

So, feel free to make any revision you think may help your paper to keep running for awards and potential publication opportunities! You have until April 14th for submitting a new revised version of your full paper. To do that, please send the document directly to iamot2023@ufrgs.br.

We will manually change your formerly submitted version, then the Scientific Committee will evaluate each submission and further details will be provided during the Conference. Award winning papers will be announced at the Gala Dinner, on May 03.

See journals confirmed for fast-tracks and special issues at: https://www.iamot2023.com/special-issues-and-fast-tracks.

Now it is time to organize your stay in Porto Alegre. If you are interested, we have some accommodation options available on the conference website (https://www.iamot2023.com/practical-information).

The conference's registration system will be open TODAY. We remind you that for effective presentation and to be included in the Conference Proceedings, we require that EACH PAPER/ABSTRACT has at least ONE REGISTRATION.

Please check the IAMOT 2023 website and your e-mail for further information about registration.

Looking forward to see you in Brazil!

Contribution Details

ID: 511
Title: HIGH DIGITAL GROWTH: ESSENTIAL CAPABILITIES AND THE RESEARCH AGENDA

ANEXO C - COMPROVANTE DO ARTIGO 1 (SUBMETIDO - PERIÓDICO IJEIM)

Inderscience Publishers: IJEIM-133299 - Article entering review process

Caixa de entrada ×

Inderscience Submissions <submissions@inderscience.com> qua., 30 de nov. de 2022, 20:44

para mim

inglês › português Traduzir mensagem Desativar para: inglês ×

INDERSCIENCE Submissions
Article submission and peer-review system

Dear Prof. André Damasceno,

Thank you for your recent submission, reference code IJEIM-133299, entitled,
'High digital growth: essential capabilities and the research agenda'

submitted to Int. J. of Entrepreneurship and Innovation Management.

We are pleased to inform you that your article has passed the screening stage and is now in the review process.

You can track the progress of your article by logging in to our online submissions system at https://indersciencesubmissions.com/

Your username is: altdamasceno
You can get a password reminder on the log in page.

Thank you for considering this journal as a venue for your work.

Kind regards,
The Online Submissions Team,
Inderscience Publishers Ltd.
submissions@inderscience.com

ANEXO D - ACESSO AO ARTIGO 2 (PUBLICADO - INNOVATION & MANAGEMENT REVIEW)

Lessons from the fastest Brazilian unicorn | Emerald Insight

ANEXO E - COMPROVANTE DO ARTIGO 3 (SUBMETIDO - PERIÓDICO BASE)

[BASE] Submission Acknowledgement Caixa de entrada ×

Prof. Dr. José Carlos da Silva Freitas Junior via SEER Unisinos <openjournal@unisinos.br> 14:24 (há 2 minutos)

para mim

André Damasceno:

Thank you for submitting the manuscript, "Avaliação da intenção empreendedora digital de jovens universitários brasileiros" to BASE - Revista de Administração e Contabilidade da Unisinos (ISSN: 1984-8196). With the online journal management system that we are using, you will be able to track its progress through the editorial process by logging in to the journal web site:

Submission URL: https://revistas.unisinos.br/index.php/base/authorDashboard/submission/26257
Username: altdamasceno

If you have any questions, please contact me. Thank you for considering this journal as a venue for your work.

Prof. Dr. José Carlos da Silva Freitas Junior

Prof. Dr. José Carlos da Silva Freitas Junior

josecf@unisinos.br

Revista Base http://revistas.unisinos.br/base