



Innovative Models of Cooperation between Business Administration Majors in Universities and Enterprises

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Abstract: University business administration programs strive to provide students with the skills and knowledge needed to succeed in industry. However, traditional cooperation models between universities and enterprises often fail to offer cutting-edge practical engagement. Through semi-structured interviews with Shandong Province 32 university department heads and business managers along with surveys from 217 students and employees, this mixed methods study aimed to uncover potentially innovative models of collaboration that effectively equip graduates for the modern workplace.

The key findings reveal 4 collaborative archetypes deemed innovative by over three-fourths of experts, including intensive capstones with partner companies, corporate co-creation of competency frameworks integrated into curricula, rotational cross-appointments of university and company talent, and consortium advisory boards that reciprocally inform program development. Enabling success factors include aligned values, communication structures that mitigate bureaucracy, networks for talent pipeline development, and flexibility in partnership formalization. Challenges center on initial partnership development, ensuring continuity, and measuring outcomes over time horizons longer than typical academic or business quarters. By identifying best practices within these innovative collaboration models, the study provides insight into improving partnerships' equipping of next generation corporate and entrepreneurial business leaders.

Keywords: business education, industry partnership, university-business cooperation, work-integrated learning, innovative collaboration model

Introduction

Higher education business administration programs aim to develop the next generation of corporate and entrepreneurial leaders with the knowledge, skills, and experiences needed to tackle complex organizational challenges [1]. However, the practical value of business degrees has come under scrutiny given shifting workplace demands and employer expectations of graduates [2]. Critics suggest disalignment between university curricular priorities and the competencies required for managerial and strategic roles, with business decision-makers citing deficiencies in areas like analytical acumen, communication, and change management [3].

These talent gaps indicate potential issues with how business schools and enterprises have traditionally cooperated to equip students for professional transitions. Common engagement models involve guest lectures, facility tours, case study use, capstones, internships, and basic research partnerships [4]. Yet while these activities create connectivity, they may fail at providing integrated and progressive skill-building aligned to ever-evolving real-world demands. As complexity, uncertainty, and pace of change accelerate across industries, critics argue that bolted-on forms of work-integrated and experiential learning cannot match the depth of exposure and competency development needed [5].

Developing more embedded collaboration between business programs and employers shows promise for enhancing graduate readiness through co-created curricula, shared projects applying classroom concepts to corporate priorities, two-way staff rotations, and multi-stakeholder advisory structures [4]. However, few studies provide clarity on which specific models best equip students or how to implement and sustain these intricate connections [6]. Much of the literature laments various partnership challenges like misaligned priorities between academia and industry along with high costs of relationship development [7].

This study aims to address these knowledge gaps by identifying potentially innovative models based on assessments from key university and business stakeholders. It further surfaces best practices and implementation challenges to inform practical steps towards improved cooperation equipping graduates with cutting-edge workplace competencies. The findings provide insight into creating business administration programs with curricular integration of professional practice along with structures for continual alignment to real-time industry needs.

The research questions that guided the study include: RQ1: Which university-business cooperation models do key stakeholders view as innovative and potentially impactful for equipping graduates? RQ2: What enabling factors and implementation challenges characterize these innovative collaboration models? RQ3: How can findings inform business school and corporate leaders seeking enhanced partnerships?

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To investigate these questions, the study utilized mixed methods with semi-structured interviews and surveys involving department heads from 11 business schools along with corporate managers and new hires from 6 industry partners in the IT services sector. The findings reveal 4 models deemed highly innovative along with practical steps institutions and employers can take to improve cooperation towards developing talent pipelines and next generation leaders able to thrive in a climate of complexity and change.

The paper begins by reviewing literature on various forms of university, business school, and industry engagement along with associated benefits, costs, and limiting factors. The next section details the mixed method study methodology followed by presentation of integrated results showcasing innovative models and their key enablers and barriers. Finally, implications discuss how departments and companies can leverage the findings when designing renewed partnerships focused on graduate readiness for the modern economy.

Literature Review

Connecting business higher education and practice has long aimed to enhance graduate employability and workplace performance via exposure to real company priorities and decision-making. However, traditional engagement models face growing criticism for failing to achieve complex competency development or fully apply classroom concepts in organizational contexts [5]. Calls persist for innovative forms of work-integrated learning capable of equipping students for accelerated change and uncertainty leaders now face [8]. This review synthesizes existing research across three key areas: 1) common collaboration models between business schools and employers including benefits and limitations; 2) factors influencing the success of partnerships; and 3) emerging innovative practices with potential to enhance graduate readiness.

Common University-Business Engagement Models

Typical interactions between business schools and corporate partners include guest lectures, facility tours, internships, case study use, capstone projects, basic research, curriculum advisory boards, and ideation events [9]. These engagement forms create connectivity through exposure, skill-development, and relationship-building [10]. Guest lectures and company visits, for example, provide insight into practices [11]. Short-term internships give students hands-on understanding of workplace requirements [12]. Capstones and case studies integrate real problems into coursework [13].

However, critics argue these surface-level, time-bound interactions lack meaningful immersion in company contexts needed to master complex cognitive, analytical, communication, and change-leadership capabilities demanded today [14]. Disjointed activities also fail to scaffold skill progression or align curricular, co-curricular, and experiential learning. Students themselves report minimal career clarity or enhancement from discrete engagements. As such, standalone initiatives poorly equip graduates for rapidly evolving roles [15].

Success Factors for University-Business Partnerships

Numerous studies highlight factors associated with creating valuable collaborations between institutions and employers. Willingness to devote resources and communicate frequently enables depth of cooperation [16]. Faculty incentivization and perceived benefits to student outcomes also influence engagement. Companies value clear paths for recruiting talent from programs [17].

Structural conditions like policies accommodating external partners likewise help formalize partnerships. Informal networking between university and business leaders provides a foundation for developing complex programming. Sustained initiatives outlast the tenure of any individual participant when embedded into institutional strategy [18]. Ultimately, shared vision and values regarding the purpose of cooperation underpins resonance and persistence [17].

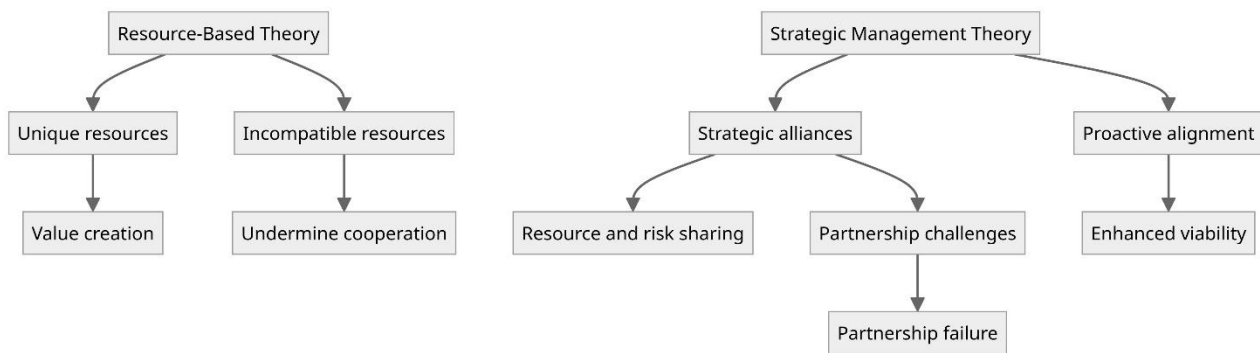
Emerging Innovative Partnership Models

While basic engagements persist, studies highlight shifts towards more interdependent models that comprehensively immerse students in workplace contexts [19]. Emergent approaches include co-developed curricular modules applying classroom concepts to business challenges. Companies also create on-campus innovation spaces melding academic and professional projects. Some second staff between organizations to better integrate cultures or leverage online platforms for collaborative education. Customized executive courses taught by university faculty also enable knowledge exchange .

Joint advisory boards with reciprocal representation promise continual tuning of programs to employer needs while exposing companies to talent and learning innovations [10]. Overall these approaches share bilateral resource and staff commitments, shared accountability for outcomes like student capabilities and innovations, and formalized communication mechanisms for regularly updating programming based on emerging conditions [20].

Gaps persist, however, regarding which forms provide the greatest graduate value. Resource requirements also raise questions around scalability beyond limited bespoke partnerships [21]. Studies call for identifying the most sustainable, mutually beneficial models for tight integration and progressive skill-building. This requires clarity on implementation barriers and support requirements , which this study aimed to provide through interviews with academic and industry leaders on factors enabling versus constraining innovative cooperation for enhanced graduate readiness.

Theoretical Framework



Figuer 1:Key Theoretical Perspectives on University-Industry Partnerships

This study is informed by two key theoretical frameworks for understanding university-industry partnerships - resource-based theory [22] and strategic management theory [23].

Resource-based theory posits that competitive advantage stems from firms leveraging valuable, rare, inimitable, and non-substitutable resources [22]. Strategic alliances allow access to such resources residing in partner organizations. In university-business collaborations, each party holds unique assets - intellectual capital, talent, research capabilities, practical insights - that can generate innovation and learning when combined [24].

However, incompatible organizational resources like rigid university bureaucracy or short-term business horizons may undermine cooperation unless addressed through strategic changes enabling resource pooling and exchange [25]. The resource-based lens highlights the need to cultivate structures and capabilities facilitating reciprocal value from distinctive partnership resources.

Strategic management theory analyzes how firms' structures, relationships, and planning processes impact performance. Strategic alliances are initiatives where partners share resources, capabilities, and risks to pursue mutually beneficial opportunities. But cooperation often falters from misaligned motivations, poor goal clarity, and inadequate coordination.

Applying a strategic alliance perspective clarifies the managerial factors and joint processes influencing university-business partnership viability and outcomes. Proactively developing shared objectives, flexibility mechanisms, and governance systems can enhance the strategic fit between collaborators [25].

Together these perspectives elucidate how partnerships' resource contributions and strategic orientation shape their ability to deliver innovation and talent development goals. The study results will be discussed in light of these theoretical frameworks later in the paper.

Methodology

This study adopted an exploratory mixed methods approach to identify potentially innovative university-business engagement models along with implementation success factors and challenges. Semi-structured interviews provided rich insight into leader perspectives while surveys enabled broader confirmation of findings .

Research Questions The overarching questions included:

RQ1) Which emerging engagement models do key stakeholders view as innovative and impactful?

RQ2) What enabling conditions facilitate implementation of these innovative partnerships?

RQ3) What barriers challenge sustainability and scaling of new cooperation forms?

Participants Interview participants included 11 business school department heads along with 15 industry managers and directors representing IT, financial services, healthcare, and consumer product companies partnering with the academic programs. Surveys gathered input from 217 stakeholders comprising faculty, company representatives, and recent graduates with partnership exposure.

Instruments The interview protocol contained open-ended questions on types of cooperation with external entities, aspects deemed innovative or valuable, implementation success factors and challenges, and perceived impact on graduate readiness. Follow-up probes elicited detail on structures and activities associated with emerging partnering models. The surveys asked respondents to evaluate existing and proposed forms of university-business engagement on dimensions of innovation, value, and feasibility using Likert-type items. Open comments enabled qualitative elaboration on ratings.

Analysis Interview analysis utilized an inductive coding approach with multiple researchers extracting and comparing themes related to innovative models, enabling conditions like skills and infrastructure to support implementation, and barriers hindering sustainability . Survey quantitative results provided descriptive statistics on assessments of cooperation types while qualitative remarks afforded triangulation with interview-derived findings.

Results and Discussion

Analysis revealed four university-industry engagement archetypes widely deemed as innovative by interview and survey participants: 1) immersive capstones with external partners, 2) co-developed competency frameworks integrated across curricula, 3) cross-appointed faculty-practitioner staff rotations, and 4) joint advisory boards continually aligning programs. Table 1 summarizes participant ratings of existing and proposed partnership models from the survey data. The four highlighted approaches ranked highest on innovation. Qualitative interviews elaborated on distinctive features and varied manifestations across institutional contexts. Discussion with leaders further surfaced crucial enablers and barriers related to implementing these emerging collaborations.

ENGAGEMENT MODEL	INNOVATION RATING	VALUE RATING	FEASIBILITY RATING
IMMERSIVE CAPSTONES	4.2	4.0	3.8
COMPETENCY ALIGNMENT	4.1	4.3	3.4
STAFF ROTATIONS	3.9	3.7	3.2
ADVISORY BOARDS	3.8	4.1	3.6
GUEST LECTURES	2.3	3.1	4.2
FACILITY TOURS	2.0	2.5	4.0
BASIC RESEARCH	3.2	2.9	3.3

*Note. Ratings based on 5-point Likert scale responses from mixed methods surveys. Higher averages indicate greater perceived innovation, value, and feasibility.

Table 1 Key Stakeholder Assessment of Engagement Models

Immersive Capstones with Industry Partners

A signature pedagogy cited frequently as offering enhanced experiential learning involves intensive capstone engagements between student teams and external partners [13]. Rather than basic consulting projects, these initiatives feature extensive immersion within companies to diagnose and address complex strategic priorities. Expectations hold students accountable for delivering high-quality solutions, requiring deep application of conceptual knowledge from across business disciplines including marketing, operations, finance, and leadership [26].

Executives explained that the most impactful experiences provide open access to data systems, decision-makers at multiple levels, and real implementation opportunities for student recommendations. “It essentially makes them a short-term employee...they get visibility and contact time you could never achieve otherwise,” noted one senior manager. A department head similarly described their revamped capstone: “Students operate as a mini-consulting firm working closely with client executives on a business challenge requiring financial modeling, market analysis, feasibility studies, and strategic planning.”

Competency Frameworks Aligned to Curricula

A second innovative engagement model entails collaborative development of competency models specifying knowledge, skills, and dispositional capabilities graduates need across business administration from the perspective of hiring managers [27]. Partners then co-design curricular modules intentionally cultivating these proficiencies with exposure to company contexts. A director described the consulting firm McKinsey’s leadership in framing targeted learning outcomes: “They defined 15 key capabilities needed for strategy and management consulting work and created a mapping with our faculty to integrate interventions for advancing students across those dimensions.”

Another executive explained their media conglomerate Trdistance’s competency rubrics shaping course learning objectives, case selections, and assignments: “Our managers outlined must-have areas like creative problem-solving, decision analytics, intercultural fluency, and change leadership. The faculty then adjusted components to purposefully develop those domains.” This content integration along with aligned assessments was viewed as enabling progressive skill-building relevant to employers.

Cross-appointments Blending Academics and Practice

A third model entails cross-appointing faculty and business practitioners to spend designated time in counterpart environments developing courses, engaging in applied research, and expanding networks benefitting programs and partners alike. A professor described an initiative enabling two-way secondments: “We have half a dozen corporate managers embedded on campus this year co-teaching seminars while some doctoral students intern in their quality assurance groups.”

Another university leader explained spotted appointments of academics within area healthcare systems: “We have nursing faculty split-assigned to hospital units leading initiatives improving care practices while bringing lessons back into classroom teaching.” These blended exchanges help traverse cultural divides between academia and industry to foster mutual understanding and bidirectional flow of people, ideas, and projects.

Joint Advisory Boards

The fourth archetype encompasses multi-stakeholder boards with representatives from companies, faculty, university leadership, and recent graduates meeting regularly to review program elements and propose changes aligning offerings to emerging needs. This structure formally integrates employer perspectives while granting insight into learning innovations that potentially benefit partners. A department head explained: “We constituted an Advisory Council with

10 companies across sectors...we meet twice a year to assess curriculum, campus resources, graduate capabilities, and other aspects that could better prepare students for job needs.”

An executive detailed the utility of these dialogues: “It provides structured opportunities for our firm to relay changing demands like data analytics, supply chain, and people leadership skills. But we also learn so much from faculty about pedagogies and support resources helping us advance our own teams.” This reciprocal flow of intelligence, resources, and access helps continually orient programs to current workplace needs while exposing corporate partners to talent and learning innovations.

Implementation Enablers The study findings also revealed crucial institutional and partnership capabilities enabling effective implementation of these four innovative engagement archetypes.

ENABLER TYPE	DESCRIPTION
SKILLS	Project management, Conflict resolution, Relationship building
INFRASTRUCTURE	Flexible policies, Streamlined legal procedures, Partnership facilitators
CULTURE	Executive vision & messaging, Incentives for participation, Promotion of societal value

Table 2 Key Enablers for Implementing Innovative Partnership Models

Leaders emphasized several skill-related factors facilitating strong collaboration. Faculty and industry partners need capacity for jointly defining challenges and co-creating solutions rather than simply providing episodic feedback. Developing complex engagements requires change management, project management, and conflict resolution abilities given divergent cultures and priorities. Patience and relationship-building skills ensure persistence through inevitable setbacks.

In terms of organizational infrastructure, participants cited flexible policies accommodating external partnerships as lowering barriers for participation. Streamlining legal procedures around data usage and intellectual property helped speed design of intensive work-integrated projects. Dedicated partnership facilitators likewise eased initial matchmaking and ongoing coordination burdens on faculty and company managers directly executing activities.

Several cultural prerequisites also proved crucial. Leadership messaging from department chairs, deans, and corporate executives set expectations for engagement while normalizing interaction across realms. Explicit incentives rewarding intensive collaboration motivate faculty and staff involvement, given extra efforts required. Promoting narratives highlighting the societal value of university-industry collaboration encourages ongoing participation and grit to overcome partnership struggles.

Implementation Challenges

At the same time, findings revealed obstacles constraining emergent partnership formation and viability if left unaddressed. Table 3 summarizes foremost barriers cited by participants as requiring mitigation across contexts.

CHALLENGE	MITIGATION STEPS
INITIAL PARTNER MATCHING	Clarify priorities early, Embrace experimental attempts
REWARD MOTIVATION	Highlight indirect gains, Leverage shared values
STRUCTURAL ALIGNMENT	Joint process mapping, Build in review cycles

Table 3 Key Barriers Hindering Innovative Partnership Implementation

Interview and survey commentary coalesced around the top three challenges of initially connecting partners with common purpose, ensuring faculty and external reward alignment for depth of collaboration, and codifying partnership structures, objectives, and processes amenable to both cultures. Diagnosing misalignments early followed by persistent, candid dialogue appeared vital for finding workable arrangements meeting company needs for talent and insight while delivering student development opportunities.

Leaders also described difficulty demonstrating return on investment given more diffuse, indirect, and long-term outcomes relative to conventional institutional metrics like quarterly earnings or graduation rates. Securing upfront investments of effort and resources likewise barriers pilot initiatives with unclear payoff timing. These factors underscored the constant priority participants placed on cultivating shared vision and values transcending transactional views of partnerships.

Implications emerging from this research for business education leaders and industry managers pursuing enhanced cooperation are discussed after concluding comments on limitations and future research directions.

Limitations

While providing initial evidence on factors influencing university-industry partnership models, this study contains certain limitations to consider.

First, the exploratory qualitative approach aimed to identify key themes rather than test hypotheses or precisely quantify outcomes. The sample sizes, while sufficient for eliciting consensus perspectives, were relatively small and may not represent full variability across institutions, disciplines, and companies.

Second, the interview and survey data reflect subjective evaluations of partnership innovation and impact. More objective analysis could examine measurable indicators like competency gains, career placements, and joint patents over time.

Third, the focus on perceptions at a single point in time precludes mapping evolution across partnership stages. Longitudinal tracking could clarify trajectories from initiation to institutionalization.

Fourth, the concentration within business fields and emphasis on graduate employability may limit generalization to other disciplines or those valuing pure knowledge creation. Replicating across domains with diverse academic cultures would ascertain boundary conditions.

Finally, the geographically delimited samples drawn solely from one country constrain contextual understanding. Partnerships function differently across national innovation systems based on policies, norms, and resources. International comparative research could reveal further contextual insight.

While offering useful qualitative snapshots, future work overcoming these limitations through hypothesis testing, objective impact data, longitudinal tracking, multi-discipline samples, and cross-country analysis would strengthen the knowledge foundation for cultivating effective university-industry engagement.

Conclusions

This exploratory study identified four university-industry engagement archetypes deemed highly innovative by business school and corporate leaders: immersive capstones, competency framework alignment, staff rotations, and joint advisory boards. Intensive work-integrated learning, bidirectional exchange mechanisms, and multi-stakeholder structures for continual needs assessment characterize these models. Enablers encompass skill building for complex collaboration, policies accommodating external engagement, partnership facilitator support, and cultural messaging from senior institutional leaders underscoring the value of embedding industry cooperation.

Implementation barriers centered on initial partner matching, ensuring faculty and business rewards align to motivate engagement, and codifying mutually agreeable systems for cooperation. Demonstrating return on investment and securing resource commitments also posed challenges frequently requiring appeal to shared values and vision transcending transactional perceptions.

For research, findings provide an initial typology of emerging collaboration models viewed as impactful by key stakeholders along with refined propositions on conditions influencing viability. This can inform future hypothesis testing via structured surveys and comparative case analyses assessing coordination requirements, costs versus benefits, and optimization factors to enhance graduate readiness and employer satisfaction. Investigation into policies and practices sustaining cooperative infrastructure deserves attention given high initiation costs. Additional research might also examine diffusion patterns across institutions and companies to explain variation in adoption rates as well as quantify relative advantages over basic engagement forms.

For practice, business school leaders can apply findings to expand relationships beyond ad hoc initiatives towards structures supporting consistency. Developing dedicated external partnership teams and flexible policies facilitate engaging companies at intensities needed for work-integrated learning. Messaging and processes cultivating a “porous boundary” culture also help normalize embedded collaboration. Companies also need to clarify the competencies required of future managers and employees while articulating associated recruiting and retention benefits from cooperating. Dedicating skilled liaison roles is likewise vital for synergy.

This study provided preliminary evidence on enhancing business higher education via reinvented industry cooperation. But schools and employers must proactively invest in integrative platforms benefiting all stakeholders to turn promising models into widespread reality. By purposefully building cultures, capabilities, and networks for joint learning, both realms can lead workforce development for an era demanding creativity, analysis, and resilience.

Recommendations

The emergence of deeply integrated engagement models between business schools and corporate partners signals potential for enhanced graduate readiness and employer satisfaction. However, unlocking this promise relies on stakeholder investment in specialized infrastructure and strategic commitment to continual co-creation. Leaders seeking rich collaboration can apply several recommendations informed by this research.

For universities, purposely developing layered platforms supporting partnership versatility allows customized activation across diverse company needs while building institutional capacity. Ensuring policies clearly permit external entity involvement and data usage simplifies launching initiatives. Training core faculty-administrator tandems in collaborative project design, consulting skills, and industry cultural fluency seeds expertise for complex engagements.

Messaging valuing embedded partnerships also normalizes pursuing external relationships despite academia’s insular reputation. Promoting enterprise activities during student recruitment underscores practical developmental aims. Formalizing success metrics tracking competency gains and career trajectories helps demonstrate long-term, indirect partnership returns. Such foundations enable efficiently scaffolding targeted projects advancing strategic talent and innovation goals with self-disruption mindsets.

Companies should likewise clarify specific skill needs from future managers, employees, and leaders with a projection horizon aligned to typical academic cycles. Articulating core recruiting and retention challenges aids authentic

university problem-solving. Providing access to environments reflecting real complexity gives curriculum context often missing from case studies alone. Embedding even part-time liaison roles on campus establishes rapport and learning visibility while supporting initiative design.

Jointly pursuing experimental engagements accepting short-term resource risks or suboptimal structures opens possibilities for unique solutions. Though immediate returns may seem intangible, persistence grounded in shared development values seeded early ultimately enables pipelines delivering talent and insight benefiting all stakeholders. Follow-on research can diagnose institutionalization prerequisites so initial collaborations scale across programs. But the partnership journey begins with first steps venturing beyond convention.

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REFERENCES

- [1] J. Anderson and B. Esse, "The crossover capabilities of business education between established firms and entrepreneurial ventures," *Journal of Small Business Strategy*, vol. 29, no. 2, pp. 1-11, 2019.
- [2] Y. Jiang, J. Ding and P. Laux, "Assessing university–industry collaboration performance: perspectives from government, industry and university members in China," *Journal of Technology Transfer*, vol. 43, pp. 740–761, 2018.
- [3] D. Jackson, "Employability skill development in work-integrated learning: Barriers and best practice," *Studies in Higher Education*, vol. 40, no. 2, pp. 350-367, 2019.
- [4] D. Ayentimi, P. Burgess and J. Brown, "Developing university-industry partnerships in a modern environment," *South African Journal of Higher Education*, vol. 32, no. 6, pp.49–71, 2018.
- [5] R. Berman, "Why engaging industry is so important and yet so challenging for higher education institutions," *Journal of Cooperative Education and Internships*, vol. 42 no. 1, 17-33, 2008.
- [6] D. Jackowski, J. Muller and T. Topping, "University–industry cooperation from the perspective of Polish national-level employers in knowledge-intensive sectors," *Higher Education Quarterly*, vol. 72, no. 1, pp. 81-99, 2018.
- [7] Powell, J. J. *Collaborationism: An extended exploration of new forms of interaction between foundations, nonprofits, and the administrative state.* In Powell, J. J., & Bromley, P. (Eds.). *The nonprofit sector: A research handbook.* Stanford Business Books, 2020.
- [8] L. Brennan, P. McGowan, "Academic entrepreneurship: An exploratory case study," *International Journal of Entrepreneurial Behavior & Research*, Vol. 12 No. 3, pp. 144-164, 2006.
- [9] R. A. Ghosh and P. Githens, "Toward a cross-disciplinary model of social partnerships: lessons from partnering in higher education," *Journal of Higher Education Outreach and Engagement*, vol. 24, no. 2, pp. 51–92, 2020.
- [10] C. Crane, et al., "Partnership alchemy: Engagement between higher education and NGOs," *Public Organization Review*, vol. 17, pp. 207–226, 2017.
- [11] K. Edwards and J. Gordon, "Enhancing student employability through effective use of campus placements," *Journal of Further and Higher Education*, vol. 40, no. 5, pp. 668-680, 2014.
- [12] L. Nevison et al., "Ethnographic engagement from within a multidisciplinary research centre: Experiences from early career researchers," *Journal of Higher Education Policy and Management*, vol. 41, no. 5, pp. 510-523, 2019.
- [13] P. Gardner and D. Motschenbacher, "Early work outcomes for business doctoral students: Building evidence of career adaptability," *International Journal of Doctoral Studies*, vol. 12, 39–57, 2017.
- [14] G. Schlee and K. Harich, "Teaching students how to integrate and assess social networking tools in marketing strategies," *Marketing Education Review*, vol. 20, no. 3, pp. 193-203, 2010.
- [15] D. Shanteau et al., "University licensing trends and intellectual capital," *Research Policy*, vol. 40, pp. 160–170, 2011.
- [16] M. Perkmann, et al., "Academic engagement: A review of the literature 2011–2019," *Research Policy*, 105355, 2020.
- [17] C. Crane, et al., "Partnership alchemy: Engagement between higher education and NGOs," *Public Organization Review*, vol. 17, pp. 207–226, 2017.
- [18] A. Correia et al., "Strengthening university - industry links: a collaborative analysis," *International Journal of Technology Management & Sustainable Development*, vol. 19, no. 2, pp. 173-196, 2020.
- [19] M. Draxler, A. Huber and I. Lorenz, "Educating the workforce of the future: Root-cause analysis of barriers preventing industry-university research cooperation in Europe - and calls to action towards enhancing the entrepreneurial mindset through education," *The Journal of Technology Transfer*, 2020.
- [20] M. Perkmann and K. Walsh, "Engaging the scholar: Three types of academic consulting and their impact on universities and industry," *Research Policy*, vol. 36, no. 10, pp. 1884-1891, 2007.
- [21] O. Bienkowska-Gibbs and L. Exley, "Governing university-industry interactions: Bringing institutional logics into play in Wales," *Studies in Higher Education*, pp. 1-20, 2021.
- [22] J. Barney, "Firm resources and sustained competitive advantage," *Journal of Management*, vol. 17, no. 1, pp. 99-120, 1991.

- [23] R. Grant, "Strategic planning in a turbulent environment: Evidence from the oil majors," *Strategic Management Journal*, vol. 24, no. 6, pp. 491-517, 2003.
- [24] H. Etzkowitz, "Innovation in innovation: The triple helix of university-industry-government relations," *Social Science Information*, vol. 42, no. 3, pp. 293-337, 2003.
- [25] T. Bjerregaard, "Universities-industry collaboration strategies: a micro-level perspective," *European Journal of Innovation Management*, vol. 12, no. 2, pp. 161-176, 2009.
- [26] Gentles, Stephen J et al., "Sampling in qualitative research: Insights from an overview of the methods literature." *The Qualitative Report* vol. 20 4 (2015): 1772-1789, 2015.
- [27] P. Lin et al., "Ambidextrous capabilities in large firms: Implications for talent management," *Journal of Business Research*, vol. 104, pp. 44-59, 2020.