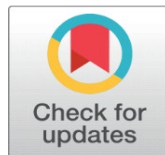
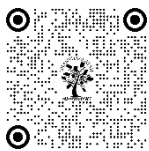


# ADVANCING DIGITAL INNOVATION TO STRENGTHEN BRAND VALUE: SUPPORTING WOODEN CRAFT ENTREPRENEURS' CREATIVE DEVELOPMENT FOR WIDER MARKET APPEAL

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## ABSTRACT

This study explores the relationship between innovation and brand equity, focusing on how strategic orientation and digitalization influence brand development, especially in the handicraft industry. The research integrates key theories, including the Technology-Organization-Environment (T-O-E) framework, contingency theory, and resource-based value (RBV), to examine how these dimensions shape innovation typologies and contribute to brand equity. It posits that a firm's ability to assimilate digital innovations—particularly in technology-driven environments—significantly impacts its brand equity. However, it cautions that merely adopting digital strategies without consistent strategic orientation and managerial resolve may not guarantee innovation success. The study also highlights specific challenges within the handicraft sector, using Saharanpur's wooden craft industry as a case study. Findings suggest that fostering innovation in clustered regions can enhance competitiveness more effectively than in dispersed firms, echoing Porter's cluster theory. Additionally, the research offers practical insights for managers and policymakers to support sustainable innovation by balancing exploitative and exploratory practices. Overall, the study underscores that strategic orientation, combined with digitalization and managerial commitment, is critical for embedding innovation in organizational culture and enhancing brand equity.

**Keywords:** Brand Equity, Innovation, Handicraft

## 1. INTRODUCTION

'Brand equity' with 'innovation' harnessing refers to a marketing wide philosophy that is focused on novel product-market identification, creation (Slotegraaf & Pauwels, 2008), exploring and exploiting opportunities by firms and SMEs (Steffl & Emes, 2021). Underlying the innovation harnessing in marketing and brand equity is the notion of resilience, sustenance and adaptation to evolving market circumstances that collectively shape and re-shape competition. Research work in this area tends to reflect more on 'innovation' and its relationship with 'brand equity' as multi-dimensional (Donbesuur et al., 2020). Innovation in theoretical terms pertains to multiple connotations and meanings (Casteneda & Cuellar, 2020). Earlier studies suggest that organizational learning, institutional environment and technology awareness driven aspects might moderate the relationship between organizational innovation assimilation and brand equity development (Mcarthy et al., 2014). However, innovation assimilation (Schneider & Damanpour, 2006) is sought to be exerting more significant impact on brand equity development (Hanaysha & Hilman, 2015) been moderated by extensive organizational learning, knowledge sharing and institutional environment (Zhu et al., 2006). Business model re-design

and business model transformation surfaces (Hasgall et al., 2019) as obvious outcomes when technology and digitalization is leveraged for innovation assimilation (Chatterjee et al., 2002) in organizational perspective. Despite these recent scholarly attempts aimed at widening our understanding of innovation assimilation in brand equity formulation, the existing academic literature is nonetheless limited in several aspects. First, the 'innovation assimilation-brand equity' studies are limited to examining the specific bivariate relationships. Secondly the possibilities of moderating effect assessment of learning, training, technology usage, AI and ML technologies, or moderation by other contextual factors has been observed as under-researched in multiple aspects. Thirdly, the earlier 'innovation assimilation-brand equity' studies tend to model the specific impact of a firm-wide (marketer wide) innovation assimilation on branding exercise, meaning that innovation is widely perceived and conceptualized as only organization-specific activity with no active role of either the technology, employee's mindset or the technology level understanding. Research would therefore benefit from an individual employee-specific and SME specific conceptualization of the phenomenon. A sizable section of literature has reported on the association between innovation assimilation and brand equity as possessing multiple influences on market orientation, corporate performance, and mass acceptance. In a nutshell, a firm's overall capability to incorporate innovation in day-to-day working is widely regarded as a potential driver of the brand equation. However, some scholars are of the viewpoint that uniform efforts of all dimensions may or may not lead to consistent brand equation formation and that each dimension may differentially figure out the impact.

## 2. RESEARCH OBJECTIVE

To empirically examine the significant positive effect of digitalization dimensions and strategic orientation on Innovation typologies of wooden craft from community entrepreneurs in Saharanpur The innovation typologies definitely exert extensive impact on manner in which the product packages out to customer and is more important in creative industries in wooden carving than any other industry (Chand & Rowan, 2014). Yet minimal knowledge seems to exist regarding the impact with regard to innovation typologies as promoting brand equity and digital mass acceptance prospects. Review of business economics literature reveals numerous models for effectively managing the innovation within the organizational system; focusing on need to reduce complexity to organizing the intricate network of concepts. A section of literature emphasizes the systematic integration of innovative processes (spread across departments and distributed over multiple revenue units) into the organizational structure, leading to value sharing and participative management.

## 3. HYPOTHESIS DEVELOPMENT

Scholars on subject argue that organizational aspects are the prime drivers of the phenomenon. Recent literature illustrates the extensive role of internal dynamics, capabilities and competencies (Zongyuan & Haiyan, 2024), facilitators and barriers; as responsible for the digitalization based innovation typology adoption and incorporation in innovation delivery and brand equity enhancement (Botha et al., 2023). Digital transformation for sake for innovation or for brand equity enhancement essentially involves the makeover in terms of business model innovation, change in internal product lines, processes, assembly supply chains and renewal of business strategy as well as business culture (Ahituv et al., 2019). The innovation typology revival with digitalization or technology incorporation revolves around the innovative re-arrangement of business activities through the introduction of new digital interfaces and respective innovative re-arrangement of business activities essential to run and operate the business. Based on the literature review and subsequent gaps identified, the prospective enablers of innovation and digitalization in knowledge intensive handicraft industry seem to converge towards these major thrust areas: organizational resources namely the strategic entrepreneurial orientation, need for integrating resources (especially knowledge, knowledge couplings, physical and market based knowledge) with aid of technology(digitalization), technology based affordance and complexity perspectives and combating threats with collaborative efforts; to devise innovation typologies that ensure ambidextrous usage of resources and action on opportunities. The core assumption in this architecture is the emphasis on technology (digitalization) as breeding innovation in sequential and systematic manner.

### Aspect One: Firm's Strategic Entrepreneurial Orientation-Digitalization relationship

Across the market posturing and strategic management literature, firm based entrepreneurial quotient and entrepreneurial orientation has been recognized a vital hallmark of firm based resolve to ever seek innovation, experiment with new ideas, explore technology as means to innovate and seek new market opportunities (Ahimbisibwe et al., 2021). Especially with regard to wooden handicrafts industry, survival and resilience (Ghoshal et al., 2023) has

been reported to hinge on entrepreneurial competencies, their positioning across market and leverage of contemporary digital technologies (Halim et al., 2010). Entrepreneurship-technology relationship (Zhou et al., 2005) figures as prominent in shaping and influencing market based demand and supply cycles and wooden handicrafts industry is not aloof (Dashora, 2021). Further scholars argue that firm based entrepreneurial orientation fosters knowledge coupling (Botha et al., 2023), organizational resource allocation, re-deployment (Guth & Ginsberg, 1990), organizational agility (Lu & Ramamurthy, 2011), lean patterns of execution, organizational unlearning capability, organizational MOATS formulation (Zullo, 2022), ability to experiment with new technologies (Gomes et al., 2022), technological affordance (Garcia & Calantone, 2002), technological complexity (vis a vis product design and manufacturing) (Priyono & Hidayat, 2024), prowess in understanding environmental dynamics (Hasgall et al., 2019) and environmental munificence (Xia & Lee, 2005). Firm based entrepreneurial intention is widely observed to influence the prospects for experimentation, technology make over, digitalization and seeking digitalization as a means to secure innovation driven outcomes in markets in terms of products and processes. Hence the study proposes these research hypotheses:

### **H1: There is significant impact of firm based strategic entrepreneurial orientation on organizational digitalization dimensions**

*H1A: There is significant impact of wooden craft firm's entrepreneurial orientation on shaping of organizational agility*

*H1B: There is significant impact of wooden craft firm's entrepreneurial orientation on shaping of organizational unlearning capability*

*H1C: There is significant impact of wooden craft firm's entrepreneurial orientation on operationalizing technological affordance*

*H1D: There is significant impact of wooden craft firm's entrepreneurial orientation on operationalizing technological complexity (vis a vis product design and manufacturing)*

*H1E: There is significant impact of wooden craft firm's entrepreneurial orientation on understanding environmental dynamics*

*H1F: There is significant impact of wooden craft firm's entrepreneurial orientation on understanding environmental munificence*

### **Firm digitalization – Innovation typology relationship**

Based on review of literature and considered factor based relationships, the digitalization in terms of organizational resource management, securing internal knowledge coupling, managing scattered knowledge, deployment of technological resources in form of digitalization (Kohli & Melville, 2019); relying on technology for countering external threats; all point to extensive transformations in innovation that the firm is seeking in product-market perspectives (Li et al., 2023). Firm based strategic digitalization seems to owe a history of influencing innovation in multiple ways and means (Hasgall et al., 2019). Firm based pattern of digitalization incorporation across knowledge resource management, across internal and external resource allocation patterns, across harnessing internal knowledge coupling, across operationalization of technological affordance, across operationalization of technological complexity (vis a vis product design and manufacturing); has been observed to lead to diverse patterns of efficiency and novelty derived innovation typologies (Adner, 2002), (Adams, 2023), (Casteneda & Cuellar, 2020), (Nguyen & Le, 2022), (Dong & Wang, 2022). As per McKinsey's organizational growth levers (Brar et al., 2024) unleashing the digital and data ability, agile resource allocation and unlearning identifies as possessing considerable impact on innovation and growth. Hence we devise these two set of research hypothesis (one set links the digitalization dimensions with efficiency centered innovation and other set links the digitalization dimensions with novelty centered innovation). Efficiency centered innovation focuses on improvements in efficiency and contribute towards the enhancement in efficiency in organizational perspective. The contributing hypothesis focus on summarizing the role of firm based digitalization dimensions (spread across T-O-E approach) on the probable shaping of efficiency driven innovations in handicraft industry scenario.

### **H2: There is significant impact of firm based organizational digitalization dimensions on innovation typology assimilation**

Novelty centered innovation focuses on improvements in product and processes based novelty and contribute towards the enhancement in novelty in organizational perspective. The contributing hypothesis focus on summarizing the role of firm based digitalization dimensions (spread across T-O-E approach) on the probable shaping of novelty and distinctiveness driven innovations in handicraft industry scenario.

*H2A: Wooden craft firm's organizational agility is positively associated with efficiency centered innovation*

*H2C: Wooden craft firm's organizational unlearning capability is positively associated with efficiency centered innovation*

*H2E: Wooden craft firm's operationalization of technological affordance is positively associated with efficiency centered innovation*

*H2G: Wooden craft firm's operationalization of technological complexity(vis a vis product design and manufacturing) is positively associated with efficiency centered innovation*

*H2I: Wooden craft firm's understanding of environmental dynamics is positively associated with efficiency centered innovation*

*H2K: Wooden craft firm's understanding of environmental munificence is positively associated with efficiency centered innovation*

*H2B: Wooden craft firm's organizational agility is positively associated with novelty centered innovation*

*H2D: Wooden craft firm's organizational unlearning capability is positively associated with novelty centered innovation*

*H2F: Wooden craft firm's operationalization of technological affordance is positively associated with novelty centered innovation*

*H2H: Wooden craft firm's operationalization of technological complexity(vis a vis product design and manufacturing) is positively associated with novelty centered innovation*

*H2J: Wooden craft firm's understanding of environmental dynamics is positively associated with novelty centered innovation*

*H2L: Wooden craft firm's understanding of environmental munificence is positively associated with novelty centered innovation*

#### **4. RESEARCH METHODOLOGY AND INSTRUMENTATION**

The study settings involves the region wide wood carving handicraft manufacturing units located in Saharanpur district based geographical area. The study setting distinguishes the research as this is essential for capturing the appropriate and adequate responses. The research hence revolves around the native craftsmen, firm based employees and other stakeholders associated with wooden carving industry in Saharanpur. The 'wooden carving craftsmen and personal associated with wooden carving industry' across the handicraft clusters in Saharanpur in Northern India were the target population for this study. For the research purpose, we seek to define the 'wooden carving craftsmen' as those personnel who have developed a habit of undertaking and practicing the art of wooden carving as creative pursuit and belong to set of artisans specializing in cultural and creative traits. As per Export promotion council Handicraft's report on wooden carving industry, the industry is undergoing structural transformation (Jain , 2016) and requires the innovation push and emphasis on diversity. The diverse sourcing practices and agents could be tapped for data collection (Verma & Gupta, 2019). In similar perspective, diverse categories of wooden carving product manufacturers can be tapped effectively to collect heterogeneous data. Drawing upon the works of Oviatt & McDougall, (1994), this research selected organizations with at least five employees for study. This means that the firms that were studied included small to medium sized handicraft firms engaged in wooden carving expertise and marketing. Henceforth the choice of craftsmen, managerial class and supply chain vendors and enterprises was influenced by select criteria mentioned here:

- The enterprise should have consistent handicraft industry presence especially across wooden carving and associated products designing and manufacturing
- The enterprise should be focused on wooden carving products for domestic and export markets
- The enterprise need to have an employee strength of more than five employees
- The enterprise need to belong to Saharanpur handicraft and craftpreneur cluster in western geographical portion of Uttar Pradesh
- The enterprise need to be registered as MSME or as small to medium enterprise and must possess consistent track record of wooden products carving.

The credibility of the source of information is pertinent to the validity of the study. This is because the questionable source can cast doubts over the integrity of results of the study in focus. Thus to test the study's theoretical model, a survey of purposively aligned handicraft organizations was implemented. This is consistent with prior digitalization, technology enabled innovation assimilation studies on subject matter (Amini, 2023). The sample frame comprises purposive sampling across handicraft enterprises who consistently pursue the profession of wooden carving and are associated with the industry in role of manager, marketer, supply chain agent or as financier also. Secondly these



identified segments must have spent at least five years in this wooden carving industry in particular. The rationale was to reach out to the most specific and most representative set of persons for research purpose. This is consistent with prior handicraft manufacturing and handicraft carving studies (Dong & Wang, 2022), (Verma & Gupta, 2019). As such non probability sampling approaches can be applied and such approaches are appropriate for exploratory, descriptive and cross sectional research studies in behavioral finance perspective. Hence purposive sampling was relied upon for the collection of primary data. The researcher paid attention to the choice of respondents who possess elementary knowledge of the technology, well versed with marketing and hands based approach. As credibility of source of information is pertinent to the validity of study, as such care was undertaken in selection of the managers, founders and marketers and supply chain vendors across wooden carving industry in handicraft cluster.

Aspect	Variables	Source of adapted items
Firm based Strategic Orientation	Strategic Orientation	(Wiklund & Shepherd, 2005), (Venkatraman, 1989)
Firm based digitalization	Organizational Agility	(Lu & Ramamurthy, 2011), (Goldman et al., 1995), (Cetindamar et al., 2021)
	Organizational Unlearning	(Casillas et al., 2010), (Akgun et al., 2007)
	Technological Affordance	(Chatterjee et al., 2015)
	Technological Complexity	(Xia & Lee, 2005)
	Environmental Dynamics	(Shang & Jia, 2024)
	Environmental Munificence	(Tan & Litsschert, 1994)
Firm based innovation	Efficiency centered Innovation	(Amit & Zott, 2012)
	Novelty centered Innovation	(Amit & Zott, 2012)
Firm based ambidexterity	Exploitative Stance	(Jansen et al., 2006)
	Explorative Stance	(Jansen et al., 2006)
Outcomes	Brand Equity	(Keller, 1993)
	Mass Acceptance	Self-Devised

Several studies provide details about methodological decision criteria involved in exploratory factor analysis like the assessment of appropriateness of data for extractive factor analysis( KMO and Bartlett's test of sphericity), rotation (Varimax or Othogonal), factor extraction or retention criterion, cut off value for acceptable factor loadings and suitable percent variance explained. This research study chooses to assess the dimensionality, reliability and validity of all scales with aid of extractive factor analysis and confirmatory factor analysis.

### Analysis and Outcomes

Organizational awareness of 'strategic orientation' dimensions has been observed as instigating the technology readiness, knowledge operationalization and pro-innovation agenda implementation with technology and digitalization perspective (Acar & Ozsahin, 2018) and subsequent realization of corporate purpose (Besharov & Mitzneck, 2023). This is equally relevant in handicraft wooden carving firms as well when matter involves seeking different resource configurations (Karpati et al., 2024). Strategic orientation-T-O-E framework relationship has been highlighted in numerous studies (Picoto et al., 2021) and poses consequences for business model innovation in digitalized environments (Zhou et al., 2022). This has been observed as influencing the business model innovation (Fan et al., 2023), (Alkhamery et al., 2021), (Acar & Ozsahin, 2018)as well.

The **first hypothesis** of study argued that wooden craft firm based strategic orientation would be positively related to organizational digitalization dimensions (agility, organizational unlearning capability, technological affordance, technological complexity, environmental dynamics and environmental munificence).

**Table Summarizing the hypothesis results**

H1A	Organizational Orientation	Agility<---Strategic	OA	<---	SO	.292	Significant
H1B	Organizational Orientation	Unlearning<---Strategic	OL	<---	SO	.239	Significant
H1C	Technological Orientation	Affordance<---Strategic	TA	<---	SO	.477	Significant
H1D	Technological Orientation	Complexity<---Strategic	TC	<---	SO	.803	Significant
H1E	Environmental Orientation	Dynamism<---Strategic	ED	<---	SO	.319	Significant
H1F	Environmental Orientation	Munificence<---Strategic	EM	<---	SO	.670	Significant

The hypothesis H1A purported to relationship between wooden craft firm's entrepreneurial orientations and shaping of organizational agility, hypothesis H1B presented the scope for relationship across wooden craft firm's entrepreneurial orientations and shaping of organizational unlearning capability; which collectively call for organizational knowledge management patterns, organizational culture and learning tendencies as being affected by reported or intended organizational strategic orientations. The hypothesis H1A and H1B respectively exhibited 0.292 and 0.239 impact, stating that strategic orientation shapes the organizational propensity to act, to enact, to change and orient for innovation typology adoption and assimilation. The derived observations are in line with existing studies (Nguyen & Le, 2022) and collectively vindicate the assumptions of resource based theory and Technology-Organization-Environment (T-O-E) framework. Learning orientation as part of strategic orientation as well as knowledge management expertise as part of strategic orientation seems to matter extensively in debates and analysis on subject matter. This was examined as part of hypothesis H1B respectively and vindicated that organizational unlearning is central to innovation adoption in later stages. As part of hypothesis H1C and H1D, the strategic orientation-technological nexus was explored in terms of affordability and complexity (as reportedly shaping prospects for innovation adoption in later stage). Similarly hypothesis H1E and H1F examined the relationship between firm based strategic orientation and environment generated contextual and contingent influences.

#### **Path between T-O-E dimensions- linking dimensions of T-O-E and innovation typologies**

Handicraft firm based digitalization (operationalized as T-O-E framework involving agility, organizational unlearning capability, technological affordance, technological complexity, environmental dynamics and environmental munificence) was examined for prospective relationship with innovation typology assimilation (in two distinct forms of efficiency centered and novelty centered approach). This lead to conclusions that reflected upon the earlier studies and vindicated the support for hypothesis that digitalization dimensions( deduced from T-O-E framework) influence innovation typology formulation, enactment and decision making. Yet sectional or factor wide differences were evident. Organizational agility across handicraft manufacturing firms was observed as influencing efficiency centered innovation along with organizational learning and technological complexity. These were observed as statistically significant yet the technological affordance; environmental dynamism and munificence were observed as casting negligible impact on efficiency centered innovation adoption in handicraft firms in Saharanpur cluster. Novelty centered innovation focuses on improvements in product and processes based novelty and contribute towards the enhancement in novelty in organizational perspective. The contributing hypothesis focus on summarizing the role of firm based digitalization dimensions (spread across T-O-E approach) on the probable shaping of novelty and distinctiveness driven innovations in handicraft industry scenario. With regard to novelty centered innovation adoption by handicraft firms, the T-O-E derived digitalization dimensions were observed as more conducive to casting statistically significant impact except the factor of organizational learning. Collectively, research evidenced support for hypothesis H2A, H2B, H2C, H2F, H2H, H2J, H2L. The insights that this set of research hypothesis yielded is critical. Efficiency centric innovation typology promotion was observed as reliant on organizational resource reconfiguration especially the organizational agility capability and

organizational unlearning capability. Novelty centric innovation typology promotion was however observed as reliant on all six dimension of T-O-E conceptualization (except technological affordance aspect). This illustrates more weightage of digitalization dimensions in promoting novelty innovation typologies rather than efficiency centered typologies.

## 5. RESULTS AND DISCUSSIONS

Drawing on the T-O-E framework, the respective dimensions were segregated, and drawing on the contingency theory, the innovation typologies and relationship with brand equity were devised. Moreover, although the carving for 'strategic orientation' in handicraft manufacturing firms has been sought to foster 'digitalization' and digitalization has been observed as promoting two types of innovation capabilities before the ambidexterity can be gained.

Innovation typologies (Aravind & Damanpour, 2011) are critical outcomes of digitalization and often bear a significant impact on branding. In drawing on RBV theory, the conceptual model argues that firm-based resources and capabilities especially the dynamic capabilities in the form of digitalization dimensions matter (Brar et al., 2024). Drawing on the contingency theory, knowledge flows and knowledge coupling, and technology organization–environmental aspects play a crucial role in shaping innovation-derived outcomes. Moreover, although digitalization dimensions might play a critical role in fueling innovation yet organizational ambidexterity too needs theoretical and empirical consideration. To address this issue, the model explores the conceptual link between organizational ambidexterity and brand equity development prospects.

The evolving 'information technology' derived digitalization-based innovation refers to organizational adoption and diffusion of new IT enabled processes, services, and products in order to posture better brand equity. Such a proposition insists upon the technological, organizational, and environmental antecedents as driving the phenomenon (Govindarajan & Kopalle, 2006). Digital and digitalization-based innovation pertain to a product-centric perspective involving novel combinations of physical and digital products (Krzakiewicz & Cyfert, 2019) to formulate new products that are value-laden and unique (Garcia & Calantone, 2002). IS innovations and IS-supported innovation for enhancement of brand equity could involve dimensions of systematic application of IT artifacts within organizational perspective to change existing business models, flow of information, and decision structures to yield new products, tap new markets and tap new opportunities with current resource allocations (Kohli & Melville, 2019). The current study hence sought to bring together the scattered literature on the elements that impact, shape up and influence the innovation typologies of wooden craft from community entrepreneurs in Saharanpur. The research discussed the handicraft industry's formal conceptual model and hypothesis development.

Accordingly, framework related with linking the core research constructs was formulated and relationships between research constructs were introduced. The resource based value, contingency perspective and T-O-E theoretical paradigms were used as key theoretical underpinnings for the conceptual model. In addition to the theoretical implications of the study discussed above, methodologically this study has introduced a novel approach to the study of innovation typology prospects in handicraft firms. Unlike prior organizational innovation studies, throughout this study, respondents were continuously reminded to focus on the behavior of the wooden carving units. Overall, this study provides marketing managers and strategists across handicraft manufacturing sector with a comprehensive overview of T-O-E dimensions, ways to measure these dimensions and how it can improve brand equity. In the subsequent sections, specific managerial implications from the study are discussed and useful recommendations are offered.

## 6. CONCLUSION

The study has established that to a large extent, handicraft firm's intent for strategic orientation is desirable for digitalization to occur and innovation to materialize. Strategic orientation-derived digitalization and innovation facilitation are hard to ignore amidst the race for sustenance and survival. It is equally important to state that simply implementing strategic orientation with digitalization does not always facilitate organizational indulgence in varied innovation typologies. The mere organizational indulgence in innovation does not guarantee innovation conceptualization; for the firm to be innovative, managerial resolve with the consistency of T-O-E dimensions is equally important. It is possible that a reasonable and calculated managerial approach to T-O-E operationalization is deemed essential (Kamali & Loker, 2002).

## 7. IMPLICATIONS

Several implications for both the corporate and public policy makers especially from regional and statewide clusters can be derived from the study's conclusions. First, there is a pressing need to improve the competitiveness of regional handicraft manufacturers especially the wooden carving industry. In line with Porter's cluster theory, the innovation adoption in cluster is sought to be far easier (Simmie, 2006) than in the firms that are scattered over a larger regional geography (Swords, 2013). Digitalizing innovation for enhanced brand equity is deemed essential for handicraft manufacturers in times of business turbulence. The research hence suggests important managerial implications. As such handicraft firms need to be aware of different effects of exploitative and exploratory innovations.

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## CONFLICT OF INTEREST

None.

## REFERENCES

- Acar, A. Z., & Ozsahin, M. (2018). The relationship among strategic orientations, organizational innovativeness, and business performance. *International Journal of Innovation Management*, 22(1), 1-5.
- Adams, T. (2023). The Vital Role of Technology in Resource Management. *Manufacturing and Logistics IT*, 4-5.
- Adner. (2002). When are technologies disruptive? A demand-based view of emergence of competition. *Strateg. Manag. J.*, 23(8), 667-88.
- Ahimbisibwe, G. M., Ntayi, J. M., Ngoma, M., & Bakunda, G. (2021). Entrepreneurial mindset: Examining the contribution of deliberative and implemental mindsets to SME internationalization. *Journal of Small Business Strategy*, 31(3), 47-58.
- Ahituv, N., Hasgall, A. E., & Naveh, N. (2019). Effective assimilation of technological innovation in an organization characterized as a Complex Adaptive System. *Journal of Innovation Management*, 7(2), 38-58.
- Akgun, A. E., Byrne, J. C., & Lynn, G. S. (2007). New product development in turbulent environments: impact of improvisation and unlearning on new product performance. *Journal of Engineering and Technology Management*, 24(3), 203-230.
- Alkhamery, N., Zainol, F. A., & Nashmi, M. (2021). The Role of Dynamic Capabilities in Improving Readiness for Digital Business Transformation. *The Journal of Management Theory and Practice (JMTP)*, 2(1), 1-5.
- Amini, M. (2023). A Multi-Perspective Framework Established on Diffusion of Innovation (DOI) Theory and Technology, Organization and Environment (TOE) Framework Toward Supply Chain Management System Based on Cloud Computing Technology for Small and Medium Enterprises. *International Journal of Information Technology and Innovation Adoption*, 11(8), 1217-1232.
- Amit, R., & Zott, C. (2012). Strategy in changing markets: New Business model: Creating value through business model innovation. *MIT Sloan Management Review*, 53(3), 41-49.
- Aravind, D., & Damanpour, F. (2011). Managerial Innovation: Conceptions, Processes, and Antecedents. *Management and Organization Review: The International Association for Chinese Management Research*, 1-4.
- Besharov, M., & Mitznneck, B. (2023). The Multiple Facets of Corporate Purpose: An Analytical Typology. *Strategy Science*, 8(2), 233-244.
- Botha, C., Hasanefendic, S., & Bossink, B. (2023). Internal organizational factors driving digital transformation for business model innovation in SMEs. *Journal of Business Models*, 11(2), 86-109.
- Brar, J., Shah, R., & Sinha, S. (2024). Achieving extraordinary growth: Myths and realities. *McKinsey Quarterly*, 3-6.
- Casillas, J. C., Acedo, F. J., & Barbero, J. L. (2010). Learning, unlearning and internationalisation: Evidence from the pre-export phase. *International Journal of Information Management*, 30(2), 162-173.
- Casteneda, D. I., & Cuellar, S. (2020). Knowledge sharing and innovation: A systematic review. *Knowledge and Process Management*, 27(1), 159-173.
- Cetindamar, D., Katic, M., & Burdon, S. (2021). The Interplay among Organisational Learning Culture, Agility, Growth, and Big Data Capabilities. *Sustainability*, 13(1), 2-21.
- Chand, R. C., & Rowan, J. V. (2014). Developing Capabilities, Not Entrepreneurs: A New Theory for Community Economic Development. *Hofstra L. Rev.*, 839-40.



- Chatterjee, D., Sambamurthy, V., & Grewal, R. (2002). Shaping up for e-commerce: Institutional enablers of the organizational assimilation of Web technologies. *MIS Quarterly*, 26(2), 65-89.
- Chatterjee, S., Moody, G., & Lowry, P. B. (2015). Strategic relevance of organizational virtues enabled by information technology in organizational innovation. *Journal of Management Information Systems*, 32(1), 158-196.
- Dashora, S. (2021). Entrepreneurial Status and Problems in Wooden Gangour Craft. *Entrepreneurship*, 4.
- Donbesuur, F., Ampong, G. O., & Yirenkwi. (2020). Technological innovation, organizational innovation and international performance of SMEs: The moderating role of domestic institutional environment. *Technological Forecasting and Social Change*, 2-4.
- Dong, H., & Wang, B. (2022). Direct and Configurational Paths of Strategic Orientation and Business Model Innovation to Successful Enterprise Performance. *IEEE Access*, 72671-75.
- Fan, X., Zhao, S., Zhang, B., Wang, S., & Shao, D. (2023). The impact of corporate digital strategic orientation on innovation output. *Heliyon*, 9(5), 2-3.
- Garcia, R., & Calantone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: A literature review. *The Journal of Product Innovation Management*, 19(1), 110-132.
- Ghoshal, I., Kumar, A., Yadav, U. S., Singh, A., & Mandal, M. (2023). Digital and innovative entrepreneurship in the Indian handicraft sector after the COVID-19 pandemic: challenges and opportunities. *Journal of Innovation and Entrepreneurship volume*, 2(3), 69.
- Goldman, S. L., Nagel, R. N., & Preiss, K. (1995). Agile Competitors and Virtual Organizations: Strategies for Enriching the Customer. *Information Systems Research*, 2-3.
- Gomes, G., Seman, L. O., Berndt, A. C., & Bogoni, N. (2022). The role of entrepreneurial orientation, organizational learning capability and service innovation in organizational performance. *Revista de Gest~ao*, 29(1), 39-54.
- Govindarajan, V., & Kopalle, P. K. (2006). Disruptiveness of innovations: measurement and an assessment of reliability and validity. *Strategic Management Journal*, 27(2), 189-199.
- Guth, W. D., & Ginsberg, A. (1990). Guest editors' introduction: Corporate entrepreneurship. *Strategic Management Journal*, 5-15.
- Halim, M., Halim, A., & Mat, A. C. (2010). Craftermakers: A Significant Study on Entrepreneurial Creativity and Competitive Advantage. *CANADIAN SOCIAL SCIENCE*, 6(3), 59-66.
- Hanaysha, J., & Hilman, H. (2015). Product innovation as a key success factor to build sustainable brand equity. *Management Science Letters*, 567-76.
- Hasgall, A. E., Ahituv, N., & Naveh, N. (2019). Effective assimilation of technological innovation in an organization characterized as a Complex Adaptive System (CAS). *Journal of Innovation Management*, 7(2), 38-58.
- Jain, S. (2016). Export Promotion Council for Handicrafts. 4-6.
- Jansen, J. J., Volberda, H. W., & VanDenBosch, F. A. (2006). Exploratory innovation, exploitative innovation, and performance: Effects of organizational antecedents and environmental moderators. *Management Science*, 52(11), 1661-74.
- Kamali, N., & Loker, S. (2002). Mass Customization: on-line Consumer Involvement in Product Design. *Journal of Computer-Mediated Communication*, 7(4), 6-7.
- Karpati, Z., Ferincz, A., & Felsmann, B. (2024). Relationship between different resource and capability configurations and competitiveness - Comparative study of Hungarian family and non-family firms. *Journal of Family Business Management*, 14(4), 781-801.
- Keller, K. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, 1-22.
- Kohli, R., & Melville, N. P. (2019). Digital innovation: A review and synthesis. *Info Systems Journal*, 29(1), 200-233.
- Krzakiewicz, K., & Cyfert, S. (2019). Strategic orientations of the organization - entrepreneurial, market and organizational learning. *Management*, 23(1), 2-5.
- Li, S., Gao, L., & Han, C. (2023). Exploring the effect of digital transformation on Firms' innovation performance. *Journal of Innovation & Knowledge*, 8(1), 2-5.
- Lu, Y., & Ramamurthy, K. (2011). UNDERSTANDING THE LINK BETWEEN INFORMATION TECHNOLOGY CAPABILITY AND ORGANIZATIONAL AGILITY: AN EMPIRICAL EXAMINATION. *MIS Quarterly*, 35(4), 931-54.
- Mcarthy, E., Puffer, S. M., Graham, L., & Satinsky, D. M. (2014). Emerging Innovation in Emerging Economies: Can Institutional Reforms Help Russia Break Through Its Historical Barriers? *Thunderbird International Business Review*, 56(3), 2.

- Nguyen, T. H., & Le, X. C. (2022). An Extended Technology-Organization-Environment (TOE) Framework for Online Retailing Utilization in Digital Transformation: Empirical Evidence from Vietnam. *Journal of Open Innovation: Technology, Market, and Complexity*, 2-22.
- Picoto, W. N., Crespo, N. F., & Carvalho, F. K. (2021). The influence of the technology-organization-environment framework and strategic orientation on cloud computing use, enterprise mobility, and performance. *REVISTA BRASILEIRA DE GESTÃO DE NEGÓCIOS*, 23(2), 278-82.
- Priyono, A., & Hidayat, A. (2024). Fostering innovation through learning from digital business ecosystem: A dynamic capability perspective. *Journal of Open Innovation: Technology, Market, and Complexity*, 10.
- Schneider, M., & Damanpour, F. (2006). Phases of the Adoption of Innovation in Organizations: Effects of Environment, Organization and Top Managers. *British Journal of Management*, 17(1), 215-236.
- Shang, M., & Jia, C. (2024). What determines the performance of digital transformation in manufacturing enterprises? A study on the linkage effects based on fs/QCA method. *Journal of Cleaner Production*, 2-4.
- Simmie, J. (2006). Do clusters or innovation systems drive competitiveness? *Cluster and Regional Development*, 23-24.
- Slotegraaf, R. J., & Pauwels, K. (2008). The Impact of Brand Equity and Innovation on the Long-Term Effectiveness of Promotions. *Journal of Marketing Research*, 45(3), 293-95.
- Steffl, J., & Emes, J. (2021). How Innovation Types Drive Consumers' Brand Perception—The Innovation-Brand-Interplay of Tech Giants. *Forum Markenforschung*, 171-216.
- Swords, J. (2013). Michael Porter's cluster theory as a local and regional development tool: The rise and fall of cluster policy in the UK. *Local Economy: The Journal of the Local Economy Policy Unit*, 28(4), 369-83.
- Tan, J. J., & Litsschert, R. J. (1994). Environment-strategy relationship and its performance implications: An empirical study of the Chinese electronics industry. *Strategic Management Journal*, 15(1), 1-20.
- Venkatraman, N. (1989). Strategic orientation of business enterprises: The construct, dimensionality and measurement. *Management Science*, 35(8), 942-45.
- Verma, A., & Gupta, I. (2019). Saharanpur's Heritage of Woodcraft: Prototyping a Future. *Journal of Heritage Management*, 4(1), 36-72.
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing*, 20(1), 72-92.
- Xia, W., & Lee, G. (2005). Complexity of Information Systems Development Projects: Conceptualization and Measurement Development. *Journal of Management Information Systems*, 22(1), 45-83.
- Zhou, K. Z., Yim, C. K., & Tse, D. K. (2005). The Effects of Strategic Orientations on Technology- and Market-Based Breakthrough Innovations. *Journal of Marketing*, 69(2), 42-60.
- Zhou, Y., Han, W., & Lu, R. (2022). Strategic orientation, business model innovation and corporate performance—Evidence from construction industry. *Frontiers in Psychology*, 22(1), 1-4.
- Zhu, K., Kraemer, K. L., & Xu, S. (2006). The Process of Innovation Assimilation by Firms in Different Countries: A Technology Diffusion Perspective on E-Business. *Management Science*, 52(10), 1557-76.
- Zongyuan, L., & Haiyan, H. (2024). The Impact of ERP Assimilation on Mass Customization Capability: A Dynamic Capabilities View. *IEEE Access*, 36778-92.
- Zullo, R. (2022). Companies Build "Capabilities" Before They Build "Moats". *Equal Ventures*, 4-6.