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#### MAPPING IDEA & LITERATURE FORMAT

# Unlocking the Symphony of Innovation: Weaving Knowledge Management into Organizational Performance

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Abstract: In the relentless pursuit of organizational excellence, the synergistic interplay between knowledge management, innovation, and organizational performance has emerged as a central focal point. This study embarks on a quantitative exploration to decipher the intricate connections that underlie these phenomena. The investigation delves into the dynamic landscape of knowledge management and its profound impact on innovation within organizations. It hypothesizes that adept knowledge acquisition, sharing, and utilization practices engender heightened innovation levels. Simultaneously, the study postulates that organizations effectively harnessing knowledge management experience superior overall performance, characterized by enhanced flexibility, productivity, and competitiveness. Further delving into the innovation dimension, the research scrutinizes the symbiotic relationship between innovation and organizational performance. It proposes a positive correlation between a higher degree of innovation and an organization's prowess in competitive advantage, revenue generation, and customer satisfaction. The study also sheds light on the instrumental role of wise leadership in fostering knowledge management capabilities. It anticipates that leaders embracing qualities such as discernment, adept communication, and an understanding of core issues stimulate knowledge management prowess. This, in turn, is expected to positively influence innovation performance through the mediation of knowledge management capabilities. Amidst the tapestry of these relationships, the study examines the context of industry clusters and their impact on knowledge management and innovation performance. It theorizes that industry clusters, rich in resources and robust relationships, will synergistically promote knowledge sharing and acquisition practices, thereby amplifying innovation performance. Furthermore, the research probes the intersection of organizational sustainability, knowledge management, and open innovation. It postulates that organizations effectively integrating social and environmental dimensions within their business strategies will experience a positive influence on innovation performance. In this rigorous empirical journey, quantitative methodologies are employed to unveil the intricacies of these interconnections. Data collection, analysis, and interpretation form the keystones of the research process, facilitating the validation or rejection of the proposed hypotheses. Ultimately, this study aspires to illuminate the underlying mechanisms that propel organizations towards unparalleled success by orchestrating knowledge management, innovation, and organizational performance into a harmonious crescendo.

Keywords: Knowledge Management, Innovation, Organizational Performance, Wise Leadership, Industry

JEL Classification Code: O32, M15, O33, O14, L25, D83.

### 1. INTRODUCTION

In the dynamic dance of today's business world, where competition blazes and technology reigns supreme, the melody of innovation has become the anthem of success. But what orchestrates this harmonious fusion of ideas, strategies, and breakthroughs that push organizations to the forefront?





The answer, hidden within the corridors of knowledge management, paints an intriguing narrative of discovery and transformation. Imagine a world where knowledge isn't just information; it's power, growth, and the very essence of evolution. From the inception of knowledge management as a scientific discipline to its intricate connections with innovation, a symphony of research threads has emerged, weaving a captivating tale of how organizations harness, share, and amplify their intellectual resources.

Guided by the baton of academic curiosity, the research tableau begins with a crucial inquiry: What kind of relationship is carved between knowledge management and the pulsating heartbeat of innovation? Envision the industry clusters that resemble galaxies, where knowledge is both the glue and the catalyst, interlinking firms and boosting their innovation performance. Through the looking glass of innovation, we step into a realm where companies redesign the landscapes of products and processes. Delve into the very fabric of knowledge management innovations – organizational, social, and technological – and explore their interplay with enterprise competitiveness, revenue streams, and stakeholder satisfaction. The canvas of innovation, once barren, is now a tapestry of unexplored potential.

As the sun sets on traditional performance evaluation, a new dawn break. The horizon is painted with the hues of organizational sustainability, a realm where knowledge management and open innovation converge. In this captivating ecosystem, industry, knowledge, and creativity intertwine, urging us to question how we measure, understand, and foster the very essence of a sustainable organization. Amidst the cacophony of theoretical constructs and empirical explorations, the spotlight illuminates the enigmatic concept of wise leadership. Leaders who wield not just authority, but also wisdom, guide organizations on the path to innovation. How does the resonance of wise leadership resonate with knowledge management capability and shape the symphony of innovation performance?

In this symposium of thought-provoking studies, we voyage through dimensions where the abstract becomes tangible, and the hypothetical molds reality. Join us as we navigate the realms of knowledge transfer, innovation ecosystems, and the intricate art of managing intellectual wealth. Let this symphony unfold, revealing the intricate connections that transform knowledge into innovation and shape the destiny of organizations.

#### 2. Literature Review Procedure

The provided table contains summaries of several research papers related to knowledge management, innovation, and their interplay within organizational contexts. I'll provide an interpretation of each entry and desribe in Table 1:

#### 1. Knowledge Management → Innovation → Performance (Breznik, 2018)

This paper explores the connection between knowledge management, innovation, and performance in the context of competitive organizations. It emphasizes that innovation has become essential for organizations and highlights the role of knowledge transfer as a source for innovation. The study aims to investigate the development of knowledge management as a discipline and analyze its linkage with innovation. The key variables include knowledge management, knowledge sharing, innovation, and organizational learning. Effects of Industry Cluster Knowledge Management on Innovation Performance (Lai et al., 2014). This research focuses on the relationship between knowledge management in industry clusters and corporate innovation performance. The study explores how knowledge management acts as a mediator in the context of industry clusters, enhancing innovation performance. It identifies various variables related to industry clusters, knowledge management, and innovation performance.

### 2. Innovations within Knowledge Management (Nowacki & Bachnik, 2016)

This paper examines innovative approaches in designing, implementing, and maintaining knowledge management structures. The study investigates the level of knowledge management innovation in companies and its influence on competitiveness, revenues, and satisfaction of



stakeholders. The research categorizes knowledge management innovations into organizational, social, and technological aspects and assesses their impact.

### 3. Organizational Performance Evaluation with Knowledge Management and Innovation Management (Dickel & Moura, 2016)

This study addresses the challenge of evaluating organizational competitiveness and innovation. It proposes a model that incorporates knowledge management and innovation management to measure organizational performance. The model identifies key components and processes related to knowledge management and innovation, providing insights for performance improvement.

# 4. Interplay Between Organizational Sustainability, Knowledge Management, and Open Innovation (Lopes et al., 2017)

This research investigates the relationship between organizational sustainability, knowledge management, and open innovation. It explores how companies can integrate social and environmental aspects into their core business strategies. The study aims to understand the influence of these factors on organizational sustainability and innovation performance.

## 5. Knowledge-Based Human Resource Management Practices, Intellectual Capital, and Innovation (Kianto et al., 2017)

This paper proposes a conceptual model that examines the impact of knowledge-based human resource management practices on intellectual capital and innovation performance. The study identifies key elements for innovation within intellectual capital and explores how HRM practices contribute to enhancing organizational knowledge assets.

# 6. Open Innovation in Ecosystems: Integrating Innovation and Management Literature (Öberg & Alexander, 2019)

This research delves into the concept of open innovation and its impact on companies' innovation processes. It analyzes company-to-company linkages within open innovation and categorizes these linkages based on their openness and relationship to knowledge management. The study seeks to understand how different linkages enable the flow of knowledge.

# 7. Relational Study of Wise Leadership, Knowledge Management Capability, and Innovation Performance (Ding et al., 2019)

This research examines the relationship between wise leadership, knowledge management capability, and innovation performance. It explores how leaders with wisdom contribute to organizational innovation and how knowledge management capability acts as a mediator. The study identifies specific attributes of wise leaders and their impact on innovation. Each research paper explores various dimensions of the relationship between knowledge management, innovation, and organizational performance. The studies contribute to understanding how these factors interact and influence each other within different contexts.

### 3. Conclusion and Proposition

### Hypothesis 1: Knowledge Management and Innovation

- There is a positive relationship between knowledge management practices and the level of innovation achieved by an organization.
- Organizations that implement knowledge acquisition, knowledge sharing, and knowledge utilization practices will have a higher level of innovation.

#### Hypothesis 2: Knowledge Management and Organizational Performance

- Knowledge management practices have a positive influence on organizational performance.
- Organizations that manage knowledge effectively will have better performance in terms of flexibility, productivity, and competitiveness.





#### Hypothesis 3: Innovation and Organizational Performance

 A high level of innovation in the organization will correlate with better organizational performance, both in terms of competitive advantage, revenue, and customer satisfaction.

#### Hypothesis 4: Wise Leadership and Knowledge Management Capability

- Wise leadership will have a positive influence on the organization's knowledge management capability.
- Leaders who have characteristics such as the ability to assess goodness, being able to
  create a context for knowledge sharing, and understanding the core of the problem will
  tend to encourage the organization's ability to manage knowledge.

### Hypothesis 5: Wise Leadership, Knowledge Management Capability, and Innovation Performance

- Wise leadership will be positively related to organizational innovation performance.
- Organizational capability in managing knowledge will act as a mediator between wise leadership and innovation performance.

### Hypothesis 6: Industry Clusters, Knowledge Management, and Innovation Performance

- Industries that are members of a cluster will have a positive relationship with knowledge management practices and innovation performance.
- Industry clusters that have strong resources and relationships will support knowledge sharing and knowledge acquisition practices, which in turn will improve innovation performance.

### Hypothesis 7: Organizational Sustainability, Knowledge Management, and Open Innovation

- Organizations that successfully incorporate social and environmental aspects in their business practices will tend to have a positive relationship with innovation performance.
- Engagement in open innovation and implementation of knowledge management practices will support the organization's efforts in achieving organizational sustainability.



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Table 1: Mapping Literature

Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
			→ Innovation → Performance		'
Knowledge Management – from its Inception to the InnovationLinkage (Breznik, 2018)	Today's environment for organizations is intensively competitive and therefore innovation has become an indispensable counterpart of knowledge management today's environment for organizations is intensively competitive and therefore innovation has. In the past, some prominent authors (e.g. Nonaka, 1994; Kogut & Zander, 1996; Grant, 1996) already emphasized knowledge transfer as a source for innovation. They were followed by du Plessis (2007) who clarifies the role of knowledge management in innovation as an aid to addressing its complexity. Become indispensable counter part of knowledge management	The purpose of this paper is two-fold. First, to investigate development of knowledge management as a scientific discipline, and second, to analyse the linkage between knowledge management and innovation related with innovation topic	Relations Knowledge management – knowledge sharing – innovation – organizational learning	Resource based view	This paper provides an excellent tool to study such a relevant phenomenon.
The effects of industry cluster	With the increasing importance of knowledge	Knowledge management emerges as the mediator of	Industry cluster: • Industry resources		Knowledge management emerges as the mediator of

• Industry Relationship

Knowledge Management

• Knowledge Creation and

acquisition

management and innovation,

what is the current level of

management in relation to

cluster firms? With the special

awareness of knowledge

knowledge

innovation

et al., 2014)

management on

performance (Lai

industry clusters in terms of

performance, thus providing

hypotheses. The findings of

corporate innovation

support for the research

industry clusters in terms of

performance, thus providing

hypotheses. The findings of

corporate innovation

support for the research

Network Theory





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Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
	resources and relationships that	this study are valuable for	Knowledge Dissemination		this study are valuable for
	characterize cluster firms, are	further research and strategic	and storage		further research and strategic
	the effects on corporate	thinking on the			thinking on the sustainability
	knowledge management	sustainability of corporate	Innovation Performance		of corporate operations.
	significant and do they	operations.	Market Performance		
	influence performance?		Product performance		This study probes into
			1		industrial clustering resources
					and relationships, knowledge
					management, and innovation
					performance. The theoretical
					discussion gives rise to several
					hypotheses concerning
					relationships between the
					above variables. Statistical
					testing thenvalidates these
					hypotheses and relationships.
					Key findings are as follows.
					When the resources of an
					industrial cluster are complete,
					firms vertically integrate in
					central locations to lower costs
					and share resources. Such
					actions enhance knowledge
					creation and acquisition, and
					knowledge storage and
					dissemination. Upon the
					formation of an industrial
					cluster, firm scan easily
					acquires resources and lower
					costs, thereby reinforcing the
					effects of cluster relationships,
					which influence corporate
					innovation performance. The
					firms in industry clusters





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
					achieve better innovation
					performance due to knowledge
					management. In practice,
					industrial clustering not only
					unites similar industries, but
					also attracts industry talent,
					which leads to information
					and knowledge exchange, with
					a spillover effect of sharing
					techniques. Regarding
					knowledge management,
					through the effects of
					industrial clustering, firms
					enhance their operational
					performance. Thus, industry
					clusters indirectly influence
					innovation performance
	Another relevant question is	The research aims at			robst, Raub, and Romhardt
	how innovative companies	studying the scope of			(2002) propose a concept of
	should be when designing,	innovative knowledge			eight knowledge management
	implementing, and	management. It uses the			processes: localizing, acquiring,
	maintaining their knowledge	concept of eight pro-cesses			developing (creating), sharing,
	management structures and	of knowledge management			disseminating, leveraging, and
Innovations	systems by:	and identifies three broad	Enterprise competitiveness		storing knowledge. They stress
within knowledge		categories of knowledge	• Revenue		the linkage between internal
management	1. What is the level of	management innovations in	Buyers' satisfaction		and external processes and
(Nowacki &	knowledge management	an organizational context. It	Business partner satisfaction		assume that managers know
Bachnik, 2016)	•	tries to verify the outcomes	Business parener satisfaction		where knowledge resources lie
	researched companies?	of these innovative efforts.			in the organization and that
	2. What is the influence of	The research considers			every employee should be
	knowledge management	fouraspects of organizational			engaged in the knowledge
	innovations on a	effectiveness: enterprise			management processes.
	company's	competitiveness, revenues,			Employees serve as
	competitiveness, revenues,	buyers' satisfaction, and			transmitters of knowledge. To





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
	Its business partners'	businesspartners'			enable free information
	satisfaction, and its buyers'	satisfaction.			sharing, it is also necessary to
	satisfaction?				adopt the right organizational
	3. Is there a statistically				culture and structure.
	relevant association				Knowledge management
	between the type of				processes and systems should
	knowledge management				be designed to leverage the
	innovations (if they are				expertise of the workforce and
	organizational, social, or				to add new value by making
	technological) and the				people collaborate on new
	benefits they bring?				information, extract vital data,
	4. What is the motivation for				and process it appropriately to
	knowledge management				the organizational needs.
	innovations?				Smart processes and systems
					may help recognize upcoming
					trends, anticipate possible
					scenarios, reduce uncertainty,
					gain new skills and allies, and
					streamline daily operations.
					Having in mind these
					potential benefits, companies
					arewilling to experiment with
					new approaches to knowledge
					manage-ment, such as design
					thinking (Beckman, & Barry,
					2007; Bachnik,2011;
					Bitkowska, Nowacki, &
					Zaleśna, 2012; Brown & Katz,
					2009; Martin, 2009).
					The industry does not seem to
					influence the companies'
					innovative-ness in the area of
					imiovative-ness in the area of





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					knowledge management. The
					most importantinsights are:
					<ul> <li>Production companies less frequently implement innovations in developing and creating knowledge and spend less on localizing knowledge.</li> <li>Trading companies more frequently invest in innovations in sharing and disseminating knowledge and prefer a wider scope of knowledge acquisition. More service companies pursue innovations in developing and creating knowledge.</li> <li>They prefer a smaller scope of knowledge acquisition, and</li> </ul>
					put less emphasis on acquiring,
					developing, and creating
Organizational	However, how to evaluate	The objective of this study			knowledge than on localizing.  Similarly, the management of
Organizational performance	whether an organization is or is	was to develop a model to	Knowledge management		organizational knowledge has
evaluation in	not competitive and	measure organizational	People = Incentives for the		proved to be decisive for
intangible criteria:	innovative? How to measure	performance with a focus on	generation of knowledge		achieving objective and
a model based on	the results of the management	knowledge management and	Functions oriented for	Selectivity Theory	competitive advantage, since
knowledge	of its knowledge? Innovation	innovation management.	knowledge management	delectivity Theory	the knowledge of organizations
management and	and knowledge management	Therefore, it was considered	Recruitment and selection		and their experiences have
innovation	are now considered intangible	necessary to build a	based on skills		made the decision-making
management	assets and, therefore, their	measurement tool; to apply	Dased Oil Skills		easier, precise and assertive. In
management	about and, therefore, then	measurement tool, to apply			casier, precise and assertive. III





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(Dickel & Moura, 2016)	measurements become a big challenge for organizations	the proposed tool to evaluate it seff ectiveness; to analyze the performance index obtained in the surveyed organizations; and to compare the results obtained from the companies surveyed to identify key areas for performance improvement.	<ul> <li>Structure = Search engine knowledge Intranet Internal expertise available to decision</li> <li>Processes = Knowledge documentation Performance measurement Knowledge transfer between sectors</li> <li>Innovation Management</li> <li>Organizational Alignment = Clear focus on innovation. Well communicated organizational goals</li> <li>Support and organizational resources = Financial resources for innovation Adequate infrastructure to generate value</li> <li>Innovation process = Clear process for innovation Ideas from various sectors</li> <li>Behavior and organizational = Innovative organizational culture &amp; partnership with universities</li> </ul>		this context, this studys howed that it is possible to measure aspects taken asintangible, such as innovation management and knowledge management, so that we can know more precisely on which competitive level the company is, throug has pecific methodology that considers the key indicators of measuring that performance
An analysis of the interplay between organizational sustainability, knowledge management, and open innovation	Survival is the goal any organization. Under the perspective of an environment of limited resources, competitiveness arises as wellas the search for new strategies for organizational	<ol> <li>Whether organizational sustainability, knowledge man-agement, and open innovation are intertwined?</li> <li>Whether organizational sustainability, knowledge</li> </ol>	Organizational Sustainability (with competitive advantage)  • Flexibility  • Performance  • Technology  • Innovation Process and product	Capacity Theory     Absorptive     capacity theory	The case study's results explore in depth the company's experience in adoptingthe strategic organizational sustainability using knowledge management and open innovation to promote

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(Lopes et al.,	sustainability (Buys et al.,	man-agement, and open			sustainable innovations in
2017)	2014)	innovation interact in	Absorptive Capacity with:		accordance with the model of
		practice in a real	Knowledge management		the Organization for
	In this sense, there is still lack	worldenvironment?	Open Innovation		Economic Co-operation and
	ofsufficient knowledge on how				Development for eco-
	to incorporate social and				innovation, acting as a driver
	environ-mental aspects in the				for significant changes in the
	organizational core business or				orga-nization's culture in
	how toovercome existing				organizational sustainability.
	barriers and encouraging				
	companies to fullydeploy				Open innovations mean: It
	sustainability in business				leads to business growth by
	processes				permitting companies to
					leverage more ideas from a
	problem mark question: For				variety of external sources.
	organizational sustainability				(Huang et al. 2010)
	company should focus its				
	efforts on knowledge				
	management and innovation.				
	The development of				
	sustainable new products adds				
	layers of complexity to the				
	traditional new product				
	development process, but is				
	equally a potential source of				
	gains for the economy, society,				
	and people (Thome and				
	Scavarda,2015; Thome et al.,				
	2016).				
Knowledge-based	Banyak peneliti yang	This paper proposes a	This scarcity of research		The results show that
human resource	menggagas tentang hubungan	conceptual model in which a	highlights the need for further	Knowledge	intellectual capital
management	antara Intelectual capital (IC)	human resource	studies on the relationships	Management	positivelymediates the
practices,	dan HRM dan hubungan	management (HRM) system	between HRM, IC and	Theory	relationship between
Г	i and any and any any				p octived





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
intellectual capital	sebab akibatnya (vis-à-vis)	of explicitlyknowledge-based	innovation performance. The		knowledge-based HRM
and innovation	terhadap innovation.	HRM practices impacts	present paper aims to fill this		practices and innovation
(Kianto et al.,	Moreover, the HRM practices	afirm's intellectual capital,	gap. Specifically, we have built a		performance and illustratethe
2017)	considered inthese studies tend	producing higher innovation	conceptual model that:		pivotal role of human capital
	to be insufficiently adapted for	performance.			in this relationship:
	the purpose of en-hancing		1. Identifies key IC elements		knowledge-based HRM
	companies' knowledge		for innovation,		practices impact structural
	processes		2. Suggests key knowledge		andrelational capital partially
			based HRM practices and		through human capital, and
			3. Examines the impact of		human capital affects
			knowledge based HRM on		innovation performance by en-
			IC and innovation		hancing structural and
					relational capital.
					771
					This paper makes several contributions to existing
					literature. First, it contributes
					to the strategic HRM literature
					by extending the under-
					standing of knowledge based
					HRM practices. Building on
					previous re-search byLópez-
					Cabrales et al. (2009) and
					Minbaeva (2013), this
					paperexplicitly discusses the
					composition of the bundle of
					HRM practices thatfocuses on
					stimulating organizational
					knowledge processes. We con-
					ceptualize such practices as
					knowledge-based HRM, and
					our empirical.





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
					results suggest that these practices increase organizational knowledge assets and, thus, through them, have a positive indirect impact on innovation performance. Our study also adds to the knowledge on the impact of knowledge-based HRM practices on various elements of IC, thereby strengthening the link between strategic HRM and the knowledge-based view of the firm by demonstrating that HRM increases other organizational knowledge assets besides human capital.
The openness of open innovation in ecosystems – Integrating innovation and management literature on knowledge linkages (Öberg & Alexander, 2019)	Literature describes how knowledge may be created, retained, and transferred. Different linkages would expectedly enable such outcomes to different extends, and promote the transfer of tacit or explicit knowledge to various degrees	Open innovation entails both internal and external processes. This paper focuses on the interlink between the two, that is, how companies engage with other firms in their innovation processes, and thus targets the company-to-company linkages between firms.  The purpose of the paper is to describe and discuss company-to-company linkages for open innovation. The following	Open Innovation (Chesbrough,2012).  • Internal & external technology base as research → Out licensing (e.g. other firm market) & Technology spinoff → New market & Current market  • Technology in-source as a development  • Open innovation:  • Breadth = The more different the competences, the more open. (Idrissia et al, 2012)		The paper describes and discusses company-to-company linkages for open innovation. It categorises and discusses such linkages in terms of their opennes s and how they relate to knowledge management. The introduction raised three questions that are elaborated on tabel 2.





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
		research questions are addressed:  - What type of company-to-company linkages are described in the management literature?  - How can they be categorized related to innovation and ecosystems?  - How do they enable the unconstrained flow of knowledge?	Depth = The deeper the knowledge, the more open (Idrissia et al, 2012)     Freedom, lack of formalization = The freer the collaboration, the less formalized (Herzog, 2008; Aslesen & Freel, 2012)     Number of phases = saluran distribusi / tahapan birokrasi Lazzarotti & Manzini, 2009)     Number of actors = banyaknya pihak Lazzarotti & Manzini, 2009		
Relational study of wise (phronetic) leadership, knowledge management capability, and innovation performance (Ding et al., 2019)	Phronetic artinya wisdom to use power & based on ethics. So, Leadership perhaps memiliki hubungan yang erat untuk mewujudkan phronetic dengan baik. Sehingga Further, a wise organization has been regarded as transferring useful knowledge to staff and stimulating employees' potentials. In the workplace, some knowledge as experience is helpful for individuals' problem solving	As Chen and Huang (2009) utilized empirical methods to provethat KM capability has impacted innovation performance positively, according to the logical derivation, this study presents the assumption that organizational members' wise leadership has a significant relation on organizational innovation performance, and KM capability acts as the vehicle in the process. Hence, this research begins to test what kind of characteristics of wise leaders contribute to organizational innovation, and how to use KM as a tool	Wise leadership:  • Judges Goodness  • Create sharing context  • Grasp the essence.  • Communication arts  • Exercise political power  • Foster phronesis  Knowledge management:  • Knowledge sharing  • Knowledge sharing  • Knowledge utilization  Innovation Performance:  • Administrative innovation Adapting abilities for Changes; Progress management; Long-term goal	The upper echelon theory = This theory considers the concept of top management as the main strategic decision maker in the organization. Organization. Thus, strategic decisions made by leaders have a direct impact on organizational outcomes. Organizational outcomes. Since it is the executives who have responsibility for the organization, their characteristics,	Prof. Nonaka and his colleagues summarize six abilities of the phronetic leader as"  1- making judgment based on the social value of the organization (Judge goodness);  2- equipped with keen perception (Grasp the essence);  3- good at creating the opportunity for sharing (Create sharing context);  4- excellent communicating skills and vivid verbal ability (Communication arts);





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
		as a result, this study seeks	for innovation; Coordination	what they do, and	5- strong policy enforcement
		ways to enhance enterprises'	mechanism.	how they do it, will	and collective
		innovation performance.	<ul> <li>Technical innovation ability</li> </ul>	have a direct impact	consciousness (Exercise
			of research and development;	on organizational	political power);
			the ability to combining	outcomes.	6- merit ability on cultivating
		1. Wise Leadership →	products and new technology;	their characteristics,	other people (Foster
		Knowledge management	Ability of reducing the cost	what they do, and	phronesis)'
		capability	and improving the quality	how they do it,	(Nonaka&Takeuchi,
		2. Wise Leadership →		specifically.	2011).
		Innovation Performance		influence	
		3. Knowledge management		organizational	
		capability -> Innovation		outcomes	according to the illustration
		Performance		(Finkelstein dan	byNonaka et al. (2016), this
				Hambrick 1996).	research proves that distributed
					leadership has a positive
					relationship with
					organizational innovation
					performance. Thedistributed
					leadership is focusing on
					middle-level managers; hence
					the research results mean that
					the middle managers'
					leadership has positive
					relations with organizational
					performance. Both
					topmanagers and middle
					managers are employees' the
					formal posi-tions in
					organizations, however, the
					employees' status
					competitiontheory illustrate
					that some informal status as
					people's prestigeand

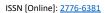




Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
					reputations (All variables →
					on innovation performance)
					Open innovation indicates
					that innovative performance can be improved by both
					acquiring knowledge from
					outside sources and employing
					external paths to
			Knowledge-Oriented	• Leadership &	commercialize knowledge
			<b>Leadership</b> = Leadership		resources developed internally.
Knowledge- oriented leadership and open innovation: Role of knowledge management capability in France-based multinationals (Naqshbandi & Jasimuddin, 2018)	The lack of research onknowledge-oriented leadership and KM capability in the open innovation context is a significant research gap inour knowledge.	This paper discusses the links between knowledge-oriented leadership, open innovation and knowledge man-agement in the international business context. Open innovation has become crucial for an increasing number ofmultinational enterprises (MNEs) to gain and maintain competitive advantage and become a market leader.	combines transformational and transactional leadership styles and is characterized by a leader's focus on enhanced communication regarding employee expectations and firm's objectives.  • Knowledge management capability (e.g., KMI Technological, KM Structural, Cultural, Application, Acquisition, Sharing)  • Open Innovation (e.g., outbound & inbound)	Management Theory = Donate and de Pablo (2015) argue that to effectively manage knowledge, leaders are required to adopt a combination of leadership styles, and not just adopt a single leadership style. • Knowledge based view theory.	Open innovation (e.g., the quality of new products, new processes)  Based on the findings of this study, it is argued that firms should support such leaders and strive to develop such systems and infra-structure that promotes speedy and effective flow of information to the right sources where it can be used to create value. Leaders should be encouraged to bring such systems and technologies into practice so that the firm can benefit from its knowledge resources. It is anticipated that this study will serve as a guideline for the organizations that are striving towards achieving competitive

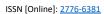








Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
	Cho,2016; Lin, 2007) influences OI in SMEs	the Journal of Business Research to apply theoretical knowledge to actual business decisions, processes, and activities, especially those of SMEs			open innovation policies and practices help SMEs to stay relevant and competitive in the markets. Therefore, the findings of this study have theoretical and practical implications.
The mediating role of knowledge application in the relationship between knowledge management practices and firm innovation (Ode & Ayavoo, 2020)	Very limited studies have examined the link between knowledge management and innovation from a developing country perspective. Are cent study by Gaviria-Marin, Merigó, and Baier-Fuentes, (2018) using bibliometric analysis demonstrate that very few studies focus on knowledge management-relate dissues in developing countries, especially Africa. Anning-Dorson (2018) demonstrate that the effect of firm-level practices can be context specific, thus it is essential for researchers to investigate practices that suit different contexts.	This study makes three contributions to literature. First, the paper conceptualises knowledge management as an organisational function involving many practices that are context-specific whichc an improve innovation effectiveness. Secondly, the paper demonstrates that different knowledge management practices interact in different ways to enhance innovation effectiveness. Third, the paper provides ananalys is of how knowledge management practices interact with firm innovation in developing country service firms	<ul> <li>Knowledge Diffusion</li> <li>Can locate and apply knowledge to changing competitive conditions.</li> <li>Has processes for using knowledge in development to new products / services.</li> <li>Has processes for using knowledge to solve new problems.</li> <li>Has processes for applying knowledge learned from experiences.</li> <li>Takes advantage of new knowledge.</li> <li>Uses knowledge to improve efficiency.</li> <li>Makes knowledge accessible to those who need it.</li> <li>Quickly apply knowledge to critical competitive needs.</li> <li>Quickly links sources of knowledge in solving problems.</li> </ul>	• Resources Based View	The results show that knowledge generation, storage and application have significant and positive effects on firm innovation. The findings also show that knowledge application mediates the relationship between knowledge generation, diffusion, storage and firm innovation. The findings imply that knowledge management practices contribute to innovation as a hierarchy, with the link through knowledge application having the greatest impact on firm innovation.



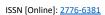


Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
			Has processes for applying		
			knowledge learned from		
			mistakes.		
			• Uses knowledge to adjust		
			strategic direction.		
			• uses feedback from projects to		
			improve subsequent projects.		
			Knowledge Generation		
			• has processes for acquiring		
			knowledge about our		
			suppliers.		
			• has processes for acquiring		
			knowledge about our		
			customers.		
			• has processes for acquiring		
			knowledge about new		
			products/services within our		
			industry.		
			• has processes for exchanging		
			knowledge with our business		
			partners.		
			• has processes for acquiring		
			knowledge about competitors		
			within our industry.		
			• has processes for generating		
			new knowledge from existing		
			knowledge.		
			• has processes for distributing		
			knowledge throughout the		
			organization.		
			• has processes for inter-		
			organizational collaboration.		





• has processes for
benchmarking performance.  • has processes to protect knowledge from theft from within the organization.  • has processes to protect knowledge from theft from outside the organization.  Knowledge Storage  • has incentives that encourage the protection of knowledge.  • has processes to protect knowledge.  • has processes to protect knowledge from inappropriate use outside the organization has processes to protect knowledge from inappropriate use inside the organization has processes to protect knowledge from inappropriate use inside the organization.  • has the existence of tools to access the stored knowledge.  • has technology that restricts access to some soutces of knowledge.  • has mechanisms to foster information sharing by employees.  • has employees participation techniques such as multidisciplinary teams, quality circles, improvement





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
			Knowledge Diffusion		
			• improvement groups, etc		
			• has information distribution		
			systems for employees,		
			customers, and suppliers'		
			effective systems for the		
			dissemination of knowledge.		
			• has systems of explicit		
			knowledge codification		
			• uses technology to		
			disseminate knowledge.		
			• availability of resources to		
			engage in developing new		
			products.		
			Our company seeks out new		
			ways to do things.		
			• ability to respond to related		
			technology activities and		
			unexpected activities created		
			by competitors.		
			Innovation		
			availability of knowledge to		
			develop new products that		
			meet market needs.		
			Our company frequently tries		
			out new ideas.		
			• availability of skills to apply		
			appropriate process		
			technologies to producing		
			new products.		
			• our company is creative in its		
			methods of operation.		





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
			<ul> <li>ability to develop and adopt new products and process technologies to satisfy future needs.</li> <li>our company is often the first to market with new products and services innovation in our company is perceived as too risky and is resisted</li> </ul>		
Knowledge management capabilities and organizational risk-taking for business model innovation in SMEs (Hock-Doepgen et al., 2020)	To minimize uncertainties and to improve the ability to make well informed decisions, SMEs must permanently identify innovative opportunities and threats arising from within and outside the boundaries of the firm and to sense and leverage the knowledge about these threats require special knowledge management (KM) capabilities, which allow them to identify and process existing and new knowledge into innovative business opportunities.  KM capabilities are those underlying organizational activities which facilitate the infrastructure and the processes for exploiting internal knowledge and acquiring, converting, and applying external knowledge	Our study provides three main contributions to research. First, we contribute to the emerging literature on the internal enablers of Business Model Innovation (BMI) by providing a better understanding of how particular KM capabilities affect BMI in SMEs.  Theoretically, this also helps to specify the role of dynamic capabilities for BMI (e.g., Leih, Linden, & Teece,2015; Teece, 2018). Second, we enrich the literature linking KM and innovation (e.g., Clauss & Kesting, 2016; Cohen & Levinthal, 1990;  Trantopoulos, von Krogh, Wallin & Woerter, 2017). So far, KM and KM capabilities have primarily been linked to product and	Business Model Innovation  Overall, dramatic cost advantages.  Dramatic improvements of operative processes' effectiveness (e.g., R&D/production/marketing).  Completely new sources of revenue.  A dramatic expansion of the product or services range.  Capture new consumer segments.  Significant new sales and distribution channels.  Significantly improved satisfaction of customer desires and requirements.  Greatly improved efficiency in resources (HR, finance, technologies, etc.).	• Dynamic Capability Theory	The results from the SEM indicate that particularly external KM capabilities stimulate BMI. This relationship is strengthened for firms with a high risk-taking tolerance. Internal knowledge is only effective for firms with a low risk-taking tolerance.





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
Title	sources (Gold, Segars, & Malhotra, 2001). For example, these KM capabilities could comprise the utilization of technologies to screen customer data, the distribution of new knowledge among the employees, or the organizational processes acquiring, storing, and using knowledge. The ability to gather internal and ex-ternal knowledge and to apply it at the right time is assumed to be essential for BMI (Teece & Leih, 2016). Thus, SMEs must develop an understanding of which KM capabilities to possess to be able to innovate the business model	process innovation. Thus, our findings provide new insights on how the nature of KM may vary according to the type of innovation and whether the innovation is pursuing data at a more holistic level. Third, we contribute to the literature on the particularities of BMI management for SMEs (e.g., Anwar, 2018; Clauss, Bouncken, Laudien, & Kraus, 2019b; Laudien &Daxböck, 2016).	New forms of value or supply chains.  Knowledge Management Technology  It is to search for new knowledge.  It retrieves and uses knowledge about its products and processes.  It to retrieve and use knowledge about its markets and competition.  Knowledge Management Structure  Structure facilitates the discovery of new knowledge.  Structure facilitates the creation of new knowledge.  Designs processes to facilitate knowledge exchange across functional boundaries.  Structure facilitates the transfer of new knowledge across structural boundaries.  Knowledge Management Culture  Employees are valued for their individual expertise.	Theory	Result





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
			Employees are encouraged to		
			ask others for assistance when		
			needed.		
			• Employees are encouraged to		
			interact with other groups.		
			• Employees are encouraged to		
			discuss their work with people		
			in other work groups.		
			Knowledge Management		
			Acquisition Process		
			Has processes for		
			benchmarking performance.		
			Has teams devoted to		
			identifying best practices.		
			Has processes for exchanging		
			knowledge with our business		
			partners.		
			Has processes for acquiring		
			knowledge about new		
			products/services within our		
			industry.		
			Has processes for acquiring		
			knowledge about competitors		
			within our industry.		
			Knowledge management		
			conversion process		
			• as processes for using		
			knowledge to solve new		
			problems.		
			Matches sources of knowledge		
			to problems and challenges.		





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
			Uses knowledge to improve		
			efficiency.		
			• Can locate and apply		
			knowledge to changing		
			competitive conditions.		
			Quickly apply knowledge to		
			critical competitive needs.		
			Quickly links sources of		
			knowledge in solving		
			problems.		
			Organizational risk-taking		
			tolerance		
			Our company places high		
			value on taking risks, even if		
			there are occasional mistakes.		
			In our company, risky		
			activities are commonplace.		
			• Relative to other companies,		
			we tend to favor higher-risk,		
			higher return decisions.		
			Managers in our company		
			rarely make risky decisions.		
			Environmental dynamism		
			• Technological changes in our		
			industry were rapid and		
			unpredictable.		
			• The market competitive		
			conditions were highly		
			unpredictable.		



Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
			Customers' product		
			preferences changed quite		
			rapidly.		
			• Changes in customers' needs		
			were quite unpredictable.		
			Competitive intensity		
			• Competition in our industry		
			is cutthroat.		
			• There are many competitive		
			rivalries in our industry.		
			Intensive competitor-related		
			activities are a hallmark in our		
			industry.		
			Firm hierarchy**		
			Our organization the		
			employees can communicate		
			directly with the CEO.		
			• In our organization it is easy		
			to distribute new ideas to		
			people responsible for		
			decision making.		
			Our organizational reporting		
			channels are unbureaucratic.		
			Our organization has lean		
			organizational structures.		
			Our organization has a very		
			flat hierarchical structure.		
Impact of	Although several researchers	1. What is the role of KM	Knowledge Management		Asper the results, KM
knowledge	have studied KM and SD from	in green innovation and	Knowledge Creation	<ul> <li>Knowledge</li> </ul>	significantly impacts on green
management	different perspectives,	CSD?	Knowledge Acquisition	Management	innovation and CSD activities.
practices on green	inadequate attention has been		Knowledge Sharing		Green innovation also





Title	Research Problem	Research Purpose	Variable / Item	Theory	Result
innovation and corporate sustainable development: A structural analysis (Abbas & Sağsan, 2019)	paid to exploring the role of KM in achieving SD, particularly with the help of green innovation. also highlighted the need for enriching the limited literature on KM, green innovation, and corporate sustain-able development (CSD). There are even few studies that have used the multivariate statistical technique followed by structural equation modelling (SEM) to investigate the causal relationship between the variables in manufacturing as well as the services industries in Pakistan. To fill this gap, the current study analyses the multi-dimensional relationship between KM, green innovation and CSD and examines how KM processes impact on green innovation and CSD activities. Considering the significance of contextual factors, the researcher took organizational size and industry category as control variables.	2. Do contextual factors, such as organizational size and industry category, significantly impact CSD activities?  This study will expand the inadequate literature on the rela-tionship between KM, green innovation and CSD, and the findings will provide valuable insights to the managers of manufacturing and services industries about how they can achieve their SD goals by benefiting from KM and green innovation.	Knowledge Application  Green Innovation     Green technology Innovation     Green Management innovation  Corporate Sustainable Development     Environmental Sustainability     Social Sustainability     Economics Sustainability	Sustainability     Development     Theory	indicated a significant positive impact on CSD. The dimensional analysis indicated that except for knowledge creation and acquisition, which indicated an insignificant impact on social sustainability, all the paths indicated significant results. Moreover, KM is found as equally important for all sizes manufacturing and services firms.



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