

## Article

# Hegemony of Network Capabilities, Frugal Innovation and Innovation Strategies: The Innovation Performance Perspective

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**Abstract:** The emergence of advanced technologies has brought new challenges and opportunities for all kinds of business organizations. In a technologically advanced era, innovation plays a dominant role for the successful operation of the commercial landscape. Therefore, the current study was conducted to investigate the impact of network capabilities (NC) and frugal innovation (FI) on innovation performance (IP). Furthermore, the mediating role of FI and moderating role of innovation strategies has also been tested on the link between NC and IP. Small and medium enterprises (SMEs) registered with small and medium enterprises development authorities (SMEDA) were approached for the completion of the current study. Only 509 owner/managers agreed to participate. A quantitative research design was employed for the current study. During the two–three months process of data collection only 387 complete responses were received from the SMEs working in Pakistan’s big cities. Correlation, regression and bootstrap methods were applied to test the study hypotheses. The findings revealed that NC positively affect FI and IP. Furthermore, the findings also confirmed the mediating effect of FI between NC and IP link. The performance of SMEs working in emerging economies is largely based on their innovative activities. In this dynamic scenario SMEs’ survival is attached to continuous IP in their products and services.

**Keywords:** network capabilities; frugal innovation; innovation strategies; innovation performance; SMEs



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**Citation:** Haffar, M.; Ozcan, R.; Radulescu, M.; Isac, N.; Nassani, A.A. Hegemony of Network Capabilities, Frugal Innovation and Innovation Strategies: The Innovation Performance Perspective. *Sustainability* **2022**, *14*, 2. <https://doi.org/10.3390/su14010002>

Academic Editors: Eglantina Hysa, Félix Puime Guillén, Alba Kruja, Mirela Panait and Ahsan Akbar

Received: 31 October 2021

Accepted: 16 December 2021

Published: 21 December 2021

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## 1. Introduction

In today’s modern era, innovation has the dominant role for the survival, sustainable growth and economic development of the business organization [1]. In this regard, the notion of innovation performance of business organizations has gained considerable attention from management and researchers in both developed and emerging economies [2]. These researchers documented innovation as a firm, dynamic competency that makes it possible for the firms to maintain a competitive position by meeting the customer’s emerging needs [3]. Due to the emergence of the dynamic environment, the success of a business organization largely depends on its innovation capabilities, which allow them to respond to the rapid changes of the business environment [1,4]. Consequently, practitioners and researchers continuously explore and identify the mechanisms for enhancing the innovation capability of business organizations.

IP represents a real challenge for SMEs specifically [1]. The emergence of FI offers an opportunity or a challenge for SMEs, depending on the NC of these SMEs. SMEs critically need the innovation in their business processes for improving their technical expertise and IP [5]. IP has appeared as an attractive view in the emerging economy and depends on numerous elements such as a firm’s explorative learning, networks, business guanxi [6],

external industry factors, internal firm specific factors and product characteristics [7]. However, NC of owner/managers had been ignored by the existing researchers for the improvement of IP of SMEs. Due to the changing environment, it is critical for owner/managers of SMEs to establish networks for the maximum utilization of resources [8]. Therefore, the aim of this study was to focus on the NC of owner/managers of SMEs and the effect of these networks on IP.

NC are based on four elements, i.e., coordination, relational skills, internal communication and partner knowledge, which enable business organizations to improve relations in order to acquire various resources [9]. In a dynamic business environment NC have critical importance for the successful operation of a business organization [10]; however, NC are not the sole factor that make visible improvements in IP. NC are required and also needed to utilize the resources and information via networks for the improvement of IP. In the current study we highlight the internal mechanism that is necessary for the IP of SMEs.

In recent years, environmental turbulence and economic instability greatly influenced the business processes, strategies and innovation efforts in both developing and developed economies [8]. In developing and emerging economies in particular, restricting resources and facilities compelled commercial landscapes to rethink their innovation strategies, among which, the notion of FI has emerged and gained the wider attention of researchers and practitioners [11–13]. FI is considered a resource scarce solution (e.g., business model, service, product or process) that is designed and implemented by the business organization regardless of resource constraints (i.e., material, financial, technological or other resources), whereby the ultimate outcome is in the form of lower cost offerings that meet the basic demands of customers who would otherwise remain unserved [13]. FI strategy becomes important and an optimal choice for the business organizations working in developing economies, where income constrained customers are satisfied with low-cost products and services [12]. FI is easy to implement and feasible for resource constrained businesses such as SMEs. Therefore, exploring the antecedents and outcomes of FI has become a necessity for business organizations in developing economies. The current study considered this research gap and highlighted NC as a significant predictor of FI and IP as an outcome.

FI is the mechanism which permits management to utilize data to explore new information and generate innovation at a lower cost for income constrained customers in developing economies [11]. Researchers such as Cai et al. [14] have acknowledged that FI plays an important role for the improvement of IP. FI facilitates organizations to exploit existing organizational resources to be involved in innovation activities relating to their product or processes. IP of an organization is also based on the innovative strategies. Through IS, organizations are able to gain information about various stakeholders [15]. This valuable information is considered a vital input that helps to decide innovation activities within an organization [16]. Therefore, in the current study we investigate the moderating role of IS on the connection between NC and IP.

This study aims to draw an IP model for SMEs to explore the impact of NC on IP. This study also tests mediation of FI in the relationship between NC and IP. In the current study we also assess the moderating role of IS on the relationship of NC and IP. In the next section of the investigative study, literature relating to study variables has been briefly discussed along with associated developed hypotheses. The subsequent part of the work discusses data collection processes, tools and techniques. Results of analysis, measurement and conclusion are presented in the following section of the study. Concluding the research study are the theoretical implications and practical implications, which are also considerably noted and cross-matched for testing the desired results.

## 2. Literature Review

### 2.1. Network Capabilities and Innovation Performance

Businesses dynamic conditions increase the importance of NC for the innovative activities of the business organization [17]. Stronen et al. [18] suggested that NC enable firms to receive, store and distribute an increased volume of information. Khan et al. [19]

documented that NC represent the capacity of the business organization to develop relations with partner firms and deploy information and communication together with internal and external resources. NC play a vital role for organizations to respond to the emerging challenges of a dynamic business environment [17]. NC facilitate the improvement of external and internal coordination of an organization [20,21]. Through networks, organizations are able to access the valuable information that is necessary for the decision regarding innovation activities [22]. NC gain critical importance for organizations as these networks facilitate coordination with external players [23]. Through coordination and combining with external resources, organizations are able to gain the required knowledge and information that provides input for the decisions of innovation activities [24]. Organizations with sound NC are in a better position to make innovation decisions and implement these decisions successfully [23], which in turn improves the IP of these organizations. In line with these arguments, we established that:

**Hypothesis H1.** *Network capabilities significantly predict innovation performance.*

### 2.2. Network Capabilities and Frugal Innovation

Walter et al. [9] operationalized NC with four elements, i.e., relational skill, coordination, partner knowledge and internal communication. Relational skill, the first dimension of NC, refers to the ability to establish relations with other firms and individuals to enhance the existing knowledge regarding business environment, major threats and available opportunities [25]. Coordination, the second dimension of NC, refers to the ability to match the business resources with other organizations within an industry in order to create relationships with these firms [26]. Partner knowledge, the third dimension of NC, enables for the acquirement of knowledge about the resources, services and products of partner firms that help with the formulation of strategies [9]. Internal communication, the fourth dimension of NC, is concerned with the transmission of acquired information among all the members of the organization at all levels [25]. These dimensions of NC enable developing, utilizing and maintaining relationships with other organizations in the industry to achieve diverse resources. Such resources help the organizations formulate and improve their innovation strategies regarding service improvements, customer satisfaction, product development, profit maximization and buyer–supplier performance [21].

On the other hand, FI is referred to as the mechanism through which an organization is able to provide innovative products and services in uncertain conditions, through the adjustment of scarce organizational resources with superior knowledge and capabilities [12]. FI is critical for the development of an organization's innovation strategies and enables them to meet the demands of potential customers at a lower cost [13]. NC play an important role for FI of an organization as these capabilities are valuable sources of required information. According to Majid et al. [26], Organizations with sound NC are more inclined towards FI. NC provide arrangements for the exchange and integration of information with external parties, which become the foundational step towards FI [21,26]. Organizations with sound relationships with external partners are more likely to improve FI [11,13,27]. In line with these arguments for the current study we formulated a study hypothesis, i.e.,:

**Hypothesis H2.** *Network capabilities have a positive association with frugal innovation.*

### 2.3. Frugal Innovation and Innovation Performance

Existing studies highlighted that organizations achieved IP with the help of infrastructure that was flexible and facilitated the quick reformulation and adjustment of its innovative activities with the scarce resources [7]. Therefore, FI provides opportunities, through which organizations can be involved in innovation activities based on their existing resources [2]. IP is concerned with the continuous efforts of the business organization towards innovation activities [1]. FI is one of the innovation activities that facilitates organization for the utilization and reconfiguration of existing strategic resources for innovation

purposes, as per the need of unsatisfied customers, which is critical to attain IP [28]. Dost et al. [13] documented that FI is one of the best ways to achieve IP through the utilization of existing resources to respond to unsatisfied customers. FI mechanism contributes to the promotion of innovation plans of an organization [11,29]. In line with these arguments, we established that:

**Hypothesis H3.** *Frugal innovation has a positive relationship with innovation performance.*

#### 2.4. Mediation of Frugal Innovation

NC of an organization become the major sources of novel information from external stakeholders [30]. Organizations gain new information regarding customers, markets and competitors, which allows them to formulate new methods for their products and processes. On the other hand, FI is a mechanism through which a business organization is able to utilize its existing resources for innovation activities. Organizations integrate information about external parties using NC to provide a foundation for the innovation related activities. Researchers in the existing studies documented that NC facilitate organization for their innovation activities, which in turn improve their IP. The current study established the intervening role of FI between NC and IP. NC provide the basis for acquiring required information, which is necessary for the innovation activities of an organization [31].

Through the mechanism of FI, organizations are able to best utilize the information received from external stakeholders in order to promote innovation to enhance IP. FI enables firms to restructure their operation, which is a mechanism for reducing costs [28]. This cost reduction is through NC and established FI. The NC provides an opportunity to acquire a variety of information from various stakeholders [32]. The NC enhance FI to achieve the IP [23,24]. Therefore, it is argued that NC play a foundational role for FI, which in turn enhances the IP.

**Hypothesis H4.** *Frugal innovation mediates between network capabilities and innovation performance links.*

#### 2.5. Moderating Role of Innovation Strategies

IS are the mechanism through which an organization is able to deploy available resources to perform in an uncertain environment, which enables firms to move forward and become innovative [33]. IS are critical for the development of an organization's future strategies regarding innovation and enables them to align existing resources with their environment [27]. Empirical findings highlighted the role of NC for IS of an organization [34]. IS perform as a moderator between NC and IP. The NC of an organization are conceded as having a key effect on the execution of innovation activities and lead organization towards IP [35]. This research work proposed that during a strong relationship between the NC and IP, the moderating role of IS could not be ignored. IS enable the business organization to have a successful formulation and implementation of innovation related activities, which in turn improve the IP of these organizations.

**Hypothesis H5.** *The relationship between network capabilities and innovation performance is moderated by innovation strategies.*

#### 2.6. Theoretical Framework

The Theoretical framework is shown as under (Figure 1).

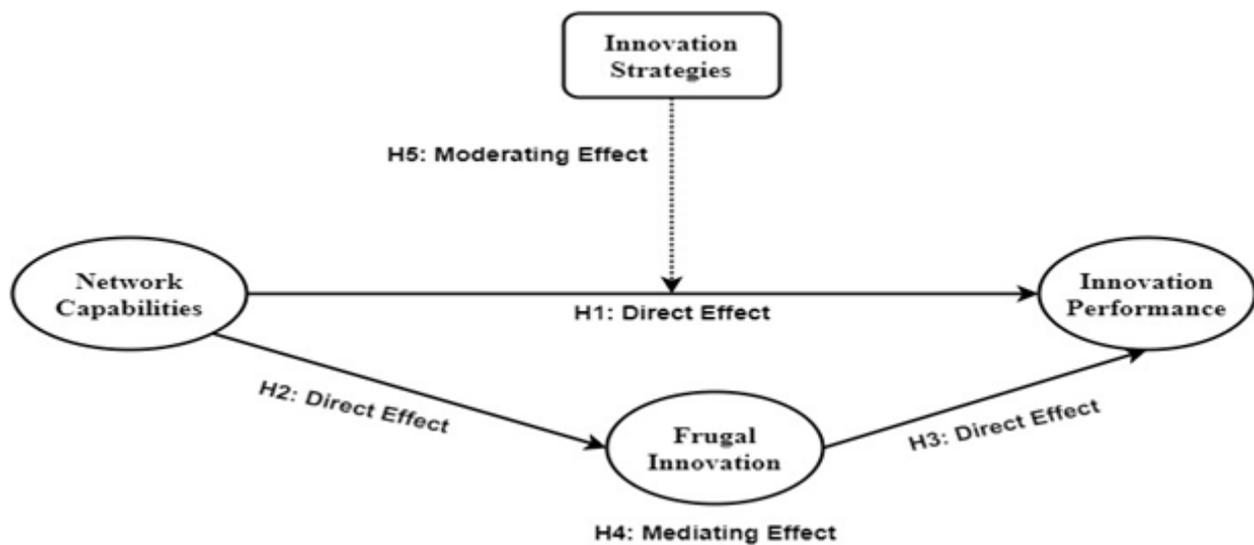


Figure 1. Theoretical framework.

### 3. Methods

#### 3.1. Data Collection and Participants

In the current study we tested the hypothesized model with the help of a cross-sectional design of the research. Owner/managers of SMEs were the participants and a list of SMEs was obtained for generating sampling frame. Information about the registered SMEs was obtained from SMEDA to identify a representative sample. Data was collected from 509 SMEs operating in Pakistan. The questionnaire was used to collect data from the selected respondent. Furthermore, questionnaires were checked by the experts before their distribution among respondents. Out of the total questionnaires distributed, the number of useable questionnaires returned by the respondent owner/managers was 387.

#### 3.2. Measurement

Table 1 presents the information about the measurement scale used in the current study for the measurement of NC, FI, IS and IP. The five-point Likert scale was used for recording the responses of respondents, i.e., 1 for strongly disagree and 5 for strongly agree.

Table 1. Coefficients of reliability and validity.

	Items	Cronbach's $\alpha$	FL	CR	AVE
Network Capabilities	19	0.82	0.73–0.91	0.87	0.68
Frugal Innovation	09	0.79	0.70–0.88	0.92	0.71
Innovation Strategy	09	0.86	0.76–0.90	0.94	0.73
Innovation Performance	11	0.81	0.71–0.93	0.90	0.69

##### 3.2.1. Network Capabilities

The measurement scale used for the measurement of NC is based on four elements, i.e., coordination (6items), relational skill (4items), internal communication (5items) and partner knowledge (4items). The NC measurement items used in the current study were developed and validated by Walter, Auer and Ritter [9] (see Appendix A).

##### 3.2.2. Frugal Innovation

The measurement scale used for FI was adapted from the work of Rossetto et al. [36]. A 9-item scale adapted from Rossetto et al. [36] was used for the measurement of FI (see Appendix A).

### 3.2.3. Innovation Performance

In the current study we used an 11-item scale for the measurement of IP developed by Alegre and Chiva [35] (see Appendix A).

### 3.2.4. Innovation Strategies

For the measurement of IS in the current study we used a scale developed by Terziovski [37]. A 9-item scale was used for the measurement of IS (see Appendix A).

## 4. Results

The study hypotheses were tested with the help of descriptive statistics, correlation coefficients and SEM. Correlation coefficients determine the associations among the NC, FI, IS and IP. Direct relations are confirmed with the support of path analysis values generated through SEM technique. Furthermore, the “Process” approach developed by Preacher and Hayes [38] was used for testing the mediation effect. Moreover, Fornell and Lacker’s [39] approach was used to confirm the discriminant validity of the constructs. Cronbach’s  $\alpha$  value was used to check the reliability of the construct. The outcomes of reliability and validity are shown in Table 1.

The outcomes of confirmatory factor analysis (CFA) confirmed the model fitness, while construct reliability (CR), discriminate validity and convergent validity were also satisfactory. Four models with different configurations were run to access the model fitness. Table 2 contains the results of the four models.

**Table 2.** CFA results.

	$\chi^2$	Df	$\chi^2/df$	RMSEA	GFI	CFI
Hypothesized model	1021.34	390	2.619	0.06	0.91	0.92
Model with three factors	1174.65	360	3.263	0.15	0.88	0.89
Model with two factors	1244.58	310	4.015	0.22	0.71	0.72
Model with one factor	1236.21	290	4.263	0.26	0.64	0.65

### 4.1. Correlation Results

Table 3 contains the correlation coefficients and the value of descriptive statistics. The correlation coefficients confirmed the connection among study variables. The correlation coefficients revealed that NC are positively associated with the FI (0.32 \*\*), IS (0.25 \*\*) and IP (0.21 \*\*). The results also confirmed that FI is also positively associated with IP (0.30 \*\*) and IS (0.23 \*\*). Similarly, IS are positively associated with IP (0.17 \*\*).

**Table 3.** Correlation coefficients.

Constructs	Mean	SD	1	2	3	4	5	6	7	8
Gender	0.9	0.81	1							
Age	33	—	0.09	1						
Work experience	2.9	0.84	0.08	0.03	1					
Education level	2.4	0.91	0.06	0.05	0.04	1				
Network Capabilities	3.8	0.93	0.09	0.12 *	0.08	0.07	1			
Frugal Innovation	3.5	0.91	0.05	0.09	0.04	0.05	0.32 **	1		
Innovation performance	3.9	0.95	0.03	0.07	0.06	0.09	0.21 *	0.30 **	1	
Innovation strategy	3.6	0.90	0.08	0.03	0.04	0.09	0.25 **	0.23 *	0.17 *	1

Note: SD (standard deviation) \*  $p < 0.005$ , \*\*  $p < 0.001$ .

### 4.2. Analysis of Direct Effect

The study hypotheses with direct effect were analyzed with the help of SEM technique and coefficients of path analysis, which confirmed the direct effect of NC for IP and FI.

Furthermore, the outcomes also established the direct effect of FI for IP. The results of SEM presented in Table 4 show significant connections among established links. The first hypothesis of the study presents the direct association of NC on IP. The coefficients of path analysis established the direct influence of NC on IP (0.22 \*\*). Based on these findings, H1 of the study was confirmed.

**Table 4.** Coefficients of path analysis.

Hypotheses	Direction	Value	Confirmation
NC → IP	+	0.22 **	Confirmed
NC → FI	+	0.33 **	Confirmed
FI → IP	+	0.28 **	Confirmed

\*  $p < 0.5$ , \*\*  $p < 0.1$ , \*\*\*  $p < 0.001$ .

The second hypothesis of the study presents the direct effect of NC on FI. The coefficients of path analysis confirmed the direct effect of NC on FI (0.33 \*\*). Based on these findings, H2 of the study was accepted. Furthermore, the third hypothesis shows the direct influence of FI on IP. The coefficients of path analysis established the direct influence of FI on IP (0.28 \*\*). Based on these findings, H3 of the study was confirmed.

#### 4.3. Mediating Role of FI between NC and IP

H4 relates to the mediation effect of FI between NC and IP. Mediation effect is tested with the help of Preacher and Hayes' approach (2008). The outcomes of Preacher and Hayes' approach are presented in Table 5. The mediating effect of FI between NC and IP is confirmed as the value of indirect effect is significant (i.e., Beta = 0.1471, lower value = 0.1894, upper value = 0.2222). In addition to Preacher and Hayes' approach, the Z score = 5.74 \*\* of Sobel test, which also confirmed the indirect effect of NC on IP of FI. These results confirmed H4.

**Table 5.** Results of indirect effect of network capabilities.

Model Detail	Data	Boot	Bias	SE	Lower	Upper
1NC → FI → IP	0.1471	0.1463	−0.0008	0.329	0.1894	0.2222
Sobletest Z score = 5.74 **						

Note: NC (network capabilities), FI (frugal innovation), IP (innovation performance) \*\*  $p < 0.001$ .

#### 4.4. Moderating Role of IS on NC and IP Link

H5 of the study is about the moderating effect of IS on the association of NC and IP. In the current study we applied hierarchical regression to test the moderation role of IS on NC and IP link. The outcomes of the hierarchical regression analysis are presented in Table 6 using a three-step procedure. Base model information is depicted in steps 1 and 2 in Table 6. Furthermore, step 3 presents the coefficients for the moderation of IS on NC and IP link. Table 6 also presents the coefficient of the interaction term, i.e., NC × IS, which shows that IS significantly affect the connection between NC and IP ( $\beta = 0.24$ ,  $p < 0.01$ ).

**Table 6.** Results of hierarchical regressions.

	Step 1	Step 2	Step 3
Moderation of Innovation Strategy			
Gender	0.028	0.010	0.009
Age	0.023	0.020	0.017
Work Experience	0.007	0.005	0.006
Educational Level	0.033	0.034	0.043
Network Capabilities		0.30 **	0.33 **
Innovation Strategy		0.22 **	0.26 **
NC × IS			0.24 **
R <sup>2</sup>	0.009	0.191	0.198
Adjusted R <sup>2</sup>	0.003	0.159	0.175
Δ R <sup>2</sup>	0.007	0.163	0.028
Δ F	4.172	79.63	17.13

Note: \*\*  $p < 0.001$ .

## 5. Discussion

The objective of the present study was to highlight how NC contribute to the improvement of IP of FI. To achieve the objective, we interlinked the NC with FI and IP. Beyond the direct relationships, the mediating role of FI and the moderating role of IS have also been tested on NC and IP link.

For the current study we formulated five hypotheses. Regarding H1, we proposed that NC have a direct and positive relationship with IP. The findings revealed that NC allow firms to acquire valuable information which provide a foundation for the increase of IP [40,41]. NC allow the firms to integrate and configure the required information from external stakeholders and utilize the acquired information as input for decisions relating to innovation activities [42,43]. The findings show the positive effect of NC on IP and are consistent with previous empirical findings [41,43].

The results also revealed that H2 was confirmed as the NC significantly predicted FI. These findings suggested that NC are the leading force behind the improvement of FI. The current study also proposed that FI has a positive relationship with IP. Therefore, the results confirmed H3 as FI significantly predicts IP. These findings suggested that reformulation of innovation strategies at a lower cost and alignment of product/services with emerging markets increases the mechanism of FI, which helps organizations achieve IP at a higher level [14,28,43].

Regarding H4, the results confirmed that NC predicted IP of FI. NC provide necessary innovation-related knowledge through relationships with various stakeholders, which become the foundational step towards FI and a source of IP [40,42]. The finding shows that organizations having required information about market conditions and customers have strong FI activities, which are a major source for the improvement of IP. Finally, H5 proposed moderating the role of IS on the connection between NC and IP. IS facilitate organizations for the best utilization of existing resources for the achievement of innovation-related opportunities that exist in the market [33]. The findings revealed that the effect of NC on IP is moderated by IS.

### 5.1. Theoretical Contribution

The current study contributes to the theory and literature in various ways. This study provides a significant understanding of the innovation mechanisms of networks established by the business organization. The current study contributed by using NC as vital determinants of FI and IP in the context of SMEs operating in emerging economies. Limited studies have empirically tested these relationships in the context of SMEs. The researchers have mostly deliberated on these constructs within the context of large-scale organizations.

Second, the current study contributes by offering an IP model for the SMEs sector. The IP model shows how the integrated elements, e.g., NC, FI and IS determine IP. The current study enlarges the existing body of knowledge by investigating how NC enable SMEs to

gain the required information for the formulation of innovation activities using existing resources, which help to improve the overall innovation performance.

Third, the empirical findings denote the review of NC in developing FI. FI is an important mechanism of organizations exploring new opportunities that support innovation direction and utilization of existing resources [32,40]. Finally, the mediating role of FI contributes to the existing literature of innovation management. Furthermore, moderating the role of IS for the improvement of IP also significantly contributes to the existing body of knowledge.

### 5.2. Practical Implications

The current study also has valuable implications for management in practice, policy makers and SMEs operating in emerging economies. First, the current study suggests that SMEs must focus on innovation activities rather than just pursuing the traditional mode of business. The findings revealed that SMEs of emerging economies can enhance IP with the help of NC of FI. By doing so, IP can only be achieved when organizations have strong FI and resources for the required innovation activities. Furthermore, for the formulation of the best strategies of innovation, NC can be considered for a better response to the dynamic environment of IP [23].

Second, this study suggests that NC provide a foundation for FI. Therefore, for the successful response to the various demanding innovation strategies such as FI, which ultimately strengthen IP, management must focus on NC [41]. However, to bring flexibility in firms, strategies make it easier to achieve IP. Therefore, this study suggests owner/managers of SMEs consider the NC in order to acquire the updated information for betterment of IP.

Third, the focus of the current study was to also highlight the mediating role of FI between NC and IP link. The outcomes of the current study suggest that owner/managers of SMEs must coordinate with all the stakeholders, in order to identify the changing circumstances that enable them to cope with these changes, by making required changes in the existing innovation strategies to achieve IP. Lastly, this study highlights the moderating mechanism in which IS moderate the relationship between NC and IP. Without innovation stance towards business activities, it seems difficult to leverage the benefits of NC to improve IP.

## 6. Conclusions

The basic aim of this study was to highlight the stance of SMEs towards FI as well as the IP of these SMEs that are the consequences of NC. NC are one of the important factors that enhance IP. The most constructive aspect of NC is FI. The current study found positive effects of NC on FI and IP. Furthermore, the findings also suggested that FI also positively affects IP due to the development of NC. Moreover, IS also moderate the relationship between NC and IP. In summary, we concluded that NC contribute to enhancing the FI capabilities of SMEs, which become the reason for their higher IP.

The current study has some limitations that might be addressed by future research directions. The current study has been conducted on the SMEs working in emerging economies; however, future research may include some other economies to generalize the findings of this research. We took data from SMEs only about study variables; however, some other industries may be taken for future research. We only examined the relational effect of NC on FI and IP through quantitative analysis; however, data may be taken and analyzed through qualitative techniques for more insights of study variables. The current study applied a cross-sectional design for testing the hypothesized model; however, a longitudinal design can be used to understand the impact of NC on IP of FI.

**Author Contributions:** Conceptualization, A.A.N.; supervision, A.A.N.; project administration, M.R.; formal analysis, N.I. and R.O.; investigation, A.A.N.; methodology, A.A.N.; visualization, R.O.; software, M.R.; data curation, M.H.; writing—original draft preparation, M.H. and N.I. All authors have read and agreed to the published version of the manuscript.

**Funding:** Researchers supporting project number (RSP—2021/87), King Saud University, Riyadh, Saudi Arabia.

**Institutional Review Board Statement:** All the codal formalities were complied with under Institutional Review Board Letter No. GCMS/2021/ADM327. No humans or animals were harmed during the conduct of this research.

**Informed Consent Statement:** Written informed consent has been obtained from the participants to publish this paper.

**Data Availability Statement:** Data are not publicly available for keeping respondents-privacy.

**Acknowledgments:** Researchers supporting project number (RSP—2021/87), King Saud University, Riyadh, Saudi Arabia.

**Conflicts of Interest:** No conflict of interest.

## Appendix A

### *Network Capabilities*

#### *Our organization analyzes:*

1. What we would like and want to accomplish with which partner.
2. Use of resources to the individual association.
3. The partners' goals, potentials and strategies.
4. About building up relationships with partners.
5. The coordination and relationships with our partners.
6. The support from partners.
7. The ability to build important personal associations with business partners.
8. How we put ourselves in our partners' position.
9. How we can deal flexibly with our partners.
10. How we can solve problems constructively with our partners
11. Partners' markets.
12. Partners' products/procedures/services.
13. Partners' strengths and weaknesses.
14. Competitors' potential and strategies.
15. Regular meetings for every project.
16. How employees develop informal contacts among themselves.
17. Communication across projects and subject areas.
18. How managers and employees do give intensive feedback to each other.
19. How information is often spontaneously exchanged.

### *Frugal Innovation*

#### *Our organization regularly:*

1. Focus on core functionality rather than additional functionality.
2. Search for new solutions.
3. Improve the durability of the products/services.
4. Offer good and cheap products/services.
5. Reduce cost in the operational process.
6. Reduce the final price of the products/services.
7. Care for environmental sustainability in the operational process.
8. Improve partnerships with local firms.
9. Search for efficient and effective solutions to customers' social/environmental needs.

### *Innovation Strategies*

1. The organization's vision or mission includes a reference to innovation.
2. Innovation strategy has helped the organization to achieve its strategic goals.
3. Increasing our production volume is an important measure of our process innovation.
4. Improving administrative routines is seen as part of our innovation strategy.
5. Internal cooperation is an important part of innovation strategy implementation.

6. Customer satisfaction is part of our innovation strategy.
7. Improving product or service quality is one of our key objectives of innovation strategy.
8. Formulating innovation strategy increases employee skills.
9. Improving employee commitment, morale or both is part of our innovation strategy monitoring.

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