



EXAMINING THE INTERPLAY OF HR INITIATIVES, KNOWLEDGE MANAGEMENT,
TECHNOLOGICAL CAPABILITIES AND PRODUCT INNOVATION

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Abstract: Product innovation is the basic strategy by which organizations can survive in the current marketplace for a longer period. Therefore, the present study objective was to examine the impact of reward management, performance appraisal and career management on knowledge management effectiveness and product innovation. Additionally, knowledge management's mediating role and the moderating role of technological capability are also examined in the present study. Data was collected from the employees working in the fiberglass manufacturing firms in Bahrain. The collected data was analyzed using PLS-SEM. The study findings revealed that knowledge management effectiveness within the firm is significantly impacted by HR strategies like performance appraisal, reward system, and employee career management. Moreover, knowledge management effectiveness also significantly impacts product innovation. In the end, the study also confirmed the moderating role of the technological capability of the organization on the path of knowledge management and product innovation. The present study fills the gap of limited studies, using HR capabilities to improve Bahrain's fiberglass manufacturing firms' product innovation. Furthermore, the findings of the present study are helpful for policymakers of manufacturing sectors to integrate HR initiatives into their product innovation strategies.

Keywords: product Innovation; career management; performance appraisal; reward system

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1. Introduction

Product innovation is considered the lifeblood of organizations because the products' life cycles are very short most of the time. Moreover, the competition in the market at the international and local level is enhancing as well. Studies have reported that more than 70% of the organizations considered innovation as one of their top strategies. All of these firms ranked innovation as an important aspect of their future strategy of the organization. In the same context, innovation is a high priority area for the executives of more than 90% in the recession of 2008 (Andrew, Manget, Michael, Taylor, & Zablitz, 2010; Aragonés-jericó & Vila-lópez, 2020; Carolinapaludo et al., 2020).

Practitioners, along with scholars, agree that the organization's innovation capacity has strategic importance. It shows the organization's ability to be successful and shows the ability to compete in the business environment. Product innovation holds the importance of strategic resources in modern business. The innovation capability

of the organization plays a vital role in the survival and success of the organization. Several organizations try to achieve the ability to innovate their processes, services, and products, but very few businesses are successful in reaching this level (Jelenic, 2011). Recently, HR practices have been reported with high significance for businesses to boost innovation (Ogalo, 2020). However, to the best of the authors' knowledge, no other study is available investigating this interesting interplay to help forward robust implications for practitioners.

Accordingly, In organizations, knowledge management in terms of technological methods, organization activities, and management philosophy is widely accepted in business. Knowledge management of the organization makes a difference in all the activities from top to bottom (Majid & Mahmud, 2019). There are very few studies conducted for the connection between knowledge management, the performance of organization, and innovation in terms of available literature available. It is essential for organizations to understand the importance of knowledge management so they can invest in this area effectively. Researchers noticed that knowledge management is a soft discipline that is very important for the organization's corporate culture (Noruzy, Dalfard, Azhdari, Nazari-Shirkouhi, & Rezazadeh, 2013).

Career management competencies are essential for the formulation of career goals, understanding the labor market conditions, finding and selecting the learning opportunity, which is relevant. It is also important for professional networking, as well. Career management is the process by which a person takes information regarding career goals, weaknesses, strengths related to skills, interests, values and get engaged in strategies related to the career, which increases the chances that organizational goals will be achieved. The career management process involves using career strategies, development of career goals, and exploration to career to achieve the goals related to the career (Gerard, 2012).

In order to manage the human resource of the organization, performance appraisal plays a very important role. The term performance appraisal is referred to as the process by which organizations judge the employees' performance at every level. In the process of appraisal, assessing the performance of employees and providing them feedback is included. Improving the performance of employees is the main goal and objective of performance appraisal. Through the performance appraisal, management can easily assess employees' performance and compare it with already set standards. In order to understand the level of performance of the employees, performance appraisal is critical. Through the employees' performance appraisal, the organization's management can decide the level of rising, which should be given to the employee in terms of salary and tasks. For survival in the market, the organization and employees need to respond rapidly according to their changing demands. For this purpose, regular performance appraisal within the organization is very important (DeNisi & Murphy, 2017).

For the retention of employees and attract the best employees within the market, reward management is one of the important strategies of the organization's human resource department. Thus, the punishment and reward system can create incentives within the organization, which plays an important role in improving human resource productivity. Human resource managers have used reward management strategies in order to retain and attract competent employees. Through proper reward management strategies, employees' motivation level is increased, which impacts the employee's overall performance. Based on the reward structures, human resource managers can set the goals and objectives that are needed to be achieved through each employee (Yavarzadeh, Rabi, & Abadi, 2015).

In this scenario, HR capabilities and strategies are important for the organization to retain the employees, share knowledge, and bring innovation to their products. Thus, the present study's main objective is to examine the impact of Performance Appraisal, career management, and reward system to improve the organizations' innovation with the mediating role of knowledge management and the moderating effect of technology.

2. Literature review

Product Innovation. Product innovation is basically providing different needs to different people. In literature, product innovation is defined as new components, new materials, bring changes to the already available products and bringing totally new products to the market. In other words, innovation is referred to as something

totally new to the market or getting some changes in the main product. The products' innovation impacts the features of the products, its design, its quality, its usability, its size, and timing to deliver. In terms of organization, revenue, and cost of the product being produced are altered as well because of innovation (Reguia, 2014).

In order to achieve the objectives of the organization, product innovation plays a very important role. It is because new products are and new ideas are developed because of product innovation, quality of the product is enhanced, and services are improved as well to deliver the products to the organization. The products of the organization can easily be distinguished from competitors based on the innovation of products. It is important to mention that organizations that have a problem in their product innovation cannot control their prices in the market (Pallas, Böckermann, Goetz, & Tecklenburg, 2013).

For the organization's success, product innovation is remaining the factor of innovation for a number of authors and researchers. In the same context, researchers mentioned that sustaining the success of the organization is mainly dependent upon the factor of innovation. Researchers believe that the growth of the business and expansion of the business is mainly dependent upon the factor that organizations can bring innovation within their products and services. By having innovative products and services, organizations may achieve a superior position among its competitors (Waribugo, Ofoegbu, & Akpan, 2016; Omarkhanova, Tleuzhanova, Zholmukhanova, & Mukhambetova, 2020; Mazzoni, 2020).

It is mentioned that product innovativeness is viewed as a perception of something new, unique, original, and novel. On the other hand, studies have also pointed out that the product's innovation is made up from the perspective of organization and consumer. Organizations must focus on the organizational capability to bring innovation in their products on a long-term basis. Additionally, research has mentioned that the products' benefits to the customer are mainly dependent upon the level of innovation in the product. In some studies, the product's innovation is referred to as meaningfulness and novelty of the new services and products being introduced well in time (Rajapathirana & Hui, 2018).

Knowledge Management effectiveness: Relationship with Product Innovation. Performance is the ultimate expectation of any business, and many studies have proven this (e.g., Shaikh et al., 2019; Ahmad, Rafiq & Ahmed, 2019). The organization's strategy is to provide the right information at the right time to the right person and put the information to improve the organization's performance. Researchers have pointed out that knowledge management is drawn from the already available resources that any organization may already have available, including HRM practices, organizational change management, and management of a good information system (Girard & Girard, 2015).

The learning process within the organization is improved if the organization have knowledge. If shared properly, such knowledge can enhance the intellectual assets, including innovation capability because knowledge is acquired and appropriately applied. If any organization has competency in knowledge management, it is considered the orientation of knowledge management (Vukšić, Bach, Inkinen, Kianto, & Vanhala, 2015).

In literature, knowledge management is defined in several different perspectives. Few researchers believe that knowledge management is the set of activities that leads the firm to acquire knowledge at an external and internal level. On the other hand, it is mentioned that knowledge management is the development of a proper system to grow the organization's knowledge. In the same context, Knowledge management is defined as a function of organizational management, including knowledge creation, management and flow of knowledge, and knowledge efficiently and effectively. By this way, organizations can get benefits on the long run basis from the existing knowledge of the organization. Therefore, knowledge management effectiveness is treated as the discipline of management that focuses on developing knowledge and using the knowledge in an effective manner to achieve the strategic objective or the organization (KUMAR, 2016).

Process perspective is used to analyse the knowledge management effectiveness of the organization. Thus, knowledge management effectiveness is basically a process in order to enhance the knowledge application

through which innovation within an organization can be achieved. The organizations with a high level of knowledge management effectiveness will have a high level of innovation for products and services (Moon & Lee, 2014; Grabara et al., 2020).

The relationship with knowledge management effectiveness and innovation of the product is well documented. Several scholars have reported that knowledge has a significant impact on the innovation of the organization. Innovation is enhanced via application, conversion and acquisition of new ideas. Therefore, the organizational power to make the new products is enhanced (Pallas et al., 2013). Researchers reported that knowledge management is an important management tool, which helps generate new ideas related to products and services (Jelenic, 2011). Researchers have not only discussed the benefits of knowledge management to organizations. Practitioners have also expressed concerns regarding the quality of products due to the organization's knowledge management. In the same context, the adoption and implementation of knowledge management in innovative ideas may lead to innovation in the organization's production system (Kör & Maden, 2013).

H1: There is a significant positive relationship between Knowledge Management and Product Innovation.

Career Management. For career development, career management is a very important antecedent when an individual has planned its career and goals related to career. They need competencies and skills to execute these goals related to career through proper practices of management. It means executing the plans is the next step after career planning. In management, career management is the process, which is ongoing monitoring, implementing, developing, and preparing the career plans as well as strategies developed by individuals or with the help of the organization's career system (Ahmed et al., 2018). Thus, career management is the regular process of human resources in work life. Additionally, a person who has a very satisfying and good career has a fulfillment feeling. On the other hand, a person who has a poor career decision may have a very disastrous effect on its well-being (Adekola, 2011).

For the future knowledge of the employees working at any organization, career management is very important. A number of professionals explain the use of career management. This system helps for the commitment and motivation of employees. Moreover, it strives the employees to gain knowledge regarding organizational products and services, which is important for the organizational performance and innovation on a long-run basis (Seema & Sujatha, 2013).

As the organization becomes flexible regarding the employees, they also become flexible. As the work mode of employees is improved, their path of career is altered as well. When an employee joins an organization, his/her path to reach the organizational goals is altered. Managers take a lot of time in order to decide the career path of their employees. Organizations need to choose their employees' careers by which they can improve their organizational knowledge (Shani & Divyapriya, 2013).

H2: There is a significant relationship between Career Management and Knowledge Management

H3: Knowledge Management Effectiveness mediates the relationship between Career Management and Product Innovation.

Performance Appraisal. Among important practices of HRM is performance appraisal. It was started in the USA back in 1813 because organizations were interested in increasing the performance of their organization. The organizations implement effective performance appraisal in order to improve their performance. Performance appraisal is the important factor of performance management function having the focus on achievement of organizational goals. The basic purpose of performance management is to improve the performance of teams. Researchers mentioned that a different prospect is provided to the manager by the performance management so they can discuss the performance of subordinates with them. The main purpose is to reach the agreement to appraise the performance of employees (Rao, 2015).

Performance appraisal linkage with knowledge management is proven in a number of previous studies (e.g.,

Sangakala et al., 2016). The researchers analysed the performance management system, and they found that the performance management system inhibits knowledge sharing. Employees are facilitated to gain knowledge by the organization by giving proper attention to the employees' needs, providing them proper feedback to their performance and performance appraisal based on standards set by the firm (Horvat, Sharma, & Bobek, 2015). The organization has a better performance appraisal system, and the employees will have the urge to get knowledge sharing requirements. Incentive system of the organization can be improved through the knowledge management system of the organization. An organization can increase the incentives of employees including trips, bonuses and salary. Moreover, they should also provide a proper evaluation to the employees regarding their performance at the job. Therefore, the performance management system put positive pressure on the employee to improve their performance through knowledge sharing among employees (Liu & Liu, 2011).

H4: There is a significant relationship between Performance Appraisal and Knowledge Management Effectiveness are significantly related to each other.

H5: Knowledge Management Effectiveness mediates the relationship between Performance Appraisal and Product Innovation.

Reward System. Motivated employees are the need of the organization to improve the workplace's effectiveness and achieve the firm's goals. In order to enhance the motivation of employees, the reward must be used properly by the organization. Financial means are one of the most important mean to keep the employee motivated. The available literature broadens the scope of financial rewards on the reward system. These reward systems are important in order to shape employee behaviour. In literature, there are two types of rewards discussed. The first reward type can be financial or non-financial, fixed or non-fixed and contingent on the basis of certain criteria. The second reward criteria are mainly dependent upon the organization's principals and norms upon which rewards are allocated.

Knowledge sharing among employees must be awarded in the form of incentives by the organization. A number of empirical studies conducted in the past show that organizational reward impacts employees' performance, which leads to improving the organization's performance. Several firms reward employees for them, improving on their knowledge (van Eerde, 2015).

Accordingly, some studies have also shown the importance of knowledge management. Nevertheless, there is still minimal research conducted to examine the impact of the reward system of knowledge sharing. Some employees are working in an organization that possess a different kind of knowledge. These employees decide to share the knowledge with other workers based upon the reward is given to the (Lee & Ahn, 2007).

H6: There is a significant relationship between Reward System and Knowledge Management.

H7: Knowledge Management Effectiveness mediates the relationship between Reward System and Product Innovation.

Moderating Role of Technology Capability. The organizations with strong technological capability are better able to fulfill the customers' needs and perform better in the market than competitors. It is important for organizations to have knowledge regarding the technological capability of the competitors. Every technological capability of the organization is important for the organization to bring product innovation. If the organization have a strong technological capability, it will better use the available knowledge and produce innovative products. Therefore, in order to use innovation effectively, it is critical that organizations use technological capability effectively. Moreover, there exists an inconsistent relationship between knowledge management effectiveness and product innovation. This inconsistent relationship rises the need for moderator in this path. Therefore, the organization's technological capability may have a moderating relationship between knowledge management effectiveness and product innovation (Wu, 2014).

H8: Technological capability moderates the relationship between Knowledge Management and Product Innovation.

3. Methodology

The present study has adopted a cross-sectional approach. To achieve the study's objectives, we have designed a questionnaire to collect data. We have used a 5-point Likert scale. The nature of the present study is explorative. We have adopted this path modelling technique as according to the literature, if the nature of the study is prediction-oriented or we are extending some existing study, then the path modelling technique is recommended (Sarstedt, Ringle, Henseler, & Hair, 2014). In the process of data analysis, we have followed several steps. First, we have screened the data with the help of SPSS to make sure the data is appropriate for PLS analysis or not, whereas in the second step by using the smart PLS 3.0 the measurement model (MM) was ascertained by considering the discriminant validity (DV), convergent validity (CV), internal consistency reliability (ICR) and individual item reliability. In the third step for assessing the structural model, we have applied the bootstrapping technique by taking 315 cases and 5000 bootstrap samples. In the third step, we have particularly we have checked the model's predictive relevance, level of the R-squared values, the significance of the path coefficients, and effect size (Hair Jr, Sarstedt, Hopkins, & Kuppelwieser, 2014). Total of 350 questionnaires were distributed among the employees working in the three fiberglass manufacturing companies, out of which 310 were returned; we have omitted 16 questionnaires, so the response rate for this study was 84%.

4. Results and Analysis

The PLS path model was initiated with MM's assessment in the form of constructs validity, which includes discriminant and CV and reliability. By considering the latest development regarding the inappropriateness of PLS path modelling in the validation of the model, a two-step process for the reporting and evaluation of PLS results, we have implemented a two-step process in the present study which was recommended by (J Henseler & Ringle, 2009). (See Figure 1 and Table 1).

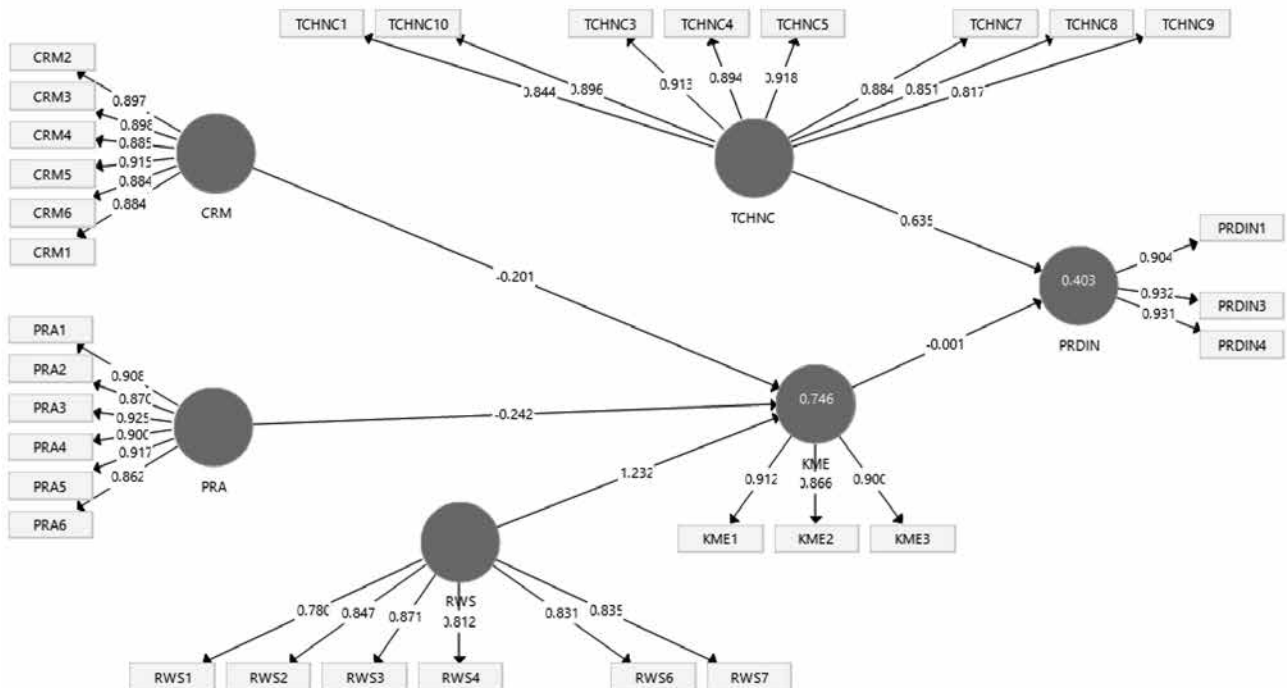


Figure 1. Measurement Model

Note: CRM= Career management, TCHNC= technological capability, RWS= reward system, PRA=performance appraisal, PRDIN= product innovation, KM= knowledge management

Table 1. Outer Loadings

	CRM	KME	PRA	PRDIN	RWS	TCHNC
CRM2	0.897					
CRM3	0.898					
CRM4	0.885					
CRM5	0.915					
CRM6	0.884					
KME1		0.912				
KME2		0.866				
KME3		0.900				
PRA1			0.908			
PRA2			0.870			
PRA3			0.925			
PRA4			0.900			
PRA5			0.917			
PRA6			0.862			
PRDIN1				0.904		
PRDIN3				0.932		
PRDIN4				0.931		
RWS1					0.780	
RWS2					0.847	
RWS3					0.871	
RWS4					0.812	
RWS6					0.831	
RWS7					0.835	
TCHNC1						0.844
TCHNC10						0.896
TCHNC3						0.913
TCHNC4						0.894
TCHNC5						0.918
TCHNC7						0.884
TCHNC8						0.851
TCHNC9						0.817
CRM1	0.884					

Note: CRM= Career management, TCHNC= technological capability, RWS= reward system, PRA=performance appraisal, PRDIN= product innovation, KM= knowledge management

The MM assessment consists of ICR determination, individual item reliability, discriminant and convergent validity (J Henseler & Ringle, 2009). Studies have suggested the grouping of the indicators into separate constructs to treat the potential effect of a large number of indicators. By checking the outer loadings of all constructs, this study has measured the Individual item reliability. ICR is known as the degree at which the similar idea was assessed by all items on a specific scale. In an organizational study, we generally use the coefficient of composite reliability (CR) and coefficient of Cronbach's alpha for the estimation of ICR of an instrument (Bagozzi, Yi, & Nassen, 1998). For the determination of the ICR of measures, the current study has used the coefficient of CR (see Table 1).

Table 2. Reliability

	Cronbach's Alpha	rho_A	CR	(AVE)
CRM	0.950	0.951	0.900	0.799
KME	0.873	0.874	0.902	0.797
PRA	0.952	0.953	0.901	0.805
PRDIN	0.912	0.915	0.905	0.851
RWS	0.911	0.924	0.830	0.689
TCHNC	0.957	0.960	0.864	0.771

Note: CRM= Career management, TCHNC= technological capability, RWS= reward system, PRA=performance appraisal, PRDIN= product innovation, KM= knowledge management

Compared to Cronbach’s alpha, the coefficient of CR gives the less biased reliability estimates whereas Cronbach’s alpha undertakes an equal contribution of all items to their constructs and doesn’t consider the genuine contribution of all loadings at the individual level. The Cronbach’s alpha may over or underestimate the reliability scale. According to research, indicators have different loadings that can be easy to understand as Cronbach’s alpha values. It doesn’t matter which particular reliability coefficient was used if ICR’s value is equal of greater than 0.70, is known as acceptable or satisfactory for a model. However, if the value of ICR is less than 0.60 its shows that no reliability is there (Kamarudin et al., 2020).

According to Sarstedt, Ringle, and Hair (2014), CV shows the extent at which the proposed latent construct is signified by the items and correlates with the different measures of similar latent construct. As per Fornell and Larcker (1981) suggestions, with the examination of Average Variance Extracted (AVE) of each latent construct, we can consider the CV. According to the suggestions of Sarstedt, Ringle, Henseler, et al. (2014) to get the good CV, for each latent construct, the value of AVE must be equal or greater than 0.50 (Table 3).

Table 3. Validity

	CRM	KME	PRA	PRDIN	RWS	TCHNC
CRM	0.894					
KME	0.870	0.893				
PRA	0.828	0.853	0.897			
PRDIN	0.865	0.868	0.856	0.822		
RWS	0.883	0.843	0.873	0.654	0.890	
TCHNC	0.689	0.796	0.708	0.635	0.875	0.878

Note: CRM= Career management, TCHNC= technological capability, RWS= reward system, PRA=performance appraisal, PRDIN= product innovation, KM= knowledge management

Fornell and Larcker (1981) have defined DV as the extent at which a specific latent construct is dissimilar from all other latent constructs and illustrated by a single construct. However, we can use AVE’s values to compare the correlations between the latent constructs by taking the square roots of AVE as recommended by (Fornell & Larcker, 1981) (see Figure 2).

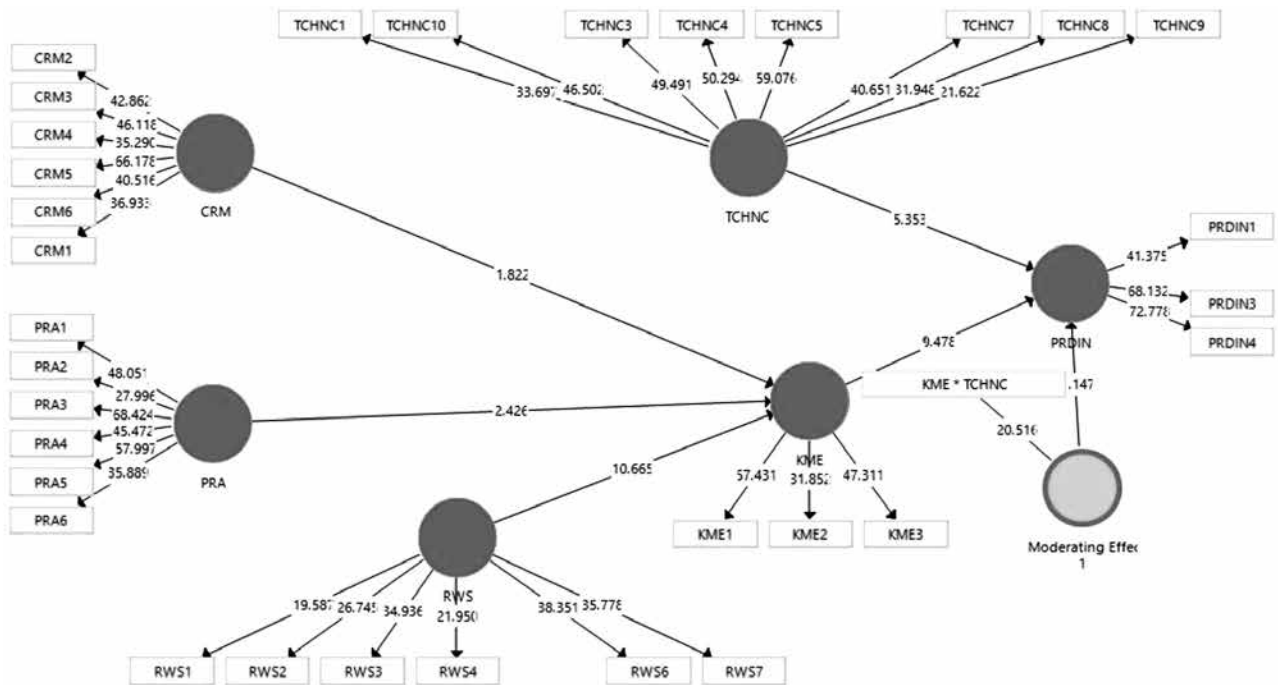


Figure 2. Structural Model

Note: CRM= Career management, TCHNC= technological capability, RWS= reward system, PRA=performance appraisal, PRDIN= product innovation, KM= knowledge management

After recognizing the MM, the structural model (SM) was evaluated in the next step. For checking the evolution of path coefficient significance, we have also applied the bootstrapping procedure by taking 5000 bootstraps and 310 cases (Sarstedt, Ringle, Henseler, et al., 2014). The results of the direct and moderating paths are shown in table 4. The results reveal the fact that all the paths are coefficient and significant.

Table 4. Direct Relationships

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
CRM -> KME	0.201	0.189	0.110	1.822	0.034
KME -> PRDIN	0.266	0.262	0.139	9.478	0.000
KME*TCHN -> PRDIN	0.375	0.275	0.065	3.147	0.000
PRA -> KME	0.242	0.228	0.100	2.426	0.008
RWS -> KME	0.232	1.210	0.116	10.665	0.000
TCHNC -> PRDIN	0.628	0.635	0.117	5.353	0.000

Note: CRM= Career management, TCHNC= technological capability, RWS= reward system, PRA=performance appraisal, PRDIN= product innovation, KM= knowledge management

The results of the mediation analysis are shown in table 5. The results indicate that all the mediating paths are positive and significant at p-value less than 0.05 (see Table 5).

Table 5. Mediation

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
CRM -> KME -> PRDIN	0.013	0.010	0.031	0.430	0.000
PRA -> KME -> PRDIN	0.016	0.016	0.036	0.443	0.000
RWS -> KME -> PRDIN	0.082	0.075	0.171	0.480	0.000

Note: CRM= Career management, TCHNC= technological capability, RWS= reward system, PRA=performance appraisal, PRDIN= product innovation, KM= knowledge management

There are some additional measures in PLS-SEM for the assessment of SM, such as the value of R-square which is also known as the coefficient of determination (Jörg Henseler, Ringle, & Sinkovics, 2009). R-square's value illustrates the proportional change in the dependent variable explained by one or more independent variables (see Table 6).

Table 6. R-Square

	R Square
KME	0.746
PRDIN	0.403

Note: PRDIN= product innovation, KM= knowledge management

The effects of latent variables on latent dependent variables were checked by effect size by the variations in the value of R-square. The values of R-square 0.35, 0.50 and 0.20 interpret the high, medium and low effects of SM (Figure 2).

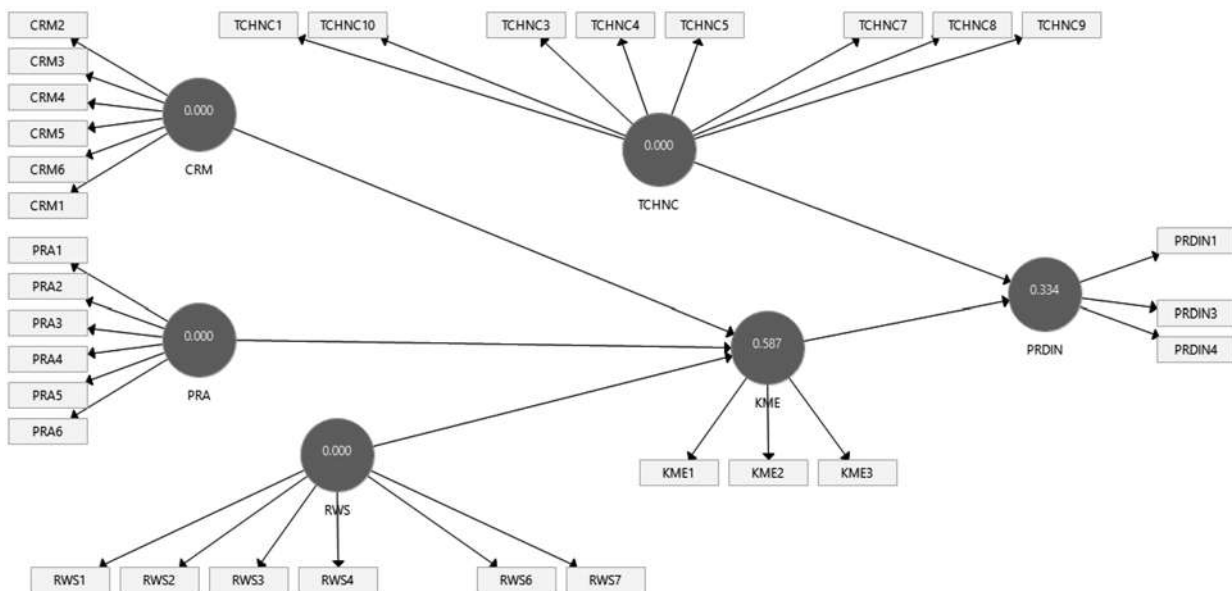


Figure 2. Blindfolding

Note: CRM= Career management, TCHNC= technological capability, RWS= reward system, PRA=performance appraisal, PRDIN= product innovation, KM= knowledge management

The indicators predictive relevance was checked by using the blindfolding procedure according to which the value of predictive relevance must be non-zero (See Table 7).

Table 7. Q-Square

	SSO	SSE	Q ² (=1SSE/SSO)
KME	651.000	268.678	0.587
PRDIN	651.000	433.715	0.334

Note: PRDIN= product innovation, KM= knowledge management

5. Conclusion

In the present era, organizations face immense pressure to survive in the international and local markets because of the intense pressure of globalization. In this scenario, it is important for organizations to keep innovating their product line. Innovation is the only way by which organizations can maintain their market share and expand as well. Therefore, the present study examined the impact of different HRM initiatives on creating knowledge management and enhancing product innovation of the organizations (Adewumi, 2020; Antoni et al., 2020; Altounjy et al., 2020; Dlalisa & Govender, 2020). Researcher of the present study found that career management of the employees working in manufacturing firms is very important to shape their behavior. If the employer helps these employees plan their career, they will be better able to share their skills and knowledge with other colleagues and subordinates. In the same vein, the employees' performance appraisal is also a key aspect of positively shaping their behavior regarding knowledge management. If an employee has the perception that he or she is fairly appraised in terms of his/her individual performance, that employee will develop trust in the organization. As a result, the organization's overall knowledge management effectiveness is improved (Abadía Alvarado & De la Rica, 2020; Bibi, 2020; Abdulateef et al., 2020; Akbar et al., 2020).

Another important HR tool for the management of employees is an effective reward system in the organization. Employees must be rewarded fairly in terms of monetary and non-monetary benefits. Their wages and other perks must reflect their individual tasks and performance of the past. As a result of these HRM strategies, manufacturing firms can enhance their effectiveness of knowledge management. For the regular innovation of the products, knowledge must be shared among employees on a regular basis. Every employee has a unique set of skills and knowledge. By sharing the skills and knowledge with other colleagues and team-mates, the organization's overall effectiveness is increased. Capability to innovate the products is also increased as well (Brichieri-colombi, 2020; Grajetzki, 2020; Abdil Zarrin et al., 2020; Abulela & Davenport, 2020). In the end, the study confirmed the moderating role of Technological capabilities of organizations. In the case of the latest technology available, the organizational capability of product innovation will increase. By providing new and innovative product lines, organizations can increase buyers' market share (Antoni et al., 2020; Berejena et al., 2020; Auriacombe & Sithomola, 2020; Basheka & Aurjacombe, 2020).

The present study has a few limitations as well. The model proposed in the present study can examine the direct impact of HR initiatives on product innovation. Moreover, the present study examined three HR initiatives to enhance the knowledge management effectiveness of the organization, and future studies should also focus on other HR initiatives as well. In the end, findings of the present study help the policymakers in the fiberglass manufacturing firms and HR practitioners use HR initiatives as part of their strategy for product innovation through knowledge management effectiveness.

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