Innovative Organizational Forms that Add Value to Both Organizations and Community: The Case of Knowledge Management

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Abstract:

The foundation of new economies has shifted from natural resources to intellectual assets and top managers have been forced to focus on Knowledge Management that has been acknowledged as the most important resource and capability of modern firms' advancement. Knowledge-creating companies may establish a sustainable competitive advantage in the turbulent business environment where markets shift, competitors multiply and products may be outdated almost overnight. Additionally, knowledge can help companies to enjoy improved levels of business competitiveness due to their ability to respond to their customers' needs, create new markets, develop innovative products and finally dominate ambitious technologies.

Through knowledge, conventional firms and organizations may break up their limitations, improve their national and local economic and social development and also create healthier employment chances. In this context, knowledge society can also be viewed as the society that is basically attached to knowledge acquisition, knowledge sharing and knowledge application in order to improve prosperity and well being of people.

The purpose of this paper is to analyze the ways knowledge management may increase the performance of modern firms and organizations, support the creation of more and better jobs and promote equal opportunities and gender equality in a more integrative society. Data from actual cases have been employed in order to provide an empirical support to the theoretical development of a conceptual model.

Key Words: Innovation, Knowledge Management, Human Capital, Competitiveness, Organizational Effectiveness

JEL Classification: M21

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1. Introduction

In recent years of turbulent and unpredictable business environment and market imperfections, there is a difficulty regarding the sources of firms' and organizations' competitive advantage. Modern firms, scanning and evaluating their turbulent external environments, have to coordinate their managerial initiatives so as to develop and advance their performance and finally to enhance their competitiveness. Firms and organizations should also be flexible and adjustable to the changing national and international market conditions in order to stay competitive and benefit from a continual managerial success.

In this challenging economic environment, there are a lot of chances for modern firms and organizations to achieve superior profits. It is also quite acceptable that firms can acquire strategic competitiveness and above average profitability rates, when the entire employees understand the organizational strategy, the intermediate goals and the ultimate targets. In fact, most leading firms succeeded in linking every employee to the overall strategic management process and their business success does not depend neither on research and development expenses nor on production and marketing strategies, on the contrary, their most important strategic advantage is mainly created due to their human resource innovative approaches. Successful firms proved to be more flexible and innovative, focused on current and future customer needs and more absorptive to pioneer organizational practices based on the knowledge economy.

This paper aims at analyzing the way knowledge management may increase the performance of modern firms and organizations, support the creation of more and better jobs and promote equal opportunities and gender equality in a more integrative society. Data from actual cases have been employed in order to provide an empirical support to the theoretical development of a conceptual model.

2. Applying Innovative Organizational Forms

In the new markets of intense competition at national and global level, many firms gained competitive success through human resource. Working with employees is really meaningful, as it is widely accepted that workforce is a firm's most valuable asset and so, by treating them with the proper care, the firm can outperform its competitors' success.

In recent years, it has been acknowledged that the identification of the skills and talents of the workforce, their utilization, their development and their communication within the organization is the key to create a competitive advantage. With the proper training, leadership and teamwork initiatives the organization can develop all employees' skills and abilities and exploit them within a continuously evolving corporate structure. In the rapidly changing knowledge-based economy, some researchers have paid attention to examine the determinants on the adoption of human resource practices (Tannenbaum & Dupuree-Bruno, 1994) and their effects on productivity and efficiency (MacDuffie, 1995), given their increasing importance to the competitive advantages of firms.

In the history of knowledge management, the creation of new knowledge and speeding it throughout the organization is perceived as the most integrated conceptual framework of knowledge creation and innovation, drawing the international scientific attention. The knowledge-based view concerns knowledge as a valuable resource of the firm (Grant, 1996; Spender, 1996). Many researchers have argued that creating knowledge is the basis of innovation and a vital source for producing business value (Novaka & Takeuchi, 1995) embodied in processes and services (Novaka, 1994). The knowledge creating process is a never ending process that upgrades itself continually over time. In other words, knowledge is developed and evolved through time and space and widened via formal and informal learning. This spiral process is applied across organization's boundaries providing a crosslevelling exploitation of knowledge.

Joseph Schumpeter is often mentioned as the first economist having drawn attention to the importance of innovation, which can result from technology transfer or through the development of new business concepts. Technology transfer is the process by which existing knowledge and capabilities developed under public Research and Development funding are used to fulfil public and private needs. The links between research and innovation, with the research laboratory being the optimal starting point, have been discussed in many studies. The knowledge sharing, as well as the sharing of facilities among public institutions and private organizations increases productivity, generates new industry, improves living standards and public services. Technology transfer from public research institutions can occur either by natural mechanisms, such as scientific publications, training of students or continuing education of employees already working in industry or by specific measures.

Machlup (1962) conducted a pioneering work on the 'knowledge economy', in which he attempted to identify the sectors in the United States economy with a heavy concentration on knowledge assets. In the same work, the production and distribution of knowledge sectors were presented. He classified knowledge education, production into six major sectors: R&D, artistic creation, communications media, information services and information technologies and he showed these to account for that they related to the largest sectoral share of GDP and employment in the economy. Thus, according to Machlup, the knowledge economy is a set of sectors, which intensely concentrate knowledge assets in both human and fixed capital.

As a matter of fact, 'knowledge infrastructure' and 'production structure' are distinctively different from country to country and they are fairly stable over time. In now days, it seems to be a common understanding amongst all scholars in the field that institutions play a central role in innovation systems. Indeed, they form the interactive learning processes in the economy and fulfil several important roles in relation to innovation activities.

3. The Role of Knowledge Management

The preceding arguments suggest that organizations can use strategic human resource practices to influence the behaviour and expectation of employees and add greater value to organizational performance and community's welfare. Through effective strategic human resource practices in terms of staffing, training, participation, performance appraisal and employees' rewards, organizations could cultivate the level of capacity in knowledge acquisition, sharing and application, which in turn improves employees' performance, as well as organizational performance.

However, employees are often unwilling or unable to share their knowledge and expertise with others because of self interests and lack of trust (Currie and Kerrin, 2003). Accordingly, it is important for firms and organizations to harness the involvement and participation of employees through knowledge management. Thus, knowledge management has been gaining ground in the management agenda. Modern firms and organizations have realised that caring for organisational knowledge is perhaps the only way to enhance innovation and achieve sustainable competitive advantage in the contemporary business environment. Therefore, *strategic human resource practices relate positively to knowledge management capacity (Hypothesis 1)*.

An organization's performance is closely tied to its ability to utilize its knowledge resources (Subramaniam and Youndt, 2005). Knowledge management is the process of creating, capturing and using knowledge to enhance organizational performance. It is an approach to adding or creating value by more actively leveraging the know-how and expertise resided in individual minds. Thus, knowledge management has been acknowledged as the most important resource of capability of an organization. It is a determinant factor for business success and effectiveness and a source of competitive advantage (Davenport and Prusak, 1998). A number of researchers suggest that in many successful firms, the most valuable strategic advantage may be related to their human factor polices and practices.

Mayo (2001) suggests that employees bring their own human capital to firms and by working together rather than as independent contributors, they can create more added value for the firm or the organization. The overall business strategy determines the design of the human resource policies and practices, which cultivate the knowledge management capacity in terms of knowledge acquisition, sharing and application. Thus, organizations would enhance their capability in introducing new products, services and management system, which influence directly employees' talents, skills and motivation, the structure and design of their work and so on. All the above factors influence employee's behavior, their job satisfaction and performance. Therefore, *knowledge management capacity relates positively to the employees' improvements (Hypothesis 2)*.

However, in recent years, there is a growing concern about who is becoming empowered by learning new competences and who is not. Indeed, human intelligence inequities and differential opportunities to learn establish the fundamental differentiation between people. All human capital should have equal opportunities to be included in the process of capacity building. Thus, knowledge management strategies have been developed in order to promote the learning society through joint efforts and integrated actions on innovation, competence building and social cohesion, by enabling people to have a sense that they are members of the same community. Building shared values, reducing disparities in wealth and income, improving female and youth employment, promoting voluntarity, social participation and employment of disabled people, creating green jobs and generally enabling people to have a sense that they are engaged in a common enterprise, facing shared challenges and having equal opportunities to be included in the process of capacity building facilitates the goal of social and economic well-being of the community. Thus, employees' improvements lead organizations to operating performance and future sustainable success and also add value to the community by improving the social and economic well-being of people. Therefore, employees' improvements relate positively to the organizational performance, as well as to the economic and social well-being of the community (Hypothesis 3).

In this study, the validity of all the above hypotheses has been tested, by using data from actual cases, in order to provide an empirical support for the theoretical development of the conceptual model.

4. A Test of Three Hypotheses

The central concern of the present study is the empirical examination of the role of knowledge management in improving integrated actions of organizations and community. This relation is examined by using data from actual cases in an attempt to provide an empirical support for the theoretical model, according to which the innovative organizational forms improve employees' talents, skills, motivation, their job satisfaction, the structure and the design of their work and so on leading to organizational improvement, as well as to economic & social well-being of the community.

More specifically, this research study employs a questionnaire survey approach to collect data for testing the validity of three hypotheses of the theoretical model. The questionnaire was addressed to a number of firms in the region of Attica (Greece). Variables in the questionnaire include background information, strategic human resource practices, knowledge management capacity and integrated actions on organizations and community.

The results suggest that aproximately 58% of the managers develop human resource practices, as they believe that improved organizational performance, as well as community's economic and social well-being could be achieved, if firms and organizations have well-developed staffing, training, participation, performance appraisal and compensation practices.

Figure 1 illustrates the innovative organizational forms employed by modern organizations in order to improve their performance and enhance community's economic and social well-being.

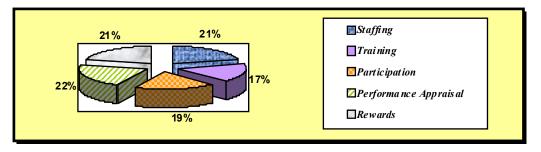
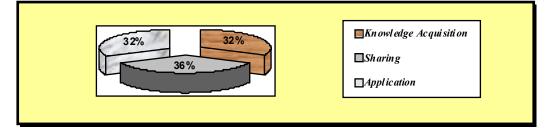


Figure 1. Strategic Human Resource Practices

As shown in Figure 1, the findings indicate that firms mainly focus on performance appraisal, compensation and staffing in order to improve employees' performance and therefore promote organizational performance.

Furthermore, Figure 2 shows the results of our analysis concerning the effects of strategic human resource practices on knowledge management capacity. The findings indicate that a higher level of knowledge management capacity could be achieved, if firms seek to attract and select 'premium workers', invest more in training programmes, give employees more opportunities of participation and align performance appraisal and compensation systems to encourage employees to contribute their knowledge and expertise. Especially sharing seems to play a significant role in the process of creating knowledge management capacity for most of the firms of our sample.

Figure 2. Knowledge Management Capacity



Thus, as far as innovative organizational forms are concerned, a number of variables such as staffing, training, employee participation, performance appraisal and rewards are statistically examined in relation to the variables of knowledge acquisition, knowledge sharing and knowledge application. The statistical analysis includes the calculation of Spearman rank correlations between each pair of variables of the model. The estimated coefficients measure the strength of the

association and demonstrate a positive relation between each pair of variables. The results of these statistics are presented in Table 1. P-values have also been estimated in order to test the statistical significance of the estimated correlations and they all found to be below 0.05 indicating statistically significant non-zero correlations at the 95% confidence level.

VARIABLES	KNOWLEDGE ACQUISITION			KNOWLEDGE SHARING			KNOWLEDGE APPLICATION		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
STAFFING	0,343	0,450	0,218	0,468	0,513	0,374	0,478	0,415	0,497
TRAINING	0,487	0,563	0,400	0,457	0,520	0,351	0,394	0,415	0,319
PARTICIPATION	0,601	0,643	0,538	0,562	0,606	0,486	0,621	0,602	0,599
PERFORMANCE APPRAISAL	0,474	0,461	0,478	0,418	0,391	0,420	0,371	0,377	0,330
REWARDS	0,623	0,761	0,535	0,486	0,556	0,405	0,527	0,622	0,428

 Table 1. Spearman Rank Correlations

Specifically, as far as the variable of *staffing* is concerned, it was found to be correlated positively and strongly to the knowledge application and knowledge sharing. It was also found to be correlated positively, but moderately, to knowledge acquisition. When the gender factor was taken into account, the Spearman rank correlations were more or less the same. In the case of men, all three variables were found to be strongly correlated to staffing: knowledge sharing, knowledge acquisition and knowledge application, while in the case of women, only knowledge application was found to be strongly correlated to staffing and knowledge sharing was found to be positively, but to a moderate degree, correlated to staffing.

Training, on the other hand, was found to be strongly and positively correlated to knowledge acquisition and knowledge sharing. It was also found to be positively related, but to a moderate degree, to knowledge application. In the case of men, all three variables were found to be strongly correlated to training: knowledge acquisition, knowledge sharing and knowledge application, while in the case of women, the variable that is strongly correlated to training is the knowledge acquisition and the variables of knowledge sharing and knowledge application were found to be positively, but moderately, correlated to training.

Employees' *participation* appeared to have a positive and strong correlation with knowledge application, knowledge acquisition and knowledge sharing. It is worthwhile to mention that in the case of men, the knowledge acquisition, knowledge application and knowledge sharing variables were strongly correlated to employees' participation and in the case of women, the variables knowledge application, knowledge acquisition and knowledge sharing were also found to be strongly correlated to employees' participation.

Performance appraisal was found to have a positive and strong correlation with knowledge acquisition and knowledge sharing. It was also found to be correlated positively, to a moderate degree, to knowledge application. In the case of men, the variable that was strongly correlated to the performance appraisal is knowledge acquisition and the variables of knowledge sharing and knowledge application were found to be positively correlated to the performance appraisal, but to a moderate degree. In the case of women, the variables that were strongly correlated to performance appraisal are knowledge acquisition and knowledge sharing, while the knowledge application variable is positively, but moderately, correlated to the performance appraisal variable.

The employees' *rewards* variable appeared to be correlated positively and strongly to knowledge acquisition, knowledge application and knowledge sharing for both genders. Especially for men, the variables knowledge acquisition and knowledge application proved rather strongly correlated to employees' rewards. On the other hand, when the women were taken into account, the variable that is most strongly correlated to employees' rewards was knowledge acquisition.

Accordingly, the results moderately support *Hypothesis 1*, which states that strategic human resource practices relate positively to knowledge management capacity.

Furthermore, the variables of knowledge acquisition, knowledge sharing and knowledge application are also examined in relation to a number of other variables, which are perceived as contribute their beneficial effects on organizational improvement and community's well-being, namely the employees' talents and skills, motivation, the structure and the design of their work, employees' job satisfaction, their behaviour and performance. The findings suggest that a higher level of organizational effectiveness is achieved, when organizations well develop their knowledge management capacity in acquisition, sharing and application. All three factors of knowledge management capacity have significant effects on employees' talents, skills, motivation, the structure and the design of their work, their job satisfaction, behaviour and performance, thus promoting organizational improvement and community's economic and social well-being. Accordingly, the results support *Hypothesis 2*.

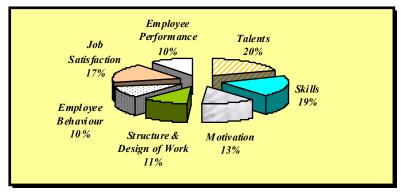


Figure 3. Employees' Improvements

Figure 3 presents employees' improvements in terms of talents, skills, motivation, structure and design of their work, behaviour, job satisfaction and performance resulting from the development of the knowledge management capacity of firms.

The statistical results of the correlations between each pair of variables are presented in Table 2. The estimated P-values are all below 0,05 indicating the statistical significance of the estimated non-zero correlations at the 95% confidence level. According to these findings, *knowledge acquisition* was found to be positively and strongly correlated to the job satisfaction of employees, their behaviour, motivation, the structure and design of their work and the employee performance. Moreover, it was found to be correlated positively, but to a moderate degree, to employees' talents and skills. Similar results were obtained, when the gender factor was taken into account. In the case of men, the following four variables were found to be strongly correlated to knowledge acquisition: job satisfaction, the structure and the design of work, employee behaviour and motivation, while in the case of women, the variables that were strongly correlated to knowledge acquisition are the job satisfaction, employee behaviour, motivation, performance and employees' talents and skills.

VARIABLES	KNOWLEDGE ACQUISITION			KNOWLEDGE SHARING			KNOWLEDGE APPLICATION		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
TALENTS, SKILLS	0,389	0,320	0,406	0,330	0,255	0,323	0,455	0,377	0,480
MOTIVATION	0,517	0,613	0,449	0,545	0,556	0,506	0,575	0,604	0,528
STRUCTURE & DESIGN OF WORK	0,515	0,678	0,396	0,592	0,541	0,570	0,536	0,597	0,435
EMPLOYEE BEHAVIOUR	0,563	0,670	0,476	0,623	0,690	0,522	0,585	0,570	0,557
JOB SATISFACTION	0,656	0,688	0,688	0,711	0,671	0,722	0,545	0,603	0,471
EMPLOYEE PERFORMANCE	0,425	0,393	0,415	0,516	0,328	0,632	0,410	0,413	0,343

Moreover, the *knowledge sharing* was also found to be rather strongly and positively correlated to the employees' job satisfaction, as well as to employees' behaviour. It was also found to be correlated strongly and positively to the structure and the design of employees' work, motivation and employee performance. Finally, it was found to be positively correlated, but to a moderate degree, to employees' talents and skills. Moreover, when the gender factor was taken into account, the Spearman rank correlations were found to be quite comparable. In the case of men, the following four variables were found to be strongly correlated to knowledge sharing: employee behaviour, job satisfaction, motivation and the structure and design of work, while in the case of women, the variables that were rather strongly correlated to knowledge sharing are the job satisfaction and employee performance, as well as three other variables were strongly correlated to knowledge sharing: the structure and design of work, employee behaviour and motivation.

Furthermore, the *application of knowledge* was found to be positively and strongly correlated to the employee behaviour, motivation, job satisfaction, the structure and the design of employees work, as well as their talents, skills and performance. Similar results were obtained, when the gender factor was taken into account. Specifically, in the case of men, the following five variables were found to be strongly correlated to the application of knowledge: motivation, job satisfaction, the structure and the design of employees work, employee behaviour, as well as the employee performance, while in the case of women the variables that were strongly correlated to the knowledge application variable are the employee behaviour, motivation, talents and skills, job satisfaction and the structure and design of work.

Finally, the entire set of the above mentioned variables, referred as employees' improvements, is examined in relation to the variable in quest: the organizational improvement and economic & social well-being. Figure 4 shows the results of our questionnaire analysis concerning these effects in terms of building shared values, improving female and youth employment, promoting social participation, enabling people to have a sense that they are engaged in a common enterprise, facing shared challenges and having equal opportunities to be included in the process of capacity building.

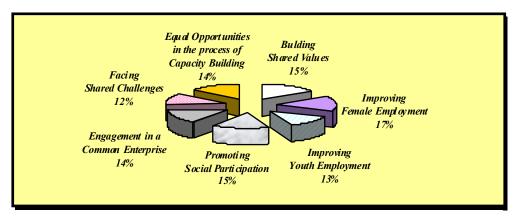


Figure 4. Integrated Actions on Organizations and Community

The results of the statistical analysis are presented in Table 3. The Spearman rank correlations have been estimated in order to test the validity of *Hypothesis 3*. The calculated P-values are all below 0,05 indicating statistically significant non-zero correlations at the 95% confidence level. According to these results, the variable of the *organizational improvement and community's economic & social*

well-being was found to be strongly and positively correlated to the variables of motivation, job satisfaction, employee behaviour, talents, skills and the structure and design of employees work, as well as to employee performance with a positive moderate relation. When the gender factor was taken into account, the Spearman rank correlations were found to be similar. In the case of men, the following five variables were found to be strongly correlated to the variable of *organizational improvement and community's economic & social well-being*: motivation, employee behaviour, the structure and design of employees work, job satisfaction, as well as the talents and skills, while in the case of women, the four variables that were strongly correlated to *organizational improvement and community's economic & social well-being* are the job satisfaction, motivation, employees' talents and skills and the employee behaviour.

VARIABLES	ORGANIZATIONAL IMPROVEMENT AND ECONOMIC & SOCIAL WELL-BEING					
	Total	Male	Female			
TALENTS, SKILLS	0,456	0,479	0,452			
MOTIVATION	0,526	0,561	0,507			
STRUCTURE & DESIGN OF WORK	0,402	0,520	0,293			
EMPLOYEE BEHAVIOUR	0,501	0,553	0,450			
JOB SATISFACTION	0,514	0,519	0,539			
EMPLOYEE PERFORMANCE	0,313	0,332	0,279			

Table 3. Spearman Rank Correlations

Therefore, the results of the questionnaire analysis indicate that strategic human resource practices are positively related to knowledge management capacity which, in turn, has a positive effect on employees' performance. These findings provide evidence that innovative organizational forms add value to both organizations and community. As shown in Figure 5, indeed 64% of the questionnaire sample supports the above statement of the theoretical model by responding positively to the question concerning the improvements in organizations and the community's well-being. However, there is a number of other factors (including financial support) affecting significantly socio-economic improvements. All these factors should be taken into account in measuring the concept of economic and social well-being.

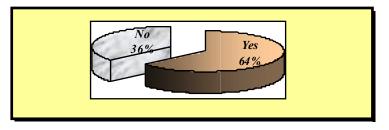


Figure 5. Organizational Improvement and Economic & Social Well-being

Thus, the results of our questionnaire analysis, concerning the role of innovative organizational forms for the performance of modern firms, as well as the economic and social well-being of community, suggest that organizations mainly focus on human resource practices and use knowledge management in order to improve employees' talents, skills, motivation, the structure and the design of their work, their behaviour, job satisfaction and performance and therefore promote and enhance organizational performance and community's well-being.

More specifically, the findings of the present study indicate that knowledge acquisition, knowledge sharing and knowledge application play a significant role in the process of improving both individual and organizational performance for most of the firms of the sample. Additionally, supporting employees' participation and promoting their motivation, enable people to face shared challenges and equal opportunities, conditions that may lead to a higher level of performance of modern organizations, as well as to economic and social well-being of people.

Therefore, according to the above results, the application of innovative organizational forms contribute their beneficial effects on performance improvements, through knowledge acquisition, knowledge sharing and knowledge application. These findings highlight the critical role of human resource practices, as well as the mediating effect of knowledge management capacity to adding value to both organizations and community.

5. Policy Implications and Conclusion

Current business environment and new changing competitive markets are characterized by increased competitiveness. Firms and organizations are meeting an extreme pressure to survive, searching for sustainable competitive advantages beyond traditional approaches that centred mainly on physical and financial assets. The recognition of the shift of competitive advantage to encounter human factor policies and practices has completely altered the traditional frameworks of management and strategy. The overall business strategy determines and properly designs human resource practices, which influence directly employees' skills, motivation and empowerment, the structure and the design of their work and so on, leading to improved national and international competitiveness and the modernization of organizations. In this study we seek to examine the role of knowledge management in promoting competitiveness and modernization of organizations, as well as the economic and social well-being of the community. The results are rather suggestive and demonstrate that knowledge management capacity is a mediating mechanism through which strategic human resource practices benefit modernization and competitiveness of organizations. These findings suggest that there is a special need to invest in the knowledge management capacity of organizations, thus supporting the mediating effect of knowledge management capacity in the relationship between human resource practices and organizational performance and therefore enhance economic and social well-being of the community.

In practice, if nothing is done to upgrade the skills of workers, a growing proportion of the labour force will disappear from the labour market with bottleneck problems as a result. Moreover, another even more difficult challenge of modern communities is to integrate workers with a different cultural background into the labour market. Indeed, it becomes increasingly important to give special emphasis to the problems of integrating workers in an attempt to promote socio-economic cohesion and the social and economic well-being of people in the community.

Thus, the practical implication of the results of the present research study is that managers need to actively manage their firm's human capital through a variety of human resource practices in order to stimulate its capacity in managing knowledge acquisition, sharing and application. This kind of initiatives could also stimulate creative and innovative thoughts that may eventually lead to better performance and also establish and fully exploit a source of sustainable competitive advantage in the new competitive markets. In other words, managers need to recognize the importance of knowledge management, which facilitates modernization and enhance competitiveness of modern firms and organizations. They should utilize strategic human resource practices to cultivate a better level of knowledge management capacity, which in turn will result in favourable outcomes, as well as in modernization and competitiveness of the organizations and the wellbeing of people in the community.

Most managers of the leading firms have accepted the attitude that their employees are their most significant asset, a source for creating strategic competitive advantage and the safest path for their corporate expansion and growth. It is also accepted that applying innovative organizational forms in business can guarantee the future of already acquired business success.

The findings of the present study, hopefully, contribute to the theoretical development of a conceptual model for explaining the relationship among innovative organizational forms and organizational performance, as well as community's welfare by providing an empirical support using data from actual cases.

Therefore, policymakers should encounter society's knowledge management capacity as a mediating factor in examining the strength and direction of the relationship between human resource practices and social and economic well-being of community. However, more research is needed on the determinants of economic and social well-being, focusing on historical accidents, initial conditions, natural resource endowments and so on, as well as on the ways in which they can be fostered efficiently and effectively, so as a better economic and social performance to be achieved.

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