

The Mediating Role of Empowerment on the Relationship Between Organizational Culture and Innovation Performance

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ABSTRACT

Purpose: The purpose of this study is to determine organizational cultures and innovation performance mediating effect of empowerment by examining a set of manufacturing firms.

Methodology: The research data was collected via questionnaire from 821 employees and different levels of managers in 85 manufacturing companies. In this study questionnaire form was used as data collection method.

Findings: The findings show that there is a significant relationship between different organizational cultures features empowerment and innovation performance. It is also found that only adhocracy culture directly supports innovation performance and it is determined as the most important predictor of innovation performance.

Practical Implications: Empowerment full mediate the effects of clan, hierarchy and market culture that support innovation performance. The findings indicate that not only adhocracy culture but also other organizational cultures (clan, hierarchy and market) support innovation performance when empowered their employees.

Originality: This paper is aimed to provide not only theoretical study but also practical results This study has shown that innovative performance in different organizational cultures can be achieved.

Keywords: Organizational Culture, Innovation Performance, Empowerment

JEL Codes: M14, O30, M12, M10

Örgüt Kültürü ve Yenilik Performansı İlişkisinde Güçlendirmenin Ara Değişken Etkisi

Öz

Amaç: Bu çalışmanın amacı, imalat firmalarında örgüt kültürlerinin yenilik performansına etkisinde çalışanı güçlendirmenin ara değişken etkisi ortaya koymaktır.

Yöntem: Araştırma verileri, 85 imalat firmasında 821 farklı seviyelerdeki çalışan ve yöneticilerden toplanmıştır. Araştırmada veri toplama yöntemi olarak anket formu kullanılmıştır.

Bulgular: Araştırma bulguları farklı örgüt kültürü özelliklerinin, güçlendirme ve yenilik performansı arasında anlamlı bir ilişki olduğunu göstermektedir. Sadece adhokrasi kültürünün yenilik performansını doğrudan desteklediği ve yenilik performansının en önemli belirleyicisi olduğu belirlendi.

Sonuç ve Öneriler: Güçlendirme klan, bürokrasi ve pazar kültürlerinin yenilik performansına etkisinde tam ara değişken etkisini göstermiştir. Çalışma sonuçları çalışanlar güçlendirildiğinde, sadece adhokrasi kültürünün değil diğer örgüt kültürlerinde (klan, bürokrasi ve pazar) yenilik performansını desteleyeceğini göstermiştir.

Özgün Değer: Bu makalede sadece teorik çalışma değil, aynı zamanda pratik sonuçlar sağlanması amaçlanmıştır. Bu çalışma ile farklı örgüt kültürlerinde yenilikçi performans sağlanabileceğini göstermiştir.

Anahtar Kelimeler: Örgüt Kültürü, Yenilik Performansı, Güçlendirme

JEL Sınıflandırması: M14, O30, M12, M10

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1. Introduction

Innovation is a key driver of economic development and plays a crucial role in competition at both the national and firm levels. Prior literature proposes a positive link between innovation and a range of desired performance outcomes (Hogen and Coote, 2014). Along with globalization, rapidly changing technology has created a challenging and intense competition environment. Companies must maintain sustainable competitive advantage in terms of their products and services. It has become necessary for organizations to improve their ability to innovate in order to sustain and improve their activities (Rodriguez, Hechanova and Regina, 2014). Today's harsh market conditions have led organizations to struggle for distinctive ways of increasing their effectiveness. It has been seen that the focus of organizational culture has been more limited to innovation performance. However, in the course of the time, both empowerment and innovation in the long-term outcomes themselves become two main constituents of firm effectiveness (Black and Porter, 2000). In order to manage the effectiveness of a firm, the antecedents of effectiveness should be revealed. In this context, the factor of organizational culture becomes outstanding when the related literature has been examined (Denison and Mishra, 1995; Quinn and Spreitzer, 1991; Frazier et al, 2004). This study attempts to exemplify and prove the significant relationship between organizational culture and innovation performance throughout the samples acquired from a developing country, Turkey.

Previous work on organizational culture and effectiveness relationship put efforts to characterize organizational culture in order to demonstrate its impacts on organizational outcomes. One of the most adapted theories in these researches is Denison's theory of organizational culture and effectiveness (Denison, 1997). According to Denison's theory of organizational culture and effectiveness, there are four main cultural traits; Involvement, consistency, adaptability and mission, which collectively determine the capability of organization to deal with its adaptation to external environment and integration of internal efforts (Yılmaz and Ergun, 2008). As asserted by Denison and Mishra (1995), culture affects various performance indicators in multiple ways and each cultural trait affects some specific performance indicators by its own way.

Another available conceptualization of organizational culture is Competing Values Framework (CVF), which was developed by Quinn and his colleagues (Qu-

inn et al., 1990). CVF is the most popular approach in assessing the organizational culture and it is also used in this study.

In this study, we aim to deeply analyse this relationship by exploring effects of organizational culture and empowerment on innovation performance. We intend to do this by empirically examining the mediating effects of empowerment on innovation performance. In the literature, many studies demonstrate the relationship between organizational culture and innovation remarkable, however the reasons underlying this relationship and the ways culture effects innovation have not been sufficiently enlightened yet. As researchers suggest, mediating variables might be considered as concepts that provide insights about how and why independent variables effect the dependent variable (Frazier et al, 2004), this study attempts to offer one possible mechanism that can explain details of the relationship between culture and innovation performance. In addition, a few studies are emphasized mediating roles of empowerment in this relationship, as this is the core determinants of organizational culture (Despande and Farley, 2004; Çakar and Ertürk, 2010, Yıldırım and Karabey, 2016). Also, very little research has investigated the relationship between organizational culture and empowerment that lead to innovation performance.

Generally organizations begin with adhocracy culture. Adhocracy culture is characterized low power distance values and high empowerment managerial practices. Power distance values of organizations increase in the following years, because of growth, complexity, hired professional managers. Also, some national cultural values effect this situation. Another point we have seen in our practical applications; second generation company owners are applying high power distance to employees to build power and establish authority. However, it is envisaged that the entrepreneurship and innovative tendency of the companies which are growing with the effective empowerment and managed by the new generation will increase.

2. Theoretical Background

2.1. Organizational Culture

Culture has long been a sociological and/or anthropological concept to understand and compare different national characteristics. It is also however an organizational concept that has been widely used in recent studies on manage-

ment and organizations. Organizational culture briefly defined by Deal ve Kennedy (1982) as “the way we do things around here” helps the employees to clearly understand and adopt to the basic assumptions, the pattern of human interactions, and the way of identifying and solving problems within the organizational boundaries (Schein, 2010). Hofstede (2010) defined culture is “the collective programming of the mind which distinguishes the members of one group or category of people from another”.

Reviewing the vast literature on culture, it is apparently seen that organizational culture consists of some layers ranging from core assumptions as the deepest level, to beliefs and values as the intermediate level, and to norms and artifacts as the surface level (Schein, 2010; Denison and Mishra, 1995). Organizational culture reflects underlying assumptions, beliefs and expectations within the organization. It involves set of unwritten rules that guide the behaviours and the actions in the organization. Because of its nature, organizational culture is difficult to detect. It is reflected by dominant leadership styles, processes, procedures, values and the definition of success within the organization (Hofstede, 2010; Cameron and Quinn 1999). According to Denison (2000) basic cultural assumptions occupy the central place in the organizational culture. It is difficult to observe and measure them directly; however, they are reflected in the actions of the organizational actors (Schein, 2010).

With the beginning of the 1980s, organizational researchers started to pay more attention to the concept of culture. Unlike the other research areas in which researchers mainly focus on explaining and documenting organizational phenomena, studies in organization culture area mainly focus on providing guidance to management in their efforts to improve organizational performance. An organization’s culture strongly influences employees’ behaviors beyond formal control systems, procedures, and authority (O’Reilly, Chatman and Caldwell, 1991). As such, organizational culture is a powerful means to elicit desired organizational outcomes (Hogan and Coote, 2014).

2.2. *Quinn and Cameron’s Theory of Organizational Culture (Competing Values Framework-CVF) and Innovation: An Overview*

Each organization is the combination of different subunits such as departments and hierarchical levels. These subunits have their own unique cultures

(Hatch, 1993; Martin, 1992). The cultural differences among subunits of the organization are the main sources of conflicts and difficulties faced by management in coordinating organizational activities. However, there are also common elements exist which are shared by all subunits and bring the organization together.

In literature, because of the complex and broad nature of culture, various dimensions have been proposed in assessing organization culture. Each dimension has relevant points and this triggers the need for a proper framework, which can combine and organize various dimensions. CVF is such a framework, which is empirically validated and can integrate various dimensions.

CVF uses two dimensions to measure the organizational culture and to demonstrate the cultural differences across organizations. Some organizations viewed as effective when they are changing and adapting and some other viewed as effective when they are stable and predictable. The first dimension is flexibility and stability, which is the measure of the control on the decisions within in the organization. This dimension ranges from organizational versatility to organizational durability. Organizations in which the employees have roles in the decision-making process are considered displaying high levels of flexibility whereas the organizations in which top management extensively holds control are considered as being strongly attached with organizational core values and show high levels of stability (Cameron and Quinn, 1999).

The second dimension measures the internal and external focus of the organization. Some organizations viewed as effective if they obtain harmony inside the organization and some other viewed as effective if they aim to compete with other organizations. While internal focus indicates organization's emphasis on internal factors, external focus puts organization's capability of adapting its environment front (Cameron and Quinn, 1999).

These two dimensions form four quadrants. Each quadrant represents different set of indicators related with organizational outcomes. These four core values represent competing assumptions. As it is demonstrated in Figure 1, opposite values exist at each end of the continuum. Therefore, quadrants on the diagonal are competing and opposite of each other. Upper right quadrant values flexibility and external focus while lower left quadrant emphasizes stability and internal focus. These four quadrants are labelled as, clan, adhocracy, hierarchy and market.

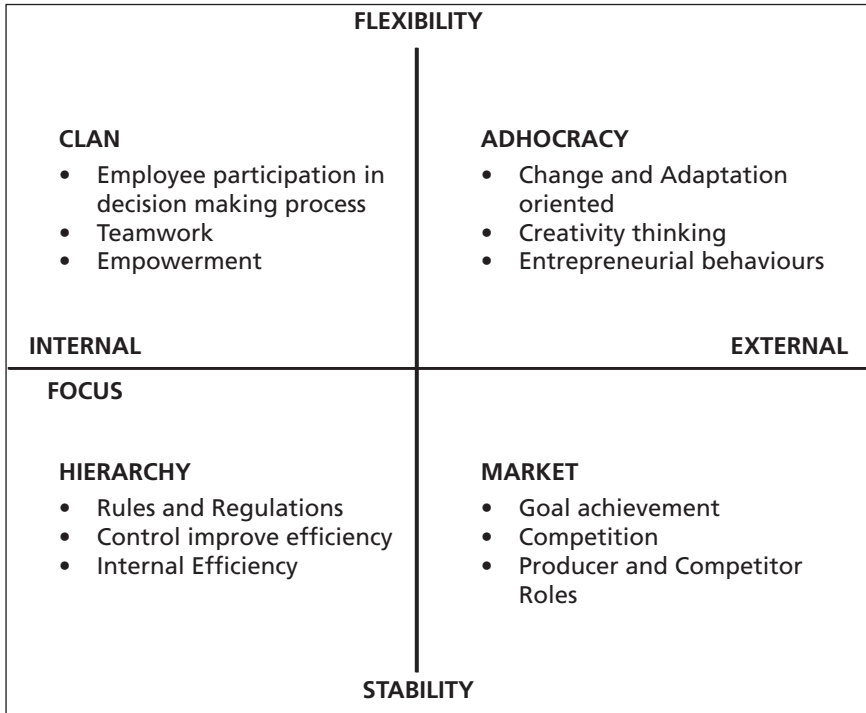


Figure 1. Quinn and Cameron's competing values framework

CVF also captures the paradoxical nature of organization management. The four cultural domains in CVF represent competing assumptions. Clan culture is the one identified with high levels of flexibility and internal focus. In this cultural domain, employee participation in decision-making process, teamwork and empowerment are supported. Being a group member is a strongly held value among the members of the organization (Cameron and Freeman, 1991). The clan culture is typified as a friendly place to work where people share a lot of themselves. It is like an extended family with best friends at work. Leaders are thought as mentors, coaches, and, perhaps, even as parent figures. The success of clan culture is defined in terms of internal climate and concern for people. The organization places a premium on teamwork, participation, and consensus (Cameron and Quinn, 1999; Taşgıt and Ergün, 2013).

Adhocracy culture is the one identified with high levels of flexibility and external focus. This culture is change and adaptation oriented. Members are

encouraged for creative thinking and entrepreneurial behaviours are appreciated (Cameron and Freeman, 1991). The adhocracy culture is characterized as a dynamic, entrepreneurial, and creative workplace. People stick their necks out and take risks. Effective leadership is visionary, innovative, and risk-oriented. The glue that holds the organization together is the commitment to experimentation and innovation. The success of adhocracy culture means producing unique and original products and services (Cameron and Quinn, 1999; Taşgit and Ergün, 2013).

Hierarchy culture is the one identified with high levels of stability and internal focus. Internal efficiency is the main focus of the organizations. Behaviours and actions are strictly controlled by rules and regulations. Management believes control improves efficiency (Cameron and Freeman, 1991). The hierarchy culture is characterized as a formalized and structured place to work. Procedures and well-defined processes govern what people do. Effective leaders are good coordinators, organizers, and efficiency experts. The success of hierarchy culture is defined in terms of stability, predictability, and efficiency. Formal rules and policies hold the organization together (Cameron and Quinn, 1999; Taşgit and Ergün, 2013).

Market culture is the one identified with high levels of stability and external focus. Organizations in this cultural domain try to achieve goals and direct their members' actions aligned with this purpose (Cameron and Freeman, 1991). The market culture is a results-oriented workplace. Leaders are hard driving producers, directors and competitors. They are tough and demanding. The success of the market culture is defined in terms of market share and penetration. Outpacing the competition, escalating share price, and market leadership dominate the success criteria (Cameron and Quinn, 1999; Taşgit and Ergün, 2013).

These four cultural domains are associated with different types of leadership roles (Hooijberg and Choi, 2001) and key management theories. Leader types we generally observe in group culture are facilitator, mentor and parent while innovator, entrepreneur and visionary role are mostly used in adhocracy culture. Leaders in hierarchy culture often use coordinator, monitor and organizer roles whereas leaders in market culture use hard-driver, competitor and producer roles.

Previous researches provide empirical evidence for the culture's impact on organizational performance (Quinn and Spreitzer, 1991 Cameron and Freeman,

1991, Çakar and Ertürk, 2010). Each cultural domain has effects on different performance indicators and each domain influences these indicators in its own way. For instance, organizations with market culture value goal achievement and management are concerned with productivity, profits and competition. Therefore, these organizations are expected to be successful in quantitative performance indicators such as market share, sales growth and other financials. On the other hand, clan culture emphasizes cohesion among members. Employee participation and level of empowerment are high in such organizations, which means a high probability of success in quality indicators as involvement and empowerment are important determinants of total quality management. In addition, we expect employee satisfaction to be high. In hierarchy culture, the environment is stable and procedures govern the actions of the members. The decision-making process is clear and depends on standard rules. The long-term concern is stability and efficiency. Lastly, adhocracy culture highlights the concept of innovation (Despande ve Farley, 2004). Effective leaders are visionary, innovative and risk-oriented. In other words, we could assert that these organizations could be more efficient in new product development as the long-term concern on accessing new resources and rapid growth is emphasized. That's to say, these organizations are expected to be more successful in innovation performance.

A similar approach can also be found in Denison's theory of organizational culture and organizational performance. Involvement trait facilitates flexibility, integration and creativity hence we expect organizations with high score in involvement to be successful in a task, which requires these aspects such as quality improvements (Denison, 1997). On the other side, consistency trait focuses on common beliefs and values thus decreasing the need for control systems by facilitating coordination and communication (Yılmaz and Ergün, 2008, Deal and Kennedy, 1982). Adaptability trait improves the transformation of information from customers and environment to the organization itself. Accordingly, we expect organizations with high score on adaptability to be successful in new product development. Mission trait emphasizes stability and external focus and facilitates the clear understanding of organizational goals among members. Therefore, it is considered to be strongly related to financial performance indicators and market share.

With conditions and environments in which organizations are operating, are continuously changing, organizations face with many conflicting demands. Man-

agement should display different characteristics related to different cultural domains to deal with these challenges. This fact is suggested by many researches. Denison (1997) suggested that organizations with high combined score of four cultural traits achieve superior results (Yılmaz and Ergun, 2008). Quinn (1988) introduced the balanced culture concept to identify the cultures which values related to each cultural domain are strongly held. According to Quinn, organizations with this culture have the capability to manage challenges and conflicting demands more effectively.

In this study, we claim that organizational culture has a crucial role in determining the innovation performance. Also, empowerment has a mediating role between organizational culture and innovation performances. On this account, we have conducted a research process which analysis could be utilized to back up the relationship between organizational culture and innovation performance.

2.3. Innovative Performance

An innovation is defined as any idea or practice perceived to be new by the adopting organization. As such, an innovation could involve any internally generated or purchased device, system, policy, program, process, product, or service that is new to the adopting organization (Daft, 1982; Damanpour and Evan, 1984).

The concepts of innovation and creativity are different. Creativity means producing many exciting ideas and new concepts. However, many companies face failures because they can not make creative ideas sustainable. Innovation ensures the sustainability of these ideas by finding applications that result in new products, processes and services that enable creative ideas to reach the company with higher sales figures, market share and profitability. (Rodriguez, Hechanova and Regina. 2014). Innovation implies the generation, acceptance, and implementation of new ideas, processes, products, or services. An organization must be innovative to survive in a volatile environment (Johnson et al. 1997). Innovative performance in the narrow sense refers to results for companies in terms of the degree to which they actually introduce inventions into the market (Freeman and Soete, 1997). The definition of innovative performance in the broad sense focuses on both the technical aspects of innovation and the introduction of new products into the market, but it excludes the possible economic success of innovations as such (Ahuja and Katila, 2001; Stuart, 2000).

Innovation is also defined in two categories as radical and incremental innovation. Veryzer (1998) uses such terms as breakthrough, revolutionary, really new and boundary-expanding to define radical innovation which reflects the products that involve dramatic departures from existing products or their logical extensions. On the other hand incremental or continuous innovation on the other hand results from a continuous process of product improvements, upgrades and line extensions. Accordingly, it can be suggested that innovativeness can be measured as a creation of new ideas, new processes, new technological and organizational innovations and new services in a given period of time and their presentation to public.

2.4. Culture and Empowerment on Innovative Performance

The concept of empowerment that emerges with the development of modern management approaches has different definitions in the literature. Empowerment is defined as "sharing organizational power or giving power to those who do the work", "sharing knowledge, information and power with subordinates", "redistribution of decision-making power to include those who do not have this power" (Hales and Klidas, 1998, Cunningham et al., 1996).

In general, there are three main perspectives on the concept of empowerment: leadership, structural, and motivational. The motivational approach developed by Conger and Kanungo (1998), and later by Thomas & Velthouse (1990) and Spreitzer (1995), takes into account employees' perceptions of empowerment. This approach, expressed as "Psychological Empowerment" in the management literature, is based on the examination of employees' self-efficacy perception (Conger and Kanungo, 1988). Conger and Kanungo (1988) have proposed that empowerment is viewed as a motivational construct-meaning to enable rather than simply to delegate. Empowerment is defined as "a process of enhancing feelings of self-efficacy among organizational members through the identification of conditions that foster powerlessness and through their removal by both formal organizational practices and informal techniques of providing efficacy information".

Thomas and Velthouse (1990) developed a cognitive model of psychological empowerment. They have also considered empowerment like Conger and Kanungo as a motivational concept, but they have developed it further and defined

it as an intrinsic task motivation. According to Thomas and Velthouse (1990), empowerment is a function of some task assessments, and the concerted effect of these task assessments results in intrinsic task motivation in the work. These task assessments, which are included in the motivation process, are defined in four dimensions as meaning, competence, effect and choice.

Spreitzer (1995) has developed the psychological empowerment scale on the model developed by Thomas and Velthouse. According to Spreitzer (1995), the meaning is the person's values, goals and behaviors, and the role he or she is involved in. Competence demonstrates the belief in one's own capacity and expertise to fulfill the needs of one's work. Self-determination is the ability of the individual to take initiative in his work, to determine the methods he will use in his work, and to make decisions on his own. Effect refers to the power to influence one's work and organizational outcomes. The employee who finds his job meaningful, sees himself competent in his work, finds himself autonomous and effective, has a high perception of psychological empowerment.

According to Drucker (1988), widespread interest in psychological empowerment comes at a time when global competition and change require employee initiative and innovation (Spreitzer, 1995). Drucker (2014) describes innovation as "the act of creating new capacities in resources to increase the level of utilization". In management literature, use of psychological empowerment has come at a time when foreign competition and change have forced a search for alternative forms of management that encourage innovation behaviour, commitment and risk-taking (Thomas and Velthouse, 1990). In his study, Spreitzer (1995) indicates that two consequences of empowerment, managerial effectiveness and innovative behaviour, are specified in the nomological network. In a managerial context, empowerment has great potential to contribute to these outcomes because work processes cannot be solely structured by formal rules and procedures.

Innovative behaviours reflect the creation of something new or different (Spreitzer, 1995). Most generally, intrinsic task motivation contributes to innovative behaviours (Redmond, et. al., 1993). More specifically, because empowered individuals believe they are autonomous and have an impact, they are likely to be creative; they feel less constrained than others by technical or rule-bound aspects of work (Amabile, 1988). In his study, Spreitzer (1995) tested the hypothesis that

psychological empowerment is positively related to innovative behaviours. Spreitzer gets the result that the relationships between empowerment and innovative behaviour and managerial effectiveness were significant. The concept of psychological empowerment based on employee motivation is consistent with individuals' motivation-related creativity abilities and innovation behaviour exhibits. In another recent study, the relationship between psychological empowerment, work engagement and innovation were examined. According to the findings of the study, empowerment affects work engagement and causes lower turnover intention, higher innovation behaviour (Bhatnagar, 2012).

Innovative culture is a form of behavior that promotes ideas and changes that lead to the creation of values and attitudes within a firm, including improvements in the functioning and effectiveness of the firm; conflicts between these changes and traditional behavior may arise. In this context, researchers indicate that cultural perception styles play a determinative role in the development of innovative behaviors (Shane, 1992). Innovation implies the generation, acceptance, and implementation of new ideas, products, or services. An organization must be innovative to survive in a volatile environment (Johnson et al. 1997). Thus it can be seen that without a strong, shared culture which is clearly innovation-oriented, a firm can hardly be competitive due to innovative development (Deshpande, 1993). There are many researches indicated that organizational cultures have important effect on innovation.

In the framework of the explanations so far, the research hypotheses and model as follows:

H1_{a,b,c,d}: Organizational culture (adhocracy culture, clan culture, hierarchy culture and market culture) will be positively related to innovation performance.

H2_{a,b,c,d}: Organizational culture (adhocracy culture, clan culture, hierarchy culture and market culture) will be positively related to empowerment.

H3: Empowerment will be positively related to innovation performance.

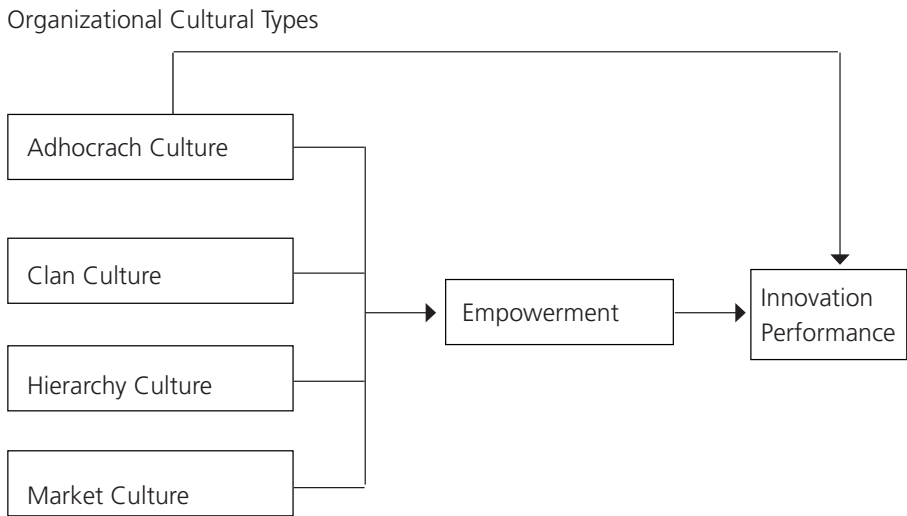


Figure 2. Research model

3. Methodology

3.1. Data Collection, Procedure and Measures

We test the hypothesized relationships with data from manufacturing firms located in the East Marmara region of industrial district of Turkey. In this study, the questionnaire was used as data collection method. In the data collection process used mail and face to face via MBA Students. The total number of respondents -as the individual employees and managers- are 821 from 15 different industries. Manufacturing firms within the sampling area that have at least 30 and at most 7500 employees. Questionnaires are acquired from different positions in the firms so that they could reflect the culture of their organizations better. %80,5 of the respondents are males while %19,5 of them are females. Mean of the respondents' ages is 33 whereas the mean of the average firms' ages is 29 years.

All constructs were measured with already existing reliable scales. All items were measured on a five-point Likert-type scale where 1 = strongly disagree and

5= strongly agree. For each quadrant of organizational culture, six items are included in the questionnaire. Totally, 24 items covering organizational culture developed by Cameron and Quinn (1999) and known as "Organizational Culture Assessment Instrument". Innovation performance items are adapted from Neely and Hii (1998), Antoncic and Hisrich (2001), Hagedoorn, and Cloudt (2003) studies. Empowerment items are adapted Denison (2000) studies.

3.2. Factor Analysis

To increase the validity and reliability of structures, both exploratory and confirmatory factor analyses were performed on the research data. For the exploratory factor analysis was used SPSS 11.5. For confirmatory factor analysis and test measurement model, structural equation modelling (SEM) was used. Analysis results revealed that independent variables alpha reliabilities for scales ranged from 0,83 to 0.87 and factor loading items 0.495 to 0.789. Dependent variables' alpha reliabilities for scales ranged from 0,82 to 0.89 and factor loading items 0.522 to 0.806.

3.3. Confirmatory Factor Analysis

In this study, Five goodness-of-fit indices were used to assess the model fit of structural models: (1) chi-square value (χ^2), (2) root mean square error of approximation (RMSEA), (3) non-normed fit index (NNFI), (4) goodness of fit index (GFI), and (5) comparative fit index (CFI) Moreover, for overall assessment of fit, the chi-square to degrees of freedom ratio (χ^2/df) is also checked, and ratios under 3:1 typically are considered to represent a reasonably good fit (Çakar and Ertürk, 2010).

Table 1. Evaluation of measurement models for the constructs used in the study

Constructs	χ^2	df	p	NNFI	CFI	GFI	AGFI	RMSEA	RMR
Model	1608,119	572	0,000	0,897	0,931	0,899	0,882	0,047	0,050

Confirmatory factor analysis, the suggested six-factor model results in a significant chi-square statistical analyses ($\chi^2= 1,608.119$, $p < 0,01$, $df = 572$) probably because of large sample size. The resulting goodness-of-fit indices suggest that the model fits the observed covariances well on the individual-level

($\chi^2/df = 2,81$; CFI = 0,93; GFI = 0,89; NNFI = 0,89; RMSEA = 0,047; AGFI = 0,88; RMR = 0,50. These values are the indicators of a good model fit.

3.4. Correlations Analysis

Means and standard deviations were calculated for each variable and created a correlation matrix of all dependent and independent variables. Variables' means, standard deviations, Cornbrash's Alpha coefficients, and correlations among all scales used in the analyses are shown in Table 2.

Table 2. Descriptives, correlations and alpha coefficients of the measures

	Mean	SD	α	1	2	3	4	5
1 Adhocracy	3,55	0,77	0,86	1				
2 Clan	3,49	0,80	0,87	0,713**	1			
3 Hierarchy	3,71	0,69	0,84	0,541**	0,541**	1		
4 Market	3,51	0,73	0,83	0,607**	0,521**	0,527**	1	
5 Empowerment	3,37	0,77	0,82	0,568**	0,624**	0,496**	0,478**	1
6 Innovation performance	3,47	0,85	0,89	0,490**	0,450**	0,386**	0,432**	0,484**

** Correlation is significant at the 0.01 level (2-tailed); SD = Standard Deviation
 α = Cronbach's Alpha

Displayed in Table 2 are the correlations across organizational cultural dimensions, empowerment and innovation performance. As shown in the table, all organizational cultural dimensions are positively and significantly ($p < 0.01$) correlated with empowerment and innovation performance.

3.5. Hypothesis Testing

Table 3 shows the hypotheses, hypothesized links, the standardized path coefficients (β), t-values, R2 value, and the results of all hypotheses. As shown in Table 2, t-values of Clan Culture ($\beta = 0.423$, $p < .001$), Market Culture ($\beta = 0.116$, $p < .01$) and Hierarchy Culture ($\beta = 0.145$, $p < .01$) are positively associated with Empowerment. t-values of Empowerment ($\beta = 0.427$, $p < .001$) is positively associated with firm innovation performance, supporting H2b, H2c, H2d and H3. However, no statistically significant association was found between adhocracy culture and empowerment. On the other hand, statistically significant association was found between adhocracy culture and firm innovation performance (H1a), but no sta-

tistically significant association was found between clan culture, market culture and hierarchy culture with Innovation performance which indicated no support for H_{1b} , H_{1c} and H_{1d} .

Table 3. The findings

Hypothesis	Hypothesized links	β	t-values	Results
H_{1a}	Adhocracy ---> Innovation Performance	0,258	2,788***	Supported
H_{1b}	Clan ---> Innovation Performance	0,008	0,088	Not Supported
H_{1c}	Market ---> Innovation Performance	0,091	1,382	Not Supported
H_{1d}	Hierarchy ---> Innovation Performance	0,071	0,988	Not Supported
H_{2a}	Adhocracy ---> Empowerment	0,025	0,370	Not Supported
H_{2b}	Clan ---> Empowerment	0,423	6,458***	Supported
H_{2c}	Market ---> Empowerment	0,116	2,367**	Supported
H_{2d}	Hierarchy ---> Empowerment	0,145	2,672**	Supported
H_3	Empowerment ---> Innovation Performance	0,427	5,472***	Supported

*** $p < 0,001$; ** $p < 0,01$; * $p < 0,05$;

4. Discussion and Conclusion

Globalization has changed the rules of competition and this condition could be perceived for developing countries as a threat because of their relatively weak economic conditions. Activating the economy necessitates better management of industries. In this context, increasing the innovation of companies in developing countries could transform this threat into an opportunity. That's to say, dealing with the tool of innovation in a better way requires finding the antecedents of it. In the light of related literature, organizational culture is decided to be examined as a determining factor of empowerment and innovation performance. Overall, the results are in line with the view that each of the cultural domains influence firm performance like new product development, innovation (Quinn and Cameron, 1999; Haris, 1998; Lund, 2003). It provides non-western business contextual evidences that are structurally similar to those in most published research. The results of the correlation analyses are in line with the findings in prior research in that all four cultural traits are positively correlated in a significant manner with empowerment and innovation performance.

The findings show that there is a significant relationship between organizational culture features empowerment and innovation performance. It is also found that only adhocracy culture directly support is the most important predictor of innovation performance (Kalay and Lynn, 2015; Taşgıt and Ergün, 2013, Cameron and Quinn, 1999; Deshpandé, et. al. 1993). It is hypothesized that each cultural domain consisting clan culture, hierarchy culture and market culture will exert positive effects on empowerment. In addition, empowerment is the highly important factor of increase of innovation performance too. A key result is empowerment fully mediate the effects of adhocracy culture, clan culture and hierarchy culture that support innovation performance.

In this analysis revealed the significant determining effect of organizational culture domains on empowerment and innovation performance. In harmony with the previous studies, innovation and new product development could be supported better through adhocracy culture and managerial practices as an empowerment. Empowerment of the managerial practices the requirements of innovation performance in a more relationship oriented way. That's why empowerment and adhocracy culture most the innovation performance. This study could provide an efficient practical way of managing the innovation process.

Future research can examine other work outcomes such as leader effectiveness and team effectiveness to emphasize the importance of organizational culture as a management tool for enhancing work outcomes instead of limiting the dependent variable to effectiveness. They could also try to improve these culture domains, for instance adding a new domain assuring the sustainability, so that these domains could address and cover the current conditions and needs of the organizational culture.

The findings have implications for theory and practice especially in relation to building an organizational culture and empowerment within manufacturing firms that foster innovative performance. The findings of the study provide managers practical ways for managing innovation performance better and the discussion part also includes several recommendations for future research.

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