

Corporate Culture and Innovation: Implications for Reward Systems

Ivana Nacinovic, Lovorka Galetic, and Nevenka Cavlek

Abstract—Continuous innovation is becoming a necessity if firms want to stay competitive. Different factors influence the rate of innovation in a firm, among which corporate culture has often been recognized among the most important factors. In this paper we argue that the development of corporate culture that will support and foster innovation must be accompanied with an appropriate reward system. A research conducted among Croatian firms showed that a statistically significant relationship exists among corporate culture that supports innovations and reward system features.

Keywords—Corporate culture, innovation, reward systems, Croatia.

I. INTRODUCTION

ACHIEVING innovation in an organization is a topic of interest for managers and academics as it is found that it strongly contributes to the development of sustainable competitive advantage and thus improves corporate performance (Tellis, Prahu and Chandy [1]). Peters and Waterman [2] in their study of successful companies concluded that these companies had just a few basic beliefs or values where one of those beliefs is that most members of the organization should be innovators. In general terms there are two types of innovation: *product* innovation, or changes in the product a company makes or the service it provides; and *process* innovation, a change in the way a product is made or the service provided (Tushman and Nadler [3]). The term *innovation* is often mistaken only for technical innovations, but technical innovations are just a type of innovation. Every innovation has a strong impact to all aspects of organizational life. Organizations can gain competitive advantage only by managing effectively for today while simultaneously creating innovation for tomorrow. Hence, it is important for firms to have innovation as a part of their core competences. In this context the real question is how to stimulate innovation and which factors bring to innovations in a firm.

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Individual innovation helps to attain organizational success (Van de Ven [4]; Amabile [5]; Axtell et al. [6]). Innovation greatly depends upon motivated employees that take initiative and are creative in their work. Employees can help to improve business performance through their ability to generate ideas and use these as building blocks for new and better products, services and work processes. Several factors have a strong influence to the employee behavior, one of which is corporate culture that will be further explored throughout the paper. Innovation issue has been and is widely studied where several studies and authors found that corporate culture has the most important role in the development of innovation (Tellis, Prahu and Chandy [1], Jassowalla and Soshittal [7]; Poškienė [8]; Lyons, Chatman and Joyce [9]). In order to realize a continuous flow of innovations, employees need to be both willing and able to innovate.

This paper explores the development of corporate culture of innovation and the implications this has on human resources activities, reward systems in particular. Corporate culture is an unlikely barrier to innovation, but a powerful one. Sustained innovation requires a cultural foundation, embedded in how people lead and are led, that permeates the organization. Different factors bring to the development of innovation. We argue that strong culture of innovation must be supported by human resource activities where compensation system has an important role. Three sets of HR practices have been highlighted as a support to the innovation oriented HR system: (1) training focused – an emphasis on skills enhancement and human capital investment, (2) performance based rewards – an emphasis on rewarding employees' contributions and outcomes and (3) team development – leadership and team-based activities that are extensively developed and carried out (Lau and Ngo [10]).

It is a great paradox that there are innumerable obstacles to innovation in the current corporate environment. However, it is also absolutely essential to the survival, growth and prosperity of any company to have some means to manage innovation. In this context we explore the role of corporate culture and reward systems. The paper is divided into five parts, after introduction we explore theoretical background of corporate culture and innovation; we present methodology of research conducted, discuss results obtained and give a final conclusion.

II. CORPORATE CULTURE, INNOVATION AND REWARDS

Organizational change and innovation have become an absolute necessity to perform well under the present conditions of rapid external and internal developments and changes. Many firms invest heavily into innovation but we argue that this is not the only way to achieve innovation. The desire for innovation at all levels of an organization is often founded in a firm's corporate culture. Although researchers disagree about how to conceptualize and measure organizational culture, it can be understood as a system of shared values (that define what is important) and norms that define appropriate attitudes and behaviors for organizational members (how to feel and behave). Corporate culture, powerful although invisible, shapes employee behavior and influences an individual's actions. Thus, if appropriate, cultural values and norms are a powerful means of stimulating creativity and innovation (Price [11]). Every organization has a unique culture that drives the form, degree, and speed of innovation.

The mechanism of corporate culture's influence to innovation although quite complex is easy to describe and understand. Corporate culture can bring to the development of innovation through core values or norms. Core values can facilitate innovation through developing technology that meets users' needs, individual autonomy and organizational identification, risk taking and tolerance of failure, informality in problem-solving, disciplinary and organizational effectiveness, high performance standards for short and long run, an emphasis on human resources and the importance of individual growth and development (Tushman and Nadler [3]). Though any organization can publicly espouse a set of core values, most innovative organizations have effectively infused their value system throughout the company and employees behave according to it.

Organization's cultural norms are critical but less obvious source of influence on innovation (Lyons, Chatman, Joyce [9]). Norms as expected behaviors can also influence employee behavior, they define appropriate attitudes and behaviors for organizational members. The reward system defines who gets rewarded and why and thus acts as a statement of an organization's values, beliefs and norms. Reward systems are one of the easiest things a company can change in order to achieve desired results, although some other preconditions must be satisfied: full and open transparency regarding awards, the communication of the availability of the rewards, the criteria to be satisfied, and the identification of the award recipients. In case all preconditions are satisfied reward are real indicators of what an organization wants to achieve in the future.

Kerr and Slocum [12]) were among the first advocates of the approach that the reward system can be a powerful mean for influencing an organization's corporate culture. Reward system is a primary method of achieving control as it defines the relationship between the organization and the individual member by specifying the terms of exchange. Gallini and Scotchmer [13]) argue that a system of prizes is the best possible mechanism for eliciting innovation "if the size of the prize could be linked to the social value" of the innovation.

We argue that the corporate culture that will support innovation can be influenced and shaped by reward systems. Each firm has a specific corporate culture that was developed over time under the influence of key employees, owners etc. As mentioned previously, corporate culture is one of the key factors that stimulate innovation in a firm. The key question here is what mechanism relates corporate culture and reward systems and initiates innovation in a firm. In our opinion the creation of corporate culture that promotes innovation starts with reward systems because wanted behaviors will be rewarded and thus employees will be motivated to repeat such behaviors. Highly innovative organizations deftly manage the subtleties of reward and punishment (Tushman and Nadler [3]). By building an appropriate HR system a firm would be able to develop organizational culture with an innovative orientation what would result in a higher level of innovation (Lau and Ngo, [10]).

Reward system is an important ingredient in managing innovation in a company. It is essential for the firm's success to reward innovators for their contributions, to reward people who collaborate as well as individual performers. Rewards can be given in many different forms. Profit sharing programs that result from gains achieved through innovation are an outstanding means of rewarding individuals for improving the company's standing but the down side is that all employees generally get an equal reward proportion that does not recognize their individual contributions. A more specific options are merit rating and bonuses based on performance evaluations because they take into account individual innovation and collaboration. Reward practice deals with many different recognition programs both intrinsic and extrinsic than can be used. Many firms that achieve high levels of innovation relate short and long term bonus awards to rate of innovation achieved.

Different features of the reward system can stimulate different aspects of innovation within a firm. Harden, Kruse and Blasi [14] investigate the relationship of "shared capitalist" compensation systems - profit/gainsharing, employee ownership, and stock options - to the culture for innovation and employees' ability and willingness to engage in innovative activity. Several authors outline performance related-pay among key factors that contribute to the development of innovations (Laursen [15]).

Reward system design can help to modify the organization's culture. It is a mechanism that can be used by managers to communicate desired behaviors to organizational members. Managers who complain about lack of motivation in their subordinates should consider the possibility that the reward systems they have installed are paying off for behavior other than what they are seeking. Philips [16] identified compensation among the critical levers to help change the corporate culture.

III. METHODOLOGY OF RESEARCH

The questionnaire survey that is the basis for this paper was conducted from January to March 2008 among all Croatian companies that employ more than 500 employees according to the database of the Croatian Chamber of Commerce. The

respondents to the survey were human resource directors of the companies. There were 191 firms in our sample, out of which 68 firms responded to our survey, at the response rate of 36% which is satisfactory for the purpose of our survey.

The sample included only firms that have more than 500 employees, no matter of the ownership structure or legal form as it was considered that such firms have developed an adequate organizational culture and a formal compensation system. Researches in this filed often take the same study sample.

The questionnaire consisted of questions in the field of corporate culture and reward systems and also some general data about the firm. Variables were rated based on the Likert scale items.

TABLE I
 CORE BUSINESS OF THE SAMPLED FIRMS

Core business	% sample
Retail	8,82
Construction	14,71
Production	50,00
Professional services	4,41
Telecommunication	2,94
Public services	7,35
Tourism	4,41
Other	7,35
Total	100,00

Firms examined in our study sample are a good representation of the Croatian economy, with the majority of the examined firms from production sector (50%), followed by construction (14,71%) and retail (8,82%). Ownership structure of the examined firms is also mixed. A total of 42,65% of the examined firms are mostly privately owned, with Croatian owners. Further 35,29% of firms are privately owned but with foreign owners and state owned firms account for 22,06% of all firms in the sample (Table II).

TABLE II
 OWNERSHIP STRUCTURE OF THE FIRMS IN THE SAMPLE

Ownership structure	% sample
Mostly private - domestic	42,65
Mostly private - foreign	35,29
Public ownership	22,06
Total	100,00

IV. DISCUSSION AND RESULTS

As noted previously, corporate culture can support innovation through core values and norms that can be shaped with certain features of reward system. The cornerstone of our approach and the relationship corporate culture – innovation - rewards is that those who perform well and in particular the successful innovators receive rapid promotion or successively more challenging assignments what motivates them to repeat the same behavior in the future. It soon becomes clear to others in the organization that outstanding performance is the

surest path to success. Therefore it can be said that there is some relationship among the three terms. However, the relationship should be also empirically examined.

Corporate culture is one of the factors that dictate success in innovation. The challenge is how to create the culture that supports creativity and innovation. Corporate culture that supports innovation has several important features where one of them is the tolerance of failure, as even failure is seen as a source of information and therefore not every unsuccessful attempt to act should be punished (Myerson and Hamilton [17]). Employees are encouraged, compensated and motivated to convert great ideas into new products and services only if failure is incorporated into new initiatives.

TABLE III
 FIRM'S ATTITUDE TOWARDS FAILURE

Failure is seen as a possibility for learning and improvement	% of the total sample	Ownership structure		
		Mostly private - domestic	Mostly private - foreign	Public ownership
Usually not	7,35%	6,90%	12,50%	0,00%
Sometimes	16,18%	20,69%	8,33%	20,00%
Often	60,29%	62,07%	50,00%	73,33%
All the time	16,18%	10,34%	29,17%	6,67%
Total	100,0%	100,0%	100,0%	100,0%

The most important value to cultivate in the organizational culture to unleash the innovative power is acceptance of failure as part of the learning and experimentation process. There are good preconditions to develop corporate culture that will support innovations in Croatian firms. Croatians have a very open-minded attitude towards failure as more than 76% of all examined firms see failure as a possibility for learning and further employee development. There are some differences taking into account ownership structure of the examined firms. Surprisingly, firms that are majority publicly owned have the most liberal attitude to failure in achieving desired results as failure is always seen as a source of possibilities for learning. This tells us that such firms have also a modern approach to human resources.

The connection among innovations and rewards will be strongest, if it becomes embedded in the corporate culture to reward each innovation and employee contribution. Practicing performance management and rewarding innovations would increase the overall rate of innovation in the long run. Innovation must be a part of everyone's job, which can be done only by providing time and resources for employees to experiment and pursue their ideas and not punishing them for failures.

TABLE IV
THE RELATIONSHIP AMONG INNOVATIONS AND REWARDS

Innovations are stipulated and rewarded	% of the total sample	Ownership structure		
		Mostly private domestic	Mostly private - foreign	Public ownership
Not at all	2,94%	6,90%	0,00%	0,00%
Usually not	19,12%	24,14%	16,67%	13,33%
Sometimes	29,41%	27,59%	25,00%	40,00%
Often	39,71%	34,48%	41,67%	46,67%
All the time	8,82%	6,90%	16,67%	0,00%
Total	100,0%	100,0%	100,0%	100,0%

In order to support innovations, each innovation should be adequately rewarded. Empirical evidence from Croatia shows that not all firms continuously reward innovations. Only 8,82% of the examined firms report to regularly reward innovations and additional 39,71% of firms do it occasionally. There are some expected differences regarding ownership structure as well. Innovations are best rewarded in mostly privately owned firms but with foreign owners as 16,7% of these firms reward every innovation that has been proposed and additional 41,7% of these firms often reward innovation. It seems that privately owned firms with domestic owners have the poorest system of rewards for innovations as more than 30% of these firms usually do not reward for innovations.

The attitude towards failure and rewarding innovations are a good overall indicator of corporate culture's orientation towards innovation. The data for Croatian firms shows that corporate culture actually has the characteristics needed to support innovation, although these features are not equally present in all firms.

Table V shows that when innovations get rewarded firm can get additional benefits. Our data shows that employees who extremely engage in their jobs (4,41%) are at the same time rewarded for their work and especially innovations. The data also confirms the trend, if innovations are stipulated and rewarded more often, employees will engage in their jobs. What can be concluded is that if a firm wants to create a corporate culture of innovation it can use rewards to motivate employees and stimulate them for higher engagement.

TABLE V
INNOVATIONS AND EMPLOYEE ENGAGEMENT

Innovations are stipulated and rewarded	% of the total sample	Most employees are extremely engaged in job they hold				Total
		Usually not	Sometimes	Often	All the time	
Not at all	2,94%	50,00%	0,00%	50,00%	0,00%	100,0%
Usually not	19,12%	23,08%	23,08%	53,85%	0,00%	100,0%
Sometimes	29,41%	5,00%	25,00%	60,00%	10,00%	100,0%
Often	39,71%	11,11%	22,22%	66,67%	0,00%	100,0%
All the time	8,82%	0,00%	16,67%	66,67%	16,67%	100,0%
Total	100,0%	11,76%	22,06%	61,76%	4,41%	100,0%

The influence of strong corporate culture to innovation is a true paradox, as some believe that a strong corporate culture could be an obstacle for the development of innovation (Lyons, Chatman and Joyce [9]). When individuals join a firm, they usually adopt the culture of the firm as well, reinforcing the belief systems and encouraging others to adopt the culture as well. In some firms, the culture of the organization is so strong and so pervasive that the culture becomes the identity of the firm. Generally speaking, a strong corporate culture can have a very positive influence on the firm, aligning the entire firm to a specific set of values or goals. However, a strong corporate culture, that is for instance bureaucratic, can have a negative influence as well as it can discourage change and resist new approaches or new methods.

TABLE VI
STRONG CORPORATE CULTURE AND REWARDING INNOVATIONS

Strong corporate culture	% of the total sample	Innovations are stipulated and rewarded				
		Not at all	Usually not	Sometimes	Often	All the time
Not at all	1,33%	0,00%	0,00%	5,00%	0,00%	0,00%
Usually no	10,62%	50,00%	38,46%	15,00%	3,70%	0,00%
Cannot answer	34,07%	0,00%	30,77%	40,00%	37,04%	16,67%
Usually yes	35,84%	50,00%	30,77%	25,00%	48,15%	16,67%
Yes	18,14%	0,00%	0,00%	15,00%	11,11%	66,67%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

The "strength" of organizational culture is an area with high level of disagreement as there is no consensus regarding what actually represents "strong" culture. We find strong culture in the term of unity among members of an organization. The research has shown that more than half of the examined firms consider having strong corporate culture (54%). Moreover, strong corporate culture more often rewards innovations, as shown in the previous table. For example, among those firms that always reward innovation, 66,7% of them consider having a strong corporate culture.

TABLE VII
ORGANIZATIONAL DEVELOPMENT AND REWARD SYSTEMS

Reward system is used as element in stimulating org. changes	% of the total sample	New and improved ways of doing business are continuously adopted				
		Not at all	Usually no	Cannot answer	Usually yes	Yes
Not at all	9,04%	100,00%	6,67%	10,64%	6,10%	12,50%
Usually no	15,82%	0,00%	26,67%	17,02%	4,88%	37,50%
Cannot answer	37,29%	0,00%	40,00%	44,68%	43,90%	9,38%
Usually yes	29,38%	0,00%	26,67%	17,02%	39,02%	25,00%
Yes	8,47%	0,00%	0,00%	10,64%	6,10%	15,63%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

In Table VII we explored the intentional use of the reward system as an element in stimulating organizational changes. Almost 40% of examined firms often used reward system to stimulate organizational changes, however at the same time almost 25% of the examined firms did not use reward system for such purposes yet. Next we explored whether those firms that consider reward system as an element in stimulating organizational changes are at the same time those that continuously adopt new ways of doing business. Our results show that the reward system is not the key factor in stimulating organizational changes, but those firms that more often perform changes find reward system as an element that can stimulate changes.

As a part of our analysis we explored statistically significant relationships among innovations and different features of corporate culture and reward systems to prove our hypothesis that innovative corporate culture has implications for reward systems.

TABLE VIII
 CORRELATION AMONG INNOVATIONS REWARDS AND CORPORATE CULTURE FEATURES

	VAR 1	VAR 22	VAR 41	Ownership type
Innovation rewards	0,201	0,417**	0,278*	0,140

*Correlation is significant at the 0,01 level

** Correlation is significant at the 0,05 level

Innovation rewards are not significantly statistically related to VAR 1 (Employee engagement in their work) which was quite unexpected. Firm ownership is also not statistically significantly related to innovation rewards. VAR 22 (Strong corporate culture) and (Failure is seen as a possibility for learning and enhancement) are statistically significantly correlated to providing rewards for innovation, although the correlation coefficient shows that the relationship is not strong.

TABLE IX
 CORRELATION AMONG INNOVATIONS AND REWARD SYSTEM FEATURES

	VAR 2	VAR 10	VAR 27	VAR 28	VAR 30	VAR 31
Innovation rewards	0,362**	0,363**	0,294*	0,258*	0,427**	0,310*

*Correlation is significant at the 0,01 level

** Correlation is significant at the 0,05 level

Spearman's correlation coefficients show that the strongest positive statistical relationship exists among rewarding innovations and VAR 30 (Reward system is used as a core element of the HRM strategy). Other features of the reward system that show statistically significant relationship with rewarding innovations are VAR 2 (Employees are at least partially rewarded based on the skills they possess), VAR 10 (A proportion of the employee pay depends upon organizational performance), VAR 27 (Incentives such as profit-sharing and gain-sharing are an important element of the reward mix), VAR 28 (Variable pay is an important part of the total pay) and VAR 31 (Reward system is used as a tool to initiate organizational changes). The relationship among

variables is positive. The correlation coefficient again shows that the variable are statistically related, but the strength of the relationship is not high which indicates that the relationship is not that simple to explain as there are numerous factors which influence it.

V. CONCLUSION

Innovation is the wellspring of economic growth, but it is extremely difficult to obtain. By definition, it involves the creation of something that does not yet exist, something new for a firm. Based on a growing body of knowledge about corporate innovation, there are a number of major characteristics of innovative companies that must be considered, one of which is also its reward system. Reward systems reflect the corporation's interest and commitment to innovation. If an organization culture has a focus on innovation, it is likely that the compensation schemes should encourage and reinforce those behavior. Having once been innovative does not guarantee that innovation will be sustained. Innovation is manageable; it can be discouraged and it can be encouraged by the management actions.

A simple relationship among corporate culture, innovation and HR practices should not be assumed. An innovation related HR system must rely on an appropriate corporate culture in order to have an impact on innovation. Corporate culture and reward systems that have different perspective will not be a benefit for the corporate performance. In order to impact corporate culture and make it more supportive of innovation, overall human resources team must be a part of innovation initiative. The HR can create new compensation models and identify roles and responsibilities that are tied to innovation. Until people are compensated to take risks and recognize they won't be punished for doing so, it will be impossible to create innovation capabilities in any scale.

Descriptive analysis of corporate culture in Croatian firms has shown that we have very good prerequisites for developing corporate culture that will support innovation. For example, Croatian firms have a very positive attitude towards failure, and see failure more as an opportunity for organizational learning than an action that should be punished. Furthermore, a high percentage of examined firms (almost 80%) reward and stimulate innovation.

The most important source of innovation is the individual employee. Innovation will be the result of high employee engagement, which will be adequately rewarded. Our data shows that Croatian employees could improve engagement in their work, as only about 66% of them severely engage when performing activities that are a part of their jobs. This means that although in most cases innovations are rewarded, the real question is whether the rewards offered are suitable and what is the reason for this moderate engagement of Croatian employees.

As a part of our research we also explored the strength of organizational culture. The results show that more than half of the examined firms consider having strong corporate culture (54%) and that this culture has among the core values rewarding innovations.

Statistically significant relationships among innovation rewards, corporate culture and reward system features were also explored. In Croatian firms the strength of corporate culture shows a statistically significant relationship to innovation rewards, as well as with different features of variable pay.

Our data supports the notion that the development of corporate culture that will have innovation as a core value must be based on a reward system that will support this relationship. This means that the reward system should stimulate employees to engage in activities that will result in innovation. Firms should use our findings to increase the level of innovation without heavy financial investments into R&D. Only smaller investments into reward system could result in higher level of innovation and improved company performance.

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