Product Innovation: Impact of Organizational Culture in Product Innovation*

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ABSTRACT
Innovation is the fuel for continuous improvement; it is the exploitation of the opportunity to create market differentiation & competitive advantage. Innovation’s centrality and importance in international operations have been a subject of enduring debate in the age of globalisation. There are two significant changes on the business environment happening in these days which will change the business environment rapidly, and those two are One Belt, One Road (OBOR) and the Fourth Industrial Revolution (4IR) in the world. Sri Lanka as a small island nation will have an impact on this business environment change. Our neighbouring countries such as India Thailand has started working on this revaluation to upgrade their countries to suit the requirement (4IR) in the world. Sri Lanka as a small island nation will have an impact on this business environment change. Our neighbouring countries such as India Thailand has started working on this revaluation to upgrade their countries to suit the requirement (4IR) in the world. The results may assist policymakers to make better decisions in opting for an appropriate management scheme to achieve better innovation performance. Taking into consideration that innovation is essential in converting ideas into something profitable, managers should encourage new ideas to channel the creative ability of employees into innovations(Çakar & Ertürk, 2010). Therefore, organisations need to facilitate innovation by creating and maintaining a cultural environment that supports idea generation and creativity. Results of many studies reveal that to achieve high innovation capability; organisations first need to develop the behavioural and cultural context and practices for shaping an innovative culture. Further (Wickramasinghe & Ahmad, 2012) recommend the research requirements to conduct more relational studies to understand the influences of demographic, technical, psychological and social factors on the innovation process activities of the local innovation systems in Sri Lanka. In this context, the policymakers and the decision makers in Sri Lanka should take serious notes to bring the industries and to guide them to capture the expected opportunities. The human resources need to be guided to make the cultural changes in the industries and to have a national policy in line with the future needs to make efficient innovations happening in Sri Lanka.

Keywords: Creativity, Innovation, Organizational Culture

1 INTRODUCTION

The Innovation has become one of the leading priorities of most countries(Mothe & Uyen Nguyen Thi, 2010). Innovation is key to technology adoption and creation, and to explaining the vast differences in productivity across and within countries(Mel, Suresh; McKenzie & Christopher, 2009). Cross-border knowledge spillovers and the race between nations for increased innovativeness only underscore the importance of innovation(Efrat, 2014). Especially in Sri Lanka the innovation and innovativeness to be studied to be in line with the business environment changes expected together with One Belt One Road (OBOR) initiatives by the Republic of China, the eastern world moves forward with technological improvement to cater the western world requirements and standards. This paper contributes to the literature regarding human resource management and innovation management and offers several insights for chief executive officers (CEOs) in the private sectors and the policymakers of the country, to develop and align with the requirements of the future business world. The results may assist policymakers to make better decisions in opting for an appropriate management scheme to achieve better innovation performance.
Table 1 Summary of The Innovation index of Sri Lanka

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>GII Rank</td>
<td>98</td>
<td>105</td>
<td>85</td>
<td>91</td>
<td>90</td>
<td>88</td>
</tr>
<tr>
<td>Innovation Input</td>
<td>118</td>
<td>125</td>
<td>104</td>
<td>98</td>
<td>94</td>
<td>95</td>
</tr>
<tr>
<td>Sub-index</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Innovation Output</td>
<td>76</td>
<td>81</td>
<td>79</td>
<td>78</td>
<td>77</td>
<td>80</td>
</tr>
<tr>
<td>Sub-index</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Innovation Efficiency Ratio</td>
<td>13</td>
<td>17</td>
<td>46</td>
<td>54</td>
<td>58</td>
<td>78</td>
</tr>
</tbody>
</table>

Source: Global Innovation Index Report published by GII

At a glance, Sri Lanka is in the average position of 93rd place in 127 countries in the world in the past six years without substantial variance. Sri Lanka’s current production mix is based on simple technology. The Economic Complexity Index compiled by Harvard University and Massachusetts Institute of Technology has ranked Sri Lanka as a simple product producing country since 1995. As analyzed by (W.A. Wijewardena, 2015) Sri Lanka should create an ‘innovation economy’, and not just a knowledge economy, by using the research think-tanks at universities and research institutions if it is to deliver sustained prosperity to its people and he further argues in his article, Countries that have moved into complex production systems have been winners.

Sri Lanka was facing a civil war which was ended up in 2009. The economist predicted Sri Lanka as a central hub for the business and expected exponential growth in its business with other countries. (Reade & Lee, 2016) Argues, Employee innovation behaviour is greatest when employee sensitivity to ethnic conflict is high, organisational frustration is low and when supervisors are perceived to be highly collaborative in managing conflict, regardless of whether the workgroup is ethnically homogenous or diverse. In the view of the above statement, Sri Lanka should have been enriched with its innovation in the past 30 years of internal ethnic conflicts. What is the case of Sri Lanka? Did we assimilate this situation and curtailed the gains of ethnic conflict to the business? Therefore to understand the current status and to suggest an improvement, the study on innovation in Sri Lankan context is required. Further (Wickramasinghe & Ahmad, 2012) suggest more relational studies to understand the influences of demographic, technical, psychological and social factors on the innovation process activities of the local innovations in Sri Lanka.

2 BACKGROUND

Most of the organisations now invest in product innovation to sustain the market portion in their areas. It will be prudent to invest in a proper way to get the maximum out of the investment. To decide on investment, it is vital to understand what are the factors affecting the product innovation. The research problem starts from this point, and the researcher tries to answer the problem in this article. Product innovation is an essential force in markets today. It critically affects the fortunes of consumers, firms, and nations. In Sri Lanka why the product innovation index is not in the path of growth?

2.1 Creativity & innovation

(R. W. Woodman, Sawyer, & Griffin, 2016) Frame the definition of organisational creativity as a subset of the broader do-
ness practices, workplace organisation or external relations. Some scholars divide the innovation into two dimensions: Technology and Market and in the domain this is subclassified Existing market and existing technology Incremental Innovation, Existing market and new technology disruptive Innovation, Newmarket and existing technology Architectural innovation, new market and new technology Radical innovation. Other scholars like (Keeley, 2013) in his article classify ten types of innovation, and the ten types are split into three areas. The ten types are Profit Model, Network, Structure, Process, Product Performance, Product System, Service, Channel, Brand, Customer Engagement. Innovative culture is the result of a deliberate effort to integrate innovation into the company’s DNA (Bayó et al., 2015).

3 METHODOLOGY

The Board of Investment (BOI) of Sri Lanka is the authority responsible for promoting, approving and assisting foreign investment, and is empowered to grant a wide range of incentives and concessions to projects in selected sectors, provided that they are export-oriented. BOI helps to maximise exports from such projects as well as to affect the transfer of technology. Presently over 33% of the total exports under the BOI is contributed by the manufacturing sector other than apparel, and over 61% of the national industrial export other than apparel is contributed by the export-oriented manufacturing projects operating under the BOI (BOI Administered Zones, n.d.). Export manufacturing being one of the key sectors which generate over 25% of national industrial exports, the government has identified a wide range of targeted industrial sub-sectors to be promoted under the BOI to drive the economic development process of the country (BOI Administered Zones, n.d.). BOI is a potential place where the innovation behaviour can be studied.

4 THEORETICAL REVIEW OF INNOVATION MODELS

Even though various scholars describes innovation models, the most common model used by many scholars are Godin model. There are three models discussed by (Godin, 2017) are Stage Model, Linear Model, the System model.

4.1 Stage Model

Stage-Gate is a value-creating a business process and risk model designed to quickly and profitably transform an organisation's best new ideas into winning new products. When embraced by organisations, it creates a culture of product innovation excellence. There are five stages of innovation was discussed in the model, and those are Stage 0 – Idea Discovery Stage 1 – Scoping, Stage 2 – Build the Business Case, Stage 3 – Development, Stage 4 – Testing and Validation, Stage 5 – Launch. Each stage, a project passes through a gate where a decision is made whether or not to continue investing in the Innovation project.

4.2 Linear Model

The leaner model developed through time in three steps. The first linked applied research to basic research, the second added experimental development, and the third added production and diffusion. These three steps correspond, in fact, to three scientific communities and their successive entries into the field of science studies and/or science policy, each with its own concepts (Krugman, 2016). Scholars argue Open Innovation and User innovation re-originated from the linear model. Further Two versions of the linear model of innovation are discussed in the practical business world. Technology push model & market pull model.

4.3 System Model

Systems thinking is a holistic approach to problem-solving that focuses on the complex relationships and emergent properties of systems (Kong, X., Li, 2007). It further adds once humans begin to modify or manage a system, it invariably becomes a "human activity system" and is given a "purpose" - intentions for the system design. The factors involved in the knowledge management process have a great influence on innovation.

5 LITERATURE REVIEW

5.1 Product Innovation

New product development is one of the key strategic activities for many firms to achieve competitive advantage (Koufteros, Vonderembse, & Jayaram, 2005). Creativity and innovation are closely associated, but they are not the same thing. Some organisations can generate a lot of ideas but cannot put the ideas into action (Hussey 1997) (Satsomboon & Pruetsilpibumth, 2014). Creativity is defined in terms of originality (Mascarenhas 2011) (Satsomboon & Pruetsilpibumth, 2014) whereas innovation consists of transforming a new idea into a new product, process or service, which leads to gaining profit on the part of business enterprises (Kuniyoshi, John, and Tadao 1986) (Satsomboon & Pruetsilpibumth, 2014). Innovation can imply high initial and continuous investments, risks, and uncertainty, the benefits such as differentiation from competition, customer loyalty, price premiums for innovative products, and entry barriers for potential imitators generally seem to outweigh the costs (Rosenbusch, Brinckmann, & Bausch, 2011).

An innovation strategy arises from the need to establish a linkage between customer needs and the needs satisfied by a company product (Pratani, 2003). (Rosenbusch et al., 2011) Argues innovating SMEs in cultures with high levels of individualism benefit significantly less from innovations than firms in more collective cultures. In fact, the innovation-performance relationship is lowest for companies based in highly individualistic countries such as the U.S. (Buckler, 1997) state, innovation “is an environment, a culture – almost spiritual force – that exists in a company” and drives value creation. Product innovation can be defined as a “process that includes the technical design, R&D, manufacturing, management and commercial activities involved in the marketing of a new (or improved) product” (Alegre & Chiva, 2008). As innovation is seen as the key source of competitive advantage for firms, there is considerable research interest in identifying its main determinants from the perspective of organisational culture (Tsang & Park, 2013). Innovation culture
can be defined as a multi-dimensional context including the intention to be innovative, the infrastructure to support innovation, the operational-level behaviours necessary to influence a market and value orientation and the environment required to implement innovation(Dobni, 2008). Innovation is a prerequisite for success in increasingly dynamic and competitive markets. In the service economy of the 21st century, firms compete in their service products and processes, and on their solutions, strategies, and service delivery. In professional service firms, in particular, a culture of innovation is a crucial precursor to the types of innovative behaviours that can sustain organisations and foster organizational renewal. Organizations are social as well as physical constructions, and therefore an understanding of organizational culture can help to shape the process of innovation and firm performance(Hogan & Coote, 2014a). The success of innovation allows the firms to maintain and expand the consumer and product markets(Baker & Sinkula, 2009). Therefore, the performance of product innovation becomes an important concept

Innovation includes the following four steps: conception, the proposal of an idea, decision to adopt and implementation of the innovation(Daft, 1978). As product innovation activities in companies constitute one of those areas, learning orientation becomes an important concept(Goh, Elliott, & Quon, 2012). Further, innovation–performance relationship is context dependent. Factors such as the age of the firm, the type of innovation, and the cultural context affect the impact of innovation on firm performance to a large extent(Rosenbusch et al., 2011). Knowledge production and sharing have been recognised as the key to innovation. Therefore, it is important to know how culture influences meaningfully the will to share knowledge within organisations (Rivera-Vazquez, Ortiz-Fournier, & Rogelio Flores, 2009).

The number of innovations, the speed of innovation, the level of innovativeness and being the “first” in the market could be the non-financial product innovation-criteria. (Yang, Wang, & Cheng, 2009). (Lages, Silva, & Styles, 2009)Established that organisational learning capabilities for innovation, such as commitment to learning, shared vision and open-mindedness to innovation certain cultural values could facilitate adaptation to change, while others inhibit change. Societies that are more open to change are characterised by individualism, low power distance, and low uncertainty avoidance. National cultures appear to be either individualistic or collectivist while promoting the openness, the capacity of collaboration and the exchange of ideas and knowledge. The organisational culture of some companies supports and facilitate knowledge creation and sharing, whereas other companies may promote knowledge retention. In a global culture, individualistic values coexist with the values of interdependence and cooperation were significant predictors of product innovation(Rivera-Vazquez et al., 2009). Thus, global culture values integrating national culture with organisation values manifest in the managers’ role and organisations’ environment.

5.2 Cognitive Factors and Innovation

North American psychology has evolved out of an epistemology that gives preeminence to empiricism (positivism) and formal linear logic. Such scientific values have led researchers away from considering broad theories of behaviour and, instead, toward the development of empirical, pragmatic models(Pérez-Arce, 1999).

Cognitive factors also appear to be associated with the ability to innovate. The research appears to indicate a number of cognitive factors are associated with creativity. Associative fluency, fluency of expression, figural fluency, ideational fluency, speech fluency, word fluency, practical ideational fluency, originality(Carroll, 1993), fluency, flexibility, originality, elaboration(GUILFORD, 1983), cognitive-organisational proximity is a positive determinant of business cooperation with other organisations, whereas social and institutional proximity is negative determinants. (García-Fernández, 2015). Despite the importance of cognitive presence for successful online learning, there is no widely accepted measurement scale(Kang & Park, 2005).

People play a role in organisational culture. Organisations need to consider the type of employees that can most effectively drive innovation. From a diverse range of research (psychology to management), it has been found that a core of reasonably stable personality traits characterises creative individuals. A select few of these are listed: Personality traits for innovation, high valuation of aesthetic qualities inexperience, broad interests, attraction to complexity, high energy, independence of judgement, intuition, self-confidence, ability to accommodate opposites a firm sense of self as creative(Barron & Harrington, 1981). Persistence, curiosity, energy, intellectual honesty (Amabile, 1990). internal locus of control (reflective/introspective) (Richard W. Woodman & Schoenfeldt, 1990). Two cognitive components are discussed that show consistent associations with intelligence and might, therefore, be considered as potential bases of human intelligence. The first component is mental speed. The second potential basis of individual differences in cognitive abilities is working memory.

Alternative frameworks for innovation lead to different types of innovation based on the objectives and approach inherent in the framework. Innovation is considered in the context of the category life cycle, with the category being the product or service term used by customers that distinguish what it is they are buying(Moore, 2005). In this context, Moore defines innovation types consisting of: Disruptive; Application; Product; Platform; Line-extension; Enhancement; Marketing; Experiential; Value-engineering; Integration; Process; Value-migration; Organic; and Acquisition. Doblin suggests types of industry patterns. These include innovation in the Business model; Networking; Enabling process; Core process; Product performance; Product system; Service; Channel; Brand; and Customer experience. In an approach that considers change impact or scope, common types are Incremental innovation; Radical (or breakthrough) innovation; and Transformational (or disruptive) innovation. Similarly, an alternative approach considers the impact to current business, leading to the categorisation of innovation into Cannibalization; Market creation; and Competitor disruption. Innovation source can determine types of innovation. Familiar examples are Manufacturer innovation; and End-user (or open-market) innovation.
Where to focus leads to internal versus external innovation. This can sometimes be helpful in managing the level of investment needed. The Oslo Manual developed jointly by Eurostat, and the Organization for Economic Co-operation and Development (OECD) provides a framework to enable innovation measurement. The manual proposes innovation types of Product (good or service); Process; Marketing methods; and New organisational method in business practices, workplace organisation or external relations.

Innovation is the critical factor for any industry for the business success. Innovation has always played a critical role in predicting the long-term survival of organisations (Ancona and Caldwell, 1987). Innovation is the key to organisational survival, and therefore the study of processes that support innovation should be of interest to researchers and practitioners alike (Hogan & Coote, 2014b). Several researchers highlighted the importance of innovation in the business world for the survival of the business.

Business lies somewhere between art and science. It certainly can benefit from some formalisation of creativity and Innovation. The process of innovating within an organisation to create new value for customers varies by the organisation, and within organisations, it varies by product, sector, and segment. Many organisations are facing competitive challenges due to the rapid pace of technological change. Industries dependent on highly sophisticated technologies or multinational competition are particularly vulnerable to the need for continuous and rapid alterations in organisational activities (Yamin, Gunasekaran, & MAVONDO, 1999). These conditions have led management theorists and practitioners alike to call for more creativity and innovation in product lines, management practices, and production processes.

Moreover, the substantial practitioner-oriented literature suggests that in order to survive and thrive in increasingly hyper-competitive markets, innovation is the only solution (e.g., Kim and Maubourgne, 2005). It is almost a truism that organisations today are under unprecedented pressure to innovate (CROPLEY & CROPLEY, 2017). Yamin et al., 1999 describes the effects of innovation in bottom-line terms by concluding that it leads to higher profitability. The above researchers have highlighted the importance of the Innovation in the business world for the businesses to survive with the current globalisation. Nowadays, it has become clear that the capacity of organisations to innovate and manage their human resources can be sources of competitive advantage (Jiménez-Jiménez & Sanz-Valle, 2008).

5.3 Organisational Culture

The study of the predominant factors leading to innovation in Japanese MNCs found that organisational culture has an impact on organisational innovation (Satsomboon & Pruetingbultham, 2014). Organizational culture is an abstract concept and therefore difficult to understand. Most cultural aspects still demonstrate a strong and lasting impact on the tendency to innovate at the national level (Efrat, 2014). Organizational culture is one of the critical factors that foster or inhibit creativity and innovation within the organisation (Satsomboon & Pruetingbultham, 2014). According to (Tushman, 1997), Organizational culture is at the core of innovation. Culture is the commonly held beliefs, attitudes and values that exist in an organisation. Put more simply; culture is “the way we do things around here.” It is the shared social knowledge within an organisation regarding the rules, norms, and values that form the attitude and behaviours of its employees. (Adrian Furnham and Barrie Gunter: 1994). Cultural variables moderated the innovation–growth relationship (Rauch et al., 2013).

Culture is a primary determinant of innovation. Possession of positive cultural characteristics provides the organisation with the necessary ingredients to innovate. (Ahmed, 1998) (Webster & White, 2010) Organisational culture can be conceptualised and quantified in terms of the widely shared and strongly held values of a firm’s employees. An organisational culture that supports creativity and innovation could be developed through the use of HR intervention such as employee involvement and learning and development (Satsomboon & Pruetingbultham, 2014). Further, they highlighted the important implications for managerial practices, and their study establishes that the successful implementation of a culture of innovation requires that leaders should play a key role in this process. In other words, managers must adopt HR policies and practices that encourage an innovative culture and ensure that such practices are aligned with innovation strategy. Organisational culture refers to deeply held beliefs and values (Ahmed, 1998) (Cropley & Cropley, 2017) argues there are three measures of elements of the organisational culture – ATI, Organizational culture, and CP. A recognition of firm culture as a critical source of innovativeness has led to increased research attention being paid to this phenomenon (Tellis, Prabhu, & Chandy, 2009). Further (Xie, Wu, & Zeng, 2016) found that more attention to be paid to organisational culture in the emerging and transition economies. Organizational culture is found to be measurable and to be related to important organisational outcomes (Denison & Mishra, 1995). Organisational culture refers to deeply held beliefs and values. Culture is, therefore, in a sense, a reflection of climate, but operates at a deeper level (Ahmed, 1998) and added that the culture could be thought of as having two components: explicit or implicit. The strength of culture depends primarily on two things: Primarily The pervasiveness of the norms beliefs and behaviours in the explicit culture (the proportion of members holding strongly to specific beliefs and standards of behaviours). Secondly the Match between the implicit and explicit aspects of culture.

Another way of looking at culture is in terms of cultural norms. Creating culture through the use of words is however seldom enough. Essentially norms vary along two dimensions. (O’Reilly, 1989). The first one is The intensity: the amount of approval/disapproval attached to an expectation. The second one is Crystallisation: prevalence with which the norm is shared. A study by (Ekwall, 1993) in Sweden further supports the link between culture and innovativeness. Dennison and Mishra (1995) identify four cultural traits and values that are associated with cultural effectiveness. The first cultural trait is Involvement, which is positively related to effectiveness. The second cultural trait highlighted by him is Consistency which is positively related to effectiveness. The third cultural trait Adaptability, or the capacity for internal change in response to external conditions, which is positively related to effective-
ness. The fourth and the final cultural trait is sense of mission or long-term vision which is positively related to effectiveness. According to (Denison & Mishra, 1995), any theory of cultural effectiveness must encompass a broad range of phenomena extending from core assumptions to visible artefacts, and from social structures to individual meaning. They further propose that for effectiveness, organisations need to reconcile all four of these traits. The four traits together serve to acknowledge two contrasts: the contrast between internal integration and external adaptation, and the contrast between change and stability. Involvement and consistency have as their focus the dynamics of internal integration, while mission and adaptability address the dynamics of external adaptation.

The Denison Organizational Culture Survey

The development of the DOCS occurred in tandem with the development of a theory linking four key cultural traits to organisational effectiveness: involvement, consistency, adaptability, and mission (Denison & Mishra, 1995). These traits, grew from a line of research by Denison and colleagues that combined qualitative and quantitative methods to examine the cultural characteristics of high and low performing organisations. Cultural aspects, specifically Individualism, Masculinity, and Uncertainty Avoidance, still motivate innovation (Efrat, 2014). Innovation performance as a concept with two different dimensions, efficacy and efficiency, measured through twelve items (Alegre, Lapedira, & Chiva, 2006). They further elaborate Innovation efficacy reflects the degree of success of an innovation. Innovation efficiency reflects the effort carried out to achieve that degree of success. Schein’s model provides a framework for thinking about organisational culture and fostering cultures of innovation. According to the social context theory, the social context of organisations influences how people think and perceive their organisation (Wei, Liu, & Hernon, 2011). Literature identified eight organisational values consistently associating with an organisational culture supporting innovative behaviours. Three items measure each of the eight dimensions. Dimensions: success, openness and flexibility, internal communication, competence and professionalism, inter-functional cooperation, the responsibility of employees, appreciation of employees, and risk-taking.

6 CONCLUSION AND FUTURE RESEARCH AREAS

The global innovation index ranked Sri Lanka in 90th place in the world ranking in 2017 (Soumitra Dutta, Bruno Lanvin, 2017). There is no significant improvement observed in the index of Sri Lanka’s ranking shown in the past five years in the data. This gives us a significance or the requirement to study the innovation and its importance in Sri Lanka. It is natural in this stage the questions in the reader’s mind, what made Sri Lanka stagnate in its innovation? What are the ways to overcome the barriers in the coming years? By doing an in-depth study of the Sri Lankan manufacturing industries where the innovation is mainly taking birth. Studies suggest to extend future studies in Sri Lanka referring to how external and internal factors influence innovations whilst organisational culture is highlighted within innovation perspectives (Dissanayake, Wasantha & Jinadasa, 2017). Thus, future studies are encouraged to examine how different mechanisms influence innovations in Sri Lanka.

REFERENCES


innovation-growth relationship in five countries. Entrepreneurship and Re-
small to medium enterprise. European Journal of Innovation Management,
Pratali, P. (2003). Strategic management of technological innovations in the
6177(99)00007-4
Mothe, C., & Uyen Nguyen Thi, T. (2010). The link between non
performance:
Hogan, S. J., & Coote, L. V. (2014a). Organizational culture, innovation, and
6057.1983.tb00977.x
1609
199
innovation behavior? International Journal of Conflict Management, 27(2),
Reade, C., & Lee, H.-J. (2016). Does ethnic conflict impede or enable employee
innovation behavior? International Journal of Conflict Management, 27(2),

Rivera-Vazquez, J. C., Ortz-Fournier, L. V., & Rogelio Flores, F. (2009). Over-
coming cultural barriers for innovation and knowledge sharing. Journal of
Knowledge Management, 13(5), 257–270. https://doi.org/10.1108/1367327091088097

beneficial? A meta-analysis of the relationship between innovation and per-

culture of innovation: case studies of Japanese multinational companies in

Soumitra Dutta, Bruno Lanvir, and S. W.-V. (2017). The Interactive Database
Of The Gii 2017 Indicators. Retrieved from https://www.globalinnovationindex.org/analysis-indicator

in Small and Medium Scale Enterprises (SMEs) in Sri Lanka: A Review Innova-
tion and Creativity of Small and Medium Scale Enterprises. Business, Global
Review, Economics, (February).

R.A.S. Weerasing, & D. M. R. Dissanyake (2011). Impact of Attitudes and
Awareness on Environmental Management Practices: A Study Based on the
Small and Medium Sized Enterprises (SMEs) in Sri Lanka, IFRSA Business

Nations: The Preeminence of Corporate Culture. Journal of Marketing, 73(1),
3–23. https://doi.org/10.1509/jmkg.73.1.3

Tsang, D., & Park, Y. (2013). How culture and government shape entrepre-
neurial innovation: the case of Korean and UK online gaming firms. Asian

Tushman, M. L. (1997). Winning through innovation. Strategy & Leadership,

production system, facilitate entrepreneurship | FT Online. Retrieved March
31, 2018, from http://www.ftl.uk/columns/part-5-social-market-economy-go-
for-complex-production-system-facilitate-entrepreneurship/4/481485

Webster, C., & White, A. (2010). Exploring the national and organizational
culture mix in service firms. Journal of the Academy of Marketing Science,
38(6), 691–703. https://doi.org/10.1177/0092050811395562

testing the moderating effects of organizational culture and structure in Chi-
inese firms. The International Journal of Human Resource Management, 22(1),
19–33. https://doi.org/10.1080/09585192.2011.538965

Wickramasinghe, C. N., & Ahmad, N. (2012). Influence of Demographic and
Technical Profile on Success of Independent Inventors in Sri Lanka. The Jour-

Woodman, richard, w., & Schoenfeldt, lyle.f. (1990). An Interactionist Model

Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (2016). Toward a Theory of
Organizational Creativity Author (s) richard W. Woodman, John E. Sawyer
and Ricky W. Griffin Source: The Academy of Management Review, Vol
18 , No. 2 ( Apr ., 1993 ), pp. 293-321 Published by: Academy of Manage-
ment Stable, 18(2), 293–321.

tional innovation cultures and innovation performance in transitional econo-

implications on organisational performance: a study of Australian manufactur-
ing companies. International Journal of Technology Management, 17(5),
495. https://doi.org/10.1504/IJTMM.1999.002753

IS information and budget slack on innovation performance. Technovation,
29(8), 527–536. https://doi.org/10.1016/j.technovation.2009.01.004