



HAL
open science

Exploring the Impact of National Culture on Performance Measurement

Ihssan M. Jwijati, Umit S. Bititci

► **To cite this version:**

Ihssan M. Jwijati, Umit S. Bititci. Exploring the Impact of National Culture on Performance Measurement. IFIP International Conference on Advances in Production Management Systems (APMS), Sep 2014, Ajaccio, France. pp.425-432, 10.1007/978-3-662-44733-8_53 . hal-01387284

HAL Id: hal-01387284

<https://inria.hal.science/hal-01387284>

Submitted on 25 Oct 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License

Exploring the Impact of National Culture on Performance Measurement

Ihssan M. Jwijati*, Umit S. Bititci

Heriot Watt University, Edinburgh, UK

{ij37*, usb1}@hw.ac.uk

Abstract

The purpose of the research presented in this paper is to explore the impact of national culture on the design, implementation and use of performance measurement systems (PMS). Managing performance of organizations using management control system or performance management systems is essential for managers. As organizations are increasingly having to expand globally, they are forced to operate their original PMSs, but in different cultures. While, the impact of culture on PMS implementation have been revisited in the performance management literature from organizational perspectives, the impact of *national culture* on PMS was not clearly explored. Therefore the aim of the authors is to explore the impact of national culture on the lifecycle of PMS. Qualitative inductive research approach, and semi structured interviews of indigenous SMEs' were employed, and the findings suggest that national culture impact PMSs life-cycle and propositions are provided explaining the expected behaviour of different national cultures.

Keywords: performance measurement, cross-cultural management, change management, SME

1. Introduction

Traditionally, measuring performance in organizations used to be achieved by monitoring financial performance only, until a time when the inadequacy of this approach was questioned by scholars such as (Johnson & Kaplan, 1987). The use of 'balanced' performance measures was advocated by many scholars such as Kaplan and Norton (1992), Neely (1996), and others. However, PMS implementation had high failure rate according to Neely and Bourne (2000), which lead the scholars to discover different forces behind successful implementation. Among the important factors that impact PMS design, implementation and use is culture. Culture according to Bourne, et al., (2000), is one of the important drivers of successful PMS implementation. However, most of these studies have been conducted from an organisational culture view point according to Henri (2006), and because of our vague understanding of the impact of national culture, Otley (2003) has called for more research to be performed to understand the impact of national culture. In addition, as we move deeper in to the 21st century we are seeing new forms of work emerging,

particularly with globalisation, advances in ICT technologies as can be experienced with global multinationals operating in different cultural settings as well as networks of smaller organisations collaborating in global networks (Bititci et.al., 2011). Furthermore, with the increasing impact of the emergent markets, organizations' need to conduct and manage businesses in other countries is more than ever, hence each organization should be able to cope with its internal and external environment in any country, as internal contextual factors are impacted with individuals' behaviour and culture.

Therefore, exploring the impact of national culture on PMS will help us contribute to the existing literature on performance measurement by (i) exploring the impact of national culture on the lifecycle of performance measurement systems, (ii) investigating moderating factors which is affecting the impact of national culture in organizations, and (iii) proposing methods of how to guide PMS implementation in different cultures.

2. Background Literature

2.1 National Culture

National culture (NC) has been defined by Hofstede as 'the collective programming of the mind which distinguishes the members of one human group from another' (Hofstede & Hofstede, 2005). The definition implies that culture is particular to one group and not others, and culture includes system of values. Schein (1985) has suggested that culture is the way in which a group of people solves problems and reconciles dilemmas. Kluckhohn and Strodtbeck, (1961) claimed that members of group exhibit constant 'orientations' towards the world and other people. Hall (1976) developed a model distinguishing between high-context and low-context cultures. In 1980 Hofstede first introduced his model, and he founded five dimensions: power distance (PD), uncertainty avoidance index (UAI), individualism vs. collectivism, masculinity vs. femininity, and long vs. short-term orientation. Although Hofstede's model had been criticised it has been widely used and confirmed. Later, other frameworks were introduced such as Laurent, Trompenaars, Schwartz, House etc. In this paper, two frameworks are going to be used, Hofstede and Trompenaars.

Trompenaars and Hampden-Turner (1993) created their framework on relationships of subordinates and rules (universalism vs. particularism), their relationship to the group (collectivism vs. individualism), their feelings and relationships (neutral and affective), the extent of their involvement with their tasks (specific vs diffuse), how status is awarded (ascription vs. achievement), how time is managed (synchronic vs. sequential) and how people relate to nature (Internalist vs. externalist).

2.2 Performance Management Systems

Traditionally, measuring performance in organizations used to be achieved by monitoring financial performance only, until a time when the inadequacy of this approach was questioned (Johnson & Kaplan, 1987). They advocated the use of non-financial measures in addition to financial measures in their seminal book *the relevance lost*. This led many scholars to the introduction of different approaches such as Kaplan and Norton's (1992) Balanced Scorecard (BSC), Neely's performance prism, (Neely et al., 1996) among other performance frameworks. As the proliferation of PMS grew, as well as the failure rate of PMS implementation which amounts to 70% according to Neely & Bourne (2000). Attention then shifted from investigating implementation enablers and barriers to how to better use PMS results (Bourne et al, 2004).

Successful implementation of PMS depends on many factors such as: management commitment (de Waal, 200; Assiri, et al., 2006; Henri, 2006), aligning of strategy, (Kaplan & Norton, 1992; Bourne, et al., 2002; Assiri, et al., 2006), and culture (Bourne, et al., 2000; Bititci, et al., 2006), among other factors. Culture is one of the important drivers or factors impacting implementation of PMS (Henri, 2006; Bititci, et al., 2006; Bourne, 2005). Although national culture's impact has been researched in management control literature with mixed results, yet it's impact has not been properly investigated by performance management researchers. Otely (2003) has called for more research to understand the impact of national culture in performance management systems. It is therefore, vital to understand, the impact of national culture on PMS, as we are moving deeper in to the 21st century with new forms of work emerging, particularly with globalisation, advances in ICT technologies, network of smaller organisations collaborating in global networks (Bititci, et al., 2011).

Henri (2006) has found out that PMS can be used in four ways: monitoring, attention focusing, strategic decision-making, and legitimization. Monitoring when PMS provide feedback regarding performance to various stakeholders. If the results are used as a facilitator, then it is strategic use, while using the results to justify decisions or actions it legitimization. When the results are used to send signals throughout the firm, then the use is attention focusing or communications.

3. Methodology

In order to explore the impact of national culture on performance management systems, inductive qualitative research method was employed, as its more suitable for answering 'why', and 'how' questions in an iterative and flexible way, where the researcher's positions forms an integral part of the research process (Voss, et al., 2002) and Barratt et al., (2011). The research method used is multi-case study approach because it allows the researcher to explore the way companies in different cultures design, implement, and use their performance systems. The criteria for choosing different national cultures is based on Hofstede's *Power Distance v Uncertainty Avoidance* matrix as Hofstede suggested that there is an empirical evidence regarding the relationship between the country's

position within the PD-UAI matrix and organizations' behaviour. Four cultures were chosen one from each quadrant in the PD-UAI matrix (Hofstede & Hofstede, 2005). The empirical study involved two Chinese, two Italian, two Syrian and two UK manufacturing SMEs. For each company we collected information about PMS, PMS processes. Indigenous SMEs were chosen, as we expected large companies' policies, practices, and other factors to impact the influence the culture of the organisation. Additionally, in order to ensure that the chosen organizations representing their national cultures, only indigenous companies were chosen. All the case studies were having similar organization size, all were privately owned, all have industrial background, with minor differences in the firms' years of operation. Finally, ensuring -as much as possible- the clear impact of national, all case study organizations were chosen from non-regulated manufacturing sectors.

Wherever possible, interviews were held with the general managers and their top management teams. In one of the Chinese interviews, the decision maker was accompanied by members of his middle managers, where they participated in the discussion. In one of the Syrian organizations, the decision maker was interviewed alone in the beginning, and later the researcher was given time with two of the middle managers. It should be mentioned that the setting was left to the organizations involved, with the researcher expressing his wish to increase the scope, the length of the interview when the research needed more depth. In order to ensure objectivity, the interview result was triangulated with information company documents as well as researcher observations. In preparation for the company visits, a research protocol was designed. The research protocol was discussed between the authors and elaborated upon, and any question regarding the content was answered. Initially, the research protocol was piloted and tested on one UK organization, then the results of the interview was discussed, and minor changes were acted upon the research protocol, and then employed on the other case studies.

Semi structure interviews, observations, and archival sources were used to collect data, justified by the inductive nature of the research. The semi-structured nature of the interviews added exploratory richness to the research findings. Notes collected from interviews were prepared in a report that included observations from researcher, and relevant data from different sources such as internet sites or media reports. Visits to the company site helped in clarifying the nature of the organizations. Interviews were conducted by one researcher in three cultures, and conducted by another collaborating researcher for the fourth culture. Indigenous languages were the languages employed for each culture reducing translation errors. The number of researchers was ranging from one to two in the four cultures with interviewers discussing their notes on the interview. The length of the interviews depended on achieving the aim of the research ranging from two to three hours. Eight organizations were visited in the process of research. Each company is denoted by the name of culture, then C. No. denoting to the case number.

3. Findings

It seems that there is a pattern emerging across these eight cases with respect to the impact of national culture on PMS design and use. These patterns may be summarised as follows.

3.1 Chinese Culture

In Chinese companies with *family organization* culture, PMSs are designed by the top management board, with little input from the middle managers. The PMSs is formal, with formal meetings discussing the results. The use of PMS has been observed is mainly in managing strategy, in monitoring, communication, influencing behaviour, but not used in learning and development. The reason could be attributed to family culture, where this could be attributed to employees' obedience, stemming from the Chinese cultural value of vertical social order. Employee's willingness to cooperate and make the measurement process workable, and this could be to the Chinese cultural value of individual 'face' and reputation. The results resemble the results found by (Li & Tang, 2009).

3.2 Italian Culture

In the Italian culture, we can see two organizations with two different organization cultures. The first organization with an *incubator culture*, has deliberately designed its PMS by middle management, with balanced measures where we witnessed a highly used system in managing strategy, monitoring, communication, and learning and behaviour. In the second organisation with a *family culture* the PMS was designed by the top management with emphasis on financial measures. We observed evidence of resistance in its implementation where the PMS is mainly used for monitoring and legitimization.

3.3 Syrian Culture

In Syria, PMS used were mainly financial, but it was observed that the comprehensive use of PMS is reserved for the top manager. Middle managers used the measurement in their daily activities, but cross cooperation between managers was limited. The reports are kept with the top management, who in turn keep it under lock and key. Here PMS is used in legitimisation, which make some middle managers resistant to the measurement process, but it could said that the top managers are the main benefactor of the measurement who keep the result hidden from their managers, in a *knowledge is power* and *divide and conquer* approach.

3.4 UK Culture

In the UK, we have two organizations with two different decentralized cultures. The first UK organization is and *incubator* with an emphasis on people. It has a well-developed set of measures which is used for all purposes except legitimisation. Its use for learning and improvement is highly emphasised. The Second UK organisation is a *guided missile* with a greater task emphasis. It has less developed measures that are informally used for monitoring, communication, influencing behaviour purposes. Its use for learning and improvement is limited.

3.5 Impact of high power distance on PMS

It seems that high PD culture is associated with command and control use of PMS. Here the PMS systems are designed by top management only, where the role of middle management is diminished. As seen in Syria cases 1 & 2, China cases 1 & 2, and Italy C.2. The high influence of top management is probably attributed to the high power distance, which leads to little or no middle management participation. The little involvement has probably lead to the reaction of middle management by mostly being either indifferent, or resentful or non-compliant to the measurement process. The difference between China and other high PD cultures could be due to *Guanxi*, which means in the Chinese culture “relationships” or “connections”. Good *guanxi* will ensure minimization of conflicts and frustrations. It aims at building a supportive, genuine relationship founded on reciprocal respect (Yin, 2008). The only case that had some participation from the middle managers among the low PD was Syria C.1 case, and this may be attributed to the focus of the company's strategy on gaining market share, and educational level of these managers, or the high education level of the middle managers.

3.6 Impact of engaging strategy on PMS use

It seems that organizations that shift decision making to middle management have better developed and used PMS. For example, in UK C.2, the performance measures are designed by middle manager, where the use of measures is through daily meeting, and where performance results are shared, elaborated in decisions making. Engagement has resulted in ownership of PMS design, implementation and use. However, is the high degree of use related to the flexible nature of the organizational culture? More research should address the impact of flexible organizational culture on the design, implementation and use of PMS.

4. Discussion and Conclusions

In high PD cultures one of the purposes of PMS is legitimisation, while in low PD cultures legitimisation is not a purpose for PMS. Low uncertainty avoidance cultures are associated with more democratic use of PMS

Although national culture seems to have some influence on the design and use of PMS in organisations, some strategic characteristics of the organisation also influence the design and use of the PMS...e.g.

- Strategy, it has been seen where innovation is a competitive requirement we are observing a more decentralised behaviour within the organisation that is accompanies with more empowered/delegated design and democratic use E.g. Italy C.1
- Governance structure of the organisation and possibly its history can affect the design and use of the PMS... e.g. China C.1
- Personality and outlook of the leadership has an impact on the use of PMS. For example in Italy. In C.1 the organization is lead by a relatively young management, with an innovation focus leadership, while in C. 2, where the leadership is conservative, the PMS aims go to monitoring only, not as far as Italy C.1 with innovation at the core of PMS. In Syria, such a difference exists between C.1 and C.2.

Concerning the design of PMS... uncertainty avoidance can impact the way performance information is communicated/shared in the organisation. For example, in high uncertainty avoidance cultures, information is circulated with caution in 'need to know basis' as seen in the Syrian organizations. Empowered approach is more helpful to gain the support and engagement from the employees. While in Chinese cases it was seen that PMS in high power distance cultures are of low maturity systems, command and control system. The more engagement will have more democratic systems. Although in the high PD and UCI cultures like Syria the closed secretive behaviours displayed by the top managers lead to themselves designing and using the PMS which in turn leads to significant resistance from other managers... A more empowered approach to the design and implementation of PMS although counter intuitive to top management behaviour may yield more sustainable results with more ownership and resistance from the organisation

Acknowledgements

The authors would like to thank Dr Patrizia Garengo from the University of Padova, Italy, and Dr Dan Wang from Harbin University for their invaluable assistance in collecting, translating and involvement in the data.

5 References

- Assiri, A., Zairi, M. & Edi, R., 2006. How to profit from the balanced scorecard: An implementation roadmap. *Industrial management & Data*, 106, pp. 937-952.
- Bititci, U., Garengo, P., Dörfler, V. & Nudurupati, S., 2011. Performance Measurement: Challenges for Tomorrow. *International Journal of Management Reviews*.
- Bititci, U. S. et al., 2006. Dynamics of performance measurement and organisational culture. *International Journal of Operations & Production Management*, 12(1325-1350).
- Bourne, M., 2005. Researching performance measurement system implementation: the dynamics of success and failure. *Production Planning & Control*, 2(101-113).
- Bourne, M. et al., 2000. Designing, implementing and updating performance measurement systems. *International Journal of Operations & Production Management*, 7, Volume 20, pp. 754-771.
- Bourne, M., Neely, A., Platts, K. & Mills, J., 2002. The success and failure of performance measurement initiatives: Perceptions of participating managers. *International Journal of Operations & Production Management*.
- Dastmalchian, Lee & Ng, 2000. The interplay between organizational and national cultures: a comparison of organizational practices in Canada and South Korea using the Competing Values Framework. *International journal of human resources management*, 11(April), pp. 388-413.
- Davis, S. & Albright, T., 2004. An investigation of the effect of Balanced Scorecard implementation on financial performance. *Management Accounting Research*, 15, pp. 135-153.
- de Waal, A., 2003. Behavioral factors important for the successful implementation and use of performance management systems. *Management Decision*, 41, pp. 688-697.
- Deal, T. & Kennedy, A., 1982. *Corporate Cultures: The Rites and Rituals of Corporate Life*. Harmondsworth: Penguin Books.

- deWaal, A. e. A., 2006. The Role of Behavioral Factors and National Cultures in Creating Effective Performance Management Systems. *Systemic Practice and Action Research*, 1 19.
- Garengo, P. & Bititci, U., 2007. Towards a contingency approach to performance measurement: an empirical study in Scottish SMEs. *International Journal of Operations & Production Management*, 8 27, pp. 802-825.
- Greatbanks, R. & Tapp, D., 2007. The impact of balanced scorecards in a public sector environment. *International Journal of Operations & Production Management*, 8 27, pp. 846-873.
- Henri, J.-F., 2006. Organizational culture and performance measurement system. *Accounting, Organizations and Society*, Issue 77–103 .
- Hofstede, G., 1980. *Culture's Consequences*. Sage, Beverly Hill, CA: s.n.
- Hofstede, G. & Hofstede, G. J., 2005. *Cultures and Organizations Software of the Mind*. 2nd ed. New York: McGraw-Hill Books.
- Hofstede, G. & Hofstede, G. J., 2005. *Cultures and Organizations: Software of the Mind*. New York: McGraw-Hill Books.
- Johnson, H. T. & Kaplan, R. S., 1987. *Relevance Lost: The Rise and Fall of Management Accounting*. Boston, MA: Harvard Business School Press.
- Kaplan, R. & Norton, D., 1992. The balanced scorecard - measures that drive performance. *Harvard Business Review*, 70, pp. 71-79.
- Kluckhohn, F. R. & Strodtbeck, F. L., 1961. *Variations in value orientations*. xiv ed. Oxford, England: Row, Peterson.
- Li, P. & Tang, G., 2009. Performance measurement design within its organisational context—Evidence from China. *Management Accounting Research*.
- Neely, A., 1999. The performance measurement revolution : why now and what next ? . *International Journal of Operations & Production Management*, 2 19, pp. 205 - 228.
- Neely, A. & Bourne, M., 2000. Why measurement initiatives fail. *Measuring Business Excellence*, 4 4, 12(4), pp. 3-7.
- Otley, D., 2003. Management control and performance management: whence and whither?. *The British Accounting Review*, 35(4), pp. 309-326.
- Picard, R. R. & Reis, P., 2002. Management control systems design: A metaphorical integration of national cultural implications. *Managerial Auditing Journal*, 5 17, p. 222.
- Schein, E., 1985. *Organizational Culture and Leadership*. San Francisco: Jossey-Bass.
- Taticchi, P., Balachandran, K. & Tonelli, F., 2012. Performance measurement and management systems: state of the art, guidelines for design and challenges. *Measuring Business Excellence*, 2(41-54).
- Tranfield, D., Denyer, D. & Smart, P., 2003. Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Journal of Management*, Volume 14, p. 207–222.
- Trompenaars, F. & Hampden-Turner, C., 1993. *Riding the Waves of Culture: Understanding Diversity in Global Business*. London: Nicholas Brealey Publishing.
- Voss, C., TSiriktsis, N. & Frohlich, M., 2002. Case research in operations management. *International journal of operations & production management*, 22, pp. 195-219.
- Yin, F., 2008. An analysis of factors of success for Chinese/ European JVs in culture aspect. *International Journal of Business Management*, 3(6).