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The Future of Internet Era Organizations – The Concept of Chief Complementary Officer

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Due to increasing complexity in the trade of customized intermediate goods, final products and services in global value and innovation networks, we envision the emergence of a new professional group: the Chief Complementary Officer. The rationale behind this concept is that the idea of complementarity in configuring value offerings may be quite useful in regards to coping with these complexities. The brief proposes that firms and nations should develop analysis of overlapping systems of complements and form their strategies and structures accordingly. The era of the Chief Complementary Officer emerges.

Introduction

We are experiencing a radical change to the Porterian ethos and are confronting a new dimension of leadership. This change is necessitated by the emergence of new organizational configurations. The recipe for success will no longer be contingent on how organizations possess or exploit resources in their existing business networks. A firm can develop novel capabilities through exploring and involving complementary resources from other value domains and platforms, including different forms of social capital (for introduction on comple-

mentaries and their fit see Milgrom and Roberts, 1995; Seppälä and Kenney, 2012). The time is mature for this change.

The silent signals of digital productivity and individualization are supporting the new paradigm of configuring organizations. At the individual level, new artefacts, behaviors and narratives will emerge. At the firm’s productivity and value creation level, new forms of digital configurations will materialize. At the organizational and leadership level, new models will take over. As a nation and for our firms, we need to be ready for challenges that may arise beyond the current visible horizon of transformations and prepare for the radical challenges of the future. From the empiric’s perspective, the need for future organizational reconfigurations arises from the need to master the multi-direction and critical intersection of agile innovation management. This need also stems from the flexible use of internal and external resources combined with state-of-the art internet enabled supply chain and sourcing solutions.

Framing theoretical foundations: Chief Complementary Officer

The contemporary understanding of how to build and configure value and supply chains of different organizations is facing major chal-

lenges, as different competencies and respective working tasks continue to be dispersed globally. The traditional industry structure view, advocated by Porter (1980), explains value creation and capture through the possession of the right resources and a clear distinction between the customer and supply markets. The resource-based view (RBV) is focused on firm-level (internal) resources, further emphasizing the boundary between a company and its external stakeholders (for an introduction of RBV, see Wernerfelt, 1984; Peteraf, 1993). According to RBV, a firm needs to control its critical resources, as it places itself at a disadvantage when it must procure such resources from others (see Klein and Rai, 2009). However, in today's global and turbulent internet-based business environments, it no longer seems adequate to assume that competitive advantage can be based on the mere possession of resources; in addition, it no longer seems possible for a firm and a nation to even possess all of the necessary resources (for discussion on the emerging paradigm of external resource management, see Tanskanen et al., 2012).

A modern firm's competitive advantage must thus be based on three factors: possessing the skills to 1) find its right position in global value and supply chains, 2) acquire matching and value-generating resources, and 3) combine external resources with the internal resource base such that new, superior capabilities can be developed (deWever et al, 2005). Consequently, instead of focusing on competitive barriers as discussed by Porter (1980) and firm-specific resources, firms should ask the following question: *"To generate the most compelling customer value offering, what are the underlying ingredients needed, and where and how do we globally capture them, thereby complementing the internal resource base?"*

Of course, the concept of a firm concentrating on its core competencies and acquiring – or outsourcing / offshoring – all the rest is not an entirely new idea. Whereas the importance of a firm's capabilities has been recognized, less attention has been focused on how these capabilities are actually developed and accessed. As suggested, developing relationships with external stakeholders and building inter-organizational networks are key components (see Jarillo, 1993; Dyer and Singh, 1998). Furthermore the role of social capital is recognized to build firms capabilities. Social capital refers to actu-

al and potential resources that are embedded within and available through the network of relationships that a firm and its personnel possess (for more definitions of social capital, see Bourdieu, 1986; Nahapiet and Ghoshal, 1998). However, it is no longer adequate to simply possess a network; a firm must pursue relationships within that network to achieve mutual benefits and competitive advantages that cannot be imitated. Firms are realizing that important potential resources may be situated outside their imminent networks and existing relationships. Using extensive Internet technologies and tools, these previously unreachable resources can now be integrated into company operations, such as by hosting on-line idea competitions (see Simula & Vuori, 2012).

Indeed, the key challenge for today's firm is to define what type of process should be used to identify, access, and acquire complementary competencies and, more importantly, decide who should be in charge of this process. As an example, a firm's procurement function is still regarded as a supportive or clerical function in most organizations. However, this function manages an important and often critical interface to resources residing outside a firm's boundaries. Sales, research, and development functions also manage linkages to external resources. In a worst-case scenario, different functions of the firm may not even be aware of one another's activities with external stakeholders or the ways in which these activities are managed. A suboptimal approach in resource management may lead to disintegrated knowledge and even conflicting resource flows. To avoid this outcome, we believe that new skills or a new role for upper management is needed. A Chief Complementary Officer could oversee the entire resource and capability portfolio so that these aspects are aligned with the firm's strategic objectives.

Concluding comments

We believe that this new way of organizing businesses is the key to success in the future. We regard this new paradigm as a collaborative bridge or a hub, effectively combining knowledge and complementary resources. It is imminent that the various stages of value creation and capture will continue to be geographically disaggregated and that firms' activities will be globally dispersed.

The player who realizes and captures the benefits of the new competitive forces of organizational change and theory will be ahead in the race on a global scale. New types of firms offering distinctive solutions and services will be founded. New logic for value creation and capture will be widely leveraged. Exploring the new leadership paradigm is akin to entering a Terra Incognita.

References

- Bourdieu, P., 1986. The forms of capital. In: J.G. Richardson, ed. *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood, pp. 241–258.
- DeWever, S. Lievens, A., Martern, R., and Vandembemt, K., 2005. Developing Capabilities Through Networks: A Step-by-Step Process. In: Sanchez, R. and Heene, A. eds. *Competence Perspectives on Managing Interfirm Interactions (Advances in Applied Business Strategy, Vol. 8)*, pp. 71–110.
- Dyer, J.H., and Singh, H., 1998. The Relational View: Cooperative Strategy and Sources of Inter-organizational Competitive Advantage. *Academy of Management Review*, 23(4), October, pp. 660–679.
- Jarillo, J.C., 1993. *Strategic Networks: Creating the Borderless Organisation*. Butterworth-Heinemann, Oxford, UK.
- Milgrom, P., and Roberts, J., 1995. Complementarities and fit Strategy, structure, and organizational change in manufacturing. *Journal of Accounting and Economics*, 19, pp. 179–208.
- Nahapiet, J., and Ghoshal, S., 1998. Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), pp. 242–266.
- Peteraf, M., 1993. The Cornerstones of Competitive Advantage: A Resource-Based View. *Strategic Management Journal*, 14(3), pp. 179–191.
- Porter, M.E., 1980. *Competitive Strategy*. New York: Free Press.
- Seppälä, T. and Kenney, M., 2012. Building on Complementary Assets in a Unified TCP/IP World; Berkeley Roundtable on the International Economy (BRIE) Working Paper Series No. 204.
- Simula, H., and Vuori, M., 2012. Benefits and Barriers of Crowdsourcing in B2B Firms: Generating Ideas with Internal and External Crowds. *International Journal of Innovation Management*, 16(6), pp. 1–19.
- Tanskanen, K., Iloranta, K., Laiho, A., Kaipia, R. and Saloranta, S. (2012). Supply Management must become External Resource Management. 21st International Purchasing and Supply Education and Research Association conference, Naples, Italy. <http://www.lrg.tkk.fi/?q=content/supply-management-must-become-external-resource-management>
- Wernerfelt, B., 1984. A Resource-Based View of the Firm. *Strategic Management Journal*, 5(2), pp. 171–181.