Abstract

As rapid advances in technology, demographic changes and the globalization of the world economy lead to increased interactions among human organizations, the ensuing interconnectivity and interdependence create an environment of greater complexity and volatility than that experienced in the industrial era. The only way for an organization to survive in such a new environment is to anticipate changes and have the built-in capability to become adaptive and proactive. In short, what makes up “the inside” must become aligned and fit with “the outside”.

For any human organization effective adaptation takes place when its organizational design context, i.e. its system architecture and business model, becomes aligned with the emerging environmental context, i.e. the changing customer preferences and new opportunities and threats. For this to occur the members of a firm must be willing and able to engage in constructive conversations which require a common language and a minimum of trust to facilitate communication, cooperation and coordination. The quality of such interactions determine the capacity for new innovations to change the organizational design, so as to adapt well to a continually changing business landscape.

Introduction

The ongoing rapid changes that impact contemporary organizations originate in rapid advances in technology and the world economy leading to increased economic, social and political interconnectivity and interdependence. The ensuing increase in complexity and environmental volatility render forecasting the future, as a basis for planning and control, an exercise of limited value (Kurzweill, 2001; Meyer and Davis, 2004). The only way for an organization to survive in such a new environment is to anticipate change and have the built-in capability to become adaptive to emerging conditions (Ackoff, 1999; Drucker, 1999; Dervitisiotis, 2007).

An organization’s design context, managed through internal change and learning, is described in terms of an organization’s (Haeckel, 1999): (1) Value system defined by its core values in a culture that gives meaning to people’s life and activity, (2) Basic purpose which defines an organization’s reason for existence, (3) Management principles which (a) define its boundaries (“us vs. out there”) (b) specify constraints for people inside the system and (c) guide their behavior and decision-making through “Imperatives and Rules” – which do not allow other options, (4) Organizational architecture which specifies the key parts and relationships, coupled with assignment of accountability to each other for desirable outcomes and (5) Business model, i.e. the way leadership has chosen to conduct its business.

The major external change drivers that jointly create the current environmental context include new trends in the economy, in demographics and in technology, along with new rules and new moves of competitors, which cause a shift in customer preferences. The result is an emerging new business landscape for which value, as determined by customer preferences, continually migrates to new and better products (Slywotzky, 1996). The recent Apple success in devices for portable storage and music playing demonstrates how quickly value migrated from familiar MP3 music players to the Apple iPod, currently dominating the market. For any business firm, effective adaptation takes place when it’s organizational design context becomes aligned with the emerging environmental context, i.e. an evolving landscape shaped by the external change drivers.

For change and adaptation to occur in a social system, human agents as system parts must be willing and able to interact and to communicate. Such an interaction can proceed voluntarily only when a
minimum amount of trust is present that will enable the needed communication, cooperation and coordination. All this is hard enough to do when interaction takes place with individuals or organizations that know one another. In an era of rapidly increasing e-commerce and globalization of the economy, developing and maintaining trust with other parties unknown from past experience becomes even more crucial to future success and is a major challenge to many organizations.

Processes Determine Performance

We can improve performance of business processes that involve activities needed to plan, operate, coordinate and control the production and delivery of outputs (products and services to customers, financial reports to stockholders, etc.). Flores has identified three basic kinds of processes which correspond to (1) physical flows of materials and parts, (2) information flows which provide storable data for decision making, and (3) human communication flows about conversations to plan and coordinate activities for the short-term and the exploration and implementation of new strategic initiatives. Unlike the “hard” processes for materials and information flows, designed and evaluated with quantitative criteria and data, the effectiveness of human conversations relies on the proper interpretation of language data, a “soft” underdeveloped skill, often responsible for the various often costly “disconnects” in all three types of processes (Dervitiotis, 2006).

The change in a firm’s organizational design becomes essential in periods of rapid change during which the environmental context becomes more complex and uncertain. According to Ashby’s law, for a system to cope with an environment of increased complexity its own organizational design must become more complex (Ashby, 1958). This requires two types of changes in the organizational design in order to increase (1) a firm’s degree of differentiation, i.e. its capability to engage in a greater variety of activities, and (2) its degree of integration, i.e. its ability to coordinate effectively all the activities needed to execute the current strategy and to plan how to adapt to new conditions. Given the increasing complexity in today’s environmental context, no organization can manage to survive for long without changing its own structure and mode of operation (Pascale et al., 2000).

Balancing Short-term Operational Excellence with Excellence for Adaptation

In the short-term an organization’s survival depends on its ability to generate the profits necessary to satisfy its current stakeholders. This outcome depends on the quality of execution of its current strategy, i.e. its operational excellence determined by financial and other operational metrics (market share, customer satisfaction, etc.). The basic and support activities performed inside an organization comprise a firm’s value-chain, as described by Porter’s framework (Porter, 1985).

With an accelerating pace of change in the global economy, it is apparent that the activities performed inside the firm during the industrial era, belong to three different subgroups that have conflicting goals and the needed compromises lead to an overall suboptimum performance. More recently, Hagel and Brown have proposed a new scheme identifying three core competence groups which are related to the activities in Porter’s value chain (Hagel, J. and S. Brown, 2005).

The first core competence group A involves the management of the value-innovation process, as the new source of competitive advantage, evaluated by the speed of introducing new innovations which improve the value/cost relationship of outputs offered to customers. The second core group B involves the management of customer relationships by identifying existing and new human, social and environmental needs which can be satisfied through new innovative products. This function is evaluated by the economies of scope, i.e. a firm’s ability to serve a large variety of customer requirements. The third core competence group C covers all the tasks for the management of the infrastructure, i.e. the supply chain producing and delivering products and services to customers. This group is evaluated by the economies of scale made possible by large facilities or large networks.

As a result of intensifying competition, especially from RDE’s (the Rapidly Developing Economies of China, India and others), Western companies are under pressure to reconfigure their organizational design in order to reduce conflicts among the three core competence groups, when all three reside under the same roof. Initially, this issue was addressed by outsourcing to other firms those activities in the value-chain that do not affect competitive advantage, such as call centers for customer support in high-tech industries, banks, hotels, etc. Equally important has been the practice of outsourcing the manufacture of the final product, when large savings are possible mainly from lower labor costs of
unskilled and semiskilled workers. Most consumer electronic digital products in use today are made in China, Taiwan, India and others. The same applies in the development of software. Outsourcing in 2004 reached $382.5 billion, increasing at annual rate of 11%, thus expected to account for $641.2 billion of outsourcing business to countries of East Asia and East Europe by 2009 (Kutchera, H. et al., Relocate? Transform? Booz Allen Resilience Report, 10/17/2006).

Today we distinguish several trends in changing a firm’s organizational design. These have been facilitated by the big reduction of transactions costs an organization incurs working with third parties, thanks to the rapid advancements in computers and telecommunications. The ensuing interconnectivity among cooperating firms using different computer platforms enables them to achieve significant improvements in serving diverse markets.

**Trend 1.** The “hollowing” of business firms from outsourcing cost-reducing activities which is transforming formerly large integrated companies into smaller more focused ones.

**Trend 2.** The tendency for competitive firms to specialize in those activities that they can achieve world class performance, making them attractive candidates as members of large global networks.

**Trend 3.** The tendency for traditional industry boundaries to become blurred and for the creation of new groupings of organizations based on unique competitive skills.

**Trend 4.** The formation of large global networks of firms which span several traditional industries around two basic types of “keystone hubs”. The first type relies on the use of a proprietary technology hubs, such as those networks built around Microsoft or Cisco. The second type relies on network orchestrators, such as eBay or the apparel firm Li & Fung in Hong Kong which coordinates each ad hoc supply chain set up for a clothing line of a specific retailer customer, such as Gap or Limited, using nearly 8000 other firms in the apparel industry, to deliver specific product lines for retailer chains.

**Trend 5.** An strong resemblance of behaviour of hub-centered networks of firms, like Li & Fung, Carrefour or Microsoft, with a business ecology system like a forest. As such they develop a high degree of interdependence among members which determines their overall effectiveness, in terms of productivity, quality and robustness contributing to profitability and their overall success.

**Leadership Aiming for Balance Between Short- and Long-Term Goals**

To achieve both short-term goals of operational excellence and long-term goals of excellence in adaptation to new conditions arising from rapid change, leadership must help develop an organizational design with two complementary components, each of which assumes the dominant role based on the rate of environmental change.

For stable conditions in which the organizational design aims for operational excellence, leadership relies on the **conventional component** with a focus on line-management for the optimum execution of the current strategy to meet short-term earnings expectations. This includes both transformational and transactional activities. The goals of the conventional component include: (1) Cost minimization as the dominant issue, addressed by increasing efficiencies of scale, scope and skills, as in the industrial era traditional economy. (2) Standardization, uniform procedures, substitution of humans by machines, and outsourcing or offshoring that can be used to minimize costs. (3) Minimization of variation in infrastructure processes (production, distribution, etc.), relying on statistical process control, as in “6σ”.

For conditions of rapid change in which the organizational design aims for alignment with a new business landscape leadership relies on the **adaptive component** with a focus on the creative professionals for long-term creation of wealth based on value innovations. The emphasis here is primarily on tacit human interaction activities, which are most dominant in a network economy of the knowledge era. The goals of the adaptive component include: (1) The pursuit of survival and success as the key objectives, (2) optimizing the variation in all processes to enable both diversity and systemic thinking to enhance creativity for value generating innovations. (3) The optimization of the quality and quantity of human interactions in critical network links which determine value-adding innovations and adaptation. (4) Adopting landscape fitness as the dominant criterion of performance.
The development of a new organizational design most suitable for an emerging environmental context is made through interventions to change how a member organization functions as part of a larger value network, given that a firm as a system is always embedded in a larger system. This includes adding new nodes (for new functions or processes), new links (for improving communication and coordination) and new decision rules for optimizing the flow of tacit and explicit knowledge.

Conclusions

The need for changes in a firm’s organizational design arises from the continual changes in its broader environment. To cope successfully with new conditions leadership must increase the complexity of the organization itself, by increasing its degree of differentiation to handle a greater variety of tasks and an increase in its degree of integration to coordinate better all tasks in responding to new challenges.

The key requirement for effective adaptation of an organizational design requires the improvement in the quality of relationships and conversations among a firm’s members. High levels in the quality of relationships and conversations facilitate the development of the same shared values and vision for all and a high degree of trust which encourages their cooperation, coordination and exchange of tacit and explicit knowledge needed to develop synergy and value innovations that set them apart from competitors. Whereas high quality in an organization’s value innovation process leads to its successful differentiation addressed to changing customer preferences, the quality of a firm’s organizational design helps it develop a good business landscape fitness that enables it to make the best of new opportunities while minimizing new environmental threats.

References


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