



Coming to Terms with the New Economics of Information

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ABSTRACT

This mini-paper elaborates on the new economics of information and the nature and management of the modern firm.

INTRODUCTION

Information used to be inextricably intertwined with the physical flow of elements through the value chain. Nowadays, we have attained a level of technological sophistication, supported by adherence to standards, low-cost information and communication technology (ICT) accessibility and critical mass, that allows us to separate the physical flow from the informational glue that holds it together. This offers new and exciting opportunities for broadening the scale and scope of the firm and the richness and reach of its offerings. Under the reign of what Evans and Wurster [4] term “the new economics of information” the alternative to the stove-pipe, vertically integrated value chains has become feasible: value networks of outsourced, decentralized, self-standing businesses that cooperate as a virtual enterprise on the basis of well-defined (strategic) service-level agreements. Yet, coming to terms with the new network-centric business environment proves to be difficult. In a naturally progressing discussion we elaborate on closely intertwined management themes pertaining to the firm’s realignment with these new economics of information.

CONTEXT VS IDENTITY

Besides deregulation and globalisation, technological progress stands out as the key transformational factor shaping the modern context of the firm. Coming to terms with this context in the first place means appropriating oneself a clear strategy. Strategy is about what firm one wants to be to which group of customers, and about making distinguishing, defensible and, ultimately, profitable choices. Technological advancement has opened up avenues for commerce and business that could previously only be dreamed of.

The problem is that the emergence of new, exciting and promising technological possibilities has a tendency of starting waves of (rational) herd behaviour toward its adoption. This makes firms into slaves of their context. Simplistic defensive tactics, initiated by fear of missing out on an opportunity, can hardly be perceived as a source of lasting competitive advantage or profitability. Blending into the context by rushing into best practice or standardized technology is by no means a guarantee for survival. This can only be attained by setting oneself apart from the herd, the context, by creating oneself an identity, and, most importantly, by moulding the new technology to serve a chosen, proprietary strategy of sustainable competitive advantage. This requires a great deal of creative thinking and discipline [15]. First know who you are and who you want to be before you start changing your identity in response to a changing context or newly emerging technology, however exciting.

IDEA VS IMPLEMENTATION

Strategy formulation and strategy implementation are very distinct activities. During implementation constraints initially external to

the inception of the idea, constraints related to finite resources, and elements of inertia, constraints related to legacy, become apparent. Implementation rests on problem solving ability and on the careful preparation and execution of a migration path for transforming the *as is* into the *would be*.

Legacy tends to play a major part in the effective instantiation of strategy set out over time. Note that, what is now considered legacy has once helped the firm create its identity. It can be an asset, as well as a liability. This all depends on how one envisages the future of its context (industry) and strategy (value proposition) and whether, and to what extent, it still embodies the required agility. Also, making *tabula rasa* in the face of continuous change, where one would try to replace the *as is* in one big bang operation with the *would be*, in most cases is not practically realistic due to the finite nature of resources, lack of experience and elements of inertia typically resisting the process of change. The main idea is to focus on the opportunity cost of not choosing for the alternatives offered in a continuously changing environment. The right strategic attitude here is one of “conservative radicalism” [11].

EFFECTIVENESS VS EFFICIENCY

Effectiveness is about getting the right things. Efficiency is about getting things right. Effectiveness comes first: First choose the right configuration of business components, then get the value network up and running efficiently. This is one of the most pervasive themes in management literature since Mintzberg’s [13] “strategy precedes structure”-mantra.

“Don’t Automate, Obliterate.” [9]. That is, generating high-quality implementations is useless if the business configuration is wrong. This old adage was reiterated by business process reengineering adepts. Sadly enough, it was all too often learned the hard way (e.g. in the postlude of the total quality management era [8]). The distinction between effectiveness and efficiency closely parallels that between idea and implementation. The former essentially requires vision, the latter rests on problem solving—that is, implementation of ideas in a real-life context characterized by several forms of inertia, uncontrolled complexity and constraints exogenous to the initial ideas. The tricky thing here is to avoid settling for compromises that may make one forego its identity, its brand.

PROCESS VS WORKFLOW

The distinction between process and workflow is central to the work of Keen [10-12]. Process is nothing like “the over-narrow view of processes as workflow”—that is, the mechanical (re)engineering definition of process as a sequence of activities. The former is about recognizing what opportunities and threats are out there, about deciding what one wants to be and can be, about who to team up with to deliver, and, most importantly, about how to organize for it. The creation of a combative value network is the central theme. Taking on a process perspective at rethinking one’s business means focusing on the separation of concerns in terms of roles and corresponding business compo-

nents, but also, and especially, on the coordination of promises and commitments, rather than just to look at the mechanical flow of activities embedded within the individual networked components.

Keen's process is more commonly referred to as the virtual organization. This type of organizing emphasizes a tight, but not sticky, cooperation of a complex network of interacting components, in which boundaries between the actors seemingly dissolve; seemingly, because there is a clear alignment of objectives. The virtual organization challenges the rigidity and inflexibility at the boundaries of contemporary firms, which prevents them from swiftly teaming up with new, value-adding business partners. The big paradox of virtual organizing, however, is that the boundaries—that is, the interfaces—of the components in such a network should be more clearly delineated (separation of roles) and transparently described (specification of interfaces) than ever before. The intended enterprise is an extended enterprise, or rather, an extensible enterprise, inclusive, rather than exclusive: inclusive along the supply chain, and inclusive of the markets [7,16].

DECONSTRUCTION VS RECOMBINATION

The very success in deconstructing the traditional value chain will eventually be judged by the success of the complementary activity of creatively recombining the necessary pieces into a new, value-creating, open, yet proprietary, unique value network. The crucial insight is that the identities, and thus the strategies, of the parts in a value network and the identity of the whole value network cannot be conceived independently, at least to some degree. That is, we only come to understand the true synergy and meaning of this complex whole from the preconception of the identities and meanings of its parts and their interrelationships. There is a hermeneutic circle involved that is fundamental to any act of creative destruction: "The movement of understanding is constantly from the whole to the part and back to the whole. Our task is to extend in concentric circles the unity of the understood meaning. The harmony of all the details with the whole is the criterion of correct understanding. The failure to achieve this harmony means that understanding has failed," [5].

In his position paper on strategy and the internet Porter [15] therefore, quite controversially at first sight, asserts that this quest for strategic fit among parts may prompt businesses to "once again focus on building close, proprietary relationships with fewer suppliers, using the internet technologies to gain efficiency improvements in various aspects of those relationships." However, the fact alone of envisioning the enterprise as a synergistic network of openly interoperating, self-constituting components (bonded by a common mission) is likely to be capable of creating an agility far beyond that of a ponderous, monolithic whole.

CHANGEMANAGEMENT

Change management [14] emanates from all the above. It starts out from the paradigm of constant change and builds on the premise that change can be managed—that is, systems can be designed to swiftly adapt to changing circumstances, even those that cannot possibly be foreseen. Design for change requires dealing with change in a consistent, systematized and institutionalized way—that is, faithful to a strategic identity, even though this too is subject to change. The ultimate goal: a learning organization, organized to be (self-)reflective and

(self-)corrective [2-3]. Reflection and correction are a continuous (human) activity and are performed at all the different levels throughout the enterprise value network. This is what makes the enterprise a synergistic, reflective "community-of-practice" [1-2], whose identity is both recognized and legitimized by its semi-autonomous parts or sub-

communities, that all have a clear value-adding function of their own. The instrumentarium of organizational change management is vast and the skills involved are numerous (see e.g. [17]). Evidently, good political, people and business skills are at least as important as good analytical, technological and systems skills.

The above discussion on strategy, process, technology and people allows us to grasp the true scope and meaning of change management, organizational learning and knowledge management. The latter can broadly be defined as the multidisciplinary art and science that is continuously in search of synergistic combinations of technology and the creative and innovative capacity of human beings to increase the profitability of the enterprise. It is fostered by managing the enterprise-wide access to and membership of the corporate mind and memory of the enterprise, the home of shared business (meta)knowledge, given lifeblood by developing skills "at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights," [6]. In a context shaped by the new economics of information the true mission of information resources management is to enable communities-of-practice to evolve as freely as possible.

REFERENCES

- [1] Bourdieu, P., 1977. Outline of a theory of practice. Cambridge University Press.
- [2] Brown, J., Duguid, P., 1991. Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization Science* 2 (1), 40–57.
- [3] Dixon, N., 1999. The organizational learning cycle: How we can learn collectively. Gower.
- [4] Evans, P., Wurster, T., 1999. Blown to bits: How the new economics of information transforms strategy. Harvard Business School Press.
- [5] Gardamer, H.-G., 1976. The historicity of understanding. In: Connerton, P. (Ed.), *Critical sociology, selected readings*. Penguin Books Ltd.
- [6] Garvin, D., 1993. Building a learning organization. *Harvard Business Review* 71 (4), 78–91.
- [7] Gummesson, E., 1998. Implementation requires a relationship marketing paradigm. *Journal of the Academy of Marketing Sciences* 26 (3), 242–249.
- [8] Hamel, G., Prahalad, C., 1994. Competing for the future: Breakthrough strategies for seizing control of your industry and creating the markets of tomorrow. Harvard Business School Press.
- [9] Hammer, M., 1990. Reengineering work: Don't automate, obliterate. *Harvard Business Review* 68 (4), 104–112.
- [10] Keen, P., 1997. The process edge: Creating value where it counts. Harvard Business School Press.
- [11] Keen, P., 1999. Designing new organizational structures - Problems and prospects. <http://www.peterkeen.com/fripres.htm>
- [12] Keen, P., McDonald, M., 2000. The e-process edge: Creating customer value and business wealth in the Internet era. McGraw-Hill.
- [13] Mintzberg, H., 1979. The structuring of organizations. Prentice Hall.
- [14] Nickols, F., 2000. Change management 101: A primer. <http://home.att.net/~nickols/change.htm>
- [15] Porter, M., 2001. Strategy and the internet. *Harvard Business Review* 79 (3), 62–78.
- [16] Prahalad, C., Ramaswamy, V., 2000. Co-opting customer competence. *Harvard Business Review* 78 (1), 79–87.
- [17] Senge, P., 1994. The fifth discipline: The art and practice of the learning organisation. Currency/Doubleday.

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