

On Internal Knowledge Markets

By Olivier Serrat

From Possibility to Reality

In large organizations, knowledge can move rapidly or slowly, usefully or unproductively. Those who place faith in internal knowledge markets and online platforms to promote knowledge stocks and flows should understand how extrinsic incentives can crowd out intrinsic motivation.

There is no disputing the obvious: for organizations, ability and, of course, willingness to generate and share knowledge, especially tacit, internally across professions and disciplines—and the corporate silos that constrict them—are an essential source of competitive advantage. In the workplace, remarkable things can happen when people marry creativity and innovation with communication and cooperation. Sorry to say, mainstream organizations still make heavy weather of it. But the competition most face in the globalized economy, compounding the 21st century challenges we all face, compels them to move from possibility to reality if they are to raise productivity and endure. Why? Because data and information (and the contacts they can engender) have never been so cheap, so readily shared, and consequently so ubiquitous. Consequently, societies are experiencing unprecedented rates of change and organizational performance is increasingly defined by the capacity to capture, create, and deliver value to meet explicit or latent needs. And so, in the interest of their clients, audiences, and partners—therefore in their self-interest, organizations must put their houses in order so they may improve organizational effectiveness with knowledge solutions that scale scope. All the time more, they look to internal knowledge markets for help, hence the rise of communities of practice and other such networks.



Man often becomes what he believes himself to be. If I keep on saying to myself that I cannot do a certain thing, it is possible that I may end by really becoming incapable of doing it. On the contrary, if I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning.

—Mohandas K. Gandhi

Technology Impels Nations

In progressive organizations that strive beyond adaptive learning to realize generative, better, radical learning, the objectives of knowledge management are to make the enterprise operate as intelligently as it might to get the most out of knowledge assets

and so promote success and viability.¹ To these ends, as the discipline matures, theory and practice have been enriched by technocentric—and alas, to a much lesser degree, organizational and ecological—perspectives, with the internet revolution supplying constant technological impetus.²

For sure, learning together is an important part of working together: sharing is an integral part of core knowledge activities that include identification, creation, storage, and use. In fact, how can know-how be brought into play if it has not been made available in one form or another? (Knowledge that does not flow cannot grow; in opposition, know-how that is exchanged sparks ideas and prompts new knowledge.) For that reason, in quick-thinking organizations, search parties for the Holy Grail of intrafirm knowledge transfer set off a long time ago. (Uncovering and transferring tacit knowledge were an early

Biological systems are adaptable, resilient, and capable of generating perpetual novelty. That's not a bad list of attributes for a company of the future.

—Margaret Wheatley

goal of knowledge management when that discipline emerged in the 1980s following the groundbreaking work of Peter Drucker, Dorothy Leonard-Barton, and Peter Senge in the 1970s.) In short, learning organizations have put great store in sharing across their entire body (preferably proprietary, in the private sector) insights into clients, audiences, and partners; innovations and good practices that enhance the products and services developed and extended to cater to them; lessons from planning, acting, reflecting (both on and in action), and learning, as well as emerging research; etc.³

Still, it is a reality that in large 20th century organizations, finding people with the experiences, insights, knowledge, and skills one needs on a specific topic remains difficult. The division of labor, standardization of procedures, formal hierarchy, and impersonal relationships that allegedly help large organizations achieve

Discontent is the first step in the progress of a man or a nation.

—Oscar Wilde

maximum efficiency draw boundaries within which knowledge can be combined and applied; they also hamper knowledge flows internally. (Incompleteness, asymmetry, and localness of knowledge are the outcome.) Peer assists, events that bring individuals together to magnify collective

learning and develop networks among those invited, were introduced for the very purpose; they remain a rare occurrence. Inevitably, perhaps, knowledge management has relied on information and communication technologies for sharing.⁴ To simplify, for instance, an early knowledge management prop involved online staff profile pages, aka Yellow Pages, as locators of in-house expertise. In the mid-1990s, forays deepened with the introduction of collaborative technologies such as Lotus Notes, a client-server platform. In the 2000s, organizations aimed to leverage semantic technologies for search and retrieval and to develop e-learning tools

¹ To this intent, in no order, illustrative motivations behind knowledge management efforts up until now have been (i) increasing the knowledge content of products and services to fit an ever-sharper characterization of customer needs and wants; (ii) harnessing creativity and innovation for product and service leadership; (iii) achieving shorter product development cycles; (iv) storing information about the knowledge, skills, experience, and interests of personnel in dynamic, adaptive electronic directories; (v) intensifying network connectivity between individuals; (vi) building enabling environments that allow personnel to access insights and ideas appropriate to their work; (vii) maximizing intellectual—more often than not human—capital; and (viii) solving “wicked” problems.

² The first perspective focuses on information and communication technologies, ideally those that enhance knowledge generation and sharing. The second examines how an organization can best be designed to encourage and facilitate core knowledge activities, e.g., identifying, creating, storing, sharing, and using knowledge. The third directs attention to the behaviors, relationships, and interactions of people within environmental borders—subject to external influencers—that may or may not conduce a collaborative learning ecosystem.

³ With the help of narrative techniques such as learning histories, social reminiscing, and storytelling, the more discerning among them build and maintain corporate memories to augment their future with their past and eschew corporate amnesia when staff leave. See, for instance, ADB. 2009. *ADB: Reflections and Beyond*. Available: www.adb.org/documents/books/adb-reflections-and-beyond/default.asp; and ADB. 2010. *Building Narrative Capacity at ADB*. Available: www.adb.org/documents/information/knowledge-showcase/building-narrative-capacity.pdf

⁴ Arguments about the role of information and communication technologies in knowledge management are pointless. De facto, such technologies are already in pervasive use and qualify as natural media with which to amplify and drive stocks and flows of knowledge. Yet, some fear that affiliated outlays can come at the expense of investments in, say, human capital or that they might objectify then calcify knowledge into inert information, thus debasing the importance of tacit knowledge and collaboration mechanisms for its socialization. Practicable truth lies somewhere in the middle: these *Knowledge Solutions* assert that information and communication technologies can for sure help collect and connect knowledge but that deployment will only achieve that if they are expressly designed for knowledge management and accompanied by a cultural change toward knowledge values. *Learning Lessons in ADB* underscores that leadership, organization, and learning are—in addition to technology—the three other pillars of an architecture for lesson learning. See ADB. 2007. *Learning Lessons in ADB*. Manila. Available: www.adb.org/documents/reports/learning-lessons-adb/strategic-framework-2007-2009.asp

for communities of practice. From the mid-2000s, Web 2.0 “social technologies” based on the internet—e.g., blogs, bookmarks, tweets, and wikis—began to facilitate unstructured, self-governing, or ecosystem approaches that engage clients, audiences, and partners; let them have their say; and thereby build synergies through crowdsourcing.⁵ Nowadays, advocates of knowledge markets⁶ campaign for enterprise-wide electronic marketplaces and push to stipulate associated tasks (routines).

New technology is common, new thinking is rare.
—Peter Blake

Out of Many, Many

The vision is of a forum within an organization that matches knowledge seekers with knowledge providers. An explanation of what that might be would first define markets as actual or nominal places where the forces of demand and supply meet and where buyers and sellers trade goods and services, directly or via intermediaries.⁷ It follows that knowledge marketplaces would then be (broadly) defined as (real or virtual) environments, (formal or informal) community contexts, or (online) platforms for facilitating, aggregating, organizing, coordinating, brokering, and communicating flows and exchanges of data, information, and knowledge between seekers and providers, for free or against payment.⁸ (To note, knowledge markets already exist in intellectual property

This city has many public squares, in which are situated the markets and other places for buying and selling.

—Hernán Cortés

trading, recruitment, management consultancies, research and development, etc. The pervasiveness of the internet is simply moving the organizations involved more decidedly into the web. Helpfully, Kostas Kafentzis et al. make clear that the direction and speed at which they can forge ahead in the knowledge trading framework are conditioned by

their strategic orientation, community, implementation processes, transactions and services, information and communication technology infrastructure, and knowledge assets.) The resources traded would be those parts of an organization’s intellectual capital that relate specifically to human, relational (or customer), and structural (or organizational) assets that are embedded in intellect, relationships, and routines. (They would be in explicit forms such as questions and answers, copyrights, databases, designs, documents, guides, good practices, information systems and technology, manuals, patents, procedures, project libraries, research and development, software code, etc.)⁹ The figure below illustrates the four basic types of marketplaces that organizations can operate in and indeed straddle based on their outlook and capabilities along two dimensions, namely, the openness of the community and the extent of commercialization of its knowledge products and services.¹⁰ Hereafter, these *Knowledge Solutions* refer exclusively to intrafirm knowledge transfer by means of online platforms.¹¹

⁵ Crowdsourcing taps collective intelligence to execute business-related tasks that an organization would normally either perform itself or outsource to a third party. In no small addition to expanding the size of the talent pool at its disposal, the organization gains deeper insights into what stakeholders and shareholders really want.

⁶ With their penchant for equilibrium and optimization, economists would contend such markets can ensure that the scarce resource—in this instance, knowledge—is used efficiently. By addressing the inefficiency of the underuse and “undersharing” of large amounts of data and information, they would boost knowledge creation and development and help capture returns on that knowledge. Of course, this transactional way of thinking assumes clients actively pursue explicit knowledge now exactly available from others for trading and that the market can readily connect parties. And yet, knowledge is no ordinary commodity: it is highly context dependent and explicit representation by sellers will inevitably decontextualize it.

⁷ Businesses are no more and no less than customer-satisfying processes. However, because external orientation ultimately depends for implementation on the responsiveness, motivation, and behavior of personnel, particularly in the services sector, resource-based views of organizations rightly dictate that internal aspects be treated on an equal footing.

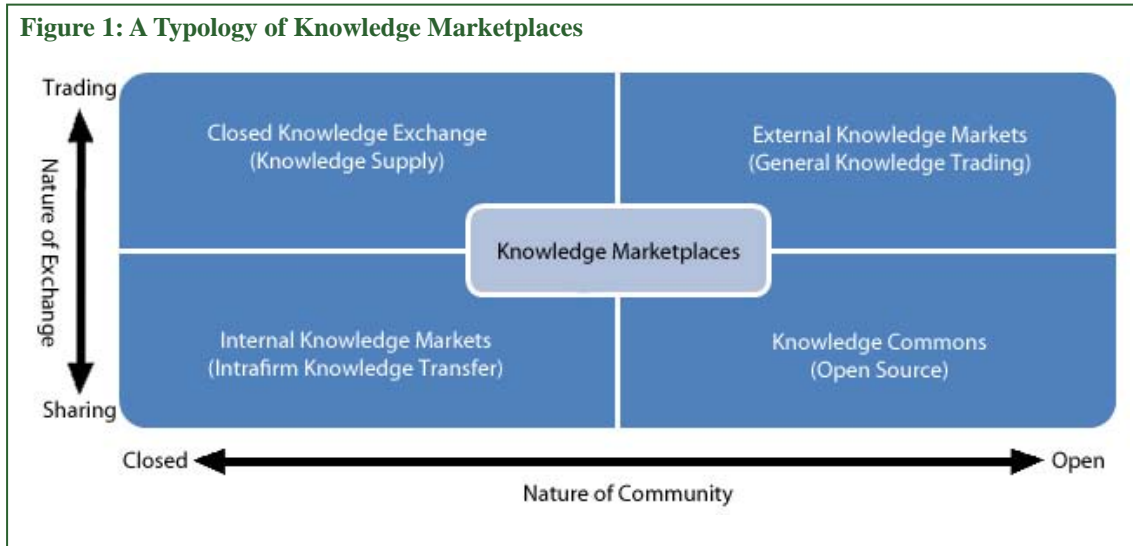
⁸ Kostas Kafentzis et al. write down that, where the business model rests on revenue, sources may include advertising fees, event fees, fees for value-added services, membership fees, sales fees, subscription fees, and transaction fees. Prices may be fixed or set by direct negotiation, auction, or reverse auction. Payment mechanisms include credit card charges, wire transfers, offline payments, and micropayments. See Kostas Kafentzis, Gregoris Mentzas, Dimitris Apostolou, and Panos Georgolios. 2004. Knowledge Marketplaces: Strategic Issues and Business Models. *Journal of Knowledge Management*. 8 (1). pp. 130–146.

⁹ The *Knowledge Solutions* on intellectual capital list sundry other knowledge assets.

¹⁰ The boundaries between the four basic types of knowledge marketplaces are not hermetic. Inter-organizational learning networks such as professional associations are closed, almost by definition, but may have for-profit or not-for-profit orientations.

¹¹ Physical spaces dedicated to knowledge sharing exist in most organizations. They include brown bag seminars, venues for distinguished speakers, knowledge fairs, talk rooms, etc. Knowledge is seldom received in the passive way that electronic communications encourage: face-to-face exchanges serve to weigh up the worth of experience for later testing and validation in action.

Figure 1: A Typology of Knowledge Marketplaces



Source: Adapted from Gregoris Mentzas, Dimitris Apostolou, and Kostas Kafentzis. 2003. *Inter-Organizational Knowledge Sharing and Trading*. Paper presented at the eChallenges conference in Bologna, Italy, 22–24 October.

Let the Buyer Beware

“Rarely do we find men who willingly engage in hard, solid thinking. There is an almost universal quest for easy answers and half-baked solutions. Nothing pains some people more than having to think,” reckoned Martin Luther King. The search for the Holy Grail of intrafirm knowledge transfer has often led corporate knights-errant to worship iconic knowledge platforms in internal knowledge markets. Spellbound by technical genuflections, they cannot see that to democratize knowledge an organization must let personnel concurrently reflect, debate, cast votes, contend, and work in partnerships. What is more, democratizing knowledge opens organizations to new forms of corporate governance as well as new roles and functions for those who would help manage know-how, standing tall on the two legs of integrity and psychology.¹²

Characteristically, and in contrast to a social network that connects members to people they already know, intrafirm knowledge transfer is to be achieved by an information and communication technology-supported platform whose value would grow as more users join in to share information, propagate good practices and impact stories, and fire off real-time responses to what questions personnel may have—all of this regardless of knowledge use. Paraphrasing Lowell Bryan’s¹³ critique of misguided management: Take it from the top, build it and they will use it, and let a thousand websites bloom!¹⁴

There seems to be some perverse human characteristic that likes to make easy things difficult.

—Warren Buffett

¹² Motivation can be intrinsic as well as extrinsic. The former is essential when tacit knowledge must be transferred. Personnel are extrinsically motivated when they can satisfy their needs indirectly, conspicuously through monetary compensation that provides satisfaction independent of the activities they undertake. Motivation is intrinsic if an activity is inherently fulfilling.

¹³ Lowell Bryan. 2004. Making a Market in Knowledge. *McKinsey Quarterly*. No. 3.

¹⁴ A disconcerting aside is warranted since the theme of intrafirm knowledge transfer is unapologetically internal. Tanya Menon and Jeffrey Pfeffer have found that, although many hypothesize in-group favoritism, cases of preference for knowledge obtained from outsiders are prevalent. The grass is greener on the other side because of (i) the innate motivation to learn from competitors, not “ordinary” colleagues; and (ii) the proximity of internal knowledge—the relative availability of which subjects it to greater scrutiny than devaluation, compared to external knowledge, the scarcity of which makes it appear special. *Nul n’est prophète en son pays*. Hence, Tanya Menon and Jeffrey Pfeffer infer, organizational practices that give credit for internal knowledge transfers and recognize the biases that arise from close oversight will curb dysfunctional search and energize internally generated competitive advantage. See Tanya Menon and Jeffrey Pfeffer. 2003. Valuing Internal vs. External Knowledge: Explaining the Preference for Outsiders. *Management Science*. 49 (4). pp. 497–513.

Were it that easy ... At the simplest level, in organizations, people search for knowledge (and knowledgeable people) to find solutions to pressing challenges or simply to do better in their work: they derive utility from what they find in the open, barter for, or buy. Naturally, knowledge providers expect a fair return, at least through reciprocity.¹⁵ Markets for tangible goods and services have a price system so that exchanges can be rendered efficiently and recorded; however, money is hardly ever the form of payment in the case of intrafirm knowledge transfer even though a scarce resource has been exchanged. (Even then, factors such as consistency, quality, repute, and timeliness weigh more heavily still in the expectations of knowledge seekers, who might treat online knowledge with suspicion if it has not been evaluated and edited by a dependable broker. The result? More browsing than buying on the part of those in need, which devalues what knowledge might have been painstakingly imparted by the provider.) Therein lies the crux of the matter, the reason why internal knowledge markets time and again fall short. Hence, the critical issue is to build trust in the workplace as demand for highly specific knowledge products and services is bound to intensify and spread.

From False Principles

The technology-efficiency argument is deceptive: technology per se will not entice someone to share experiences, insights, and knowledge with others; technology alone will not make a disinterested party search or browse; and the mere availability of information and communication technologies will not usher in a meritocracy, a knowledge-creating company, or a learning organization.

The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency.

—Bill Gates

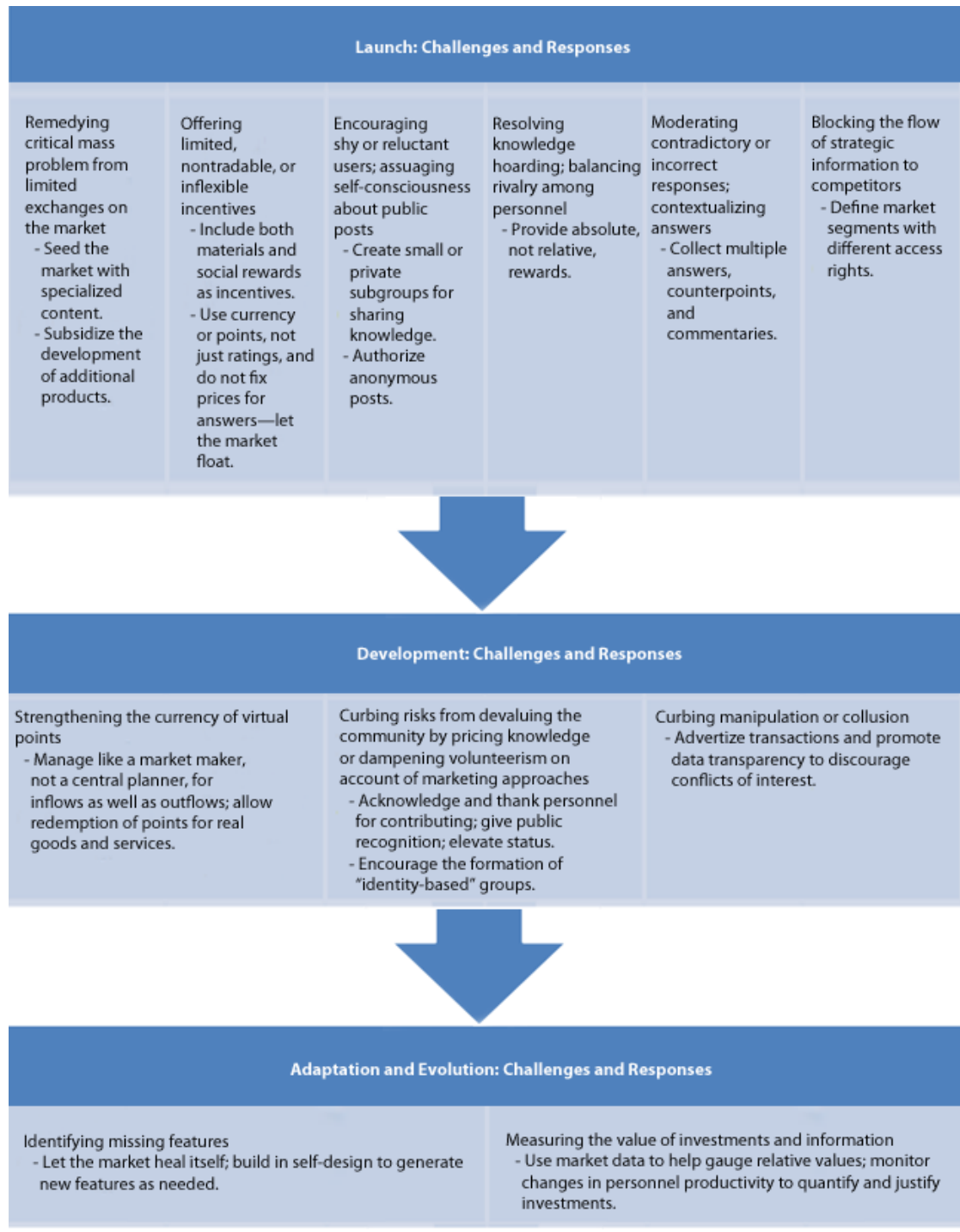
Management should not tout the virtues of knowledge sharing without substantively committing to change. Knowledge management initiatives such as internal knowledge markets—including online platforms—that do not consider the motivations of individuals are likely to fail, depressing morale and galvanizing resistance against future

endeavors. Without a shred of doubt, where creativity and innovation are required, success and viability spring from intrinsic incentives. There must be social inducements to information sharing:¹⁶ devising them requires deeper thinking about human systems,¹⁷ some enabling information and communication technologies, and much more dedicated leadership in this area than organizations commonly deploy. Integrating these requirements, Hind Benbya and Marshall Van Alstyn offer advice on how to design effective internal knowledge platforms. Key recommendations are to (i) seed the internal knowledge market with key content and then subsidize the development of additional solutions; (ii) let prices float in the market; and (iii) manage the market like a market maker, not a central planner.

¹⁵ This said, altruism is real and can be encouraged. However, it is limited by the time, energy, and opportunity costs of benefactors when it is not constrained by cultural factors. Furthermore, it makes little sense for an organization to depend on goodwill to power something as important as knowledge transfer.

¹⁶ Extrinsic motivation has patent disadvantages where knowledge must be leveraged for competitive advantage: the pressure of sanctions it is built on leads to lower levels of learning and conceptual understanding; the work performed is more superficial and people tend to produce stereotyped repetitions of what already works; and (not a few) individuals treat knowledge as a means to achieve upward mobility and seek information rather than share. With intrinsic motivation, personnel put more effort into seeding knowledge beyond their immediate work group. (There are implications for organizational culture too: people are less motivated to both share and seek knowledge beyond their unit, office, or department if reciprocity norms do not govern exchange with other work groups or if they identify more with theirs than with the organization.)

¹⁷ Organizations come about to achieve a certain purpose in an external environment. Therefore, one had better also examine closely what configuration an organization displays to appreciate better any cultural or behavioral dysfunctionality it may have. It is important to get beyond organizational charts—which reflect formal authority, not stocks and flows of knowledge—and process maps to understand how a system works in real life before attempting to make any meaningful change. Currently, one of the best ways to do that is through social network analysis.

Figure 2: Designing Effective Internal Knowledge Platforms


Source: Adapted from Hind Benbya and Marshall Van Alstyne. 2011. How to Find Answers Within Your Company. *MIT Sloan Management Review*. 52 (2). pp. 65–75.

Further Reading

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