From Repositories of Best Practices to Networks of Best Practices

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Abstract- The paper refers to the development of online “networks of best practices” as mechanisms for the sharing of practical knowledge and the support of collaboration among business enterprises. The traditional approach in the transfer of best practices considers best practices as any other piece of information that can be stored and processed in electronic repositories/databases. However, practical knowledge cannot be as easily managed and transferred as information, because it needs social context and interaction. Based on the premise that best practices are practical knowledge (“know-how”) that describes how to better implement some business processes and ideas, we elaborate on the literature of communities and networks of practice, in order to find out ways that facilitate the sharing of practical knowledge among business enterprises. By analyzing the purpose and the features of these structures of practice sharing, we argue that best practice forums can be developed as online networks of practice, which we call “networks of best practices”. We propose initial design principles for this endeavor and analyze the expected benefits.

1. INTRODUCTION

From the 1990s onwards there has been a considerable increase of interest in knowledge management, which is confirmed by the development of the “knowledge-based view of the firm” [1], according to which the firm is an institution for creating and integrating knowledge. Knowledge is considered as the “raison d’etre” for business firms [2] and can lead them to sustainable competitive advantage [1], because it is through knowledge that firms are able to improve their operations or innovate.

In the same period, the diffusion of innovative knowledge has also become one of the major research interests in management science and economics. Business firms encounter a demanding and ever-changing environment that challenges for continuous improvements and innovations. In such conditions, one of the most efficient ways to improve a business process is to learn from the experience of others, who may be found either within or outside of the organizational boundaries. Sharing knowledge across functional or organizational boundaries is seen as key to the effective use of knowledge for innovation [3]. Gratton and Ghoshal [4] claim that the enterprise’s capacity to flourish depends in part on its ability to capture and embed best practices from other companies. Enterprises that fail to adopt best-practice processes are obliged to “re-invent the wheel”, are condemned to make the same mistakes and may become laggards in the race of competition [4].

A sum of concepts and management techniques, such as benchmarking, best practices, communities and networks of practice, even though each one adopts a unique perspective in the issue of knowledge transfer, indicate the increased interest to learn from the experiences of others. Benchmarking and best practice transfer are emerging as some of the most important and widespread practical management issues [5] and as critical factors to a firm’s ability to build competitive advantage [6]. Communities of Practice give the opportunity for knowledge management, knowledge sharing, learning, insight, problem identification and organizational change [7]. Brown and Duguid [8] consider also communities of practice as significant sites for the development of innovations.

The paper refers to the development of efficient mechanisms for the dissemination and sharing of best practices, i.e. experiences and practical knowledge, among business enterprises. Although information technology (IT) can greatly contribute to the transfer and dissemination of best practices, the IT applications that are developed for this purpose treat best practice knowledge as plain information that can be manipulated as any other piece of information [8]. Hence, best practice repositories are typically developed as electronic directories and databases [9]. Such an approach fails to recognize the needs of best practices as “practical knowledge”, as it is attributed in the literature of practice. As a result, this approach cannot fully exploit the opportunities to share and produce new knowledge.

The paper indicates the shortcomings of current approaches in the dissemination of best practices and argues for the need to develop best practice forums as online inter-organizational networks of practice. It is structured as follows: section II examines the concept of best practices, their nature as business knowledge and the requirements for their successful transfer. Section III analyzes the role of information technology in the transfer of best practices and notices the shortcomings of the prevailing approaches. In section IV we consider the development of online inter-organizational networks of practice. We analyze the underlying assumptions in the literature of communities and networks of practice, indicate the expected benefits and propose specific design and operational implications for this endeavor.
II. BEST PRACTICES AND THE TRANSFER OF BUSINESS KNOWLEDGE

Best practices are successful business processes that can be transferred from one business organization to another. In this section we examine the concept of best practices, their nature as business knowledge and the requirements for their successful transfer.

A. The Concept of Best Practices

It is necessary to understand, first of all, what is meant by the term “best practices”; they are those practices that were implemented (usually) outside of the firm and have been shown to produce superior results [10]. O’Dell and Grayson [6] refer to a three-level categorization schema followed by Chevron, which discerns the following categories of best practices: a) Good ideas: they make sense intuitively but they are not yet substantiated by data. They could have a positive impact on business performance, but require further analysis. b) Good practices: they are techniques, methodologies, procedures, or processes that have been implemented and have improved business results for an organization. c) Best practices: good practices that have been determined to be the best approach for many organizations.

Being in essence success stories, best practices can be a very effective instrument for learning and transfer of knowledge in order to achieve the improvement of organizational performance, based on the knowledge and experience of others. The rationality for the use of best practices is that any practice or experience that has been proven to be valuable or effective within one organization may bring equally successful outcomes when implemented in another. Business firms can learn from the experiences of others, either in order to produce equally superior results, or to avoid the same mistakes.

Even though one may think that business practices may serve for reflection and replication, in fact replication of business practices is not possible, because (business) knowledge is always contextual and contains a tacit dimension [11]; in business there are no “recipes or magic wands that can bring automatically success” [12]. If business best practices could be easily replicated, then business failures would become extinct. In addition, business enterprises would be totally opposed to revealing their secrets and, hence, contributing to the creation and dissemination of best practices. Best practices can only be used, therefore, for reflection, in order to learn from the paradigm of others.

For this reason many business firms agree to reveal their best practices, their (unique) capabilities. Best practices can bring benefits (e.g. reputation to contributors, the opportunity for improvement for the receivers, etc.) only when they are produced and shared in a social environment.

From the definitions and the assumptions mentioned above, we conclude that term “best practices” is not used literally; sometimes best practices are only promising approaches and novelties, which other firms may consider as useful and experiment with. The benefits of best practices, in any case, are not limited to the transfer of superior ways of doing things, but include also the vast opportunities to learn from the experiences of others (even from mistakes and failures).

B. Best Practices and Business Knowledge

Best practices are a kind of practical business knowledge. Based on the classification of knowledge provided by Zack [13], best practices are “contextual knowledge”, because the contributor should describe the context in which they took place. The American Productivity and Quality Centre recognized the contextual character of best practices, declaring that “there is no single best practice, because every practice has to be adapted to fit a particular organizational environment” [cited in 10]. The European Union, which uses best practices as a mechanism for policy implementation, seems to adopt this contextual character of best practices and speaks now for “good practices”, “success stories” and “better practices” [9].

Best practices fall also in the categories of “procedural knowledge” and “causal knowledge” [13], because they refer to how something occurs or is performed and why it occurs, respectively. Best practices, therefore, resemble in essence “know-how”, as described by Ryle [cited in 14]. In addition to the declarative part (know-that), which refers to the description of the success story, best practices also contain a large part of tacit knowledge, which cannot be articulated and is acquired through practice and experience. As Brown and Duguid [14] declare, “knowledge runs on rails laid by practice”, which means that “we learn how by practice”, that the acquisition of knowledge is both an intellectual and practical process. The blending of tacit with explicit knowledge and know-what with know-how is an intrinsic attribute of knowledge [11, 14].

The inherently practical and contextual character of best practices imposes, therefore, special requirements on how best practices can be transferred and utilized. First, the description of the best practice (know-what or explicitly articulated knowledge) is not enough for its successful implementation in another organizational context, because acquiring know-what does not lead to being able to use it; “to make know-what useful requires the appropriate know-how” [14]. Second, important is not so much what we do (the specific management techniques and practices), but how and why we do it (the process and the underlying philosophy and view of the implementation). Attempting to copy just what is done, without paying attention to contextual issues, is a more difficult and risky task.

III. THE ROLE OF IT IN THE DISSEMINATION OF BEST PRACTICES

Information technology (IT) has a significant role in knowledge management. In information science, knowledge derives from information and refers to the understanding of information [15, p. 5-6]. As a result, most knowledge management efforts emphasize technology solutions that support the storage and transfer of codified information [16].

In a recent survey about best practice dissemination
mechanisms that are used by the European Union Directorates in order to support the enterprise and regional policies, we [9] found that the most prevalent such mechanism is the electronic repository (database or directory) that operates on the Web and gives the opportunity to the user to browse, explore and search for content. Some such repositories contain state-of-the-art search mechanisms, which permit multi-criteria and multi-level searches. However, none of the above repositories contains sophisticated mechanisms that support interaction among the users, such as asynchronous and synchronous communication forums, bulletin boards or web-conference facilities. In addition, none of them contains “member’s profile directory”, so that members have the opportunity to get acquainted with each other.

This kind of development of best practice repositories reveals an “objectivist approach” [17] to best practice knowledge, in which the transfer of best practices is equated to the transfer of information; best practices are considered objective pieces of information that can be codified, stored in electronic databases and thereafter transmitted to those interested in them, as any other piece of information. The important about best practices in this approach is the recognition of promising or exceptional examples that can be captured, codified and disseminated.

Codification is very important because only with this can information be processed by information technology systems. Knowledge, however, cannot be fully codified and processed by information systems, because, in addition to the explicit dimension, which can be articulated and codified, it involves also a tacit dimension, which cannot be codified [11, 14, 16]. Such constraints hold also for best practices, which are both declarative (know-what) and procedural knowledge (know-how). The transfer of best practices, accordingly, can only partially be performed with the use of IT, because, without the tacit elements, it is impossible to develop a full understanding of what this knowledge means. However, the role of IT in the dissemination and sharing of best practices is still important, as we will show in the next section.

IV. DEVELOPING NETWORKS OF BEST PRACTICES

Hilsop [17] argues that where knowledge is highly tacit, the effective sharing of knowledge requires a significant amount of social interaction. McDermott [18] considers that knowledge differs from information because it belongs to communities and circulates through communities. From this point of view, Communities of Practice (CoPs) can play a very significant role in the dissemination and sharing of best practice knowledge.

The concept of CoPs was coined at the beginning of the 1990’s and made remarkable impact in business management. Wenger argues that “communities of practice are the cornerstones of knowledge management” and “the social fabric of knowledge” [19]. A formal definition of CoPs is that they are “groups of people informally bound together by shared expertise and passion for a joint enterprise” [7]. A CoP is, in essence, a social collective where individuals working on similar problems self-organize to help each other and share perspectives about their work practice, resulting in learning and innovation within the community [cited in 20].

CoPs were developed because, in many work situations, the demand of practice exceeds the codified knowledge available to individuals [20]. From this point of view, CoPs could be used for the development of best practice forums (i.e. places for the communication and sharing of best practices). Wenger and Snyder [7], in fact, propose that “CoPs can become forums for sharing and spreading best practices across a company”, while Swan and Newell [21] praise the role of CoPs in the development and management of innovations.

To decide for the appropriateness of CoPs as a mechanism for best practice dissemination, we will analyze CoPs’ attributes and judge if they meet the needs of best practice forums. Wenger [2004], who first coined the term, considers three elements of CoPs: domain, community and practice (they relate closely to joint enterprise, mutual engagement and shared repertoire of resources, respectively, which he had defined as elements of CoPs earlier [22]).

- **Domain**: the area of knowledge that brings the community together and defines the key issues that members need to address. It is constantly (re-)negotiated between the members.
- **Community**: the group of people for whom the domain is relevant and the relationships and interaction among members.
- **Practice**: the “capability” that has been produced, the body of knowledge, methods, cases, etc., which members share and develop together.

Taking into consideration that CoPs may span organizations [14, 22], best practice forums have all these characteristics. However, the element of “community” (especially with the sense of “mutual engagement”), may not be strong enough in best practice forums; business practitioners that participate in such forums and produce and share their ideas and practices with others are neither emotionally involved with each other nor restricted by behavioral norms.

To lax these constraints, Brown and Duguid [14] proposed another social formation of practice, which they called “Networks of Practice” (NoPs). They are social spaces in which individuals work on similar problems, self-organize to help each other and share perspectives about their practice; however, the relations among networks members are significantly looser than those within a CoP [14]. The precise distinction of social structures of practice between CoPs or NoPs may not be crucial; for example, Duguid [23] considers that OSS coders may be either CoPs or NoPs.

The flexibility of NoPs in participation makes them suitable to operate on the Web [20, 23, 24]. For Duguid [24], NoPs offer a powerful example of the kind of networks that can be easily supported by IT. Besides online communities, the term NoPs was attributed to professional and occupational networks [14, 25], epistemic networks [14] and
practice-oriented extra-organizational networks [20]. In the same context, Sgourev and Zuckerman [26] talk about industry peer networks, comprised of small groups of non-competing peers, who gather regularly to exchange information and discuss matters of company performance.

A. The Expected Benefits of Networks of Best Practices

It this section we argue that NoPs are not only suitable for the sharing of business best practices, but they are necessary as well, because they can provide a wide spectrum of benefits.

NoPs are a particularly effective mechanism for the sharing of tacit knowledge and know-how, which is an intrinsic part of best practices. As argued in section II, it is only through social interaction that this dimension of knowledge can be shared.

NoPs may foster an environment in which new knowledge and innovations can be created. In such places, business practitioners can exchange opinions and share their perspectives with others. Innovation is a social process; it emerges usually as the amalgamation of previous efforts and achievements, which comes through the interaction of practitioners. Innovations, and especially radical innovations, are usually developed at the boundaries of communities and networks of practice [25].

The networking of business practitioners, who participate in solving common problems, is expected to contribute to the development of common understanding, mutual trust and mentality of collaboration. All these foster the development of social capital, which is considered now as a key factor for entrepreneurship and economic development.

Participating members not only contribute to the network, but they also benefit from the best practices of others and see the trends that are being shaped in the business world. Participants benefit also from the opportunity to find other people or organizations that have the same perspectives and similar objectives and explore the opportunities for collaboration with them. Such networks, therefore, can play a critical role in the promotion of entrepreneurship.

B. Implications for the Design of Networks of Best Practices

In this section we propose initial design principles for the development of online networks for best practice sharing. Such networks should combine the functionality of online repositories with the opportunity for online social interaction among the members. We consider these networks as “networks of best practices”.

The development of networks of best practices should be based on the attributes and the purposes of best practice knowledge, as portrayed in section II. Moreover, because these networks basically function on the Web, we need to take into account the progress made in IT applications that support online communities and online collaboration. However, when we try to understand the role of IT in the development of networks of best practices, we should have the “needs of practice in mind” [23].

The explicit dimension of best practice knowledge (i.e. success stories and experiences that can be articulated) can be acquired, stored, processed and maintained in online repositories/ databases. The dissemination of best practices can take place through the Web. This is the prevailing approach today for the dissemination of best practice [9]. However, to avoid the shortcomings of this approach, which were analyzed in section III, there is need to add new functionality to the online repositories and support the social interaction of their members.

The best practices repositories should accommodate state-of-the-art search mechanisms, which permit multi-criteria and multi-level searches. Besides text-based material, they should also contain rich-format content (e.g. multimedia), which can capture and reproduce some of the tacit elements of knowledge (e.g. video presentation could supplement textual descriptions, showing how a process is performed in practice). The repositories should give the opportunity to organize the content meaningfully (e.g. with the use of concept mapping applications), so that best practices are not scattered and fragmented knowledge.

The challenge in developing online networks of best practices is to use IT not only to disseminate information, but to support members’ interaction as well. IT can be used for the sharing of implicit knowledge and know-how. There has been significant progress in the development of network technologies and groupware applications for the creation of virtual spaces, in which participants can interact with others and exchange knowledge. The most important such applications for aggregated social interaction are online synchronous and asynchronous discussion forums, electronic whiteboards, chats, electronic bulletin boards, mailing lists, etc.

These general-purpose applications should be enriched with new features that support the requirements of communities and networks of practice. Online interactions would become more efficient if they contained features that:

a) enrich discussions with content, so that contributors have the opportunity to document and prove their ideas and relate them to other facts and ideas,

b) cultivate the spirit of community (e.g. with members’ profiles directory, so they may get acquainted with each other),

c) provide opportunities for peer recognition (e.g. rating others’ contributions – notice that peer recognition may be the most important incentive for participating in the network),

d) promote feedback (e.g. voting),

e) promote participation (e.g. the opportunity to propose/create new topics),

f) promote partnerships and collaboration (e.g. private discussion spaces),

g) develop individual work-spaces (e.g. for maintaining content),

h) support the communication with others from outside the network and sponsor the participation of new members (e.g. multi-level privileges in participation).
Even though networks of practice are informal, self-organizing and voluntary structures, they are in need for active sponsorship and management with respect to participation, cultivation and maintenance of content and relations [7, 19]. The development of a network of business best practices is normally a purposeful decision taken by an organization that wishes to support entrepreneurship (e.g. the European Union Directorate for Entrepreneurship, organizations for regional development, etc.). They need to create a whole structure of roles [19] for the management of networks of best practices, such as project leaders, communication facilitators, experts in each domain of interest, reviewers of content and discussions, technical support personnel, etc. The mission of all of them is to promote and facilitate interaction and care for the quality of contributions.

IV. CONCLUSIONS

Best practices offer the opportunity to business enterprises to learn from the experiences of others. In this way, they benefit from the acquisition of knowledge for organizational improvement and the development of business and process innovations. Best practice repositories were developed to support the transfer of best practices; however they suffer from shortcomings in disseminating and sharing practical knowledge. Taking into consideration the requirements of sharing practical knowledge and the features of social structures, such as communities and networks of practices, that are developed for this purpose, we propose the development of online networks of best practices. They can contribute to the sharing of best practices, the production of new knowledge and innovations, and the sponsorship of entrepreneurship. It can support the development of online networks of best practices; however, emphasis should always be placed on the needs of social interaction and practice.

The success of a network of best practices depends on its ability to incite members to actively participate in the production and sharing of knowledge. An important area of future research refers to the development of networks of best practices that incite active participation and contribution. Participation and behavior in networks of best practices should be analyzed in depth. Analysis of networks of best practices and juxtaposition to repositories of best practices will expose those features and settings that foster the transfer of best practices.

REFERENCES