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# Socio-Technological Aspects of Knowledge Disclosure: The Relevance of Storytelling in Knowledge Ecology Based Organizations

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# **SOCIO-TECHNOLOGICAL ASPECTS OF KNOWLEDGE DISCLOSURE: THE RELEVANCE OF STORYTELLING IN KNOWLEDGE-ECOLOGY BASED ORGANIZATIONS**

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## **ABSTRACT**

*IT has become an essential enabler of community members finding, disseminating, and applying knowledge. While most KM champions agree that the key lies in focusing on building an integrated Information Management System (IMS) that will allow a community to thrive under any circumstance is key, we feel that it is fundamental to focus on the social aspects of sharing knowledge.*

*The purpose of our research is to highlight the role of the triple network - knowledge, people, technology - and more specifically, with the adoption of the Actor Network Theory, to understand how storytelling can help organizational competence to emerge from a knowledge ecosystem (which can be understood as people networks creating knowledge networks, supported by technology networks). In this sense, social computing can be seen as the way to link digital systems with social information and context to enhance the activity and performance of people, organizations, and systems.*

## **Research Methodology**

As to the methodology, the complexity of the research topic asked for a multi-method approach combining a systematic texts analysis and a research of some cases on the web that have been interpreted on the background of qualitative approaches. In this respect, this paper is based on the arrangement of documentation gathered from researches and current sources. We have chosen such methodology to fit to the reality in the best way and to present specific hypothesis on the state of the art.

## **INTRODUCTION**

The paper is divided into 7 sections. Following this introduction, section No. 1 - giving a brief explanation of what a knowledge ecology is - describes the ideal environment of our research.

The relationship between technology and the sociological aspect of KM may be conceptualised in many ways. We embrace the fairly widespread belief that IT is a crucial factor as it simultaneously enables and amplifies the currently dominating trends in KM (*Orlikowski, 1991*). However, we

emphasize the fact that technology itself cannot deliver great results if we do not consider the interplay between IT and its social aspects.

Section No. 3 takes into account the Actor Network Theory (ANT) where technology receives exactly the same status as human actors and the distinction between human and non-human actors is systematically removed. We feel that this theory really works if applied to a peculiar aspect of KM, i.e., knowledge disclosure and to demonstrate this fact, we have tested it with the art and science of storytelling.

Section No. 4 briefly explains how storytelling can help organizational learning while section No. 5 describes the point of view expressed in section No. 3 highlighting how anecdotes and story disclosure processes could be facilitated with the use of Social Computing Systems, all instruments that can help in sustaining employee participation.

In section No. 6 we complete the description of what storytelling really is, explaining – after the disclosure process – how fundamental the role played by story crafting is.

The paper concludes with section No. 7 where it is clearly stated – in the light of the ANT – that each kind of business that wants to succeed must wisely coordinate the technological and sociological aspects of knowledge disclosure and consequently knowledge management.

## **1. THE IDEAL CONTEXT: A KNOWLEDGY ECOLOGY-BASED APPROACH**

In a dynamic business environment knowledge is always changing, growing and emerging. Moreover, knowledge does not reside in discrete units, functions or even disciplines, but always occurs within a larger network - a living ecology of human intelligence. "*Knowledge ecology*" is the name given to the inter-disciplinary field of augmenting and mobilizing collective intelligence.

Knowledge ecology (KE) essentially refers to a field of management theory and practice, focused on the relational and social aspects of knowledge creation and utilization. KE is "ecological" in the sense that the best models we have for knowledge designs that create, sustain, and foster organizational learning and development are natural "learning organizations," for example, ecosystems and brains. Recognizing the value of understanding natural systems, we are also aware that the volitional, language-based social systems bring new possibilities for design and feedback to our human institutions (*Pòr G., 2000*)

KE's primary domain of action is the design and support of knowledge ecosystems, in which information, ideas, and inspiration cross-fertilize and feed on one another. The ecology of knowledge is essentially perceived as a complex, adaptive system of ideas, information, insights and inspiration, interacting with each other and their shared environment.

The heart of KE is the art and science of collaborative midwifing the emergence of meaning and value from productive conversations. KE provides a framework, tools and practices for crafting and sustaining evolving webs of relationships in which to embed and preserve the evanescent knowledge that is always inherent in social activity.

## **2. DOES KM = IT? SOME MYTHS TO OVERCOME**

Knowledge Management is in danger of being perceived as so seamlessly entwined with technology that its true critical success factors will be lost in the pleasing hum of servers, software and pipes. As vendors label their document management, database or groupware products "knowledge management solutions," executives can be excused for mistaking the software for the solution. It is not. The question that naturally raises is: *does successful KM necessarily implies the use of IT?* This question is also supported by the industry-wide analysis of IT investments by technology economist Paul Strassmann. In his

book, *The Squandered Computer* (Economic Press, 1997), Strassmann concludes that there is no relationship whatsoever between computer expenditures and company performance.

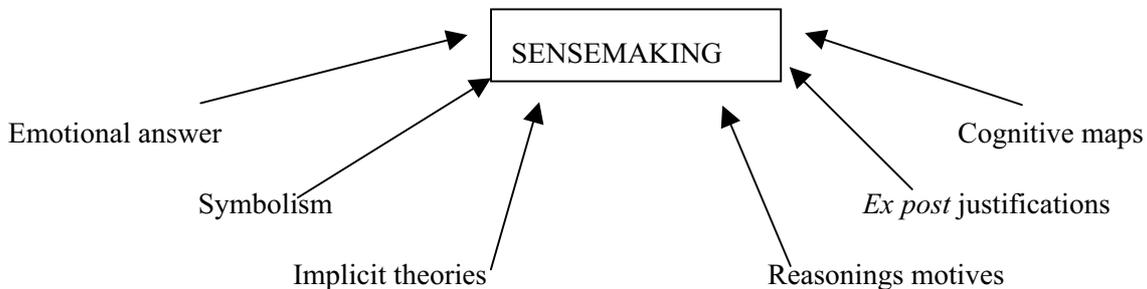
To explain our point of view we have used some myths - identified by Malhotra Y., 1999 - that must be overcome.

### **2.1 MYTH #1: Knowledge Management Technologies Deliver the Right Information to the Right Person at the Right Time.**

Malhotra says that this idea applies to an outdated business model. Information systems in the old industrial model mirror the notion that businesses will change incrementally in an inherently stable market, and executives can foresee change by examining the past. "*The basic premise is that you can predict...how and what you'll need to do and that IS can simplify this and do it efficiently*" he says. The new business model of the Information Age, however, is marked by fundamental, not incremental, change. Businesses cannot plan long-term; instead, they must shift to a more flexible "anticipation-of-surprise" model. Thus, it's impossible to build a system that predicts who the right person at the right time even is, let alone what constitutes the right information.

### **2.2 MYTH #2: Information Technologies Can Store Human Intelligence and Experience.**

Technologies such as databases applications store bits and pixels of data. "*But they can't store the rich schemas that people possess for making sense of data bits*" Malhotra says. Organizational sense-making is a process incorporating both cognitivism's elements, like frameworks and scripts, and symbolism's elements; different kinds of sense making can co-exist: a) *prospectic* (addressed to future actions) – as described in classical cognitive theories; b) *retrospective* - as suggested by Schutz and Weick; c) *introspective* – or merely deductive (Gioia, 1986). Organizational sense making is therefore the result of a system of influences:



Moreover, information is context-sensitive. The same assemblage of data can evoke different responses from different people. "*The reason this is important is that many information textbooks say that while people come and go their experience can be stored in databases. But unless you can scan a person's mind and store it directly into a database, you cannot put bits into a database and assume that somebody else can get back the experience of the first person.*"

### **2.3 MYTH #3: Information technologies can distribute human intelligence.** Again, this assumes that companies can predict both the right information to distribute and the right people to distribute it to. And bypassing the distribution issue by compiling a central repository of data for people to access doesn't solve the problem either. "*The fact of information in a database doesn't ensure that people will see or use the information*" Malhotra says. "*Most of our knowledge management technology concentrates on efficiency and creating a consensus-oriented view. The data therein is rational, static and without context.*" And such systems, he adds, do not account for renewal of existing knowledge and creation of new knowledge.

### **3. KM IS NOT JUST A MATTER OF TECHNOLOGY OR PEOPLE: THE ACTOR NETWORK THEORY**

Starting from these three considerations we share completely, we decided to apply Actor Network Theory (ANT) (Callon, 1991; Latour, 1992) in the knowledge ecology context explained in section No. 2 in order to try to understand and explain that KM is not just a matter of technologies or people, but how technologies, people and their knowledge have to be jointly managed to drive companies to succeed.

The ANT evolved from the work of Michel Callon (1991) and Bruno Latour (1992) at the Ecole des Mines in Paris. Their analysis of a set of negotiations describes the progressive constitution of a network in which both human and non-human actors (read: technical and non-technical elements) assume identities according to prevailing strategies of interaction. Actor-network theory focuses attention on the socio-technical networks that engineers and scientists create to get their projects done, emphasizing that no one acts alone (or if they do, then no one notices, so it does not matter).

ANT's systematic blurring of the distinction between the technical and the non-technical extends beyond the duality of Orlikowski and Robey (1991) and Walsham (1993). The whole idea is to treat situations as essentially equal regardless of the means; the objective is still the same. Within ANT, human actors receive exactly the same status as technology; the distinction between human and non-human actors is systematically removed. ANT takes the fact that, in a number of situations, technical artefacts in practice play the same role as human actors very seriously: the glue which keeps a social order in place is a heterogeneous network of human and non-human actors. A theoretical framework, which makes an a priori distinction between the two, is less likely to manage to keep its focus on the *aim* of a social arrangement regardless of whether the *means* for achieving this is technical or non-technical.

This is to say that companies do not go about doing their business in a total vacuum but rather under the influence of a wide range of surrounding factors. In line with its semiotic origin, actor network theory is granting all entities of such a heterogeneous network the same explanatory status as "*semiotics is the study of order building (...) and may be applied to settings, machines, bodies, and programming languages as well as text (...) [because] semiotics is not limited to signs*" (Akrich and Latour 1992). It might perhaps seem a radical move to grant artefacts the same explanatory status as human actors: does this not reduce human actors to mere objects and social science to natural science? We intend to bracket this rather dogmatic issue.

More specifically Latour says (p.99, 101): "*The only way to increase a project's reality is to compromise, to accept sociotechnological compromises. The pertinent question is not whether it's a matter of technology or society, but only what is the best sociotechnological compromise*".

These quotations not only deny the separability of the social and the technical, but they also make the same point as mentioned above, about the necessity for translations. Once all these translations succeed, the technology "disappears", i.e., it becomes "transparent" and can be taken for granted. But if the translations fail to "interest" the actors enough, then the actors go their own ways again, each with a different view of what the project is (or was).

A question arises: *is there a specific aspect of KM that can fit with this kind of socio-technological compromise that organizations should join?* The following section applies the ANT theory to the art and science of storytelling to give an appropriate answer to the question.

### **4. STORYTELLING: A SOCIOTECHNOLOGICAL COMPROMISE**

A critical challenge in knowledge management lies in assessing and addressing cultural issues. Stories are a powerful way to assess the current values in an organization's culture, as well as to help to modify it, to improve communication skills and boost learning. They are very useful to represent

complex, multi-dimensional concepts: while a certain amount of knowledge can be reflected as information, stories can hold the key to unlocking the vital knowledge which remains beyond the reach of easily codified information.

If we define work experience as the knowledge derived from a number of business situations and of the results obtained applying different strategies from case to case, we may appreciate the interest of systematically eliciting anecdotes<sup>1</sup>: in order to produce a sort of collective and transferable equivalent of team experience using stories, storytelling provides the mechanism to discuss work related issues and share, through communication, the team learning among the whole organization (Fig. 1).

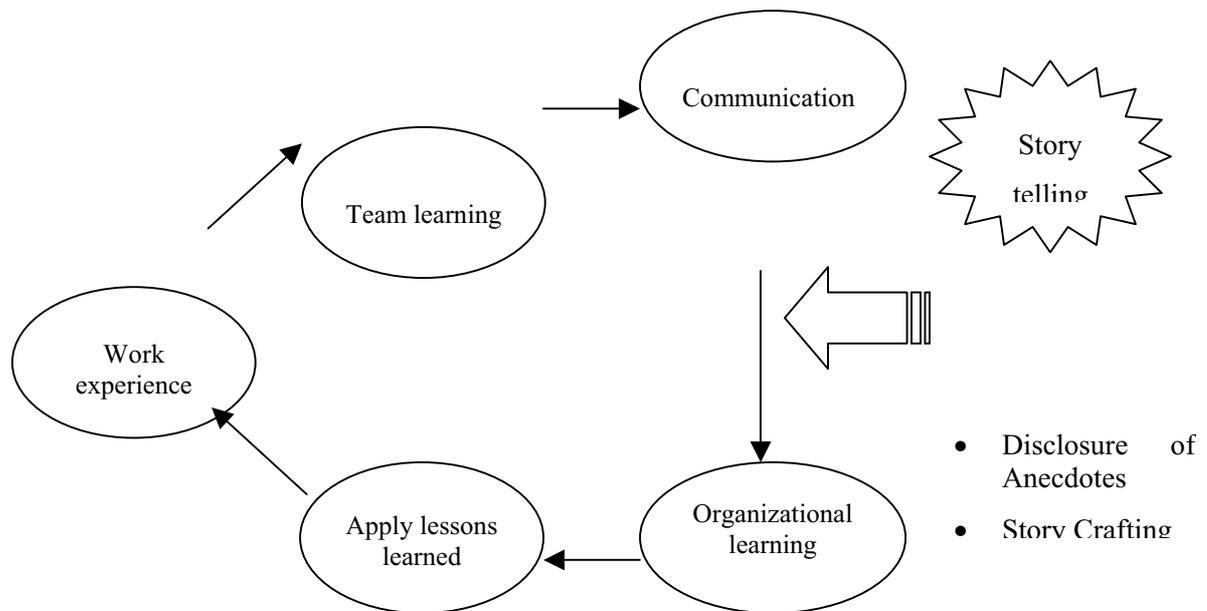


Fig. 1 - Organizational learning through storytelling.

Readapted from Heijst, Spek, Kruizinga 1998

Each project provides some anecdotes, insights and lessons learned with respect to some aspect of the industry, but if they are not abstracted away from the idiosyncrasies of the projects and made available, it is either impossible or extremely costly for a new team to benefit from them (Sarvary M., 1999).

To overcome this problem and effectively implement storytelling methods, the organization must (1) create an anecdotal base and (2) construct purposeful stories to influence its members.

*Disclosure of Anecdotes* – Managing knowledge requires attention to managing a complex ecology of interdependent, unpredictable and fluid entities: it follows that the disclosure exercise needs to follow an anthropological approach, in order to avoid influencing the environment that is being studied. In

<sup>1</sup> An ANECTODE is captured on the field or arisen from a brainstorm or research, while a STORY is constructed for a specific purpose.

section 5, we analyse how to design this intervention in a virtual environment using social computing<sup>2</sup> systems like “Babble<sup>3</sup>”.

*Story Crafting* - Story either takes and enhances an individual anecdote or creates a completely new story from anecdotal material. However, case studies, "lessons learned", and scenarios are all forms of stories that benefit from careful, deliberate crafting. In section 6, we explain the common features of stories and we also give a practical example of a purposeful story taken from David Snowden's article “Story Telling: An Old Skill in a New Context” (Snowden, 1999b).

It is important to note that, for really effective knowledge building and sharing, the ability to hear and understand the stories told in organizations will also prove invaluable. Stories are told constantly. Those who know how to listen to the many layers wrapped around such stories can hear the tacit and the explicit, the emotional and the informational elements. Someone who really understands stories knows when not to read too much into them (sometimes a story is just a story), but he or she can also spot the real knowledge wrapped inside what is said, even when the speaker may not be aware of the richness of his expression. This is useful when trying to understand the knowledge personally, but also when trying to elicit and represent knowledge such that others may benefit from it more easily.

## **5. ANECDOTE DISCLOSURE**

Storytelling is fundamentally social (Thomas, Kellogg, Erickson 2001): in everyday events, people tell anecdotes to other people (who are usually physically present) in particular social contexts (at dinner, in a meeting, etc.). These anecdotes provide the raw material for stories: by using characters, incidents and context from the anecdotal material captured from a community, we can root a purposeful story in the community it is intended to influence.

After having analysed why it is important to capture anecdotes, we will focus on the way an organization can create a virtual environment that provides a social context where we can apply effective knowledge disclosure techniques.

### **5.1 Why is it important?**

The process of anecdote capture is useful in its own right. It creates material that is inherently more attractive than ‘dry facts’, and often reveals unexpected material, attitudes and incidents that are not revealed by more traditional means of enquiry. The process of anecdote disclosure is also a valuable learning experience for the participants.

There are two linked issues here (Snowden 2000b):

1. Successful teams will tend to ignore, forget or de-emphasise elements of luck and serendipity without which their project would have failed; in some cases they may not even have been aware of them in the first place. The overriding need to succeed in the modern organisation means that the result is the only real measure, regardless of its real cause. This means that modelling future behaviour on repeating ill understood success is a very dangerous thing.
2. In contrast, unsuccessful teams will tend to play up elements of luck and emphasise lack of adequate resources, their unwillingness to make more compromises and a host of other excuses.

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<sup>2</sup> Social computing has to do with digital systems that draw upon social information and context to enhance the activity and performance of people, organizations, and systems (Thomas, Kellogg, Erickson 2001).

<sup>3</sup> “Babble” is an on-line multiuser environment that is intended to support the creation, explication, and sharing of knowledge through text-based conversation (IBM Research 2002).

These issues determine who tells what anecdotes to whom and when. For this reason, in designing effective ways to collect and provide access to anecdotes, it is important to attend to some of the basic social dynamics that affect everyday storytelling, such as reasons for telling anecdotes, the teller's knowledge of the audience, and the role the audience takes in the telling.

## 5.2 Creating social context in a virtual space: social computing systems

In a room with others, we will apply ourselves, and if we do not, the lack of participation is clearly visible to the group as a whole, and social pressure will get us involved, even if interest did not. In a virtual community this is far more difficult (Snowden, 2000 b).

In order to solve this problem, IBM's Labs designed a digital system called "Babble"<sup>4</sup> from a social perspective, a system predicated on the assumption that knowledge is rooted in a social context. Its basic rationale would be that (Thomas, Kellogg, Erickson 2001):

- knowledge is produced within, and dispersed among, a network of people;
- only a small proportion of knowledge is captured in concrete form;
- knowledge sharing involves social factors like relationships, trust, obligation, and reputation.

Babble satisfies the assumption by providing access to data and documents, but also by interconnecting the social network of the people who produced the knowledge. Moreover it includes not just the people who produce the knowledge, but those who use it as well (Erickson, Kellogg 1). After all, some of the knowledge users might have to invest considerable effort in order to apply the knowledge to their own ends, developing an understanding of its shortcomings and peculiarities, as well as building on it.

The key factor of Babble is that it is "socially translucent". By social translucence Thomas (Thomas, Kellogg, Erickson 2001) means systems that provide perceptually based information about the presence and activity of users, thus creating social resources that the group as well as individuals can use to structure and enhance their on-line interactions.

Babble provides cues about users' presence and activity through a social proxy, which portrays the conversation as a large circle, and the participants as coloured dots or marbles.

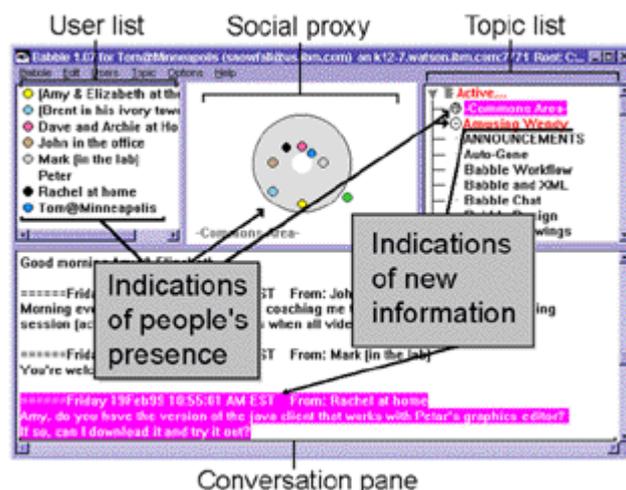


Fig. 2 – Babble user interface (Erickson, Kellogg 2001)

<sup>4</sup> Babble was created by David N. Smith in August 1997 (IBM Research 2002). In terms of functionality, Babble resembles a multi-channel, text-based chat system in that many users can connect to it, and select one of a variety of conversations to participate in (or create their own) (Erickson, Kellogg 2001).

Marbles within the circle are involved in the conversation being viewed; marbles outside the circle represent those who are logged on but are in other conversations. The marbles of those who are active in the current conversation, either contributing (i.e. typing) or 'listening' (i.e., interacting with the conversation window via mouse clicks and movements) are shown near the circle's center; with inactivity marbles drift out to the periphery.

Moreover, the textual conversation that occurs in Babble is persistent: that is, unlike conventional chat where newly arriving users see only what has transpired since they have joined a channel, Babble users can see everything entered in any existing conversation. These traces give the system the potential to function as an anecdotes store. The persistent trace left by textual conversation is a rich source of socially salient information (awareness), and its power is enhanced because participants know that the representation is shared and thus that everyone is privy to the same set of cues (accountability) (Erickson, Kellogg 2000).

When such information is made visible to all participants, people become aware of one another's presence and activity, allowing social conventions and other social dynamics to come into play. With mutual awareness comes accountability for one's actions: *if "I know that you know that I know" of your presence and activity, my activity will be interpreted with respect to that knowledge* (Thomas, Kellogg, Erickson 2001).

By invoking social translucence as a framework, social computing systems attempt to make people and their behaviour more prominent, enabling the creation, exercise, and mutual observation of social behaviour. By so doing, the interaction of people and ICT creates a basis for more coherent, productive, and fluid interactions on line.

### **5.3 Virtual disclosure processes**

In physical environments, the essence of the approach is to select a representative sample of projects and then reassemble as many as possible of the original team for a one-day storytelling workshop for each of the selected projects. The storytellers are encouraged to reminisce, in the style of a reunion. Well conducted, this creates a series of anecdotes, humorous incidents, lessons learnt, observations and plain narrative (Snowden 1999b).

It is not always possible to bring together a team in whole or in part; in these circumstances it is useful to work in a virtual environment. Virtual disclosure processes require a greater amount of energy to sustain participation, but tools like Babble offer the following advantages:

- run the process in a synchronous way (with all the actors present and interacting)
- run the process in an asynchronous way (with participants joining and leaving at different time and places)
- permit virtual storytelling over long periods of time (because the conversation that occurs in Babble is persistent, and participants are aware of their own participation and of that of the others)

In this sense, Babble provides a digital substrate upon which knowledge communities can grow, and where "anecdote bases", rather than databases, can provide a medium for people to develop, share, and reuse experiences and knowledge, and watch others do the same (Thomas, Kellogg, Erickson 2001). To leverage these resources, organizations need trained knowledge engineers who not only identify decisions, judgements, problems resolved/unresolved and chart these together with associated information flows (as in the physical environment) but also continuously inject energy into the conversation and perform a critical function of training and mentoring.

In particular, there are three useful techniques for anecdote disclosure that can be critically applied to the on-line environment (Snowden 2000a):

1. *Alternative histories* provide a powerful means by which knowledge engineers can stimulate the creation of a richer anecdotal base. Any anecdote will have a number of turning points, where an alternative future was a possibility based on a small change in a decision or some ‘environmental’ factor. Exploration of these alternative histories is a source of often truth-full anecdotes: for example, once the official history of a project has been told, the participants are asked to identify between three and seven points in that history where a small change would have resulted in a radically different outcome. Then, they are stimulated to construct an alternative and fictional story for each such turning point: the result is four or eight anecdotes rather than one.
2. *Shifting character or context* in a story can elicit a higher level of diversity in the anecdotal material. All stories have a structure, one of which will be described later in the context of story de-construction. They have antagonists, scenes, conflict, inner feelings and the like. Having identified a substantial anecdote, the group is taken through the deconstruction process described later and then asked to retell the story with an appropriate change. The change provides a new perspective on the anecdote.
3. *Indirect storytelling through the use of archetypes* allows disclosure without attribution. Within a story circle, the participants can be asked to identify archetypal characters revealed by the anecdotes they have collected; this is viable when the number of anecdotes reaches a critical mass: normally in excess of twenty. Once the archetypes are established then possible future situations can be used to stimulate anecdotes from the group using the archetypal characters. Again, the purpose is to use fictional forms to explore a wider range of possibilities and create a richer repository of anecdotes: we are moving from an ‘I’ story to a ‘They’ story. The indirect use of archetypes permits a degree of honesty that would not be possible using the ‘I’ mode.

Snowden (1999b) underlines that the ‘good’ teams, those who win good business, readily move into storytelling mode. They enjoy this experience and willingly reminisce, mining a rich vein of anecdotes, often humorous, self deprecating and memorable. On the other hand, the ‘bad’ teams who either lost business, or won business that in retrospect their company would have been better without, find it more difficult. Stories are often told from very different perspectives, with little common understanding between players. However, those particular stories are the most valuable for corporate learning.

## 6. STORY CRAFTING

Once the disclosure process (in the physical or in the virtual environment) has come to a natural conclusion, the observers review the materials and present the elicited anecdotes and their model for validation: this is a critical stage because the creation of knowledge in organization is a collective process of achieving shared meanings emerging from interaction.

Talk and interrogation enable collective interpretations and negotiations, thereby creating a common understanding and helping establish a community of practitioners (Bergquist, Ljungberg, Lundh-Snis 2001). After this stage, managers and storytellers can use characters, incidents and contexts from anecdotal material captured and root a purposeful story in the community it is intended to influence.

Stories are not effective, or even appropriate, for every attempt to express knowledge, but we believe that they are underused/underestimated in knowledge management approaches. Storytelling is useful in creating, capturing, disseminating and internalizing knowledge, and it accomplishes all of these simultaneously, not sequentially. Storytelling is also a representative knowledge socialization process in that it typically includes both instrumental and expressive aspects (Thomas, Kellogg, Erickson 2001).

There are of course many forms of stories (myth, fable, virus, archetype and disruptive metaphor<sup>5</sup>), but Snowden has noticed that stories have some common features (Snowden 1999b):

- They will be able to capture and hold the attention of the audience. It does not follow that they have to be entertaining; they can be painful or just excite curiosity.
- Good stories self propagate; they have a life of their own; they are not linked with an individual storyteller.
- A good story can be told to all audiences regardless of educational background, role or experience, and all members of the audience will gain meaning from it at different levels.
- Stories and the metaphors they contain can provide a new language for new forms of understanding. Their use can avoid sterile academic debate and overly explicit (and expensive) consultancy processes, by tapping into the intellectual asset base of an organisation and its environment.

### **6.1 Business examples**

There are many uses of stories and storytelling in business. Stories can be useful ways in a B2B relationship to assess the value the partner can really provide, or in a B2C one, to find out about the needs of customers in a deeper way. Stories can help advertise a product or service showing the proper context for the use of a product/service, or they can be used as educational materials within a company (Thomas, Kellogg, Erickson 2001).

The following real case is taken from the Snowden's article "Storytelling: An Old Skill in a New Context". This story is simple and memorable, and it could offer a purposeful example of how companies can use it to convey a set of values and/or desirable actions: in this particular case, there was a culture problem.

*"Data Sciences was an Anglo-Dutch IT services company, now a part of IBM. Several years ago it created marketing and internal cultural change programme, branded 'Genus'. A strong element of this programme was the adoption of software reuse through Object Orientation (OO). A common problem with most IT professionals is that they are inherently curious about the structure of software code, and they like to tinker, to build a better version. This strong culture militates against reuse. The Genus team to make it clear that a new attitude was required used one anecdote, based in fact. It was the story of two development groups, both tasked with producing a set of software objects that would provide framework of reusable components for the most common features of a range of applications. One group comprised a large team of experts, individuals who in some cases were world-leading experts in OO techniques, all of whom were experienced and well trained. The other group was a small team of ex COBOL programmers, whose experience was in payroll data entry systems. The latter team was provided with two weeks of basic OO training and provided with the services of a mentor.*

*As part of their task, both teams had to create a 'list object', a piece of code that defines the way in which data can be presented to a file, printer etc. The experts created a wonderful piece of code. It was elegant, it performed well and it only took two man months to develop. The COBOL programmers in contrast downloaded a 'good enough' list object from the Internet at a total cost of five dollars."*

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<sup>5</sup> For a complete review of these topics see SNOWDEN, D. (2000). The Art and Science of Story or Are You Sitting Uncomfortably? Part 2: The Weft and the Warp of Purposeful Story . *Business Information Review*, Vol. 17 (4)

Snowden (1999b) underlines that this is a powerful story in several respects:

- it says that experts may still miss the point. The COBOL programmers had understood that the purpose of OO techniques is all about reuse, not about reinventing the wheel however elegant;
- it says to owners of old skills that they have something to contribute from their own experience and that they can outperform the experts if they THINK.
- it provides hope for groups who have been left behind in training and acquisition of new skills and encourages staff retention;
- it advises that the focus should be on business objectives, in which the skill of the software engineer is not of value in itself, but in its ability to realise those objectives.

There are many other examples of similar stories. The one of how a Chief Executive listened to a student on work placement - and changed company policy as a result - says that this company is not about hierarchical learning; it encourages the communication of new ideas (Snowden 1999b).

Those stories are all anecdotes; they are unique events that serve to educate. The story itself provides the purpose. However this is by no means the only use of stories. Stories can also be used indirectly - to help us understand something.

## CONCLUSIONS

Both the research literature and experience from practice indicate the critical importance of storytelling and learning for conducting business in contemporary organisations of all kinds. The new role of IT is envisaged to provide methods, tools and technologies that support individuals, groups and organisations in their knowledge management and learning activities. This requires a new approach not only to IT applications but to the development of the new technologies as well.

At the end, we can say that storytelling represents a very powerful tool for organisations where both technological and sociological aspects of knowledge disclosure and consequently knowledge management are expressed, and we can happily say that it wisely represents a sociotechnological compromise: the ultimate low-cost high-return technology with KM's human ability of telling stories.

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