

# **Knowledge Management via a Novel Information Technology - The Case of Corporate Weblogs**

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**Abstract:** In recent years, both practitioners and scholars alike have emphasized the importance of organizational knowledge and learning as a source of competitive advantage. In this connexion, the integration of information technologies to foster these organizational sources has gained considerable attention. However, especially due to the innate characteristics of tacit knowledge, its handling is deemed to be extraordinarily difficult. This results primarily from the fact that tacit knowledge can only be disseminated via intricate interpersonal processes. Socialization is viewed as an appropriate approach but to date this is regarded as incommensurate with most existing information technologies. In this paper we argue that corporate weblogs - i.e. personalized and informal Internet publications referring to corporate concerns - constitute a viable option to deal with this dilemma while incorporating the possibility to codify as well as personalize tacit knowledge. By illuminating how to transcend the traditional impasse, we intend to contribute to knowledge management research and practitioners alike.

**Keywords:** Knowledge Management, Corporate Weblogs, Knowledge Diffusion, Personalization, and Codification

**Categories:** H.0, H.2.m, H.3.m, H.4.m

## **1 Introduction**

Nowadays, knowledge management has become an omnipresent term within the discourse of strategic management [Grant 1996]. It is widely acknowledged that knowledge has become an important strategic asset for organizations. Research on the knowledge-based view of the firm elucidates how knowledge can be managed in order to gain a competitive advantage. Hence, managing knowledge in learning organizations is a central goal of firm's strivings and an indispensable pre-requisite for success.

### **1.1 Two Contrasting Knowledge Strategies**

Concerning this matter, [Hansen et al. 1999] suggested two contrasting knowledge strategies: codification and personalization of knowledge. By doing so they argue, that due to economic reasons firms cannot or should not embark on both strategies at once.

Codification attempts to utilize information technology, whereby individual knowledge is converted into databases (i.e. explicit knowledge). This process has the distinctive advantage that it enables a company to achieve scale in codified knowledge reuse. Thus, a prerequisite for organizations employing this “people-to-documents”-approach is an electronic document system that codifies stores, disseminates, and admits the reuse of the knowledge. In practice, it can be observed that organizations are constantly investing in Information Technology (IT)-systems to encourage and facilitate knowledge management (see [Davenport and Prusak 1998]). The reason is based upon the assumption that knowledge management can be fostered by means of IT, although empirical studies and theoretical debates amalgamating these separate aspects – apart from a few notable exceptions (e.g. [Barrett et al. 2004]) - are remarkably scarce. Nevertheless, this does not result inevitably in enhanced organizational knowledge as earlier studies have shown [Davenport 1997]. The main reason is that employees often resist sharing knowledge and information [Ciborra and Patriota 1998]. A second reason concerns the difficulties to disseminate organizational knowledge effectively [Szulanski 1996].

Conversely, the personalization strategy relies heavily on socialization (i.e. tacit knowledge). As a result, channelling individual expertise in this person-to-person approach needs creative, analytically rigorous advice. The main drawback here is the sheer unenforceability to develop and govern interpersonal networks for linking people so that the tacit knowledge can be shared. Moreover, as [Tsoukas 1996] argues, organizations are distributed knowledge systems, what constitutes a further challenge for knowledge management in organizations. This can be particularly stated for the personalization strategy while face-to-face contacts remain, at least to a certain extent, a common prerequisite for trust and other crucial elements of successful exchange in online environments [Kim 2000]. Altogether, there exists only little knowledge on how to foster the strategies that [Hansen et al. 1999] are propagating. This is because past research has focused primarily upon the importance and the concepts of knowledge management and organizational learning as such [Bierly et al. 2000].

## **1.2 Aims and Procedure of the Paper**

This paper aims to investigate how weblogs can foster organizational knowledge and learning in a corporate environment and support both of the mentioned knowledge strategies. Weblogs are frequent publications of personal thoughts on personalized Internet sites in reverse chronological order [Dafermos 2003]. With regard to knowledge management and organizational learning, it seems interesting that employees are increasingly notifying information about their experiences and progress at work publicly [Efimova 2004]. The most prominent example in a corporate context might be the development documentation of Microsoft’s new software “Microsoft Longhorn”. In this context, a noteworthy feature of weblogs concerns the possibility to do accompanying commentaries. This often leads to a continuous communication between employees and/or employees and their customers about specific tasks, services or products. Due to the innate characteristics of this novel technology, we argue that corporate weblogs might foster the management of organizational knowledge and learning, thereby transcending the traditional impasse of codification and personalization of knowledge.

In order to achieve the objective of the paper, the paper proceeds as follows: Firstly, we introduce weblogs as a novel technology. Thereby, the constitutive characteristics are depicted and a novel taxonomy that enables us to distinguish between the various types of corporate weblogs is illustrated. Secondly, we set forth how the traditional impasse can be transcended via the integration of codification and personalization by means of weblogs. The paper concludes with final remarks.

## 2 Corporate Weblogs

With regard to the scope of this paper, not only the features of a single weblog (also addressed as “blogs”) but also the characteristics of the so-called “blogosphere” (referring to the collective term that encompasses all weblogs) and differences to related phenomena are introduced. A separate depiction of these termini is deemed as appropriate for the conjunction of weblogs and its applicability in a corporate context.

### 2.1 Generic Weblog Features

The term “weblog” was coined by Jorn Barger on his Robot Wisdom site in 1997. The name stems from the contraction of the words “web” and “log” and epitomizes a technology belonging to the field of social software. Although there exists no consensus concerning the definition of weblogs and various subtypes have already emerged, some common features of the weblog-phenomenon can be recognized [see Dafermos 2003]. First of all, weblogs refer to a website where individual thoughts are publicly displayed in the form of a log. The site’s content is freely accessible via the Internet and no fees have to be disbursed. In most of the cases, a single person renders the initial content of the site. However, sometimes more than one person can contribute to the weblog. Moreover, a weblog is characterized by the fact that the publications occur in a reverse chronological order and periodically, although the frequency varies profoundly. Moreover, each post (also called entry), is time-stamped and archived so that old content remains accessible. The single entries are predominantly text based and usually possess a title in the form of a large header, followed by text-fragments that are connected with pictures, and, above all, often with links. This is also the point, where the blogosphere comes into play, alluding to the fact that the entire number of weblogs in the Internet represents a distinct media ecosystem. As a result, of the interlinking, there exists a multiply intertwined network of multitudinous weblogs, i.e. the “blogosphere”. In addition, the probably most noteworthy feature of weblogs concerns the possibility for readers to write accompanying commentaries in the designated sections that often entail vibrant discussions [Herring et al. 2005a].

Following the introduction, one ought to separate weblogs from related Internet phenomena for further clarification. First, in contrast to ordinary online diaries, weblogs can be augmented with hyperlinks, permalinks or trackbacks, enabling the intentional interlinking via the blogosphere. Though this is a distinctive difference in many cases, the line is unfortunately quite blurred in this respect. As opposed to personal web pages (“home pages”), weblogs are ideally more often updated. Furthermore, they are usually establishing a relationship between the individual author and the person or community that reads the content of the webpage due to

recurrent posts and, vice versa, visits from the readership's point of view. Other comparable phenomena are bulletin board systems, newsgroups and chats. These are quite similar, but usually lack the ability to be interlinked. Nevertheless, they differ consistently concerning the authority to add original content. While in the other three forms the content is created jointly (i.e. symmetrically), in the case of weblogs, the content is solely creator defined (i.e. asymmetrical). As a conclusion, we assume that weblogs are not an entirely novel phenomenon. In fact, it is closely related to traditional Internet genres, above all, online diaries and bulletin board systems. However, weblogs can be asserted their own position in the broader genre ecology of the Internet [Erickson 2000].

## 2.2 Focussing upon Corporate Weblogs

Regarding the evolution of this new phenomenon, it is worth mentioning that weblogs initially mainly consisted of entries that resembled personal online diaries. However, weblogs have nowadays moved beyond self-reflective personal or journalistic disclosures to multifaceted applications within organizational settings. The following section is an endeavour to offer taxonomy of the various emerging manifestations of the corporate weblog-phenomenon. In order to conceive of the forms of appearance accurately, we deploy several dimensions [see Figure 1]. As an initial point, we deem it appropriate to identify the dimension target group, which can be subdivided into an internal as well as an external target group. Internal target group would then focus upon all employees, whereas external refers to stakeholders such as customers. In contrast, the content of the weblog constitutes a further dimension that can be subdivided into the aspects specific and general.

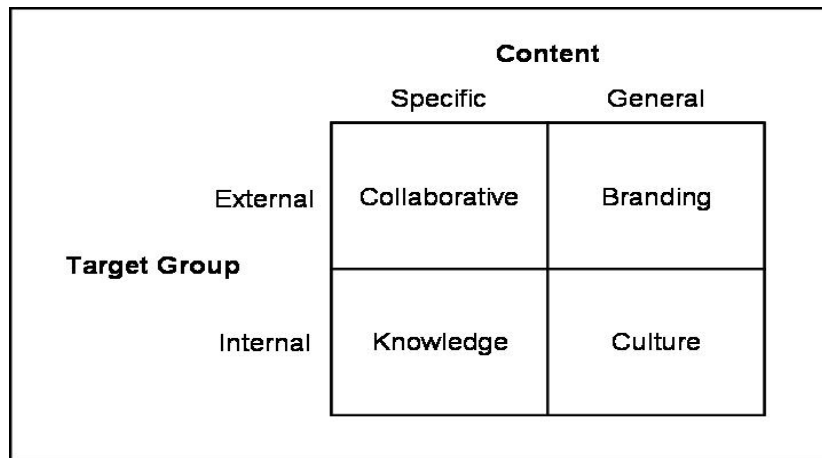


Figure 1: Taxonomy of Company-Relevant Weblogs

Concerning the employees as the internal target group, culture weblogs might prove useful to strengthen a company's culture and corporate identity. Thereby, the content is supposed to be private and informal. Thus, culture weblogs would incur the role of an information broker, leveraging the latest rumours or conversations similar

to a notice board. In contrast to this, knowledge weblogs are concentrated upon the employees as well, but their content is specific. These weblogs also address a designated group of participants and facts dominate the content of the posts. Such team-oriented knowledge weblogs might be regarded as an analogue to communities of practice [Wenger 1998].

With regard to external target groups, stakeholder such as customers etc. can be addressed in order to strengthen the profile and reputation of the company, whereby the employees always have to expose themselves as part of the workforce of the respective corporation. Hereby, it seems striking that employees are increasingly notifying information about their experiences and progress at work publicly or in a corporate environment. This can be achieved via branding-weblogs whose content is rather general. In this case, the individual posts of employee might reveal insider reports about everyday occurrences at work. Collaboration-weblogs would be an alternative in so far, as their content is specific. For instance, in a corporate context this affords the opportunity of continuous one- or even many-to-many communication between employees and/or employees and customers or other stakeholders about specific tasks, services or products.

### **2.3 Previous Weblog Research**

Finally, it seems reasonable to conclude with a general conspectus of previous and current weblog research. Disregarding initial attempts that emanated from weblog users themselves in order to reflect about their own conduct, the first research reports stem from the arenas of journalism (e.g. [Sullivan 2002]) and information science [Efimova 2002]. Recently, these considerations have been applied to different settings such as social network analysis [Schuster 2004] or elaborated further in their initial arenas [Herring et al. 2005a]. For most of the time, research primarily concerned itself with descriptive studies that tried to reveal the applications of the weblog phenomenon. However, empirical evidence and theoretical debates remain meagre [Herring et al. 2005b].

## **3 Transcending the Impasse via Weblogs**

With regard to the previous delineation of weblogs, the subsequent discussion tries to illuminate how weblogs might foster the overcoming of the impasse between codification and personalization, thereby merging these two initially distinctive strategies. Concerning the solutions for both strategies, we do not only borrow from previous weblog research but also obtain an interdisciplinary stance. When it comes to codification, we draw additional analogies from the open source software literature. In contrast, aspects of personalization are illustrated with reference to community of practice-related research.

### **3.1 Codification Issues**

The open source movement is represented by programmers and other computer users that copy, modify and redistribute the publicly available source code of software programmes such as Linux [Dafermos 2001]. In the course of these projects, codified

knowledge is created in the form of technological artefacts (i.e. threads) that epitomize inscriptions and carriers of knowledge. Bearing in mind that for participating in the projects no remuneration is offered, it is argued that there are motivational aspects that exceed the conventional understanding on how to motivate people. Due to our understanding, this might serve as an analogue to elucidate the weblog phenomenon appropriately. Regarding the motivation to disseminate one's own knowledge we borrow from Deci's duality of intrinsic and extrinsic motivation [Deci 1975]. Intrinsic motivation refers to activities and behaviours that people naturally engage in for their own sake. In contrast, extrinsic motivation deals with direct compensation for the work or actions a person undertakes and includes factors such as direct or indirect monetary compensation, or recognition by others.

With regard to intrinsic motivation, users of weblogs oftentimes voice that they "just" enjoy it to add entries to their weblogs [Dafermos 2003]. Hence, the innate desire plays a crucial role and, as compared to controlled personal goals, this might lead to a greater possibility of goal attainment. Thus, we assume that webloggers will spend a considerable amount of time and effort in order to keep their weblogs up to date. Furthermore, altruism and prosocial behaviour - as a variant of intrinsic motivation - might lead to further contributions. Posting an entry is in so far altruistic as it also provides potentially relevant information for co-workers or customers.

As important external rewards one might consider personal as well as future rewards. Regarding personal rewards, the benefits of organizing one's own information can be subsumed [Efimova 2003]. By means of weblogs, it is possible to codify one's own tacit knowledge by making the evolution of thoughts accessible. This is relevant for the individual weblogger as well as for the company (e.g. when an employee leaves, one can still trace the genealogy of his ideas). Apart from this personal benefit, a further external reward can be the recognition among peers. For example, while adding valuable comments to weblog entries of colleagues perpetually, the weblogger might enhance his reputation in the weblog-community. In a similar vein, writing intriguing entries and commentaries can be regarded as an effective way to demonstrate personal capabilities and skills. This effect can be labelled as a novel form of self-marketing or status signalling and might be especially relevant in a corporate context. Altogether, the theoretic considerations indicate, that weblog technology might overcome motivational deficits of employees regarding the usage of traditional IT infrastructure.

### **3.2 Personalization Issues**

The concept of Communities of Practice (CoP) and related notions that dominate the subsequent line of argumentation refer to the process of social learning that occurs when people who have a common interest in some subject or problem, collaborate to share ideas, find solutions, and build innovations [Lave and Wenger 1991]. In the following discussion, we adopt Wenger's position [Wenger 1998] who applied the initial concept to a commercial setting when he argues that CoP are not tantamount to collaboration since they imply also social participation, whereby the identity of the individual is shaped by the community in turn. Referring to weblogs, similar effects have been observed while participants learning in weblog networks incorporate the codes of conduct [Efimova and Fiedler 2004]. This assumption can be underlined while referring to the fact that the organizational and social contexts, in which the

CoP operate, are deemed to be important. Thereby, we propose that endoxa is created, a common belief among the community members [McArthur and Bruza 2001]. Thus, weblogs might foster the personalization strategy through intertwined weblogs within the blogosphere.

Apart from this, another important facet concerns the establishment of knowledge-based trust, as well as institution based trust [McKnight et al. 1998]. While the former one alludes to trust that evolves from recurring social interactions, the latter one aims at the integrity of the entire organization as well as the competence of its members. Thus, it might prove to be useful, to establish collaborative or knowledge weblogs in those cases where prior face-to-face interactions can be assumed [Ardichvili et al. 2004].

#### 4 Final Remarks

In this paper, we aimed at investigating the contribution of weblogs to the management of organizational knowledge. Our discussion shows that the feasibilities of weblogs might contribute to both codification and personalization of knowledge. Moreover, the simultaneous embarking on both strategies stands to reason. To a certain extent, the distinction of personalization and codification seems to vanish.

Of course, our paper and our results have several limitations. First, our results might be true not only for weblogs, but also for other kinds of so-called social software (e.g. wikis). Furthermore, we have discussed the distinctive features of weblogs in contrast to other IT-applications. Secondly, our paper is based on merely theoretical considerations. However, we hope to provide an idea and framework for empirically investigating the phenomenon of corporate weblogs in practice. A potential option here might be interviews or questionnaires with bloggers or more elaborated social-network analyses to conceive the phenomenon on a more abstract and quantitative basis.

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