A Knowledge Sharing Environment for Sport Management

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Abstract: The

The European football governing body (UEFA) has developed a unique environment to share good practices. It includes blended learning (including face-to-face and on-line interactive courses), knowledge sharing platforms and 3D virtual stadium to access specific topics in sport event management. The various functionalities include solutions to typical knowledge management issues, such as contextual versus generic knowledge or yet strategies to turn tacit knowledge into explicit knowledge. The environment provides access to libraries of good practices in the form of learning objects as well as hints to solve critical problems in each of the domains of sport management. In addition, the environment is built in a modular way (knowledge elements consist in storytelling and lessons learned in the form of short video items) which allows for reorganisation of modules in various forms to generate new scenarios for further learning. In doing so, the environment is a typical implementation of the recursive nature of the knowledge circle including creation, collection, organisation and reuse.

1 NEEDS AND OBJECTIVES

Over the past few years, the organisation of sport events and the administration of sport altogether have *evolved* tremendously. As a result a lot of *good practices* have been created. But lessons learned are *not applied* systematically and good practices are often *duplicated* leading to a lack of professionalism and loss of efficiency

The European football governing body (UEFA) has developed a unique environment to share good practices. The objective is to collect, organise and *share the good practices* across the football family (confederations, clubs, coaches, referees etc.).

The project's components include:

- 1. The identification of existing occurrences as well as the design of new occurrences where knowledge practices are captured, shared and used. It can be either training sessions to prepare sport events, workshops to teach sport administrators, or else the events themselves where good practices may be captured. Topics include event management, marketing, medical, communication, media & communication, safety & security, legal, governance and more.
- 2. A series of world wide learning programmes has

- been developed in order to integrate academic and practical knowledge together. This includes certification programmes, diplomas as well as masters degree programmes. Besides their training objectives, these programmes serve as additional sources where knowledge can be captured and organized in the knowledge environment.
- 3. The knowledge environment itself consists in a back-office knowledge base of texts and videos from which various selections are made to build particular learning or knowledge sharing programmes.
- 4. A network of content experts and knowledge brokers who both validate and organise the know how captured and set up scenarios for further knowledge sharing and learning programmes.

2 APPROACH

The approach selected is clearly interactive, allowing for co-creation of knowledge through events and learning programmes (Krogh et al., 2000). Therefore, it emphasizes « shadowing sessions » whereby professionals follow experts in

particular task during a sport event. Similarly, it emphasizes blended learning (including face-to-face and on-line interactive courses). One of the reason co-creation is a key parameter is because it induces comparisons between various practices, therefore generating a space for contextual practices, which depend on local specificities as well as for generic practices which cut across the different cultures (Boder, 2006).

Also, the knowledge sharing environment has been designed not only for browsing through a repository of items, but also to respond to the users' most common and most critical issues. It is problem solving oriented (Boder and Cavallo, 1990). For each topic, a set of answers is provided in the form of « how to », accompanied by a few hints, allowing to address a task coherently. These "how to" are updated as time flows by users who provide input to the knowledge base.

Because of the multipurpose nature of the environment, the key words in the design process are *modularity* and *granularity*. As mentioned above, material is selected from a back-office knowledge repository and reorganized in various ways to set up either knowledge platforms or else learning environments. Hence, it is important to collate the pieces according to their size (modularity) and also to their nature (the video clips must address issues at the right level of granularity, meaning neither too detailed nor too general).

3 KNOWLEDGE MANAGEMENT ISSUES

One key issue in knowledge management is to access experts' tacit knowledge and turn it into explicit knowledge (Nisbett and Wilson, 1977; Sternberg and Horvath, 1999). For this purpose, the environment includes a variety of *intelligent video clips*, one of which is a story telling device where lessons learned from the story are made explicit by the expert in the form of an interview. Another is an interactive device whereby the expert comments his activities by making it explicit why he proceeded in a way rather than another.

Another issue which is common in sport management is the extent to which a good practice is transferable across cultures. In other words, is a good practice carved in a specific context necessarily bound to become a *standard* practice? This issue can hardly be encapsulated into a readymade solution (Sandberg, 1994). At least, it cannot be implemented in a learning environment in any

way other than clustering practices according to subset of cultures.

4 TECHNOLOGY

The knowledge platform used is developed on the Symfony 2 PHP object oriented Framework and is using HTML 5 / CSS 3 / JavaScript (jQuery) standards. In addition, it is based on Mysql database and is using an XML export file to link with the UEFA administration database. The Physical production server is PHP 5.3+ and MySQL 5+ compatible, and setup with administrative accounts for SSH, FTP and MySQL. The Learning objects are using XML and Flash Technology or HTML5.

5 CHALLENGES

Three types of challenges have been encountered in the course of the project. Cultural & political challenges, challenges related to learning & processes and knowledge management challenges. Following are a few examples of these.

5.1 Cultural and Political Challenges

In the context of international sport federations, the classical constraint "knowledge is power" has come forward through the underlying conflict between top hierarchy and professional managers. Namely, sport is predominantly governed through political moves and the willingness to link political strategies with the development of good practices at operational level is not necessarily omnipresent (Davenport and Prusak, 1998; Sveiby, 1997; Teece, 2000)

Also, sport is governed by results. In this frame of mind, focusing on *processes* required to create, adapt, share and apply new practices calls upon a change of culture or at least an adaptation of the roles assigned within the federation. More generally, the shift from running day-to-day *operations* to investing into *development* is a difficult one to make.

5.2 Challenges Related to Learning and Processes

When development has been accepted as a critical strategy, then another step has yet to be overcome. New methodologies based upon interactivity, knowledge sharing and with the support of technology must be understood (Boder and

Gutierez, 1993).

Another common challenge to face is to move away from the idea that a knowledge environment should provide ready-made solutions. Grabbing a few hints from here and there, then to adapt it to your own context and to carve your own good practice is also not necessarily obvious for everyone.

5.3 Knowledge Management Challenges

You never start from scratch. Therefore, linking new practices to your own way of doing things is a challenge, not mentioning the technical challenge you face when you already have databases that need to become evolving databases if they were not designed with such a philosophy.

The level of granularity of knowledge mentioned above is certainly the hardest challenge, since the utility of good practices strictly depends upon its applicability to as many situations you face as possible. If the learning objects are too detailed, they will not serve much of a purpose. On the contrary, if they are too general, they will not be seen as bringing an added value to the situation.

The issue of validation of knowledge is also a tricky one although in principle the idea behind knowledge management is not to come up with a validating process in the same way as you would for scientific papers for instance. The term *good practice* is carved precisely to suggest that, depending on the context, a practice may be more adequate than another one. However, some practices are *standard* and therefore need to be validated as "best practices", while others are not (Argyris and Schön, 1978).

Finally, the biggest challenge probably stems from a huge confusion overwhelmingly present between document management and knowledge management. The paradigm behind the environment developed here is the recursive loop between the capture, organisation and reuse of good practices in the form of yet new sharing scenarios. The added value in the knowledge management process does not stem from just a one time capture of knowledge and its storing into a database but precisely its progressive refinement through a recursive process (Boder, 1992).

6 CONCLUSIONS

The design of such an environment must obviously be based upon a careful analysis of users' needs and requirements. The platform emphasize concrete hints, allowing for quick and easy solutions for the user. But at the same time, the idea is to trigger reflexion and to induce comparisons between the various practices. Hence, the structure and the material have been conceived to provide both readymade solutions but also to push the user to create his or her own solution adapted to the specific context. Clearly, this calls for an environment where you do not find "the" best practice but instead a variety of ideas to choose from.

The most critical requirement is clearly the user friendliness and the relevance and the speed of results of the search function. Here, the platform's efficiency is dependant upon the way the metadata have been built in. Namely, the material shall not be tagged too narrowly, again allowing the user to compare between sometimes even contradictory possibilities to address a challenge.

Finally, the two major lessons to be learned when designing such a tool include first and foremost a philosophy emphasizing blended learning, anticipating that the platform shall be used in parallel with face-to-face sessions where complementary and more in-depth pieces of knowledge may be shared and created. Secondly, there is a tendency to believe that each context should rely upon specific material whereas in fact more generic knowledge may often be applicable across domains and across topics.

REFERENCES

Argyris, C., Schön, D., 1978. Organisational Learning: a Theory of Action Perspective, Reading, MA: Addison-Wesley.

Boder, A., 1992. The process of reification in humanhuman interaction. In *Journal of Computer Assisted Learning*, vol. 8 no. 3. pp. 177-185.

Boder, A., 2006. Collective Intelligence: A Keystone in Knowledge Management. In *Journal of Knowledge Management, Vol.10, No. 1. pp. 81-93.*

Boder, A., Cavallo, D., 1990. An Epistemological Approach to Intelligent Tutoring Systems. In *Intelligent Tutoring Media*, vol. 1 no. 1. pp. 23-29.

Boder, A., Gardiol Gutierez, Ch., 1993. The JITOL model as a way to capitalize professional know-how. In *ISMICK proceedings, Compiègne*.

Davenport, T. H., Prusak, L., 1998. Working Knowledge. How organizations manage what they know. Harvard Business School Press.

Nisbett, R. E., Wilson, T. D., 1977. Telling more than we can know: verbal reports on mental processes, In *Psychological Review, Vol. 84:231-259.*

- Sandberg, J., 1994. Human Competence at Work. An interpretative approach, BAS, Göteborg.
- Sternberg R.J., Horvath, J.A., Eds. 1999. *Tacit Knowledge in Professional Practice*. Lawrence Erlbaum,.
- Sveiby, K.E., 1997. *The New Organizational Wealth*. Berrett-Koehler, San Francisco.
- Teece, D.J., 2000. *Managing Intellectual Capital*. Oxford University Press, Oxford.
- Von Krogh, G., Ichijo, K., Nonaka, I. 2000. *Enabling Knowledge Creation*. Oxford University Press, Oxford.
- Von Krogh, G., Roos, Kleine, D., Eds. 1998. Knowing in Firms: Understanding, managing and measuring knowledge. Saage.

