

Designing an Informal Dialogue and Decision-Making Mechanism to Deal with Organizational Change

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Abstract

Responding to economic, competitive and technological shifts, the challenge of change seems universal for almost all types of organizations. The development of a corporate strategy to deal with change is usually a complicated and ill-structured task undertaken by a group of managers representing diverse business functions. Research in the change management field identifies the importance of understanding and discussing the effect of an organizational change in three levels, the individual, the group or work unit, and the system level. As such, the associated change issues may be better addressed through argumentative discourse and collaboration among the individuals and groups involved, the aim being to accommodate different views and knowledge through a process of considering alternative (and possibly competing or even conflicting) problem interpretations, interests, objectives, priorities and constraints.

The current study discusses the need, and provides a set of operational specifications, for the development of an Informal Dialogue Mechanism (IDM), either working as a standalone Group Decision Support System or as a knowledge and decision making mechanism incorporated within the corporate portal. The IDM includes two sub-systems; an online *discussion forum*, where participants with common interests exchange open messages on a series of topics, and a *knowledge management and decision making mechanism*, exploiting reasoning mechanisms triggered each time a user inserts a new piece of information or knowledge and recommending a solution at each dialogue instance. The two sub-systems work in a complementary way under the purpose of enabling informal dialogue between individuals and groups implemented in different organizational units or different geographical places, and, if possible, reaching at a conclusion which can later feed the formal dialogue and strategy formulated in the upper management level.

Keywords: decision support, informal dialogue, change

1. Introduction

Contemporary enterprises face various changing conditions such as globalization, trade recession, new demands on the products' and services' quality, and exponential technologic development. In order to meet the market' needs enterprises have to make frequent changes that affect among others the labour conditions.

Informal social dialogue should form the basis for the development of a mechanism, which will focus on problems, will collect opinions and propose solutions in order to facilitate the procedure of social dialogue among a number of social partners and groups. The proposed informal social dialogue mechanism will target the following national social groups and will aim at facilitating them to exchange ideas, build networks and share knowledge on different issues and problems.

1. Employees: This social group is further decomposed to individuals and unions of employees.

A) Individuals create an *internal* network between them in which they can discuss issues and problems concerning problems and issues of their working environment. Accordingly, these issues and problems are presented to their unions and syndicates for the purpose to defend and consult them. Therefore, a second *internal* network between individuals and unions/ syndicates is created to discuss relevant problems.

B) Unions/ syndicates for the purpose of advising individuals accurately must get informed and be up-to-date on relevant subjects. Thus, they must build strong *external* networks and links to other national and social bodies, to organizations/ employers, to researchers/ consultants and to policy makers.

2. Organizations – Employers: This social group involves organizations and employers interested in discussion areas such as financial indicators, profitability, management practices and mostly areas about implementing change in their business as response to market and technology evolutions. Therefore this social group is interested in creating *external* networks with unions, researchers/ consultants and policy makers as well as *internal* networks with others employers.

3. Policy Makers. The local and national authorities are also in need of sharing rich instructive information that could help other social groups to design their strategy. To this end, a necessity of an *external* social dialogue network that will allow the discussion of several issues between researchers/ consultants, employers and union is coming into sight.

4. Research Community & Consultants. This social group involves researchers of the change management domain, working either for the academic or the business community, as well as consulting firms providing support in change management projects initiated by their business customers. Therefore, the need of an *external* dialogue network between employers and policy makers is emerged. This mechanism will contribute in exchanging ideas to several issues as well as solving critical problems between them.

Figure 1 presents the social group's networks (links) and shows how the information flows within and between the different social groups by creating a number of external and internal links.

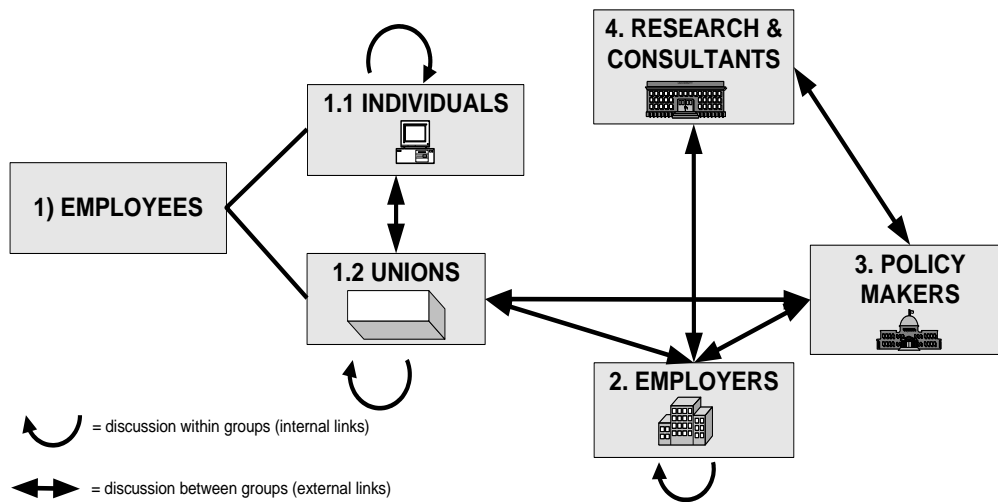


Figure 1. Social Groups' Network

The purpose of this paper is to describe the design of an informal dialogue mechanism which aims at helping a number of social partners belonging to the one or more of the above groups to collaborate on a well-organized base, combine their knowledge and reach a well-balanced decision on organizational change management issues.

2. Background Research

2.1 Knowledge Management

For more than a decade, management thinkers have heralded the arrival of the new information economy characterized by globalization, increased complexity, and rapid change. Underlying many of these prescriptions is the need to explicitly manage the intellectual capital and knowledge, either tacit or explicit, of diverse individuals and groups (Myers, 1996; Tsai, 2001). Currently, although there is much heat in the knowledge management field, there is very little light. Widespread lack of understanding exists about how to implement knowledge management effectively, or even what it is.

All knowledge exists on a continuum between tacit and explicit knowledge. The primary challenge when facing explicit knowledge is to manage its volume and ensure its relevance. For tacit knowledge, however, the challenge is to formulate the knowledge into communicable form in the first place. Knowledge-based strategies must not focus on collecting and disseminating information, but rather on creating a mechanism for practitioners to reach out to other practitioners. Such mechanisms, like communities of practice, have special characteristics. They emerge of their own accord: a number of people find themselves drawn to one another from a force that is both social and professional. They collaborate directly, use one another as sounding boards, and teach one another. They are built on a bond of obvious trust: a keyword for any knowledge-management solution.

Communities of practice are of two categories; informal and formal (Koulopoulos and Frappaolo, 1999). On the one hand, informal communities of practice usually rise up around social connections and common interests, can be both functional and cross-functional, and they are the most common type, since they grow on their own. On the other hand, formal communities of practice develop as an outgrowth of empowered teams, and

tend to be cross-functional, because they reflect team composition (Gupta and Govindarajan, 2000; Hermens, 2001).

2.2 Decision Making Process and Tasks

A typical decision-making process includes five stages (Rhodes, 1993), as illustrated in **Figure 2**: 1) Information Gathering, 2) Decision Formulation, 3) Ordering Alternatives, 4) Choosing Alternative, 5) Validating the Choice. The prospect of a typical Decision Support System (DSS) is aiding one or more steps of the decision making process.

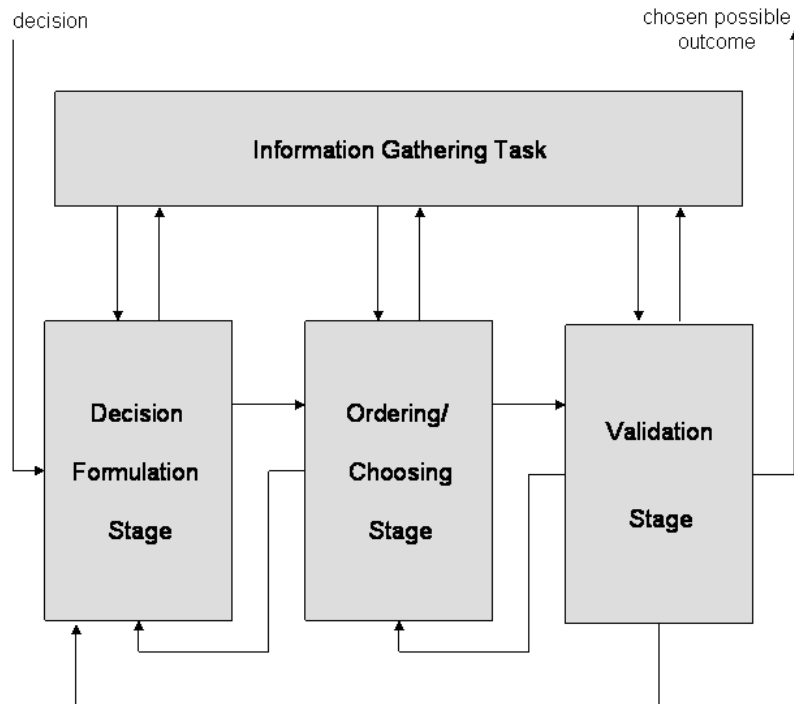


Figure 2. Diagram of the Decision Making Process, sourced by: Rhodes (1993)

In the design of the Informal Dialogue Mechanism, we are primarily concerned on providing operations that address the first and second stages; that are the information gathering and the decision formulation stages. Following, we discuss in more detail the activities taking place, as well as methods that could apply, as part of each one of the two decision-making stages (Fick and Sprague, 1981; Sprague and Watson, 1986).

A) The Information Gathering Stage

The group or individual in charge for gathering information may have two tasks to perform, one being the actual retrieval of information and the other being a browser-like task which assists users who do not have a precise definition of the information they seek. The information gathering stage may include a brainstorming session, during which a number of people and groups of diverse expertise exchange information and ideas, thus making them known to all interested parties and mainly to the decision-making bodies.

B) The Decision Formulation Stage

The first step in making any decision is to establish that the problem behind the decision is being properly addressed. For instance, consider a company where productivity is low due to low morale amongst its workers. If the management is trying to decide whether or not to buy new machinery in order to improve productivity, it is unlikely to be addressing the correct problem. The initial assistance given by a Decision Support System to structure a problem should discreetly prompt the user to check that the decision is well-founded before proceeding to an action.

The second step is to decide whether or not the decision is comprised of sub-decisions. Once we are certain that the decision can be further subdivided, we can continue doing so, until no more subdivisions can be identified. An effective starting point for subdividing decisions is the Critical Success Factors analysis. Each sub-division should have Critical Success Factors, in terms of Strengths and Weaknesses, defined for it. Eventually, a collection of small indivisible decisions will be obtained. A set of all possible outcomes for each of these decisions must then be acquired. Once the user has a list of all possible outcomes, the most desirable one must be chosen.

3. Requirements for Dialogue within and between Social Groups

An important issue to achieve an efficient discussion within a social group is the existence of a common goal. Shared goals are often highlighted as being a key element in the establishment of effective groups. In fact the literature seems to take for granted that shared goals exist in virtual groups. For example, Lipnack and Stamps (1997: p.7) define virtual groups as “a group of people who interact through inter-dependent tasks guided by a common purpose”. Through the creation of shared goals, groups of people have a shared commitment (Handy, 1995) and a common motivation. These groups exist for some task-oriented purpose, and therefore orientation to task is what distinguishes them from other types of groups (Lipnack and Stamps, 2000).

3.1 Dialogue within Groups

The requirements for dialogue within a social group, illustrate the internal networks (links) that we have proposed and are presented on **Figure 1**. These internal links within the social groups are the following ones.

Individuals as a social group. Employees should have the opportunity through the social dialogue mechanism to discuss on different ideas and aspects that may occur concerning their working environment. They will be able to share their knowledge and experience that will help them to improve their status at work. The employee’s discussion forum in this level will be a place that they will be able to discuss and exchange information on ongoing contract negotiations, business news, market data, economy analysis, changes on payments policies, health and safety at work and access to training. One of the main advantages that a forum can encompass is that individuals through this mechanism can address their problems and requests to their representatives and their unions.

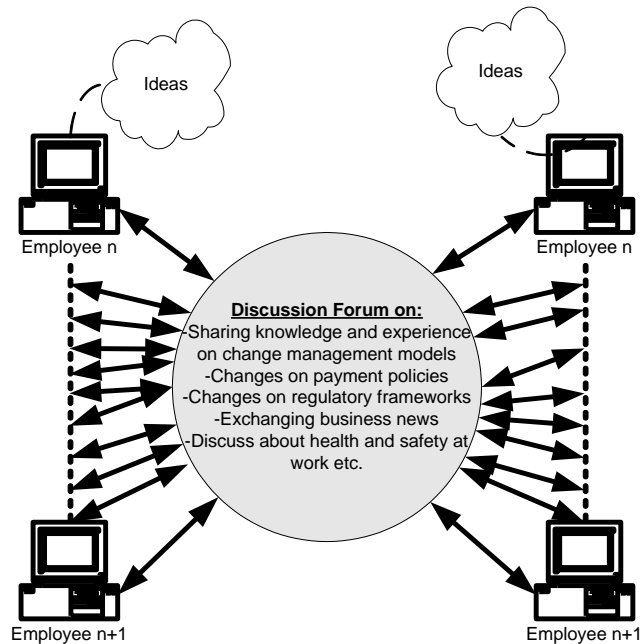


Figure 3. Discussion within Employees

Unions as a social group. This group should be informed with all the relevant data on changes on employment strategies, on legislation, on regulations, and on payment policies. The dialogue within different unions and syndicates will allow them to share existing and new knowledge, creating a more complete picture of what kind of changes evolve in the industry. In this way, the *internal* dialogue between the employees will be rich and will provide them with accurate resources and answers to different problems.

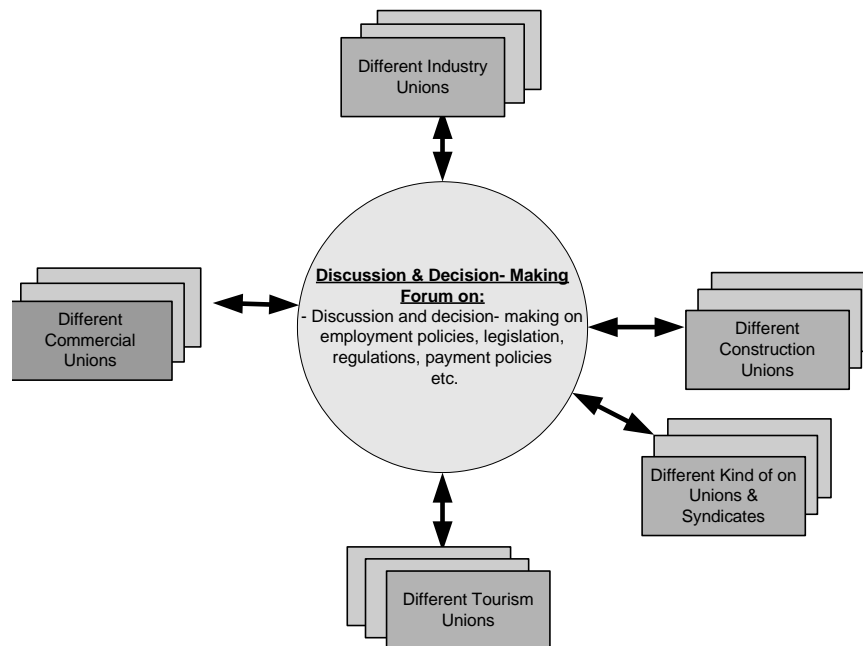


Figure 4. Discussion within Unions

Employers as a social group. An informal forum bringing together executives and chairmen of major national companies covering a wide range of industry and technology issues will be very valuable. Employers of different industries such as tourism organizations, constructions organizations, and commercial firms are interested in the progress of the economy that it reflects to their profitability. Also, they are interested in discussing about the latest managerial practices, synergies between the employer's strategy, coordination of macro-economic policies, decision-making on economic reform process, overview of financial indicators, investments, competition policies, competitiveness, environment, industrial relations/ social policies, accounting standards, taxation, research and technology, export controls, or even discuss issues about implementing change in their business as response to market and technology evolutions.

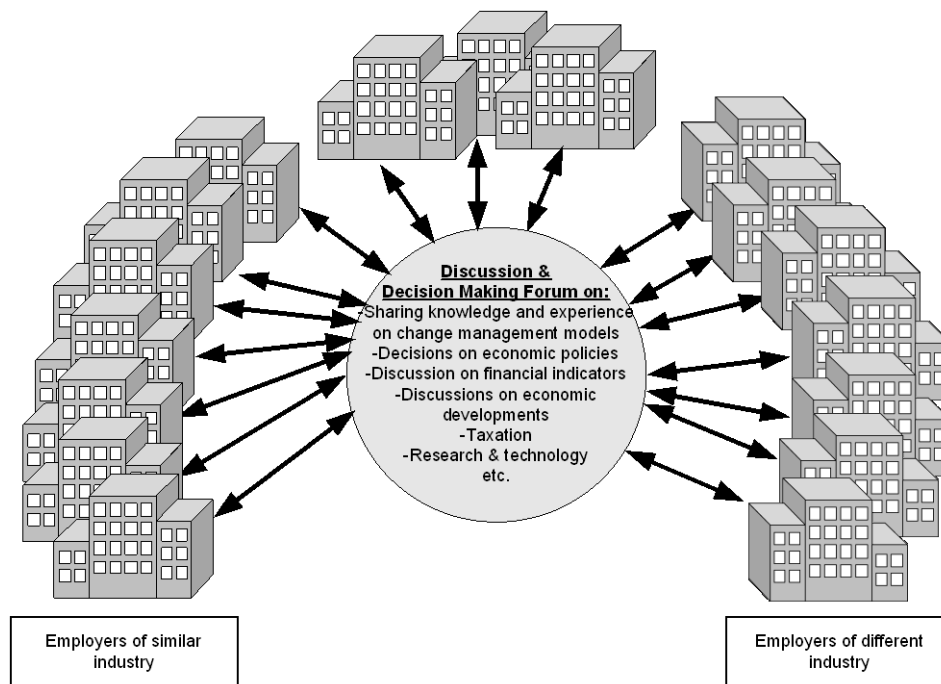


Figure 5. Discussion within Employers

3.2 Dialogue between Groups

The requirements for dialogue between social groups illustrate the external networks (links) that we have proposed and are presented on **Figure 1**. These external links between the social groups are the following ones.

Dialogue between Employers and Unions. The purpose of this discussion group is workers to have an equal voice with those of employers in formulating policies. Thus unions and syndicates represent the employees voice to employers. Employers can listen on what the workers have to say in order both to improve their position to market. The main areas of discussion between unions and employers deals with hour of work, labour inspection, vocational guidance and training, social security protection, occupational health and safety, conditions of work, promotion of full employment, management development, employment planning and promotion, development of social institutional in such fields as labour administration etc. The purpose of this dialogue is to take into account of the objective of high level of employment in preparing and implementing national policies and measures.

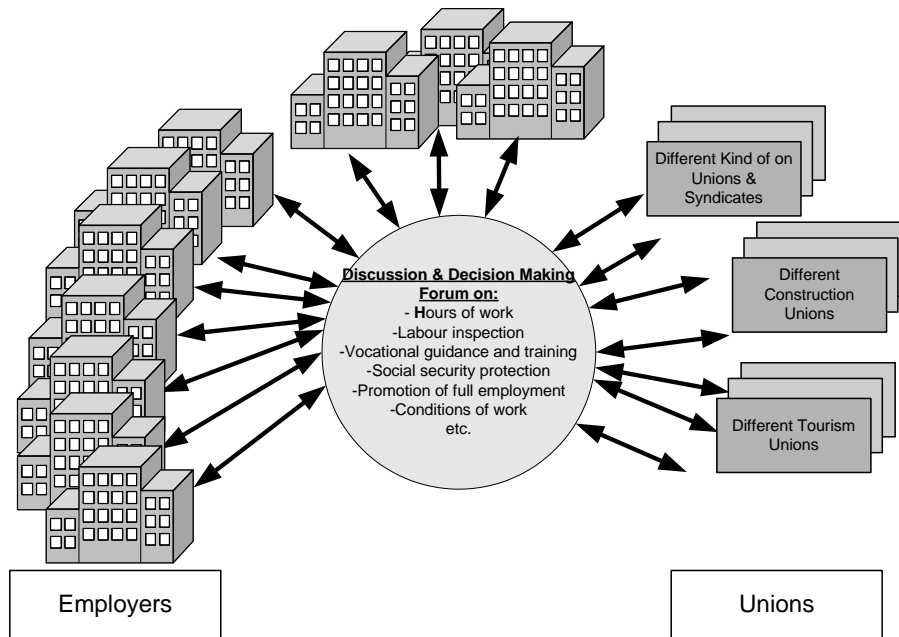


Figure 6. Discussion between Employers and Unions

Dialogue between Employers and Researchers/ Consultants. Employers and research/ consultants have many issues for discussion. Researchers/ consultants provide their knowledge, vision and experience helping employers to manage constant change. At a time where business functions, operational practices and technology are experiencing rapid and ongoing change, diversification and improvement, the coupling of academic and consulting knowledge, practical expertise and solid methodologies to tackle real business problems becomes an undeniable necessity. Researchers/ consultants look forward on cooperation and discussion with employers to solve real problems that employers face and collect data for qualitative and quantitative research. The main discussion areas between these two groups are; business models, change management practices and theories, methodological approaches, consulting projects, advises and critical discussion on managerial reports etc.

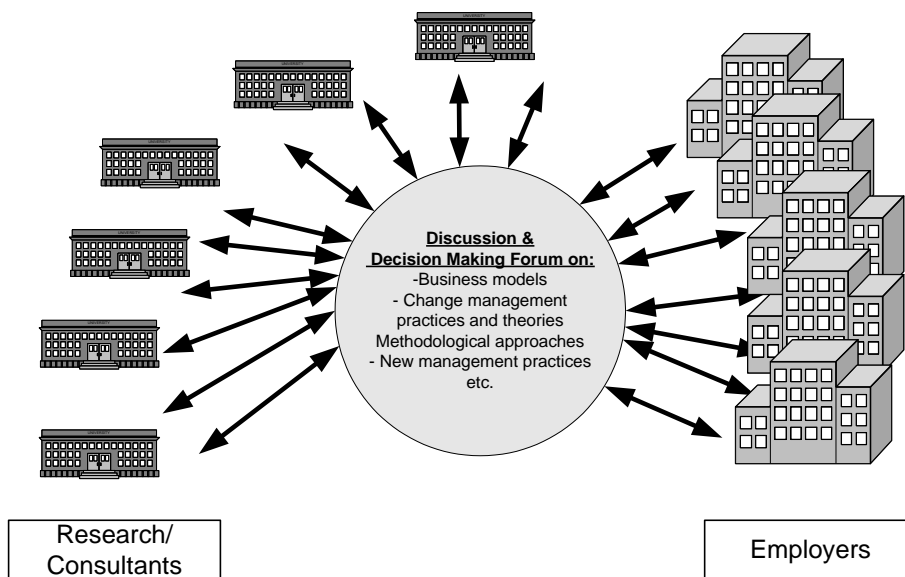


Figure 7. Discussion between Employers and Researchers/ Consultants

Dialogue between Policy Makers and Employers. Policy makers, governments and employers are interested in discussing and exchanging concepts on changes concerning taxation policies, investment opportunities, import and export regulations, opportunities to receive subsidy, industry and market growth, financial and regulatory policies, employment directions, social policy frameworks, environmental impact policies etc.

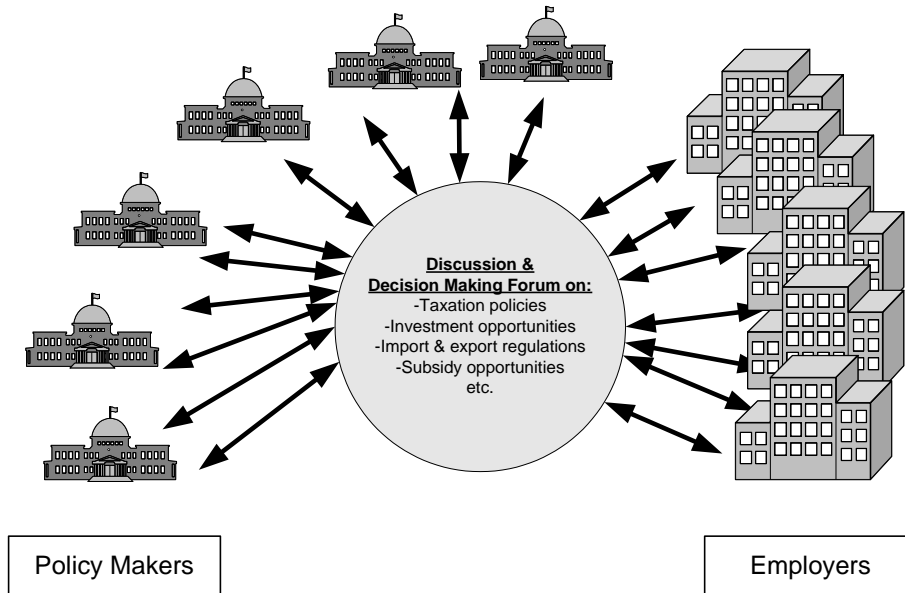


Figure 8. Discussion between Employers and Policy Makers

4. Design Considerations for an Informal Dialogue and Decision-Making Mechanism

The proposed Informal Dialogue System (IDS) includes two sub-systems; an *online discussion forum*, where social partners with common interests will be able to exchange open messages on a series of topics, and a *knowledge management and decision making mechanism*, exploiting reasoning mechanisms triggered each time one user inserts a new piece of information or knowledge and recommending a solution at each dialogue instance.

4.1 Discussion Forum

A forum is commonly defined as a section of a website or online service, where a series of topics are discussed on a bulletin board system. The informal social dialogue forum discussed hereinafter will enable social groups to form closed user groups (the aforementioned ‘social groups’ and ‘communities of practice’) and conduct online discussion on key topics, such as Training Programmes for Employees, Legislation on Employment, Best Practices for Introducing IT in the Business Environment, Change Implementation and Management Skills, etc.

The forum will enable a number of social partners and groups to participate in a discussion by reading/replying to a thread, posting a topic, quoting comments to a post, sending/receiving private messages, and voting in a poll.

4.2 Knowledge Management and Decision-Making Mechanism

Apart from the forum, the IDS will incorporate an extra mechanism aiming at collecting a great pool of diverse knowledge resources, contributed by different users and groups, and rating them with the ultimate purpose of generating an informal social decision. Its main objective is to augment the effectiveness of short-term communities through the interactive sharing and integration of knowledge between group members (Karakapilidis, 2003).

In this paper, we propose the application of this system in order to enable asynchronous collaboration of social parties being away on the formulation of an informal social position or decision. The basic knowledge items of the proposed system are *problems*, *positions*, *strength* and *weakness*. *Problems* correspond to issues to be resolved, opportunities to be seized or goals to be achieved (e.g. “Enhance employees’ awareness of Information Technologies”, “Increase number of funding programmes for companies wishing to go online”). They are brought up by organizations or employees and are open to dispute. Problems consist of a set of *positions* that correspond to alternative choices (e.g. “Develop an internal training mechanism” and “Fund training seminars for the upper level employees”, asserted by employees unions and organizations unions, respectively). Positions are associated with *strengths* (e.g. “Build organizational competence on IT”, connected to the first position) and *weakness* (e.g. “It may raise significant costs for the organization”, connected to the second position). The discussants may evaluate the importance of each strength and weakness by arguing in favor or against them. **Figure 9** provides an instance of a Knowledge Graph, which consists of the aforementioned knowledge items.

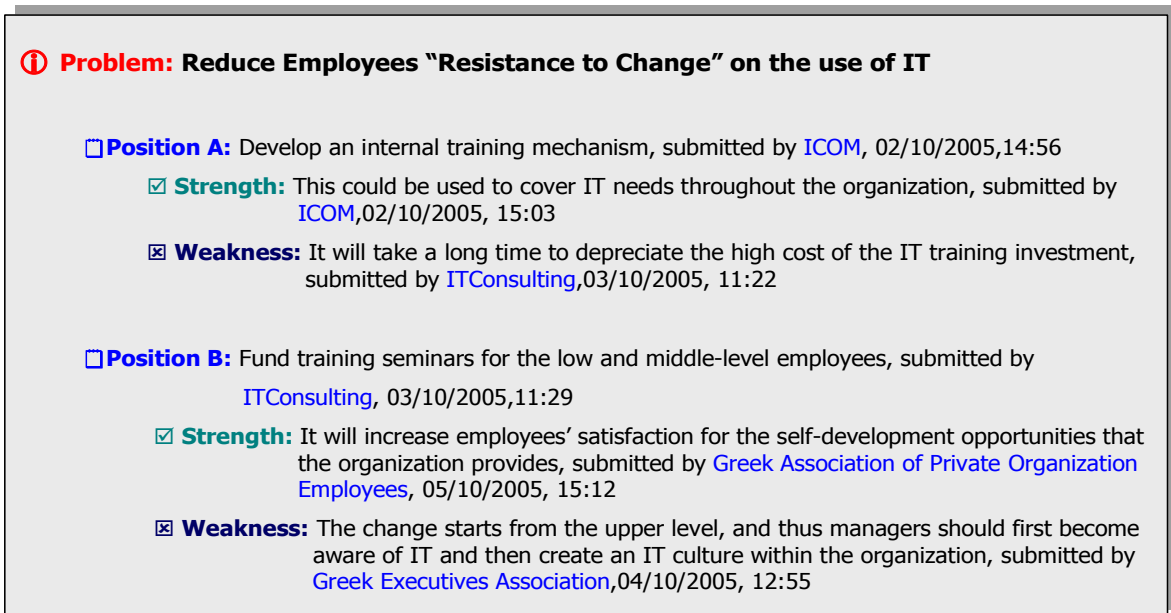


Figure 9. Instance of a Knowledge Graph

The system will include two primary functions: a) Providing a position, and b) Evaluating user positions in terms of their strengths and weaknesses. While the system users activate the first function, the second is triggered by the system.

Users will assert entries in the knowledge graph through well-designed interfaces. Upon the entry selected each time (by clicking on it), an individual may consider the permitted actions and act accordingly. For instance, when one selects a position entry, he/she may only attach a strength or weakness to it, while having selected a problem, he/she may either assert an existing position, speaking either in favor or against it, or insert a new one. It

should be also noted that the system will provide the facility of associating the subject (name) of each entry in the graph with a URL, thus enabling users to link their own discourse items with existing electronic documents that provide additional information or evidence.

The proposed system will perform a set of functions to update the discussion status and evaluate the alternative positions. These functions will be automatically triggered whenever a new item, a new argument or piece of information, is added in the knowledge graph. The evaluation mechanism will assign a score to each position by taking into account the individual scores calculated for each strength and weakness, which in turn are calculated through the argumentation already made on their elements. More specifically, the permitted (qualitative) values for a strength's or weakness's rate will be associated with numerical values (the score set [-3, -1, 1, 3] corresponds to [very_negative, negative, positive, very_positive]). In addition, the evaluation mechanism takes into account a ranking of decision makers, which may reflect their expertise in the problem domain and/or their position's impact on the issue under consideration.

Positions will be evaluated with respect to pre-defined quantitative values. It should be noted here that the choice of the quantitative values assigned to all parameters, especially to those involved in the scoring mechanism, may certainly affect the system's final recommendation (total score of a position). The values used for the calculations of the proposed system should be defined for the specific problem domain at the specific level of detail. Depending on the specific problem in hand, different scoring mechanisms, based on alternative algorithms, can be used. In addition, depending on the particular implementation and organizational context, positions can be evaluated with respect to more detailed elements (e.g. financial benefits/risks, social benefits/risks, individual benefits/risks, political benefits/risks).

5. Conclusions

Our approach focuses on aiding social groups to reach a decision on organizational change management issues, not only by efficiently structuring the discussion, but also by providing reasoning and decision-making mechanisms for it. Our primary goal is to develop an active system that efficiently captures social parties' rationale, stimulates knowledge elicitation and argumentation on the issues under consideration, while it constantly considers the whole set of the argumentation items asserted to update the discourse status. In other words, the system not only "captures the informal organizational memory" embodied in such environments (Conklin, 1992), but also helps the users during the decision making process per se by integrating knowledge from diverse areas.

The reasoning mechanisms of the system can efficiently handle qualitative data and are automatically triggered each time a user inserts a new item (piece of knowledge) in the discourse graph, in that insertion of a new item may change the status of numerous existing ones and make another position look as more promising. As a last note, it should be noted here that the system proposed for the ISDS is intended to act as an assistant and advisor, by facilitating communication and recommending solutions, but leaving the final enforcement of decisions and actions to the social groups. It is able to capture the tacit knowledge of the individuals involved, which can be appropriately stored and exploited by the national and European social and political bodies during their formal social dialogue.

Concluding, we argue that a proper integration of a discussion forum with knowledge management, decision-making and argumentation features, based on a well-structured information model, appears as the most promising solution for social parties to exchange ideas on social change management issues and formulate an argumentation that can later feed the formal social dialogue.

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