

Chapter 20

Bank of Experiences: A Tool to Enhance Creativity, Enterprises and Countries

Giordano Bruno and Giulia Romiti

1 Introduction

Bank of Experiences (BdEsp) is an job agency that puts creative potentials of engineers, designers, experts of marketing and business organization (and, more generally, professionals related to the “world of research in science and design”) in touch with companies looking for active collaborations for process or product innovation. BdEsp is a project of design management based on maps of system and of infographics, which identify the visual aspect of the platform, that is an interactive system of storage and organization of the Bank’s data and exchange flows.

The aims of the BdEsp are the management and development of human resources, real value of the Bank (Figs. 20.1 and 20.2).

2 Chapter 1

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Within the development of a post Von Bertalanffy systemic, BdEsp represents a contribution of exemplifying innovative themes such as the ability to realize multiple and dynamical coherence, the use of formal ontologies and maps with representations through fractal structures, the ability to induce new properties, the use of structural dynamics (Fig. 20.3).

Users access the virtual BdEsp platform, adhering to the goals of social economy that are foundation to the system. These conditions make the project based

G. Bruno (✉) · G. Romiti

ISIA Roma Design, Istituto Superiore per le Industrie Artistiche, Roma, Italy
e-mail: gibrun84@gmail.com; giulia.romiti@isiaroma.it

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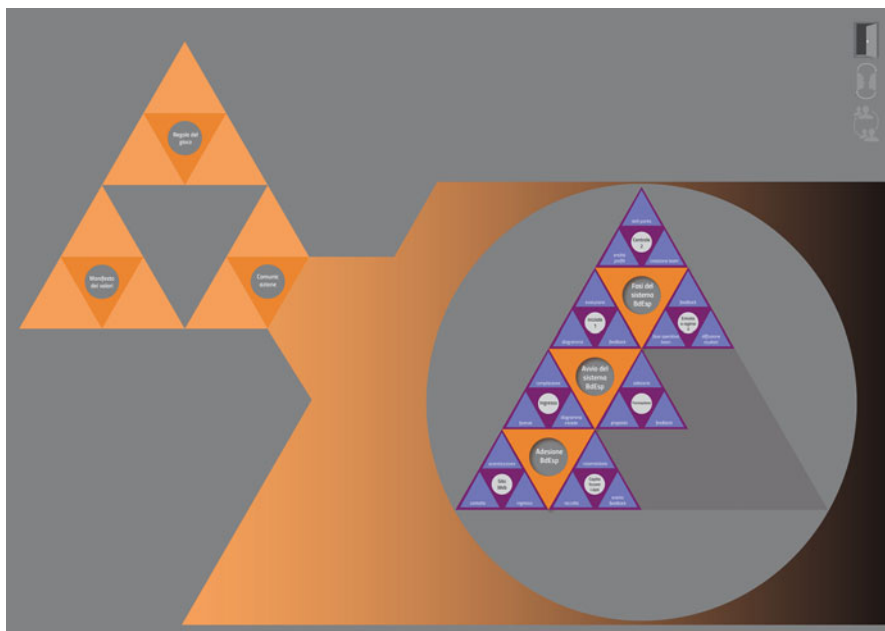


Fig. 20.1: Introductory map of systemic open

on well-defined values, placing a strong emphasis on the fundamental principles of system design. Great relevance for the system is, above all, the principle of gratuitousness, understood as a way of life and interpersonal relationships, recently well described in the research of the Italian economist Luigino Bruni [1]. Another key concept is the degrowth, theorized by philosopher and economist Serge Latouche; according to the theory of degrowth, real wealth does not consist in material goods and consumption but in human relations that create surplus value also for the economy [5].

One of the main points of the system is the acceptance of the users belonging to the platform; this stage, set in its main flows by the system managers, has the goal to bring out skills and relational/job qualities of the users.

User will be entirely and actively involved in the system, from the drawing of an indicative format to the creation of a dynamic, continuously evolving chart, thus becoming an actual part of its organization and management.

The graph shows, at the same time, skills already acquired and those to be integrated in a continuous process of feedback. In the second case it is suggested a training program, settled up by those companies and professionals, already belonging to the Bank, chosen for the role of tutors. The system, indeed, has life-long learning, spread of systemic culture and values such as sharing and collective welfare as its primary objectives. The basis of both system profile's analysis and creation of work teams is the principle of "Five kinds of minds for the future", theorized by psychologist Howard Gardner [2]. According to Gardner, indeed, it is necessary to develop five intelligences that will be needed for the future of the

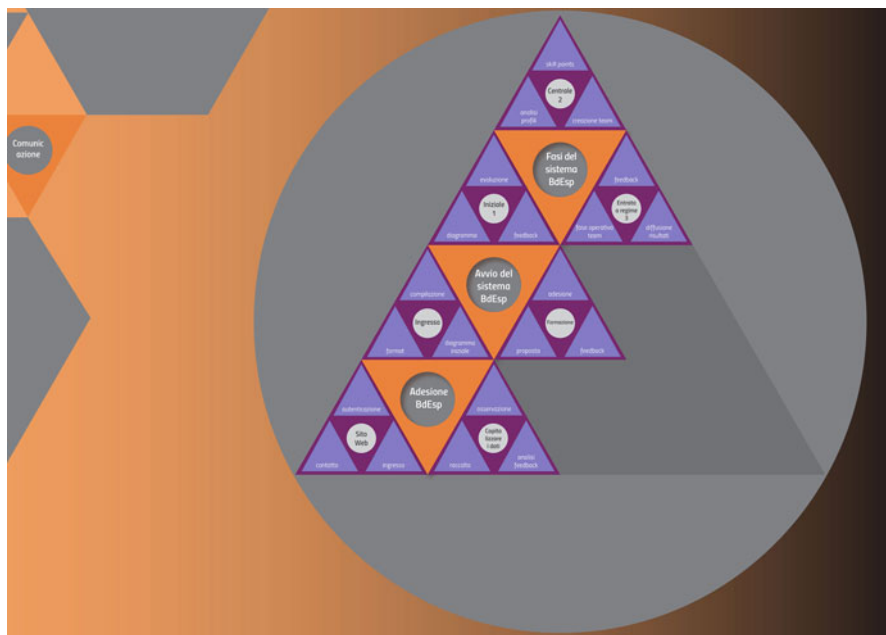


Fig. 20.2: Inside the introductive map

company; this differentiation is critical to the BdEsp system, which aims to create heterogeneous research teams, thus changing the service offered to companies and the training provided to its users (Fig. 20.4).

Within Bank work-flows, the creation of teams according to different relationships (specific to those researches which are supported and determined by BdEsp) is strongly encouraged. These flows are able to generate multiple coherence and dynamics that determine the consistency of the system. Through interactions with the system, users establish local interactions to each other, which are able to create a global, wider and more widespread behavior .

3 Chapter 2

Managers control the team's constitution, supporting the users in the aggregation to profiles which can set up very versatile work-teams. This mode of operation is implemented by companies and research centers in order to conduct their experimental projects.

Companies adhering to the Bank will be able to initiate research projects or to make teams work on their existing/to be implemented projects. Activities will follow specific time-lines and process designs, which will provide opportunities to meet and exchange—not only in “virtual-mode”. BdEsp will support the participating

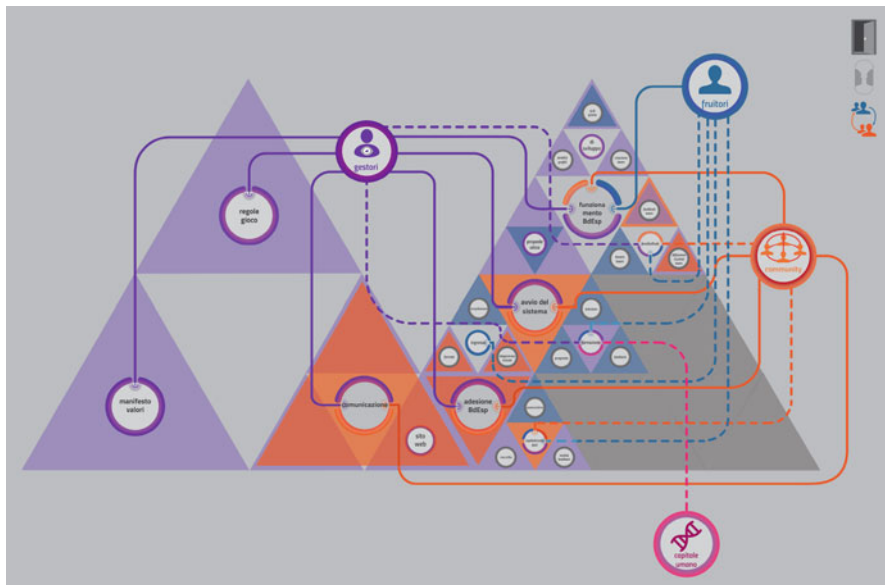


Fig. 20.3: PDF Map of the actors of the system

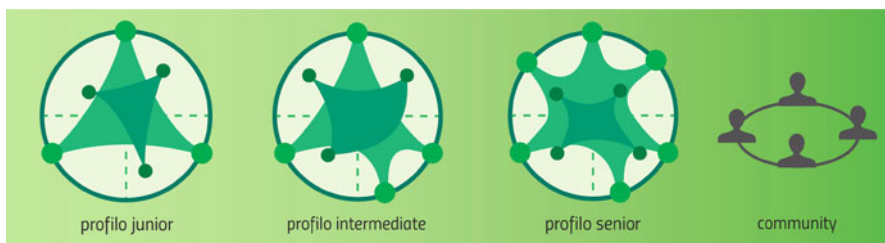


Fig. 20.4: Graph of ability

companies during the research and the management team will play an important role in mediating between the actors involved in these projects (Fig. 20.5).

Following these operating modes, the companies can take advantage of permanent consultancies by experts, get in touch with other companies belonging to the platform and implement joint-venture projects. The users of the Bank will be able to conduct research and acquire work experience at the same time, with a chance of enhancing their own skills. As for the platform’s managers, the system is a source of managerial and systemic experience, providing them job opportunities and professional growth.

The “support team” play the role of a facilitator and are made by the users of the system who are called into the management of the platform. This team plays a key role: they control the work of the teams of the Bank by giving skill points and help enhance competence of users’ profile. They also have the function of keeping the

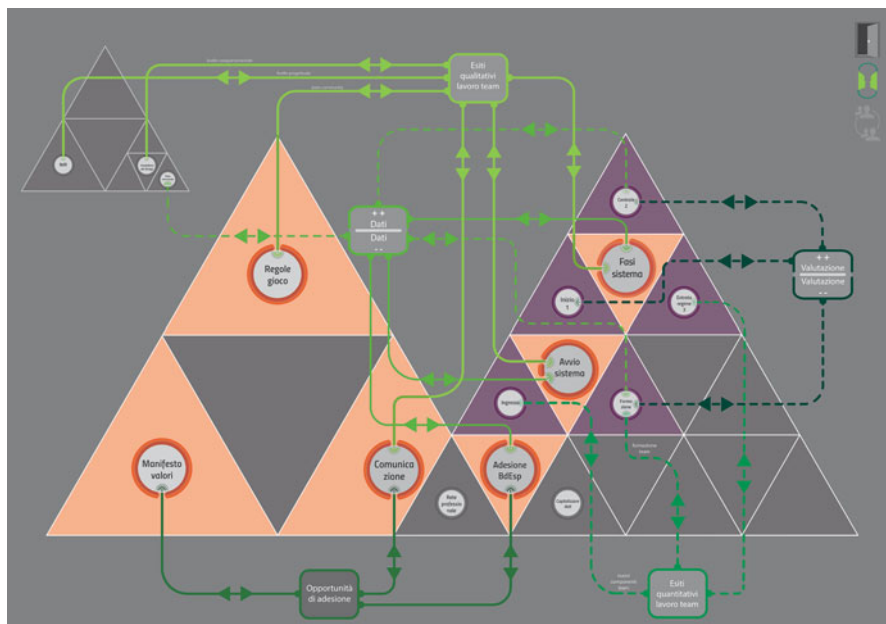


Fig. 20.5: Maps of workflows

system alive and open to exchanges with external-reality. Another important goal of the team is promoting the activities of the operators, providing critical evaluative feedback on the service provided.

Support team and managers take advantage of those system nodes that—as qualitative and quantitative filters measuring profile’s skills and the number of participants adhering—provide feedback in order to adjust both the system and the work of its actors (homeostasis of the system).

4 Chapter 3

BdEsp project, then, as an online and “on-earth” platform, represents a fertile ground for collaboration between companies and communities for the development and support of wide networks of active exchanges. The Bank creates interactions and cooperation in a view of an open system addressed both outside (open to local networks and/or different companies) and inside (territorial district and/or individual business). The values relevant to the concept of sharing and of social economy encourage relationships between the actors and the good practices of dialogue and exchange (Fig. 20.6).

As for the informatics part, BdEsp contemplates the use of ontology, which is a method of classifying information according to specific formal representations



Fig. 20.6: Simulation of application interface

of the data (formal ontology). With this type of formal organization, a hierarchy of information is underlined, in which the relationships between the actors of the system are described .

Thanks to the concept of ontology is also possible to deepen the concept of metadata, which is vital in the design of the Bank of experience. Metadata, i.e. data that describes data, are used to classify information with respect to certain classes or concepts. This is exactly the process that occurs during the observation and evaluation of users' profiles in entrance, which are properly organized to enable a better development of teamwork and operation of the platform.

5 Conclusions

The system was represented through conceptual maps, able to communicate its complexity. From the graphical point of view—and in line with the criteria of development and system's growth—we have chosen a fractal pattern (Sierpinski triangle, also called perpetual triangle) declined in several aggregating and graphical ways.

Fractal geometry, which characterizes the system in the graphical and conceptual shape, also fits to scalability logic. According to these logic, the system is not limited

to a single level but can be observed in more degrees of depth (from the reception phase to the operational teamwork's process) and using different approaches. The main objective of the scalability logic is to ensure proper management of system resources at all levels of the project. The triangular matrix pattern allows to communicate those aspects of connection and exchange among the actors of the project according to sizes and color gradients, useful to clearly define the roles of the actors involved in the early stages of the system.

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