



A happy threesome: Innovation, Creativity and Business Support

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A Happy Threesome: Innovation, Creativity and Business Support

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1. Introduction

Businesses, whether for-profit and nonprofit, are facing change like never before. Numerous driving forces to this change include a rapidly expanding marketplace (globalization), and increasing competition, diversity among consumers, and availability to new forms of technology.

In today's marketplace organisations' emphasis is changing from visible assets (such as equipment or technology) to invisible assets (like creativity and capability), Gupta and Singhal [1] already stated so by saying that successful organisations create competitive advantage through innovation and creativity. Thus, competitive advantage depends heavily on their ability to capitalise on employees' ideas and unleash creativity within their working environments. An organisations success is often measured by the annual profits, level of sales and/or position adjacent to competitors. Without a product to market an organisations position becomes untenable. Products stem from innovation, which in turn stems from creativity. People drive creativity and creativity drives innovation. Therefore enhancing the creative output of individuals involved in an innovative working environment will increase the level of innovation. The proficiency within an organisation to effectively encourage creativity within innovation does not diminish over time, but instead grows in importance for organisational success.

On top of that, more and more products require a strong added service component to be able to compete with products from low cost products from the emerging economies. While innovation has always been important and a key 'growth' strategy, it is now becoming increasingly critical for survival European SMEs frequently limit their services to installation, training and maintenance related to the products, but to be able to offer the added value need for the profitability and lifetime of the product, their products need to consider great added value services such as customization of the product and taking charge of operations related to the use of the product at the client site. Offering new products and services means taking maximum advantage of the creative potential of the organization.

As a result, companies must adopt proactive practices in order to mobilise creativity within their working environments.

2. Creativity and innovation

There are many definitions of creativity. A number of them suggest that creativity is the generation of imaginative new ideas [2], involving a radical newness innovation or solution

to a problem, and a radical reformulation of problems. Other definitions propose that a creative solution can simply integrate existing knowledge in a different way. A third set of definitions proposes that a creative solution, either new or recombined, must have value [3]. A novel idea is not a creative idea unless it is valuable or it implies positive evaluation. In summary, creativity involves the generation of new ideas or the recombination of known elements into something new, providing valuable solutions to a problem, i.e. providing innovation.

Creativity can be defined according to characteristics of the individual, which include trait theories and approaches. Creativity can be seen as a personality variable, which is located on a continuum between innovators and adapters [4]. Innovators are those who do things better and adapters are those who think differently. Creativity can also be defined according to the process. Henry [5] states that, “it is a thinking process associated with imagination, insight, invention, ingenuity, intuition, inspiration and illumination.” Woodman et al [6] frame the definition of organisational creativity as a subset of the broader domain of innovation

2.1 Creativity and Innovation: Complementary Activities

Creativity and innovation are normally complementary activities, since creativity generates the basis of innovation, which, in its development, raises difficulties that must be solved once again, with creativity, as stated by the European Commission back in 1998: “It is not possible to conceive innovation without creative ideas, as these are the starting point.”

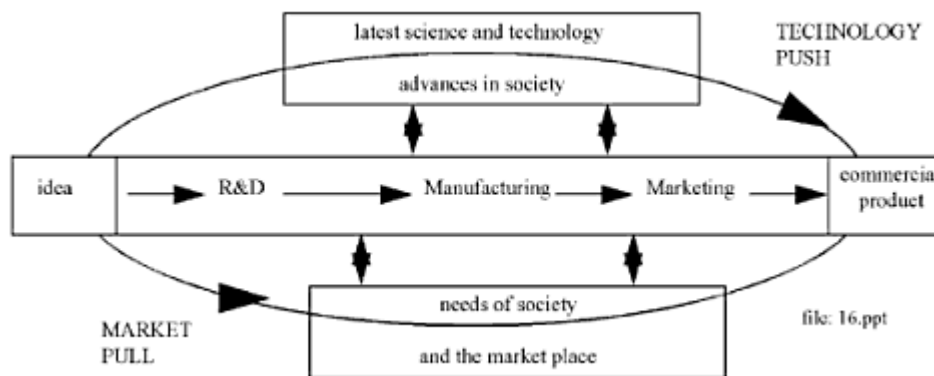
The innovation process begins with an idea generation or problem recognition stage [7], which is where creativity primarily occurs. Ettlé [8] describes a creative idea as the ‘germ’ of an innovation but differentiates creativity from innovation by highlighting that it is the innovative process, which is the means by which the creative idea is developed and exploited. Thus the organisation that neglects the importance of creativity, risks a future of no new products or process improvements and will possibly depend on buying in the methods of others.

Rosenfeld and Servo [9] state that “creativity is the starting point of any innovation” but emphasise that creativity is an individual and solitary cognitive process, whilst innovation is a more inclusive social process involving many people [10]. Tidd et al. [11] stress that knowledge is a crucial element of creativity and affects areas of the creative process such as idea generation, determination of future vision and project management. Woodman et al. [12] argue that creativity refers to ‘the creation of a valuable, useful new product, service, idea, procedure, or process by individuals working together in a complex social system. Product development requires therefore both the generation of new knowledge and solutions and novel combinations of existing knowledge and solutions.

2.2 Sources of Creativity and Innovation

The sources of creativity and innovation are often classified as arising from “technology push” or “market pull”, but the sources of innovation are much more varied than either of these two models portray. Ideas for new product development may occur as a result of a combination of influences from within or outside the organisation. The interactive model develops this idea further and links together the technology push and market pull models of innovation, it emphasizes that innovations occur as a result of the interactions of the market place, the science base and the organization’s capabilities.

Figure 1: Interactive Model of Innovation [13]



3. Creating the Environment in Which Creativity Can Blossom

Regional governments can play an important role in creating a business environment that fosters creativity and promotes innovation. The Region of Extremadura is an excellent example of how to integrate creativity, innovation and business support to boost regional innovation.

The policy is based upon three pillars:

1. Supporting innovative projects, either through direct grants or through access to knowledge and business coaches,
2. Generating a new mentality on innovation in the business environment and society in general, this is done by creating environments that facilitate the sharing of experiences, knowledge and promote the cooperation between business, social agents, public institutions and potential investors,
3. Innovation by doing, i.e. creating own concepts instead of adopting existing ones.

This policy is executed through two main instruments, on the one hand the Regional Innovation Plan Innoveex and on the other hand through the Gabinete de Iniciativa Joven (Young People Cabinet).

Innoveex is based on an integrated model for the implementation, growth and development of innovation in businesses from Extremadura, it is based upon two guiding principles: the remodeling of the business structure and the impulse of innovation. The first is supported by the existing cluster structure of strategic business areas for the region and the second on the Public Network of Technological Centers, the University of Extremadura and other agents of innovation and R&D in the region. These are all integrated in a system that favors the cooperation and network functioning in a network. Although both work from the view of complementarity between creativity and innovation, Innoveex inclines the balance more towards innovation, while the Gabinete de Iniciativa Joven, focuses more on creativity. The latter was created in order to promote a new model for regional development based on the capacity for imagination and creativity of people with a young and innovative attitude.

A successful example are the so-called “Knowledge Cafes” a forum in which employees from all over the organization discuss strategic and management issues, as they sit in small groups enjoying a cup of coffee. This forum serves as a knowledge sharing “junction”, which enables a wide-ranging discussion, but at the same time allows an intimate level of dialogue. Such a session usually begins with a presentation of one or more management dilemmas that start the conversation around the tables. After all the groups have discussed the topic – a representative from each table will present to the wider audience the outputs of his/her group's conversation. The methodology has proven to stimulate creativity processes in organisations and to reduce the resistance to the uptake of creativity management.

The regional government is also using imagination and creativity to develop pilot programmes in the classroom, helping secondary school pupils to be more proactive and encouraging young entrepreneurs to set up small firms and cooperatives.

One of the ways it brings creativity into business plans is through the a game called “Imagine your company” based on the use of counters or small blocks. Each participant will have these counters to build the structure they desire. Once they have finished they will give a name to the piece they have created and will take a picture of their structure that will be uploaded in internet. Then, all participants will have the chance to draw or write about what others have “imagined”.

Business support organisations are considered the ideal initiator and moderator for the creation of playful settings and environments that promote and stimulate creativity processes, as they are normally considered as expert organisations which operate independently, which increases their credibility, but at the same time are well related to the regional authorities, which guarantees the transfer of the results of the exercise into regional policies.

The experience and results of the regional policy and the activities in the field of creativity and innovation, have proved successful, and have allowed to dive further into the needs of business with respect to creativity and innovation. The CREATIN project was set up to give an answer to one of these needs: the need for more knowledge on specific creativity techniques that support the development of new products and services.

4. Creativity Techniques for Product and Services Development

To become more innovative, companies must absorb knowledge and turn it into action. Their capacity to do so depends to a large extent on the accumulated knowledge and skills in the company and on the extent to which innovation is perceived as the responsibility of everyone in a business, rather than just a research department.

4.1 An Example: CREATIN Project

CREATIN pretends to improve capacity for innovation in products and services of European SMEs through the application of creativity techniques, creating a methodology for continuous learning for the human resources of the centers and organizations for SMEs support, and the human resources of the SMEs, giving them the skills and abilities to integrate and apply these techniques to the innovation in products and services. Focus will be on those human resources in support organizations that give direct services to the SMEs in the area of innovation (innovation agents) and the human resources of the SMEs dedicated to research, development and innovation (innovation managers).

The state of the art analysis and empirical evidence shows that many creativity techniques are adequate for the purpose of stimulating innovation in products and services in SMEs, and the role SME support organizations play in providing services related to the application of these creativity techniques. The analysis will lead to the identification of relevant contents for the final beneficiaries of the self-learning system, i.e. innovation agents and support personnel for SMEs of the intermediary or support organizations, and the innovation managers and personnel dedicates to research, development and innovation in the SMEs themselves.

CREATIN improves the competitiveness of the SMEs giving an answer to their needs in a every time more demanding market for innovative products and services, integrating creativity in their daily activities, thus allowing them to offer innovative products and services, as well as increasing their innovative capacity and the speed of innovation adaptation. Studies show that innovative businesses create more jobs than non-innovative ones. It increases the capacity of the SME support organizations by improving the skills and

abilities of the personnel dedicated to giving support to SMEs in the field of competitiveness, innovation and productivity. These support organizations will be able to give a better answer to the SMEs needs for innovation in products and services, integrating creativity in the services they offer them

4.2 Key Factors for Creativity Inside Organisations

The development of sustainable and effective interaction between the various agents of the national innovation system – research and higher education institutions, innovative companies, intermediary organizations. The interaction between the agents of the national innovation system for the creation, distribution, transfer and adoption of innovation products needs richer content, as well as improved mechanisms and modes of operation. This purpose can best be served by strengthening the network of intermediary and transfer organizations, and the expansion of an emerging new type of bodies: innovation centers, spin-off companies, research and innovation clusters, science parks, and social networks. The administrative capacity of national and regional authorities for the management of innovation development needs to be urgently enhanced.

The field work carried out is based upon a mixed set of questionnaires using the scorecard approach, integrating both quantitative as well as qualitative parts, these questionnaires have been addressed to over 150 SMEs in Extremadura (Spain), Ireland, Cataluña (Spain), the Netherlands, Cyprus, Bulgaria, and Slovenia.

The first results make apparent that there are many factors that can facilitate and thus impede creativity management within organisations some issues came to the fore by mutual consensus. These issues include:

1. Leadership: Effective leadership is important for successful idea generation and creativity. Leaders have the ability to influence a group towards the achievement of goals and defining a clear purpose and strategic intent are critical to the success of all creative endeavours
2. Culture: creating a culture and climate for knowledge generation, transfer and use has a positive impact on organisational performance. Key success factors that support a knowledge oriented culture include (a) developing a visible connection between sharing knowledge and practical business objectives (b) integrating knowledge creation and transfer with an existing key business initiative, (c) aligning reward and recognition structures to support knowledge transfer and reuse.
3. Structure: Knowledge creation and transfer demands interactions between different organisational functions whose expertise skills and experience are mutually reinforcing and cumulative. This more consistent with flatter, more flexible and more responsive organisations.
4. Motivation : Peoples' ideas, skills, experience and motivation are imperative for successful idea generation and creativity. Therefore, if organisations wish to encourage creative activities such as knowledge sharing and reuse they must design motivation and measurement systems that incorporate these activities.
5. Communication among employees and with outsiders stimulates their performance. Thus, the better that members are connected with each other and with key outsiders the better their performance.

The preliminary results of the study also show that SMEs perceive a clear lack of structured information and support in order to implement creativity techniques to enhance the innovation process in SME's. Business support organisations and an environment which stimulates and encourages creativity and innovation are vital to increase the take up and use of creativity techniques in European SMEs. The participating regions provide different

experiences, such as the Extremadura experience described before, that can provide valuable lessons learned on how to create the right business support environment.

4.3 Creativity Management Assessment

In first instance, the project has carried out an analysis of what is the situation in other countries and regions.

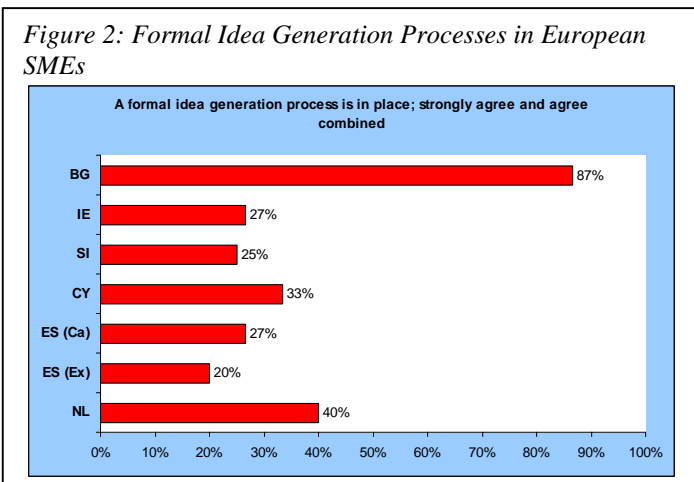
A total sample of 99 respondents was selected to evaluate the status of creativity applied on innovation processes, these come from:

- European SMEs from the regions/ countries participants in the project: (Bulgaria, Catalonia (Spain), Cyprus, Extremadura (Spain), Ireland, Friesland (the Netherland)).
- The respondent organization has a maximum 50 employees
- The SMEs were complemented by interviews with Innovation Agents, such as Business Innovation Centres, Technology Centres, Technology Transfer Offices, etc.

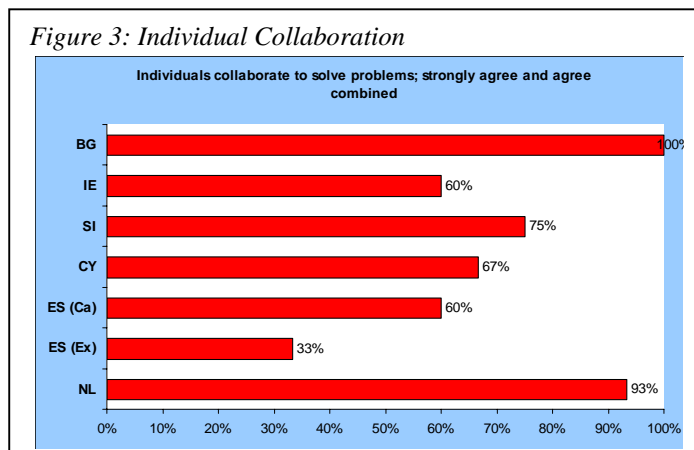
The principal data collection method used is the Creativity Management scorecard, whose aim is to ascertain

- a) attitude and perception towards creativity issues;
- b) the extent and nature of creative initiatives in the organisation;
- c) the barriers experienced; and finally
- d) whether specific structures, systems and culture are in place to enable effective creativity management in SMEs.

It is based upon an explicit set of carefully chosen and justified statements, the statements have been formulated from best practice concepts that have been compiled from workshops and justified by literature searches. The scorecard will help to identify the relative strengths (to be exploited) and weakness (to be improved) regarding creativity in the organization. This enables managers and decision makers to get an overview of their company's strengths and weaknesses with regard to creativity management highlighting those areas that require attention.



The field work, based upon the scorecard, shed light on the issues at hand, and the state



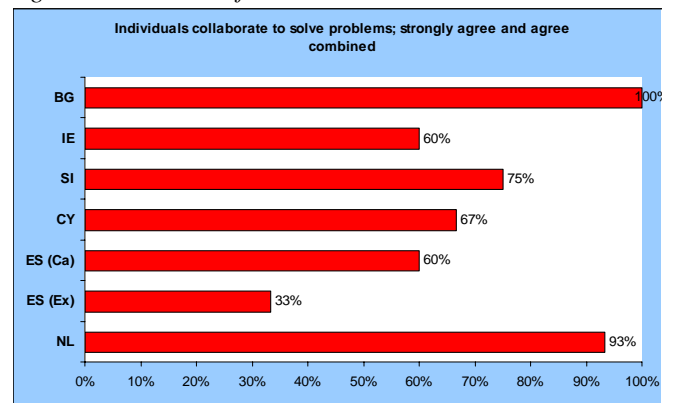
of the art of creativity in European SMEs. It is clear that the majority of the SMEs do not use formal idea generation methodologies, and the creativity processes seem to be more on an ad-hoc informal basis, and related to the collaboration on individual level to solve a specific problem.

The culture related to non-tolerance to failure and mistakes and the fact that non-conformity is not seen as a virtue are

impediments to the creativity within these type of organisations. The fact that in general, knowledge sharing and knowledge re-use are not incentivised throughout the organisations aggravate the take up of creativity processes and management. At the same time the research indicates that at the same time there is a basis for the integration of creativity management as the majority of the respondents indicate that there is a high level of trust in their organisation and team members are empowered to make decisions (the exception is Spain where this was not the case), and the fact that there is a high level of cooperation across the organization. In overall terms, it seems that the impediments for the uptake of creativity management can be overcome, as the basis for knowledge sharing and re-use (vital for creativity), i.e. the trust levels within the organisation, are there.

One of the main motivations to improve internal processes and the integration and uptake of creativity processes is related to the importance of the voice of the customer, all respondents are very clear in this respect, an issue which is supported by the fact that the structures of the SMEs enable to capture this voice. Using this experience and internal processes to promote creativity and to move towards the integration of creativity management is not a big step. Business support organisations can play an important role in helping European SMEs to overcome the impediments and prepare for the use of creativity processes to generate an even better products and services for their clients, the fact that they already are aware of the fact that the voice of their clients guides their internal processes will only help to make this a reality.

Figure 4: The voice of the customer



5. Conclusions

Research indicates that an organisation's core competencies will centre on managing the creative capacity if its workers in the future. It seems that industrial growth and productivity gains will depend heavily on improvements in creativity. Thus, a viable approach is critically needed.

The Creatin project aims to improve the capacity of European SME's. To do this, the team aimed to identify and prioritise the key barriers that currently exist to creativity in European SMEs. Preliminary results indicate a series of key factors that need to be in place (leadership, culture, structure, motivation and communication) to encourage creativity in organisations, and at the same time demonstrate that there is need for structured information and support. Business support organisations and a regional government that fosters an environment in which creativity and innovation can blossom are vital in this sense. The example of Extremadura demonstrates that is possible to do so.

The research tools and results used in Creatin can help analysts and decision makers to identify gaps between their current and desired performance, and enable decision makers to identify where successful strategies can be further exploited and pinpoint where problems, or potential, problems lie. Furthermore, they provide the necessary information that can be used to develop action plans to improve performance. Business support organisations can play an important role in helping European SMEs to overcome the impediments and prepare for the use of creativity processes to generate an even better products and services for their clients, the fact that they already are aware of the fact that the voice of their clients guides their internal processes will only help to make this a reality

References

- [1] Gupta, A.K. and Singhal, A. (1993). Managing Human Resources for Innovation and Creativity, *Research Technology Management*. (May-June): p. 41-48
- [2] Swan, J., Newell, S., Scarbrough, H. and Hislop, D. (1999) Knowledge management and innovation: networks and networking, *Journal of Knowledge Management*, 3, 4, pp 262-275.
- [3] (Higgins 1999)
- [4] Cormican. K and O'Sullivan, D. (2003) A Scorecard for Supporting Enterprise Knowledge Management. *International Journal for Information and Knowledge Management*, 2, 3, pp 191-201.
- [5] Henry 2007
- [6] Woodman, R.W., Sawyer, J. E. and Griffen, R.W (1993) Toward a theory of creativity. *Academy of Management Review*, 18; 2, pp 293-321.
- [7] Farr, J.L. and Ford, C.M., (1990) Individual Innovation. In M.A. West and J. Farr (eds), *Innovation and Creativity at Work*. Chichester: Wiley.
- [8] Ettlie, J., E. (2000). *Managing Technology Innovation*. New York, John Wiley & Sons Inc.
- [9] Rosenfeld, R. and Servo J.C. (1990) Facilitating organisation in large organisations. In M.A. West and J. Farr (eds), *Innovation and Creativity at Work*. Chichester: Wiley.
- [10] West et al., 1990). West, M. A. and Farr, J. (1990). *Innovation and Creativity at Work*. Chichester, Wiley
- [11] Tidd, J., Bessant, J. and Pavitt, K. (1997) *Managing Innovation: Integrating Technological, Market and Organisational Change*, John Wiley & Sons, Chichester.
- [12] Woodman, R.W., Sawyer, J. E. and Griffen, R.W (1993) Toward a theory of creativity. *Academy of Management Review*, 18; 2, pp 293-321.
- [13] Shavinina, L.V. (2003), *The international handbook on innovation*, Elsevier