

CreaMED project “Fostering Creativity and Innovation in the Mediterranean Area as key elements for Regional Sustainable Development: CreaMED Alliance”.

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Provision of expert services for the elaboration of the Training Seminars & Pilot Workshops in the context of the CreaMED project “Fostering Creativity and Innovation in the Mediterranean Area as key elements for Regional Sustainable Development: CreaMED Alliance”.

Deliverable D.4

“Final Report”

Systasi Consulting



in association with:

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1. Executive Summary

The economic, environmental and social crises impacting Europe over the past 5 years have posed significant challenges not only upon the E.U in finding new ways of thinking and acting, but also on national and regional level, in new policies to be developed. The EU likewise national and regional governments need to engage in change together with social, academic and economic partners at both public and private level. New initiatives need to be developed and shared across traditional policy areas dealing with current economical, social, cultural and environmental deficits. New policies need to be designed and implemented that will foster sustainable economic growth and social solidarity. To this end, Creativity and Innovation can act as catalysts of competitiveness so as to achieve sustainable growth, economic development and social cohesion.

In this context, an alliance has been constituted by several Mediterranean regions aiming to sensitize and motivate private entities (SMEs in particular that form the backbone of the European economy) as well as public authorities (regional authorities principally) in the wider Mediterranean area to comprehend the importance of creativity as pillar of innovation and sustainable socioeconomic development. CERTH, as part of this alliance, commissioned the present study that was awarded to SYSTASI Consulting – which aspires to alert, inform and stimulate enterprises located and/or active in the area of the region of Central Macedonia to utilize Creativity techniques as tools to enhance their innovativeness and competitiveness. In the context of this project, and especially according to WP5 “Implementation of Pilot Experiences”, SYSTASI identified and invited 10 SMEs of the region to participate in the training seminars and also perform a pilot workshop in their businesses so as to appreciate in real life circumstances the benefits and requisites of creativity.

During the 3-day training course conducted in May 2012, the participants were introduced to the notion of creativity as leverage of innovation, identified how creativity can influence innovation, what prerequisites are quintessential and overall were “nested” with the need

to ‘open their minds’ to participatory decision making processes that allow open and non-judgmental discussions. The techniques allowed them to introduce themselves to novel and ‘out of the box’ thinking and simultaneously showed them how to organize theirs and their collaborators creative thinking in a practical and effective manner. Additionally, ‘behavioural additionality’¹ was another main benefit achieved primarily through the seminars, as well as through the pilot workshops. According to participants’ testimonies, the vast majority of the participating companies did not apply C&I management techniques prior to the course. According to the evaluation results, **the majority of participants stated that their company intends to integrate creativity techniques in the decision making process as they appreciated the added value of creativity in problem resolution and/or issues review.**

With respect to the benefits gained **on company level** from the conduction of the pilot workshops – apart from the generation and selection of innovative and novel ideas – the following were mentioned:

- **Formulation of realistic and multi-visual perspectives of companies’ problems and issues;**
- **Improvement of team work and open communication on interdepartmental level;**
- **Provision of framework for organized discussion that allowed also thinking outside-the-box and consideration of strategic implications of proposals made;**
- **Inception of use of creativity techniques as alternative means of resolving issues or producing new ideas;**

On personal level, the main benefits gained by the participants – apart from the knowledge and skills obtained – involved: **appreciation of individual contribution by colleagues and improvement of communication.**

¹ Partial or Behavioural Additionality’ is defined by Georghiou L. and Clarysse B. (2004) as the “the difference in firm behaviour resulting from the intervention” in Georghiou L., “Evaluation of behavioural additionality. Concept paper”, in Georghiou L., Clarysse B., et al “Making the difference. The evaluation of ‘Behavioural Additionality’ of R&D subsidies”, IWT-Observatory 2004

In terms of **issues** encountered during the application of the creativity techniques at the participating companies, the following were the most common:

- **Duration of the discussions and the pilots overall;**
- **Lack of higher level management involvement;**
- **Ambiguity on the implementation aspects/prospects of the results;**
- **Improper selection of participants.**

*The following list of **recommendations** has been formed for the enhancement of utilization of creativity as leverage of innovation **in SMEs**:*

- *Proper organisation of creativity meetings;*
- *Prior training of participants on the creativity techniques to be used;*
 - *Involvement of higher level management;*
 - *Time allowed for discussion and the workshop conduction.*

*On an **aggregated regional policy level**, the following recommendations can be made so as to assist SMEs' uptake of creativity techniques and use them on entrepreneurial level:*

- *Organisation of more Creativity Trainings*
 - *Diffusion of information on creativity*
- *Establishment of a Regional or Mediterranean Creativity Think Tank*

2. Introduction

The economic, environmental and social crises impacting Europe over the past 5 years have posed significant challenges not only upon the EU in finding new ways of thinking and acting but also on national and regional level for new policies to be developed. The EU as well as the national and regional governments needs to engage in change together with social,



academic, and economic partners at both public and private level. New initiatives need to be developed and shared in order to cover traditional policies areas dealing with current economical, social, cultural and environmental deficits. New policies need to be designed and implemented that will foster sustainable economic growth and social solidarity. To this end, Creativity and Innovation can act as catalysts of competitiveness so as to achieve sustainable growth, economic development and social cohesion.

In this environment, the CreaMED project² emerged as an initiative aiming to foster the adaptation of Creativity and Innovation by Mediterranean regions through mutual policy learning, and achievement of synergies and cooperation across the Mediterranean Area. The project is intended to raise the awareness of public and private entities on the importance of Creativity and Innovation as pillars of sustainable socioeconomic development as well as to develop creativity and innovative potential in both private and public organizations encouraging them to make better use of their creative capacities and capabilities. On a strategic level, the CreaMED project aims to provide a framework for developing regional innovation policies within the Mediterranean area in a coordinated and coherent way, completely aligned with the EU priorities, boosting the Mediterranean Industry and contributing to the consolidation of the European knowledge economy.

Within this context, and in accordance to the CreaMED WP5 “Implementation of Pilot Experiences” SYSTASI’s Project Team (thereinafter “the Project Team”) elaborated the present project with the overall aim to raise the awareness and stimulate 10 SMEs located and/or active in the area of the region of Central Macedonia to utilize Creativity techniques as tools of enhancement of their innovativeness and competitiveness. The following chapters present the tasks performed as part of this study, the results achieved, the conclusions derived and the set of recommendations developed accordingly for the enhancement of adoption of creativity as leverage of innovation on entrepreneurial as well as policy level.

² www.creativity4med.eu, last accessed 25/06/2012. The project is funded under the MED Programme which is one of the European transnational cooperation programmes in the frame of the ‘Territorial Cooperation’ objective of the EU Cohesion Policy.



3. Selection of participating SMEs (1st part of CreaMed WP 5.1 “Training Creativity Workshops”)

The objective of the first activity of the Project Team, was to select in an appropriate manner ten (10) Small & Medium sized Enterprises (SMEs) that are established and/or activate in the region of Central Macedonia, Greece, to participate in the Creativity and Innovation Seminars as well as the Pilot Workshops to be conducted as part of this project. For the conduction of this task, the following activities were performed:

- A) The Project Team compiled a short yet concise letter, which described in short the objectives and tasks of the subcontractor’s activities as well as the aims of the training seminars and pilot workshops to be conducted. The letter, available only in Greek, is presented in [Annex 7](#) of the present report.
- B) The Project Team also compiled a short invitation text that was dispatched to an appropriately formulated database of SMEs established and/or active in the region of Central Macedonia. The invitation was sent primarily via electronic means while follow-up activities were performed over telephone and personal meetings.

The invitation aimed to provide concise information to potential participants with respect to:

- The context and objectives of the seminars/pilot workshops in accordance to the requirements and prerequisites of the subcontract and the CreaMED project overall;
- The organizing aspects of the seminars (date and time of the seminars, place of venue, the role of the subcontractor’s team, the role of the participating enterprises and the participating persons in particular, etc.);
- The requirements for certifying the participation of the enterprises in the training seminars and pilot workshops (commitment of each company’s management team, necessary resources for the participation in the training seminars as well as

the conduction of the pilot workshops, etc.);

- The benefits anticipated to be gained (overall objectives from learning how to utilize creativity techniques for improving their operational capabilities, to generate new ideas/products, the improvement of skills and competencies on personal level, etc.) by both the participating organisations and participants.

The text of the invitation, available only in Greek, is presented in [Annex 8](#) of the present report.

- C) A list of criteria was developed according to which companies should be and were finally selected. The criteria were:
- a. Locality: the companies should be located and/or be active in the region of Central Macedonia.
 - b. Sector: the companies should belong to different sectors so as to ensure multidisciplinary as well as variety in the views and experiences of the participants.
 - c. Levels of administration: the selected companies should have at least 2 levels of management as the seminars will be attended by middle-higher level employees who will then be responsible for organizing and performing a creativity workshop in their companies.
 - d. Innovativeness: the companies should have demonstrated in the past some sort of innovativeness or at least be willing to integrate innovativeness into their operations.
 - e. Diffusion: the participants as well as their companies should be able to diffuse the knowledge and aptitudes gained during the trainings and the pilot workshops not only to their colleagues and collaborators but also to their network of contacts outside the borders of their department of firm. This spillover effect would assist the further dissemination and valorization of the knowledge gained during the seminars and the workshops.

The list of criteria, available only in Greek, is available in [Annex 9](#) of the present

report.

- D) A database of potential enterprises was compiled according to the aforementioned criteria. Apart from the dispatch of individual invitations, the subcontractor's team notified about the training seminars and pilot workshops also the business associations of the region, such as SEPVE (Association of Information Technology Companies of Northern Greece), that also disseminated the invitation to their members and assisted in the identification and selection of the 10 SMEs.
- E) The invitations to the enterprises were sent during the second and third week of March 2012, and the follow-up activities were conducted during April. All the activities of the subcontractor resulted in the final list of enterprises presented in [Annex 10](#) of the present report.
- F) Each of the participating organisations signed a Commitment Letter (the template is available only in Greek and presented in [Annex 11](#) of the present report), with which all 10 SMEs verified that they would participate in the training seminars and afterwards conduct a pilot workshop in their companies, as well as contribute to the dissemination aspects of the project by providing relevant information to other project participants and pilot enterprises of the project.

4. Creativity Training Seminars (2nd part of CreaMed WP 5.1 “Training Creativity Workshops”)

The second task of the Project Team involved the organisation and execution of a 3-day course on Creativity and Innovation (3 crea-workshops). The aim of the crea-workshops was to promote the notion of creativity and diffuse the use of creativity techniques as means of development of new/novel ideas that can be transformed into innovative products/services and/or resolve issues SMEs face. The workshops/seminars were structured in 3 phases and were conducted on the 3rd, 4th and 5th of May 2012 at the premises of CERTH and THERMI Incubator and were organized by a team of 5 experts together with the assistance of CERTH’s project team. 22 representatives from 10 selected SMEs participated in the seminars. The list of the participants is presented in [Annex 1](#) of the present report.

The methodology followed and the outcomes gained from the elaboration of the seminars are described in the following paragraphs.

For the compilation of the content of the Training Material, the Team performed a wide review of relevant educational materials elaborated in the context of European and national projects and programmes prior to the formulation of the seminars syllabus. In combination with the desk research, the Team conducted also a high number of extensive discussions with individuals and enterprises so as to ensure that the educational context of the seminars would be appropriate and suitable for SMEs. These activities allowed the Team to develop a training content where theoretical information was appropriately supplemented by practical views and case studies and provided in a form that was both intriguing as well as informative.

From a methodological perspective, the Team firstly drew a generic outline of the seminars that described the objectives of each session, the aspects each session would cover, the

foreseen length of each subject and any additional information that should/would supplement each session and subject. This generic outline was discussed with CERTH's project team at the end of March 2012 so as to finalise it together with all the administrative details of the seminars, such as the venue area, the proposed dates, etc. After integrating all comments and suggestions, the Project Team finalized the Syllabus of the Seminar as well as the Seminars' Programme.

The syllabus of the seminar involved the following chapters:

- A Theoretical Part, which aimed to provide participants with short yet concise introductory information about the notion of creativity so as to allow a quick transition to the Practical Part of the seminar. As part of the Theoretical aspect of the Seminars, a Case Study was developed from scratch that aimed to have the participants – who were split into three teams that remained the same throughout the seminar so as to reinforce the connection between the members and allow relationships to be built likewise in real companies – working on a single issue during the entire duration of the seminars and thus allow them to see how creativity techniques can be used in different aspects of operational procedures and assist in the resolution of several problems.
- A Practical Part that was divided further into two components: The first component involved the presentation of different creativity techniques involved with Idea Generation, Idea Evaluation and Selection, Idea Implementation and finally Communication of Ideas. The second component involved active participation of the participants, as all 3 teams were asked to prepare short presentations of the ideas they generated during the course with respect to the Case Study, the ideas they selected, how they foresee implementing them and also communicating them internally and externally.

The Syllabus of the Seminars was constructed in such a way so as to be flexible, to cover a variety of different issues and angles of creativity as leverage of innovation on entrepreneurial level and simultaneously to be “user-friendly” by allowing most time to be

spent on the application of the techniques themselves while the theoretical parts were almost always complemented by appropriate videos and interactive games. Additionally, in order to assist the proper execution of the seminars, the Team prepared a set of Theoretical Background information according to the Syllabus structure and content that provided to the participants prior to the seminars. The Theoretical Background booklet aimed to introduce the participants to the notion of creativity, its connection to innovation, the success factors and barriers and finally the techniques that can be used to boost creativity on intrapreneurial level. This material, available only in Greek, is presented in [Annex 2](#) of the present report.

Further information on the Syllabus, only in Greek though, is available in [Annex 3](#) of the present report while the Programme of the Seminars is presented in [Annex 4](#). All presentations given during the Training Seminar are available in [Annex 6](#).

Day 1 (1st Training Phase – 1st Crea-Workshop)



The first day of the seminar was dedicated to an introduction to Creativity and to the application of creativity techniques for Ideas Generation. The introductory part mainly aimed to engage the participants in fruitful discussions among them as well as with the tutors and experts on the notion of creativity, its application areas, its success

factors and obstacles and its utility areas. After the introductory part, the Case Study was presented³ and all participants were split into three groups.

The Case Study involved a fictitious situation of a small firm – the Firm – operating in the

³ Available, only in Greek, in [Annex 5](#) of the present report

region of Central Macedonia producing children's clothes from organic materials that up to recently was performing well in the local market. However, due to the recent financial crisis, the revenues of the Firm started to seriously decline, also deteriorated its ability to import organic fibers from other countries (more expensive and with higher prerequisites from producers) and affected consequently the internal environment of the company. The overall question was how the Firm could overcome the crisis by utilizing Creativity Techniques that would allow its team members to reflect on the current situation, its future impacts and respectively configure novel and innovative ways to overcome the crisis.

The Case Study was constructed in such a way so as to be rather generic allowing flexibility that would result to an association of all participants – irrespective of their scientific or organizational background – with the Firm and also it was highlighting issues that apply to almost all companies in Greece: the need to find innovative ways to overcome the financial crisis while taking into consideration the limited resources available, the risks that each decision involves, the lack of any external funds for major investments, etc. The aim of all groups was to find a solution to the Case Study's problem, which they would then present at the end of the seminars (Day 3 – 3rd Crea-Workshop).

The second part of the first day (1st Crea-Workshop) involved the presentation of creativity techniques on Idea Generation. Three different techniques (Attribute Listing, Analogies and Rotating Roles) were presented. As part of the presentation, participants were asked to exercise the Analogies technique in front of the class based on a very simple exercise which was around opening a coffee shop in Thessaloniki. Since there are too many in the area, they had to create something different, original and creative, something that has never been done before in the city by using the Analogies technique. Some of the ideas generated involved: the establishment of a coffee shop that would resemble a chemical lab where the coffee would be ordered in the form of chemical



compounds and the waiters would be dressed up as chemical researchers; another involved the establishment of a coffee shop that would act as Coffee museum using visual representations with new technologies; another involved the formulation of a “participatory coffee shop” where each customer would be able to participate on their own in the preparation of their coffee, etc.

After the end of the presentation, the participants were split into 3 groups and were asked to utilize the Rotating Roles technique in order to generate ideas on how to resolve the issue presented in the Case Study. The tutors, with the assistance of CERTH’s project team, played the role of the coordinators in each team and assisted the participants to implement the technique in the Case Study situation and generate ideas on how to resolve it. After the presentation, each team withdrew and discussed about the possibilities of overcoming the issue at stake from a number of different viewpoints such as the General Director, the Marketing Director, the HR Manager, the Financial Officer and the R&D Director.

After the presentation and the application of the Rotating Roles technique, a discussion was held among all participants concerning the usability and applicability of the technique for Ideas Generation and the following comments were made:

- The technique assisted them to “open their minds” with respect to the need for a participatory process in decision making and ensuring open and lacking prejudice and personal conflicts discussions.
- When performed at internal level, perhaps it would be of assistance if an external person would coordinate the discussion or select a person that would be evaluated as objective by all participants. Overall, most participants stated that it would be best if an external coordinator would be employed, as this would allow for personal conflicts to be put aside and would allow for a fruitful discussion to take place.

Day 2 (2nd Training Phase – 2nd Crea-Workshop)

During the second day of the seminar, the participants were introduced to a set of techniques (Phillips 66, PMI and 6 Thinking Hats) aimed at Idea Evaluation and Selection and afterwards were asked to apply the method of 6 Thinking Hats on the Case Study. The tutors again with the assistance of CERTH's team played the role of the coordinators of each team and assisted the participants to implement the technique in the Case Study situation and evaluate the ideas generated in 1st training phase - day's 1 session following the requirements of the technique. After the presentation, each team withdrew and discussed about the ideas generated utilizing the Yellow, the Black, the Red and the Green Hat while the Blue Hat was mainly wore by the tutors who acted as the coordinators of the sessions.



Afterwards, all three teams gathered again and reflected upon the technique. Overall, the technique was appreciated by the participants for allowing open discussion and reflection on the ideas generated during the previous session. A question was posed concerning the criteria used/should be used for the evaluation and selection of new ideas. The discussion held respectively among all participants and tutors pointed that such criteria are not usually utilized and that this depends more from the role each participant has in the company as well as in the technique. In other words, a Financial Officer is not obliged to see things only from his point of view but also to reflect from the side of the other positions he had a chance to “use” during the application of the creativity techniques.



During the second part of the day, the participants were introduced to the Lean Start-Up methodology that aims to assist in the proper implementation of innovative and creative ideas on entrepreneurial level. During this session the participants were not dispatched to their teams as were retained in one group so as to allow each individual to reflect upon the ideas generated and selected via the utilization of the aforementioned techniques (Rotating Roles and 6 Thinking Hats). The participants' teams discussed the ideas they generated and selected with respect to the two main hypotheses of the methodology: the Value hypothesis and the Growth hypothesis.

The *First Team* stated that their Value Hypothesis involved the improvement of their product: how to continue producing a qualitative product while lowering the production costs and thus allowing the products to be sold at better prices. The Growth Hypothesis then was orientated around the development and provision of greater Added Value to the final customer. From a communication point of view, the First Team suggested that greater extroversion of the company would be required and also more marketing via participation in fairs and exhibitions, contacts with future clients both inside Greece so as to attain a greater market share and outside the country so as to reach new markets.

The *Second Team* stated that their Value Hypothesis involved the utilization of novel internet technologies for the promotion of the Firm's products to foreign markets. The Growth Hypothesis relied on the design and utilization of a proper e-shop that would allow the Firm to promote its products in Greece and also in other foreign markets.

The *Third Team* stated that their Value Hypothesis involved the Added Value of the product: meaning the value the customers recognize in Greece and has made the brand known in the local/regional market. This attribute of the product is very important and should also be further promoted to the foreign markets. The Growth Hypothesis would also be based upon the same notion and be promoted through extrovert activities (i.e. participation in fairs, exhibitions, etc.).

Day 3 (3rd Training Phase – 3rd Crea-Workshop)

The last day of the seminar was split in two parts: the first involved the presentation of communication techniques as the proper dissemination and communication concerning new business approaches is vital for the successful implementation of any changes on interpreneurial and extrapreneurial level. The communication technique taught the participants how to recognize other people's dominant communication style and adjust to it in order to exchange information in the most successful way.



The second part involved the presentation of the Case Study's outcomes by each of the teams of the participants.



The **First Team** presented first the facts that constituted the Case Study: the decrease of the



Firm's revenues and the second being the deterioration of the company's internal communication due to the crisis. During the Idea Generation phase they came up with the following ideas: the first one involved the creation of a new product and the second involved the identification of novel physical characteristics of the products. During the Idea

Evaluation stage, the first idea was rejected due to a number of reasons and mainly concentrated on the second one. In terms of Implementation, they suggested promoting the products to Mediterranean countries, the Middle East and some European countries, while the final list of the countries would be developed after the conduction of a Market Research; the Firm would also promote its Social Responsibility character by promoting the fact that its products are not exploiting child labour, by organizing philanthropic fairs, etc.; and by utilizing other networks for achieving supplementary sales. During the discussion held afterwards, it was acknowledged that the idea of promoting the premium quality products in combination with the utilization of fair trade concepts in production and promotion of Firm's products could enhance the company's sales in foreign markets and produce value as well as growth prospects.

The **Second team** presented then their outcomes. In their view, the aim should be at



promoting the differentiation of the product from all other similar products available in the market. The concept that the ideas generated were based upon was that all mothers wish to buy products for their children, which are of the best quality and safe and thus prices are/may be less important than quality and differentiation. Thus, during the Idea

Generation stage the team identified that the niche market they should target would be children with allergies. To this end, a new range of products would be developed and promoted in foreign markets mainly via the utilization of online means. And finally, in terms of markets, the Team suggested that they would target the uprising market of Middle East. During the discussion that followed it was pointed that the approaching concept was rather innovative as it involved minimum costs on behalf of the Firm. In terms of markets, the promotion of products in Middle East may prove somewhat difficult due to a number of reasons and most probably the promotion of the products in Russian markets may prove a more feasible and viable solution (this proposal was made by the First Team).

The **Third Team** primarily presented the ideas generated with the utilization of the Rotating Roles technique: the Firm will also produce bedclothes, utilizing the know-how and raw materials already available but also needing to expand its line of products, so as to approach hospitals and thus open a new market. The competitive advantage of this solution would



be that together with the bedclothes the hospitals would have the opportunity to purchase infants clothes at a discount price. This approach would “expose” the mothers giving birth at the maternity hospitals to the Firm’s products and this could result in the attainment of “sticky customers”. For this idea, a B2B approach will need to be deployed. Also, apart from this approach, a co-branding approach would also be deployed, e.g. with eco-friendly detergents for example with joint offers or discounts, etc. In terms of markets, the Team proposed to promote its products to the Russian markets due to its geographic proximity, common culture with Greece, its uprising trends, etc. For this instance, a local sales representative would be employed. Finally, paid advertisements mainly in online means would be utilized for the promotion of the product in Greece and in Russia. The discussion that followed pointed that the concept of co-sales is proper however attention should be

paid at the fact that investments should be made in the Firm for the realization of this idea which might not be viable or sustainable.

After the teams' presentations, CERTH's team presented the Forum of the CreaMED project inviting all SMEs and experts to use it in order to exchange ideas, experiences, knowledge, opinions, questions, etc. concerning the notion of creativity and its implications upon innovation or discuss on aspects of the pilot workshops. Finally, participants were asked to complete evaluation questionnaires in order to give their personal assessment of the training experience. The results of this exercise are presented in the following paragraph.

The seminars were concluded successfully with a short wrap-up of the main points of the seminar, i.e. the fact that creativity techniques apart from organizing the creativity flow inside enterprises mainly aim to assist employees to open up their minds and initiate discussions on how to improve their business, how to commit themselves towards the accomplishment of business goals, to think in a different way or from a different perspective, to collaborate in a creative way accepting other people's view points, to find ideas in the creative chaos, etc.

5. Conclusions – Recommendations from the conduction of the Training Seminars

The 3-day CreaMED seminar (3 crea-workshops) organized by CERTH in collaboration with SYSTASI Consulting in Thessaloniki, Greece, aimed to introduce selected SMEs of the region of Central Macedonia to the notion of creativity as leverage of innovation. The participants were organisations from a variety of industrial and services sectors, allowing thus during the course a fruitful interaction to take place and the exchange of prospects and opinions from various points of views. The majority of the participants were organisations that had not previously applied C&I techniques or strategies on their enterprises and thus it would be important for them to participate in the seminars course and also implement a pilot workshop in their company so as to comprehend and acknowledge the added value of these techniques on departmental and entrepreneurial level.

Overall, the creativity techniques presented and utilized during the 3-day training course allowed the participants to introduce themselves to the notion of creativity as leverage of innovation, to identify how creativity can leverage innovation, what prerequisites are quintessential and overall enlightened the need to “open their minds” to introduction of participatory processes in the decision making mechanisms of the departments and companies while ensuring open and lacking prejudice and personal conflicts discussions. The techniques allowed them to introduce themselves to novel and “out of the box” thinking and simultaneously how to organize their own and collaborators creative thinking in a useful and practical manner.

The majority of the participants stated that **the seminars exceeded their expectations from a professional as well as personal point of view**. The content and context of the seminars allowed them to introduce themselves to the notion of creativity, appreciate its benefits as well as requisites, build their personal as well as entrepreneurial capacities and guide their

thinking. The course also described the incentives required to be utilised by managers for integrating the process of creativity development inside their departments or their companies in a whole.

Thus, the greatest added value and impact of the course was the behavioural additionality caused to the participants: the vast majority of the seminar attendees although did not apply C&I management techniques prior to the course, stated their company plans to integrate creativity techniques as part of their decision making processes.

With respect to further improvements, the 'Theoretical part' of the seminars is such an area. In further detail, some comments were made during the evaluation phase of the seminars that the theory was not covered enough, although the theoretical background information was provided to all participants in advance prior to the conduction of the seminars. These comments were taken into serious consideration by the Project Team. In future seminars, it should be ensured that more time is allowed for the conduction of introductory presentations that could be attended by people not introduced to the notion of creativity or utilise available online creativity courses so as to ensure proper introduction to the theory of creativeness for those not familiarised with the notion.

6. Implementation of the Pilot Workshops (CreaMED WP5.3)

After the elaboration of the creativity training seminars, the Project Team organized and executed a series of private pilot workshops in all companies that participated in the seminars. The objective of this assignment was to assist the companies' personnel, especially those that did not participate in the training seminars, to appreciate the value of creativity and creativity techniques by applying them to real-life situations and thus acknowledge the benefits, restrictions and success factors of such techniques.

For the proper implementation of this assignment, a specialized questionnaire was elaborated by our Project Team that aimed to identify the most significant problems/issues the companies faced, their strategic plans for the forthcoming years, the areas that their personnel should/could be further trained upon as well as their organizational procedures with respect to creativity and administration. These questionnaires assisted our Project Team to identify the most important areas in each company and appropriately select – with the support of the companies themselves – the area(s) to be targeted during the pilot workshops. The questionnaire, available only in Greek, is presented in [Annex 12](#) of the present report.

From an organisational point of view, each pilot workshop was attended by 2 members of SYSTASI's project team⁴: one assisted each company's coordinator of the meeting while the second acted as the rapporteur. Additionally, 4 pilot workshops were also attended by the external Evaluator of the CreaMED project. All pilot workshops were conducted between May and June 2012 and some of them were continued in subsequent creativity meetings, after specific requests received by the companies themselves. Some basic information as well as the main results of each pilot workshop are presented in short yet concise format in

⁴ with the exception of one company



[Annex 13](#) of the present report. At the end of each session, an evaluation questionnaire – developed by the external Evaluator – was dispatched to all participants and collected afterwards. This evaluation questionnaire aimed to identify the level and extent of satisfaction of the companies from the application of creativity techniques on personal apart from entrepreneurial level. The evaluation questionnaire is presented in [Annex 14](#) of the present report while the results of the evaluation analysis are presented in [Annex 15](#) of the present report.

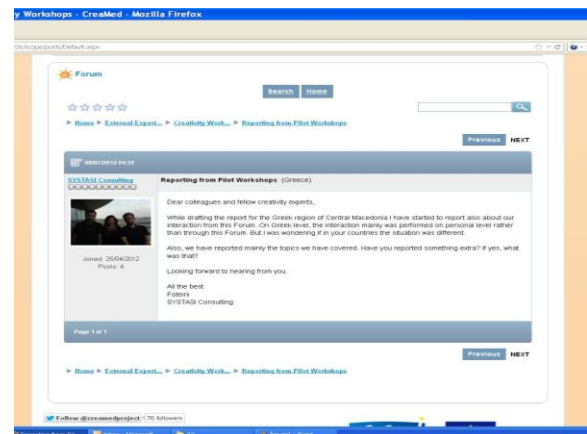
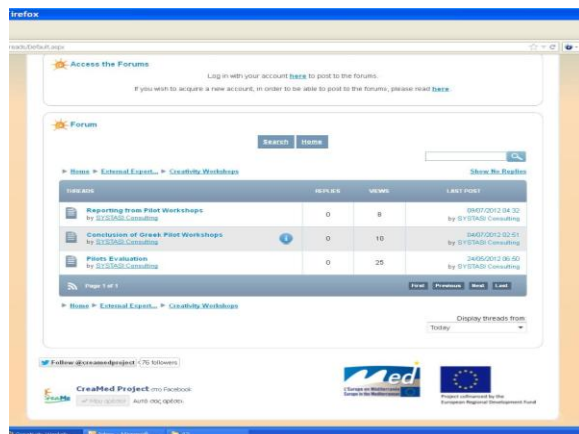


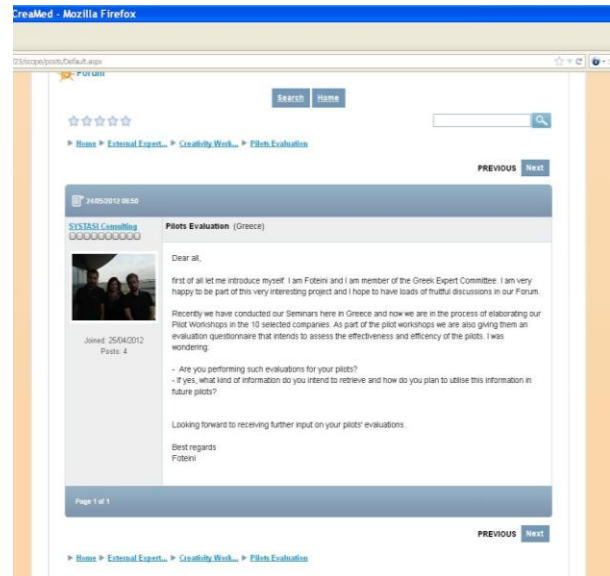
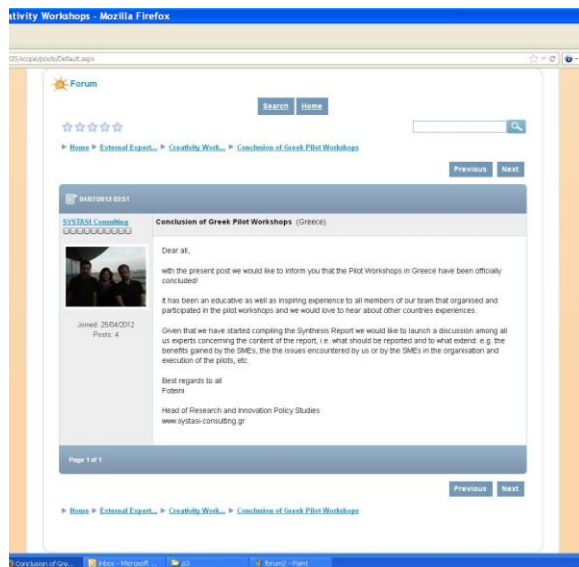
7. Forum Experience (CreaMED WP5.2)

The communication element was an integral part of the present study. According to the tender specifications of this study, our Project Team would support CERTH by publishing regularly information about the progress of its tasks on CreaMED's web-portal: www.creativity4med.eu.

Right at the launch of our Project, our Team provided to CERTH – and the respective information was uploaded on the website – a short description of our company and experts to be employed in the project (in English) so as to allow ourselves to be connected to the other experts of the project (coming from all other participating countries) and also to introduce ourselves to the partners of the project.

During the project, our Project Team utilized the webpage of CreaMED regularly and uploaded information about the training seminars it performed and the outcomes produced, the pilot workshops and also posed questions to the Expert Community of the project with respect to the evaluation of the pilots and the potential valorization opportunities of the project.





It is anticipated that further utilization of the Experts Forum will be accomplished in the forthcoming months, through the finalization of other Partners Pilot workshops and also the uprising need for exploring further the commercialization/further utilisation opportunities of the project on entrepreneurial level across all the Mediterranean Area.

8. Main conclusions on the creative process implementation on the Region of Central Macedonia

Profile of the SME participants

The companies that participated in the training seminars were carefully selected against a set of criteria, presented in *Chapter 3. Selection of participating SMEs*, in order to fulfill the requirements of the present study. First of all, they were significantly diverse in terms of sectors: 4 companies were IT related (from robotics to online transmission of events), 3 were R&D performers (chemistry, food-beverages-agriculture-environment and social research) and 1 Publishing House, 1 Hotel and 1 Foreign Language School. This diversion was beneficial on two angles: the first one was that the engagement of differentiated and diverse participants allowed an interaction and exchange of different views and opinions that assisted all participants accomplish a higher learning curve and multiply their learning benefits; the second angle involved the multiplication of participants network of contacts to other sectors and the achievement of inter- as well as cross-disciplinary advantages.

The participating companies were also diverse with respect to their familiarity and extent of utilisation of creativity techniques as part of their operational processes: the majority of the organisations were familiarized with the notion of creativity, yet only some of them were utilizing such techniques in their departments/companies when issues arose or on systematic level. This particular aspect was very important as it constituted a primary aim for this Project: to reassure that the trainings, combined with the pilot applications, would assist the participants not only to appreciate the added value and benefits of creativity and creativity techniques but also to provide them with the necessary tools and methodologies so as to apply creativity techniques whenever appropriate on departmental or company level.

The diversity of the enterprises almost eclipsed when it came to the problems they encounter and their strategic visions of the future: according to information received, the

most *critical areas for improvement* for the majority of the participating organizations involve: the enhancement of the Financial Administration of their companies, the International and/or National Promotion of their products and services and the Design and Production of Innovative Products and Services. With respect to the areas of improvement of their *employees' skills and competencies*, 8 companies identified Marketing as being a critical area for their enterprise, followed by Customer Relations (6 companies) and New and Emerging Technologies (5 companies). *All participating companies notated that they intend to develop new products and services within the forthcoming 5 years and among them 7 stated that will expand their activities to new markets and sectors during the same time period.* The *areas' most probable to receive investments in the near future* are, in declining order of importance, were notated to be: Research and Technological Development, Sales and provision of services via the Internet and Information and Communication Technologies.

Finally, it should be noted that almost all participating companies were long established SMEs with an average number of employees between 20 and 30.

Benefits obtained and Issues Encountered

According to the evaluation report of the training seminars, in general the participants were very active and interested in the content of the workshop. They participated vividly by asking questions and triggering several discussions. The overall impression of the seminar was very positive and participants expressed their interest in further developing knowledge in creativity and innovation management and its application in their work places. Additionally, according to the respondents, the main benefits of participating in the seminars were the following:

- Guided thinking, more business oriented
- Capacity building, incentive for the process of creativity development inside the company
- Consulting for dealing with everyday problems

- Knowledge, organisation through creativity techniques. Practical application on real problem
- Development of a methodical process

On creativity technique level, the majority of the participating companies stated that prior to the pilot workshops they were not familiarized with the application of such techniques on department or company level. According to the evaluation report of the pilot workshops, the pilots, performed according to each company's specific needs and requisites, allowed the participants – irrespectively of their participation also to the creativity seminars or not – to comprehend and appreciate the benefits and gains of using creativity techniques in the resolution of companies' issues or advancement of companies' perspectives. As anticipated, the majority of the organisations stated that would strive to introduce and integrate in their operational processes the utilization of creativity techniques as means of producing and organizing novel ideas.

Summarising the individual company reports compiled at the end of each pilot workshop, the benefits gained on company level – apart from the generation and selection of innovative and novel ideas – involved:

- Formulation of realistic and multi-visual perspectives of companies' problems and issues: The participant had the chance to discuss problems and/or issues their departments or companies face with colleagues from other departments as well as colleagues from their departments also. This aspect of the techniques, allowed the participants to get further insight and fresh views on the problems/issues they face by engaging colleagues either not directly involved with the specific issue at stake, and thus such discussions are not usually held with, or with colleagues directly involved in the issue but usually not employing creativity when discussing on the operations of their department or company.
- Improvement of team work and open communication on interdepartmental level: the techniques themselves require an (enhancement of) open and unbiased communication

between the members of the creativity teams that apply the techniques. Without this prerequisite, the successful conduction of the pilot workshops is not feasible.

- Identification and discussion among all participants of the improvement prospects of their companies: according to discussions our Project Team has had with the participants of the pilot workshops, the techniques helped them to organize their discussions and route their creative thinking towards producing ideas for the specific issue at stake rather than allow the participants to wonder on a number of topics that were related to the issue at stake, yet produced significant “white noise”. Additionally, the techniques provided the participants with the opportunity to think outside-the-box and consider also the strategic implications of their proposals, thus offering more room for thought and space for interaction among colleagues.
- Inception of use of creativity techniques as alternative means of resolving issues or producing new ideas: as aforementioned, the SMEs that participated in the pilot workshops despite the fact that have been established for quite some time usually did not use creativity techniques for the resolution of problems they faced. On the contrary, the majority of them utilize traditional management techniques. The creativity techniques provided them with an alternate option for engaging their employees into fruitful discussions that also enhance open communications and allow the production of a number of ideas for the resolution of companies’ problems and/or the review of certain issues.
- The provision of an organized framework for creative discussions, on team as well as company level, for the production of novel ideas and concepts: according to the participants, the creativity techniques themselves not only allowed them to channel their creative thinking towards specific issues but also “taught” them how to do so in a constructive and fruitful manner. This was particularly important especially during the pilot workshops, where the thoughts and ideas of all participants needed to be heard while ensuring that the discussions are not carried away towards other trajectories, as commonly happens in interdepartmental discussions.

On personal level, in summary, the main benefits gained by the participants – apart from the knowledge and skills obtained – involved:

- Appreciation of individual contribution: many participants of the pilot workshops indicated in their evaluation reports that they had the opportunity to express themselves in an open and unbiased manner and that the technique ensured that their views and ideas were heard by others. Additionally, they have had the chance to listen to others thoughts and views and accordingly enhance their own perceptions through open and unbiased discussions.
- Improvement of communication with other colleagues: as aforementioned, the application of creativity techniques requires an open and unbiased communication between the participating members organized by an appropriate – and not always necessarily experienced – coordinator. This requirement assisted the participants to express themselves freely and really listen to other people’s views and opinions. Additionally, the techniques themselves required from the participants to think outside the box and norms; thus think outside their usual context. This aspect assisted in the openness aspects of their communication.

In terms of issues encountered during the application of the creativity techniques at the participating companies, the following were the most common:

- The duration of the discussions and the pilots overall: a number of participants perceived the time allowed for the recording and discussion of ideas as limited despite the fact that the average duration of the pilot workshops was 4,5 hours. The reasons that could have led to this notification are: a) prior to the workshops the employees did not have any chance to discuss the pilots’ issues with their colleagues. Thus time had to be spent for the unfamiliarised participants to get background information on the subject; b) another issue that impacted the time devoted to the pilot application was the lack of prior familiarization of the employees (that have not participated in the training seminars) with creativity techniques. This aspect resulted in valuable time being spent by the coordinators of the pilots on repeatedly explaining the limitations and objectives of each technique to the participants, thus interfering with the creative thinking of the other

participants and ultimately stalling the entire process; and c) the originality of the issues: in some cases the issues discussed with the participants were not previously discussed between the coordinators and the employees. Therefore, time had to be spent for thinking and recording of thoughts.

- The lack of higher level management involvement: this point referred to the absence of higher level managers in the workshops, which was perceived as a drawback for the entire process as well as for ensuring a future commitment of them for implementing the ideas generated during the practical application of the creativity technique. This absence also imposed doubts on the employee's appreciation of the added-value and usability of such techniques on departmental as well as company level. However, this aspect did have also a positive side that should not be disregarded: in the cases where the higher level managers were absent, the employees had an opportunity to express themselves freely and openly and thus produce a greater amount of ideas.
- Ambiguity on the implementation aspects/prospects of the results: the creativity techniques applied on each company mainly were concerned with the initiation of discussions among selected employees on certain issues. As anticipated, the conduction of the pilots did not intend to resolve the identified issues but more aimed to help the companies appreciate the utilization of creativity techniques as alternative and supplementary means of organizing discussions on problems or issues to be reviewed. Despite the fact that our Project Team performed additional pilots in cases where the companies asked us specifically to move from Idea Generation to Idea Selection, yet it was not possible or feasible to organize further pilots for the identification of the means for implementing the ideas generated as such tasks exceeded the scope and objectives of creative techniques and lean more towards business and management techniques.
- Improper selection of participants: in some cases the participants identified that some of their team members were not the most appropriate people to be involved in such processes. Their disbelief concerning the benefits and added value of such techniques, their (perceived) limited time for dedicating half of their day for discussing an important company issue, their lack of prior training on the creativity techniques, etc. hindered their participation and contribution to the pilot workshops.

Recommendations

As mentioned in Chapter

2. Introduction, the current study aims to raise the awareness of and stimulate 10 SMEs located and/or active in the region of Central Macedonia to utilize Creativity techniques as means to increase their innovativeness through the generation of novel ideas for the advancement of their competitiveness. The study is part of a wider project entitled: “CreaMED: Fostering Creativity and Innovation in the Mediterranean Area as key elements for Regional Sustainable Development” (www.creativity4med.eu), funded under the MED Programme, that aims to alter the Mediterranean regions public and private institutions perception of creativity and innovation and appreciate them as means of accomplishing (regional) development. Thus, a large part of CreaMED’s activities concern the sensitization and motivation of public authorities in the wider Mediterranean area in order to comprehend the importance of creativity as pillar of innovation and thus integrate them in the regional policies they design and implement. Since though the final beneficiaries of such activities are the SMEs that are based and/or operate in the Mediterranean area, which constitute the backbone and the driving force of local economies sustainable development, a significant part of the project involved the augmentation of creativity within SMEs themselves.

As aforementioned in Chapter 4, the Creativity Training Seminars organized and offered to 10 selected SMEs of the region of Central Macedonia have produced significant results not only on entrepreneurial level but also on personal level. The participants have had the chance to learn (more) about creativity and be introduced to a number of creativity techniques that can be used for Problem Identification, Idea Generation and Selection and also for Communication purposes. The techniques were applied in a Case Study created specifically for the purpose of the seminar. The participants had to interact with other people, not previously acquainted and usually from sectors different from their own, and produce a solution to the Case Study’s problem.

However, the most significant aspect of the study was the organisation and performance of pilot workshops in all the SMEs that participated in the seminars. During these pilot workshops, the employees of the companies had the chance to utilize the Creativity techniques they have learned about at the Seminars and apply them to a problem their company faces. Thus they had the chance to appreciate the real life benefits as well as the prerequisites required from the implementation of such techniques.

A set of recommendations have been drawn concerning the increase of adoption and integration of creativity techniques in companies' operational processes as well as in regional authorities' developmental policies and actions. These recommendations have emerged from the synthesis of participants opinions notated during the training seminars and pilot workshops, complemented by our Project Team's own views and respective experiences.

On entrepreneurial level, the following recommendations can be made with respect to the enhancement of utilization of creativity as leverage of innovation in SMEs:

- Organisation of creativity meetings: a significant element that impacted upon the successful implementation of the pilot workshops and thus should be considered by SMEs wishing to integrate creativity techniques during their organizational meetings involved their organisation. This involves the selection and inclusion of the appropriate people – in terms of level of hierarchy as well as interest in the application of such techniques in their departments/companies – and also the proper organisation from a logistics point of view: arrangement of room to use, purveyance of flipchart, coffee, etc.
- Training on the creativity techniques: it was evident from all the pilots implemented that the participants who had been previously trained on creativity could more easily use the techniques to the benefit of their department or enterprise. The 5 minute presentation of the technique to the employees who had not participated in the trainings was sufficient for the elaboration of the pilot workshops, however in a real life application the participants should receive more thorough training on the technique to be used.

- Involvement of higher level management: according to the statements made by the employees as well as the outcomes of the pilots accomplished, it became evident that managers are an integral part of inclusion of creativity techniques on operational level. However, it is advisable that managers are not directly involved during the application of the training technique so as to allow room to the participants to speak freely and openly. However, it is important prior as well as after the conduction of the creativity meeting to ensure the participants that the results of the meeting will be taken under solemn consideration by the higher level management and efforts will be made to utilize the ideas generated. Additionally, if ideas generated during such meetings are implemented on operational level, will significantly impact positively the stimulus of the employees to deal with their departments/companies issues as well as the wealth of ideas to be generated.
- Time: another important element of the pilot workshops as well as the trainings was the time allowed for discussions and reflection upon knowledge obtained. Additionally, the hectic schedule of people in business is in controversy with the requirements of creativity techniques that need time and space. Thus, any creativity meetings to be held on entrepreneurial level should make provisions for people to have adequate time for discussion and reflection.

On an aggregated regional policy level, the following recommendations can be made so as to assist SMEs' uptake of creativity techniques and use them on entrepreneurial level:

- More Creativity Trainings: as aforementioned, it is of vital importance for the utilization of creativity techniques to ensure their prior knowledge. A (Virtual) Creativity Academy, the organisation of creativity seminars, could perhaps assist towards this direction. Given the tight economic environment of the region of Central Macedonia as well as of Europe in general, the utilization of new ICT technologies as well as social media should be considered as an alternative cost-effective mean of providing such trainings. Additionally, a number of European projects – especially under the Leonardo da Vinci programme of the European Commission – have been implemented which outcomes are

free of charge and thus could be used for such trainings, after appropriate adjustments by the trainers who will perform them.

- Diffusion of information on creativity: the outcomes of this study as well as other relevant studies elaborated in the region of Central Macedonia or in other Greek regions or in Europe in general should be communicated to the SMEs. CERTH through its network of contacts with business representatives and other local and regional authorities could diffuse the results of this study to the regional SMEs so as to inform them on the one hand about the available tools and methodologies existent for the enhancement of their creativity and innovation and on the other to show them real life results obtained from SMEs that have used these techniques. A handbook, a leaflet, etc. could be developed respectively.
- Creativity Think Tank: creativity and innovation are continuously evolving. New theories, models, methodologies, results are obtained incessantly which can be used by SMEs on regional, national and even EU level. A Think Tank, composed of local and regional policy makers, representatives of academia, trainers as well as SMEs interested and/or involved with creativity and innovation could be set up. This Think Tank would discuss on a regular basis the developments in the field and would strive to improve the access of SMEs towards creativity techniques.

9. Annexes

Annex 1: List of participants

Annex 2: Theoretical Background

Annex 3: Seminars Syllabus

Annex 4: Seminars Programme

Annex 5: Case Study

Annex 6: Presentations of the Seminar

Annex 7: Letter of Assignment

Annex 8: Invitation

Annex 9: Selection Criteria

Annex 10: List of participating enterprises

Annex 11: Commitment letter template

Annex 12: Design of Pilot Applications Questionnaire

Annex 13: Short Reports of Pilot Applications

Annex 14: Evaluation of Pilot Applications Questionnaire

Annex 15: Results of evaluation of Pilot Applications