Innovation Management Techniques: Pilot Implementation

Company case studies

CONTENTS

Introduction

The InnoRegio Project

Supporting Innovation Management

InnoRegio is an inter-regional project whose main aim has been to develop, diffuse and implement innovation management techniques (IMTs) in SMEs. There is a range of tools and techniques available that help companies to become more innovative. A number of them address tangible issues, such as the introduction of new products or the establishment of e-commerce facilities, whilst others address the 'softer' issues of promoting a culture of innovation within companies.

One of the key elements of the project has been to create a repository of knowledge relating to IMTs. Experts were invited to write reports on a range of IMTs, which were then diffused to SMEs and intermediary organisations through audits, seminars and digital media. Reports can be downloaded from the websites of the project, the addresses of which appear at the end of this document.

Implementing the tools: the case studies

This document summarises the experiences of the project in implementing the IMTs in approximately 100 companies. A cross-section of these pilot implementations has been selected to reflect the sectors, tools and geographical distribution of the companies involved. Each case study is preceded by a description of the technique used.

The partnership

Innoregio is an inter-regional partnership of
(1) URENIO Research Unit, Central Macedonia (GR),
(2) Cardiff Business School, Wales
(3) Fundación LEIA, Basque Country
(4) Regional Secretariat of Thessaly (GR),
(5) Agencia de Innovacao, Norte (P)
(6) Technical University of Crete (GR)

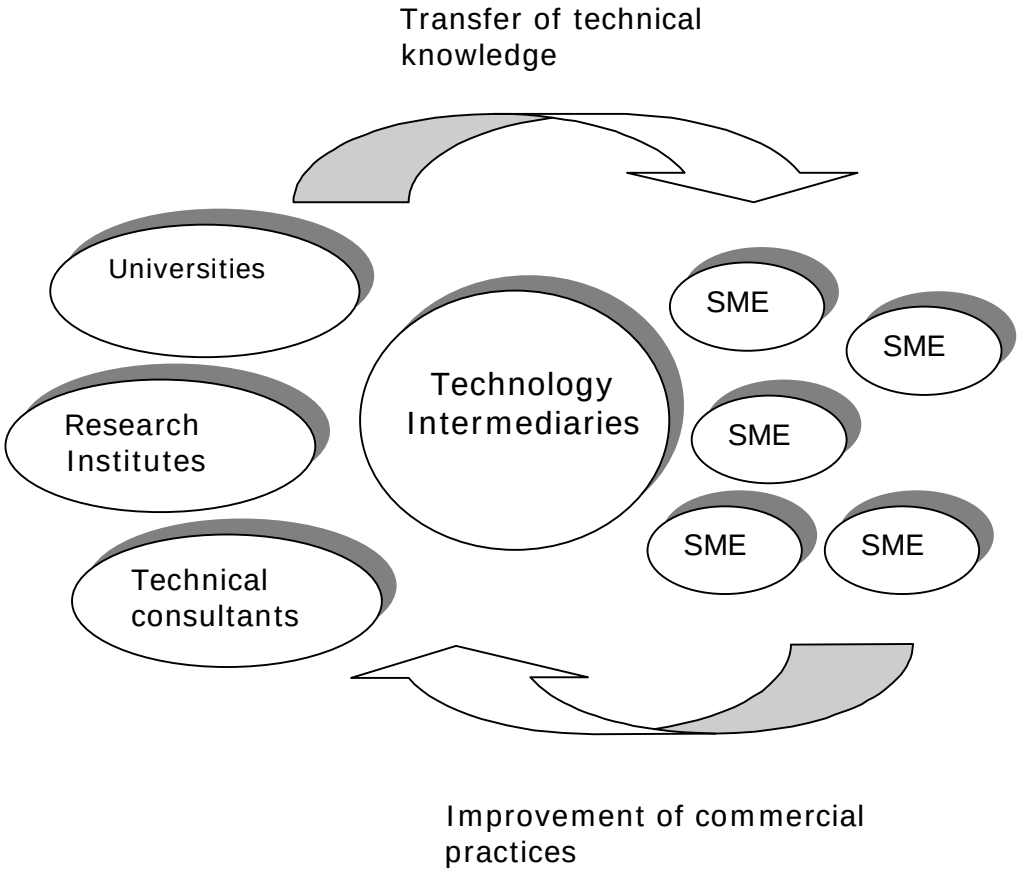
The partners acknowledge the support of the RECITE II programme (DG REGIO) for the financial and technical assistance provided.

Feedback and comments are welcome and can be addressed to any of the project partners. Contact information appears at the end of this document.

TECHNOLOGY AND KNOWLEDGE TRANSFER

Technology and knowledge transfer clinics function as important mechanisms in bringing together two crucial sets of actors in the regional innovation system: SMEs and Universities (or other sources of technical expertise).

A number of methodologies and approaches exist that have the same overall aim, which is to improve the competitive position of the regional economy by promoting SME adoption of technical advice from knowledge providers. A successful methodology has been established by Tekes, the National Technology Agency of Finland. Another approach, which forms the basis of the pilot below, is that developed by the Welsh Development Agency's Know-How Wales team.



Wholebake
Wales

The company

Wholebake produces organic cereal bars, which are sold mainly to health food shops. Established in 1984, the company saw the opportunities available for producing healthy ready-to-eat food. Since then, with the increased demand for healthy snack foods, the company has expanded significantly and offers a range of organic products. Most research and development work was done within the company and it had not developed any collaborative links with uni-

Rationale and aims

The company was in the process of developing new products. Although much of the development work had been completed, it believed that the advice of the expert could be valuable in areas such as product testing and marketing. Within these broad parameters, the company had an open mind and was ready to listen to any alternative suggestions.

Experts

The experts selected were from the Centre for Experimental Consumer Psychology (CECP), University of Wales Bangor (http://www.psychology.bangor.ac.uk/research/cecp/index_html).

CECP is internationally recognised for its excellence in research into human thought processes:

- Developing innovative, sensitive methods of measuring the effects of products on consumers
- Examining how the physical properties of a product affect consumers' perceptions, preferences, actions and emotions
- Deepening understanding of how product-related information is perceived and used.

The Centre has a track record of working with major industrial clients and SMEs in providing a different perspective of how consumers relate to companies' products.

Know-How Wales: bringing together companies and university

Methods

The clinic was organised by Know-How Wales (http://www.know-howwales.com), a programme that promotes productive links between companies and university experts. The clinic consisted of a series of appointments – of one-and-a-half hours each – that companies could book. Wholebake was given a brochure on the work of CECP in advance and the experts were made aware of the company's area of business.

During the clinic appointment, the company outlined its current situation and needs with regard to developing new products. Examples of existing products were distributed and analysed during the clinic, which lead to a dialogue relating to issues such as:

- Sensation
- Perception
- Language
- Emotion
- Learning and preferences
- Memory
- Categorisation

Key benefits:

"thought-provoking"

"potential research source"

"networking"

The experts from CECP outlined a number of services that it could provide to the company in developing new products, which included

- Taste panels
- Focus groups

Results

Wholebake and CECP followed up the clinic with further correspondence with regard to possible collaboration. Wholebake decided that, on this occasion, it would commission a competitor organisation to run taste panels before the new products were launched.

Although the link with the expert did not go further on this occasion, Wholebake was very pleased with the service offered by the clinic. Moreover, with the increased awareness of the services of CECP, the company will consider collaborating with the university in future product developments.

Peter Fairhurst, Director of Wholebake, summarised the benefits of the clinic:
"The clinic proved very thought-provoking. The discussion we had with the experts gave us a lot of new ideas about the way in which consumers relate to our products. As a result of this introduction, we are now aware of this rich source of research. It has also been an important opportunity for networking".

BUSINESS PROCESS RE-ENGINEERING

Hammer and Champy (1993) define business process reengineering (BPR) as:

" *the fundamental rethinking and* ***radical*** *redesign of* ***the business processes*** *to achieve* ***dramatic*** *improvements in critical, contemporary measures of performance, such as cost, quality, service and speed*".

The technique aims to rebuild radically the processes of the company to achieve major improvements in time, costs and quality. More specifically, the application of BPR results in reduced activities that generate inefficiency, simplification/compression of several earlier steps of a process into one, design of alternative processes, incorporation of customers' expectations to the definition of the process. The method is made up of several basic steps:

"the fundamental rethinking and radical redesign of business processes"

(1) Selection of the strategic added-value processes for redesign,

(2) Simplify new processes – minimise steps – optimise efficiency – modelling,

(3) Organise a team of employees for each process and assign a role for process coordinator,

(4) Organise the workflow – document transfer and control,

(5) Assign responsibilities and roles for each process,

(6) Automate processes using IT (Intranets, Extranets, Workflow management),

(7) Train the process team to efficiently manage and operate the new process, and

(8) Introduce the redesigned process into the business organisational structure.

M. Diamantidi S.A.

Central Macedonia

The company

M. Diamantidi S.A. is a graphic arts company. Its main activities include image processing, film preparation, offset printing and book binding. The company has gained technological and quality advantage thanks to the high technology equipment installed , production according to quality certification system ISO 9000, existing management information system (MIS), high quality of products, the increased personnel productivity, and low dependence on suppliers and clients. The company does not have R&D department, but assigns research to external consultants, while participation in sectoral, national and international fairs is regarded as a means of technology transfer and promotion. Co-operation with university laboratories and consultants is random and sporadic.

The intense competitiveness, mainly of foreigner companies which promote products through the Internet, emerged the need for re-organisation of the marketing department"

Rationale and aims

Intense competition, mainly with foreigner companies which promote products through the Internet, produced the need for re-organisation of the marketing department. In this framework the aims of the BPR application were to formulate a clear marketing strategy, evaluate customers inputs, maintain stable relations with customers, improve the product and service quality.

Experts

The pilot application was undertaken by a private information technology and business consultancy company, Business Architects Consultancy S.A (www.baconsult.gr). The consultants are well experienced in providing business support services related to strategy and project planning, project management, development and implementation, training, system evaluation and support.

Methods

The technical specifications of the BPR project in the company include two sections:
(1) Analysis and implementation of the business process reengineering

- Baseline analysis of the operational processes (AS IS) Identification and documentation performance gaps in operational processes (linear and opportunity flowchart)
- Development of new business processes (TO BE), such as control of records, continual improvement process, human resource management and evaluation of suppliers/ subcontractors
- Pilot application of new business processes including personnel training
- Evaluation of the specific implementation outputs based on qualified indicators and including corrective actions

(2) Software development (custom made) to support the application.

- Reengineering of customer relation management
- Evaluation of personnel and process efficiency
- Evaluation of quality processes and productivity at the sales, production, and financial departments of the company.

Results

The impact of the pilot BPR implementation to the company was major improvements related to:

- Systematic monitoring of the communication with the clients, from the stage of the initial contact to the delivery of the order
- Objective classification of customers (number, turnover, activity sector, etc.) and definition of the target group
- Systematic filing of documents related to customers (letters, offers, contracts, etc.)
- Faster and better response to the customer
- Systematic recording and evaluation of customers' complaints
- Identification of faults and omissions related to sales promotion
- Reduction of default products and rejected supplies, due to the evaluation of suppliers/ subcontractors
- Measurement of productivity, evaluation of personnel and improvement of resources management and allocation per process
- Improvement of personnel satisfaction
- Definition of qualitative and quantitative goals, evaluation of processes in relation to the goals and elaboration corrective actions
- Systematic reporting to the management

"BPR delivered major improvements in business processes from initial contact with the customer to delivery of order"

CREATIVITY TECHNIQUES

Creativity involves the generation of new ideas or the recombination of known elements into something new, providing valuable solutions to a problem. It also involves motivation and emotion. Creativity *"is a fundamental feature of human intelligence in general. It is grounded in everyday capacities such as the association of ideas, reminding, perception, analogical thinking, searching a structured problem-space, and reflecting self-criticism. It involves not only a cognitive dimension (the generation of new ideas) but also motivation and emotion, and is closely linked to cultural context and personality factors."* (M.A.Boden 1998).

There are numerous creative techniques, which are also classified in many ways. In general, a certain type of question or a certain area of application (such as marketing, product or service development, strategic and decision planning, design, quality management, etc.) often calls for a certain type or a certain group of creativity techniques.

Twocast Production

www.twocast.com
Wales

The company

Twocast Productions is a young company working in the software industry. Their expertise is in new media and ICT solutions such as

- Conference and event webcasting
- Distance learning
- Audio newscasting
- Media hosting and encoding

The company recently relocated from London to Wales and had not previously worked with external experts.

Rationale and aims

Being new to North Wales, they felt that they needed advice both on the local business environment and specialist, objective help on how to take their young company forward. Previously, they simply had not had the time to sit down and take an objective look at their business.

Experts

BIC Eryri, Bangor www.bic-eryri.com
They were selected because of their expertise in new product development and their record of working with young, high-tech companies. BIC Eryri had successfully undertaken creativity sessions with many of its client companies

Methods

A series of discussions was held in which the business was broken down into separate areas and different possibilities and scenarios considered. Work was carried out on a relatively informal basis with a small team from the BIC working with the key staff and marking up the output on flipcharts. Although the aims was open-ended, the process was structured. It included, amongst other things,

- looking at various business sectors in terms of their attractiveness as a target.
- Looking at how the business was currently perceived and positioned in the market-place.

The methods were aimed overall at identifying the optimum way of taking the company forward. Several half-day sessions were held to progress the work with TwoCast Productions contributing their own time. Additional research was undertaken by the company in their own time to support the process

Results

The company found the technique very satisfactory though work is ongoing . The process has generated new thinking and the options raised will need further planning. The most immediate direct benefit they found was that they understood better their own business and how to approach marketing strategy.

An unintended benefit was that through the interaction with local business support network they were offered the opportunity to act as consultants on a teleworking project for which they had ideal experience.

Commenting on the experience of using the innovation management technique, the company stated:
“We were very impressed with the value of the technique and are continuing to use it”.

“Added benefit: increased business through networking”

Rainbow Holdings

Wales

The company

Rainbow Holdings (anonymised) is a small company working in the construction/land development industry. It is part of a larger company working in the construction sector.

Rationale and aims

Rainbow Holdings had acquired a strategically placed site ideally located near the A55 Expressway, the main high-speed road link. There were so many interesting options for development that the company felt they needed outside help to take things forward.

"There were so many interesting options for development that the company felt they needed outside help to take things forward."

Experts

They were directed to BIC Eryri, NPD and marketing specialists through the business support network. Initially the company had felt that what they needed was a piece of research to quantify the likely take-up from Expressway traffic and strategic business sites nearby. In practice what was done was on a much larger scale.

Methods

Since the possibilities were many : hotel (business/tourist oriented), sports and leisure centre with top quality facilities, spa/ health centre, it was necessary to develop these ideas as clear concepts in order that thinking about them could be clarified. The consultants therefore worked with the management team in a structured way to develop concepts in these 3 discrete areas.

Each area was fully examined using idea pooling techniques before going on to work up the agreed best ideas in terms of name, strapline, values, potential clientele, business potential, positioning, ie a total identity. Four or five meetings and 1 all day creative planning session were involved in the process.

Results

This methodology resulted in significantly more tangible concepts being created than would have been otherwise. This allowed a clearer reaction and sharper feedback from the participants as to the 'feel' of each potential development. The end benefit was therefore that the eventual decision-making was made considerably easier since the options had effectively been 'brought to life'. Work is now underway to progress the chosen option, raising finance etc.

Cynthia Morgan of BIC Eryri said, *"The company had not used any such technique before and were initially sceptical about its benefits. The creative session was powerful in convincing them of its advantages".*

"The Creativity tools have made decision-making considerably easier by bringing the options to life"

E-COMMERCE

Electronic commerce activities fall in two main categories: The business to business and business to consumer categories. The business to consumer relation is carried out normally by systems that connect users to the company's web site. The transaction then is routed from the Web to the company's legacy system. This kind of systems is referred to as "electronic shops". The business to business is carried out by EDI and middle-ware systems.

Description of the application

B2b & b2c

The implementation of Business to Business electronic commerce consists of four distinct steps:

(1) Situation Analysis: in depth analysis to record the level of computerisation and the inventory management process. It is examined whether the company has Internet access and web presence and the business model is formed (approximately 15 days).

(2) System Configuration: the publisher is configured, the product catalogue is defined and the templates are created. The search engine of the web site and the shopping basket are equally configured. The payment system through the electronic shop is defined (approximately 20 days).

(3) Installation and implementation of the pilot phase: Connection between the database, the publisher and the Internet is tested and the connection with the bank for transaction clearing is set up (approximately 15 days).

(4) Final tests and delivery of the system: tests are made to ensure the correct operation of the ordering process, the shopping basket, and the payment system through credit cards. Final fine-tuning and delivery of the system (approximately 5 days).

Eurimac
Central Macedonia

The company

Eurimac is a food company that produces pasta products and packages rice, with the use of new production methods and automation. The company is member of an international brand of pasta and suppliers to extended national and foreigner distribution networks. The company has adopted and efficiently exploits high technology. Personnel training systems are installed and there exists good cooperation between the management and the personnel. Management is based on a flexible and efficient scheme, while production is fully automated. Although quality strategy has been elaborated, there is no clear business strategy, while marketing strategy, inventory management technology, internal R&D and market research are not well-developed. Major opportunities of the company are the exploitation of national and European R&D projects, increased markets for Mediterranean food products and the growth of the markets of Eastern Europe.

Rationale and aims

The fully automated production procedures have enabled Eurimac to respond quickly to market needs. However, the company continually investigates methods to improve its production capabilities. In this framework, a major priority for the company is the improvement of production management,inventory, raw materials and final products. This is a crucial issue for Eurimac, given that the company is part of a broader distribution network, whose optimum operation requires the capability of clients and suppliers to directly exchange information regarding the stock levels and the timing to respond to market orders. The pilot application suggested and implemented to address the above issues is electronic commerce – business to business. The technique provides the opportunity to operate more efficiently and respond effectively to the requirements of the distribution chain, eliminating delivery time and product cost.

Experts

The pilot application was implemented by a consulting company, ALTANET, specialized in the implementation of E-business applications (www.altaner.gr). The company was selected due to its proven experience and know-how in e-business applications (business to business, business to consumer, electronic store, interface for credit cards clearing, newsfeed), Web-based applications (e.g. e-ticketing), website development, e-Business strategy, and inter-company ?ntranets.

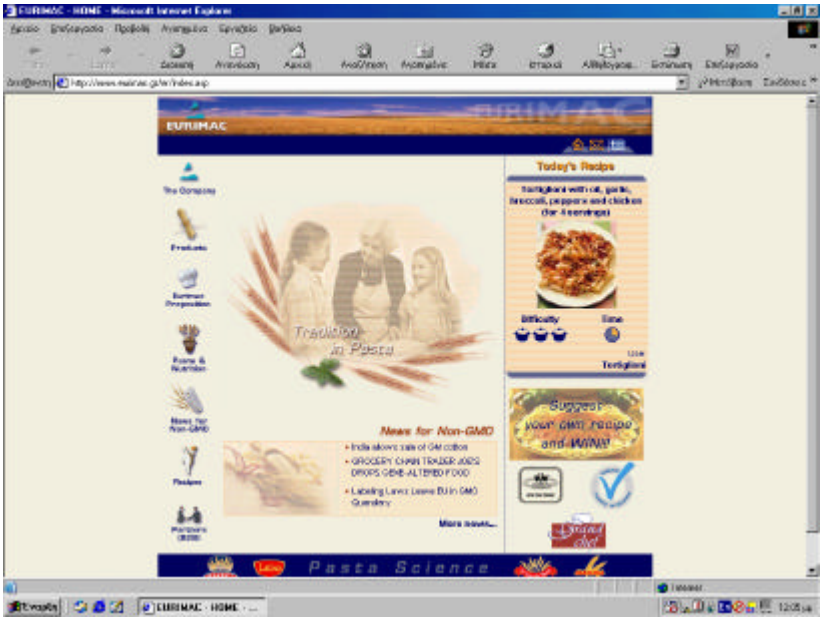
“The main threats concern the strong dependence on major clients and suppliers and the maturity of the pasta market”

"The company had a number of e-business needs"

Methods

Altanet developed a b2b application within Eurimac, with the aim of improving services to clients and reducing business costs.

Figure 1 Eurimac Home Page



Main features of the application are:

Restricted access for partners

- Login by an authorized administrator and other users for the partner
- Registration of new partners that want to use the application (Partner Registration)
- Partner user profile with multiple information fields and access authorities as defined by the partner administrator

Order capability from the company product catalogues

- Product catalogues categorized per partner and type of product
- Order capability from the product list

Current and past order information

- New order from the product list (product type, package type, quantity, delivery time)
- Information for the past 10 and/or standing orders of the partner
- Order search per date and/or per order status

System Administration (remote) by authorised personnel of the company

- Monitoring and revision of information included
- Safe management, elaboration, new information entry

Results

The b2b application is still in the testing stage: the company has printed an information brochure to inform the clients on the technical features and the use of the new application. It has also distributed the "user names" and passwords to the cooperating companies for training purposes. Real registrations are expected after the 1st July 2002, mainly by super markets, which are more familiar with b2b and they have organised logistics departments. The company is optimistic that its clients will adopt the new business way and expects that direct benefits will show up:

- Improved inventory control
- Improved company management due to the codification of products and partners
- Elimination of time consuming ordering procedures
- Low budget promotion worldwide on the Internet

The company intends to adapt and customize the services of the installed b2b system according to the partners' remarks and requirements. As a result of the pilot application, the next step under consideration is the installation of an integrated system to allow on-line inventory control by partner companies with the use of VMI (Vendor Managed Inventory).

"The company expects improvements across a number of key areas"

Center of Theoretical Training for Candidate Drivers (CTTCD)

www.ketheyo.gr

Crete

The Company

Center of Theoretical Training for Candidate Drivers (CTTCD) is an authorized training center for learner drivers, which aims to cover the process of learning the theoretical aspects of driving. The center offers a programme which instills in the candidate driver the much needed theoretical knowledge, skills and safe driving rules. Additionally, the center provides guidance to all candidates in order for them to choose the appropriate driver instructor for the practical aspect of their training.
The center provides constant support and encouragement to help its clients achieve their goal – passing the theory driving test.
The CTTCD has worked with external consultants in order to certify the procedures of training the candidate drivers according to ISO9000/2000 quality standards.

Rationale and aims

In the framework of the INNOREGIO project the implementation of e-trade was identified as a key objective. The implementation work can be viewed on the organization's homepage.

On the website there is also information available concerning the personnel, the programmes of training, and the process that is required in order to award somebody the driving licence.

"The above web page is offered both in Greek and English ."

The site is characterised by its user-friendliness and includes:

- Navigator System using friendly menus and plenty of contacts (links).
- Search engine

Promotional activities have also been addressed, for example, the registration of the website in the most important search engines.

Furthermore, the candidate will have the opportunity to communicate with the training centre via electronic mail and find information about the training curriculum and the procedure he/she will have to follow in order to successfully get his/her driving license.

Experts

The expert used was a consultancy company named “Business Technology Centre”. It was selected because of its reputation, the quality of its work.

Methods

Analysis of the needs of the Training Center was undertaken, especially to support Distance Learning applications.

The consultant and the centre worked closely together to combine the theoretical knowledge with the technical know-how.

The web page was completed after six months.

Results

CTTCD can now train and inform candidate drivers from the website that was developed under the implementation of the INNOREGIO project. The candidate driver can prepare himself/herself for the theoretical part of his/her training and also be informed about (procedure, documents, etc)

"CTTD can now train and inform candidates through the website that was undeveloped under the Innoregio project"

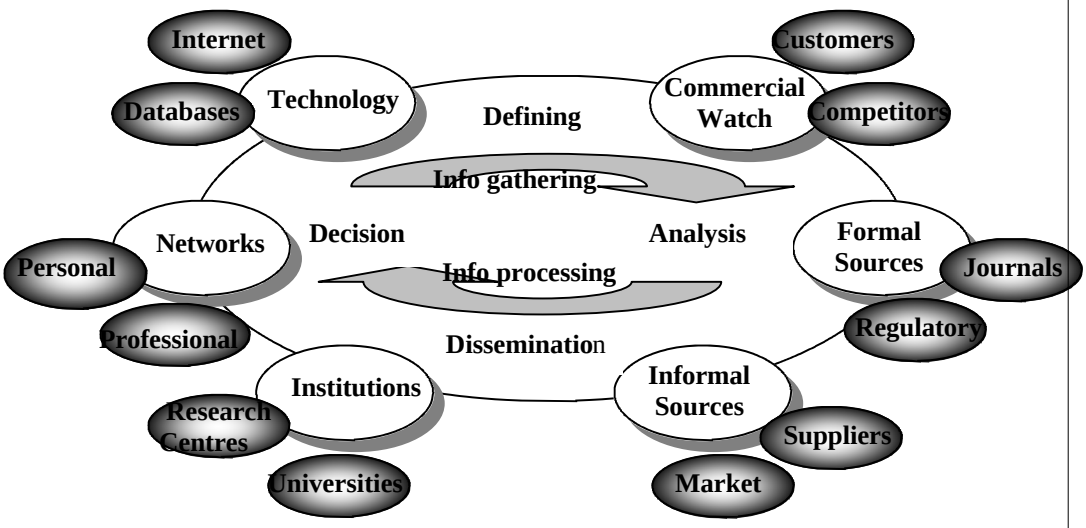
Concluding remarks

- An analytical presentation of the company and services is presented on the website
- The candidate driver will have the opportunity to communicate with the training centre.
- Additionally he/she can find information about the training curriculum and the procedure candidate driver will have to follow in order to successfully get the driving licence
- Distance learning applications and continuous information services are also provided.

BUSINESS INTELLIGENCE

Business Intelligence involves actively working within the company in a collective manner, gathering all sources of information, to enable the company to form better decisions in the way of R & D, investment and future strategic planning.

Large companies often have a formal system in place to identify market opportunities. This gives them a competitive advantage. Small and medium sized companies can also benefit by developing their own individual system.



The introduction of Business Intelligence can produce the adaptability and flexibility required to adjust to rapidly changing conditions in a wider market place.

By taking this route it is hoped that companies can:

- Decrease the information volume yet increase the useful knowledge
- Increase speed of action in emergency situations
- Search for new business customers & markets
- Identify new research & development lines for a company
- Raise awareness of competition and improve reaction
- Identify suppliers

- **Saves Time**
- **Improves Decisions**
- **Strengthens Negotiating Position**
- **Detects Threats and Opportunities**

- **Improves Quality**
- **Increases Innovative Capacity**
- **Improves Productivity**
- **Facilitates Change**
- **Benchmarks**

The Welsh Hook Centre

www.welsh-organic-meat.co.uk

Wales

The Company

Founded in 1970, the Welsh Hook Meat Centre took its name from the small Pembrokeshire village where it began. It was one of the first butchers to move into selling organic meat in 1989. In 1997 Welsh Hook could no longer manage with its small premises and so moved into a purpose built meat processing plant near Haverford-west. The business has expanded and increased its turnover by ten times since 1989 and now supplies many of the top hotels and restaurants in Britain

Aims and rationale

" With expansion in mind, they had to increase their market fairly rapidly to ensure maximise cost effectiveness within a minimum period".

The company is hoping to expand and recognises that BI is an area which needs to be addressed. They also accept that it may eventually be in their own interest to employ a dedicated member of staff to deal specifically with market research and following up sales leads, to expand the customer base. It has had a fair amount of publicity, winning the Organic Food Awards for the past two years. However with expansion in mind, they had to increase their market fairly rapidly to maximise cost effectiveness within a minimum period.

On initial contact the company had no system in place to deal with business intelligence. Working with a small admin team everything relied on spoken communication, although information such as, customer data was all held on the in house computer system and on hard copy files. The company has an e-commerce facility, which has never been fully exploited and a website which is quite good and has some links to other sites. The computer had not been used as a tool to find intelligence on future customers, suppliers, market trends at that point in time.

Experts

The pilot application was undertaken by a business support organization Pembrokeshire Business Initiative (PBI). PBI/Business Connect provides help to both new and existing businesses, to enable them to achieve their full potential. Help can be provided in many specialist areas to match the individual needs of each business with the appropriate specialist or service provider so that the right solution can be found for the individual businesses concerned.

Methods

The project was organized by PBI and consisted of a series of appointments and the directors of the company were all keen to take part in this project and worked with PBI as and when time allowed.

Step 1– Internal Analysis

On initial contact the company had no system in place to deal with business intelligence. Working with a small admin team everything relied on spoken communication, although information such as, customer data was all held on the in house computer system and on hard copy files. The company has an e-commerce facility, which has never been fully exploited and a website which is quite good and has some links to other sites. The computer had not been used as a tool to find intelligence on future customers, suppliers, market trends at this point in time.

Step 2—Identifying Opportunities

It was felt that a useful application at this point would be to produce a flow chart to offer an instant visage of the findings of the critical analysis. This was then discussed with the company and amended as necessary.

The chart has identified:

- **Critical Factors to Company Requirements**
- **Subject of Intelligence Gathering**
- **Information Sources**
- **Distribution of Intelligence**
- **Financial Implications**

"The company is now using the web site intelligence to expand its customer base and have already secured several new costumers since the second visit."

Step 3 –Responses

Working from the chart, the agreed main improvements for Welsh Hook were to gain better knowledge of where to look for appropriate websites, particularly for useful sites, databases, which could be used to target expansion of the costumer base, agonize sites for market trends. This was carried out by PBI. The company were to consider employing an additional person and install an extra computer to take over the technological data, and keep watch on all aspects of intelligence. The directors were to discuss what would be needed in a new structured system to ensure that as the company grew, information gathering and dissemination was at maximum efficiency. The company felt that they might need technological assistance at this point.

Step4– Actions

PBI introduced them to many useful websites, which they had not come across before, introducing new areas to expand the customer base and to watch for new market trends.

The company recognised the need to consolidate their present administration system by the use IT and to put an efficient system in place to achieve their aims end and it is an area they will continue to work on in the future.

Following discussion it was felt that it would be worth looking at Cymru Prosper for a suitable graduate to take on the evolvement of the IT based information system.

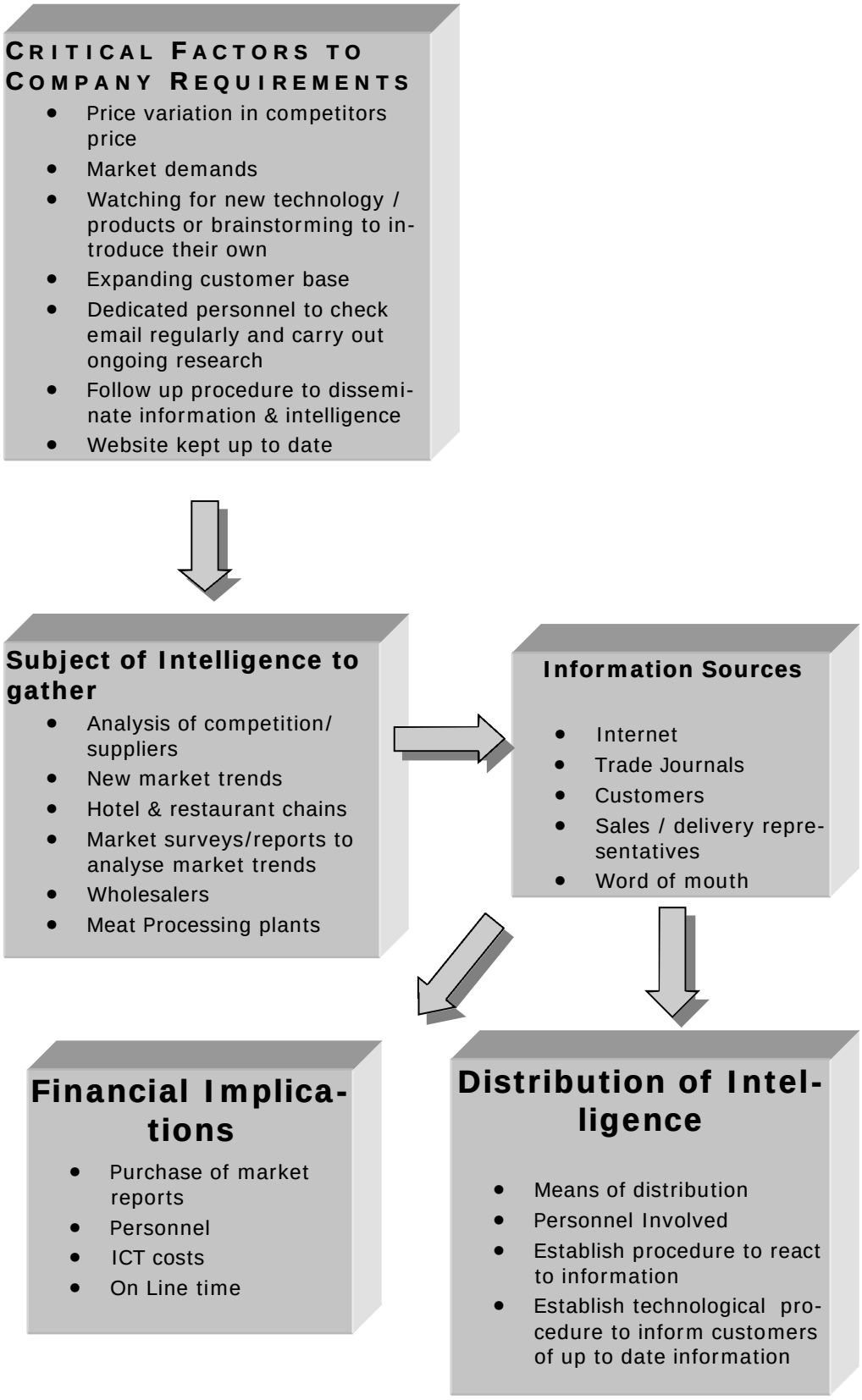
Results

Welsh Hook are now well aware of the actions they need to take to address their current situation. They acknowledge that as they expand, it is even more imperative that they put a business intelligence system in place. Once the new extension is built, space will be free to put up to two additional personnel in place.

- The company are now using the website intelligence to expand their customer base, and have already secured several new customers since the second visit.
- The company is now addressing the ITC problems and are presently upgrading their system. The new computers will be capable of handling the all the data that needs to be pulled together in an information warehouse.
- The company is now looking at the future option of putting a Prosper Cymru graduate or other suitably qualified person in place to pull all the business intelligence together into a structured computerised system.

WELSH HOOK MEAT CENTRE

Business Intelligence Diagram



Grúas Ibisate

Http://www.leia.es/proyectos/proyectoibisate/paginaPresentacion.html

Basque Country

The company

Grúas Ibisate is a former family company located in Vitoria (Basque Country, Spain). The manager of the company was a pioneer in founding a company focused on car rescue using cranes. Since then, the company has developed significantlyand now there are 18 full time staff dedicated to different sectors dealing with cranes: rescue, construction, elevation.
The company has always collaborated and cooperated with local authorities in order to achieve a better competitive position in this specialized sector, especially with institutions within the Basque Government and LEIA Technological Development Centre.

Rationale and aims.

" It was discovered that the information management system did not work properly. The information was duplicated and not well distributed."

It was discovered that that the information management system did not work properly. The information was duplicated and not well distributed. The consequences were that some information was lost, some other information was badly classified and uneasy to find or retrieve and some information was difficult to access when needed. Information relating to customers, suppliers, competitors, markets and laws, was available at both local and international levels in order to achieve a better competitive answer and to take strategic decisions. Thus, the implementation of a Technology Watch System was considered: a system based on the retrieval, analysis and dissemination of information in a focused, systematic and structured way.

Experts

The LEIA Foundation, Technological Development Centre was selected in order to develop and implement the technology watch system. The Centre has collaborated with several projects in the past and has established a relationship based on confidence. Moreover the proposal was launched from the Centre itself as a pilot scheme in order to implement the same system in other SMEs if it succeeded.

Methods

Firstly meetings took place in order to establish how the company worked, and to select the personnel for the project. Secondly, came the stages of information retrieval and the development of the knowledge management software. The software consisted mainly of an interface based on databases with the information classified and structured.

After developing the software some modifications were put forward to Leia. The process ran for a period of 12 months and two full time members of the staff were responsible for the running of the programme: retrieving information and developing the software.

Results

The benefits were:

- The efficiency in retrieving information was improved. There is no longer uncontrolled searching and the information is distributed personally.
- The communication and the decision making process were also improved. Information was no longer duplicated and there was no loss of information.
- The market is now watched: competitors, customers, suppliers.

Some parallel benefits were:

- Saving time, thus money.
- Efficiency.
- To detect opportunities of investment.
- Avoiding problems and being updated.

"The efficiency in retrieving information was improved. There is no longer uncontrolled searching and the information is distributed personally."

Camseat Ltd

Http://www.camseat.co.uk

Wales

The Company

Camseat Ltd is at present a very small company which has developed an innovative idea and invested quite heavily in order to bring success within that field. The Managing Director designed the various Camseats following requests for an unobtrusive alternative camera seat for cameramen to use for outside broadcasting. The camera seat proves popular wherever it is tried out and has been developed on a continuous basis to reach what is now near perfection. It is a product which has essentially been refined by the requests of the end user, and therefore in the forefront within this field. The design won the prestigious 'Editors Pick of the Show' award at the NAB conference in Las Vegas in April, beating off competition coming from companies such as Sony.

Aims and rationale

Having been through the many traumas of protecting and marketing a new product, the directors of the company are always willing to take on innovative ideas, which they feel will be beneficial to the success of the company.

Due to the life cycle of camera seats, instant replacement is not often priority when it comes to stadia & broadcasting budgets. This indicates that the future may lie in targeting new stadia and those which are undergoing refurbishment. The company was well aware of this and as a result is following up leads from SKY TV, who have now started to use the seats for their camera units.

Although they have a distributor in Utah, USA so far no sales have been achieved. Ireland has also been targeted with little result. It would seem that all the end users want the seat but the lead time from the first date of enquiry to actual sales is always going to take a long time.

With successful installation in places such as the new Millennium Stadium in Cardiff and the new Wembley Stadium also interested, the future could be bright for this product.

Experts

The pilot application was undertaken by a business support organization Pembrokeshire Business Initiative (PBI). PBI/Business Connect provides help to both new and existing businesses, to enable them to achieve their full potential. Help can be provided in many specialist areas to match the individual needs of each business with the appropriate specialist or service provider so that the right solution can be found for the individual businesses concerned.

Methods

Step 1-Internal Analysis

- On initial contact with Camseat, the company had no strategy set in place for the acquisition of business intelligence, everything being achieved on an ad hoc basis.
- They were making good use of some of the intelligence gathered in, and in some cases following up very well, but in other cases doing exactly the opposite. This was identified, when working with the company through the Internal analysis and the subsequent flow chart.
- Communication was good, but this is at present a very small team. Research on the internet was lacking, because of lack of resources and trained personnel. However their UK Sales liaison officer appeared to doing an excellent job in the field.
- There was strategic planning in place, but resources were proving a barrier to allowing the company to carry it out.

Step 2-Identifying Opportunities

It was felt that a useful application at this point would be to produce a flow chart to offer an instant visage of the findings of the critical analysis. This was then discussed with the company and amended as necessary.

The chart identifies :

- **Critical Factors to Company Requirements**
- **Subject of Intelligence Gathering**
- **Information Sources**
- **Distribution of Intelligence**
- **Financial Implications**

Step 3-Responses

Working from the chart, the agreed main improvements for Cam-seat Ltd were to gain better knowledge of where to look for appropriate websites, which could be used to target expansion of the customer base, market trends, future sporting events and the larger civil engineers /architects building stadia. The company were to follow up on the USA proposals and continue to pursue possible finance for marketing. They would also continue to attend appropriate exhibitions & trade fairs and keep a watch on trade journals, and information gathered by their sales liaison officer.

Step 4-Actions

- The company were given advice on information warehouses and data cleansing to ensure future data was categorised and cross referenced.
- A model of an information warehouse was drawn up and personnel are in place to put in extra hours to work with the MD and sales officers to ensure that it was set up on the computer and would cross reference the hard copy filing system already in place.
- The company continued to work in the areas mentioned above. They have updated the website and it can now be accessed through the various search engines, when clients search under technical terms.

Step 5-Results

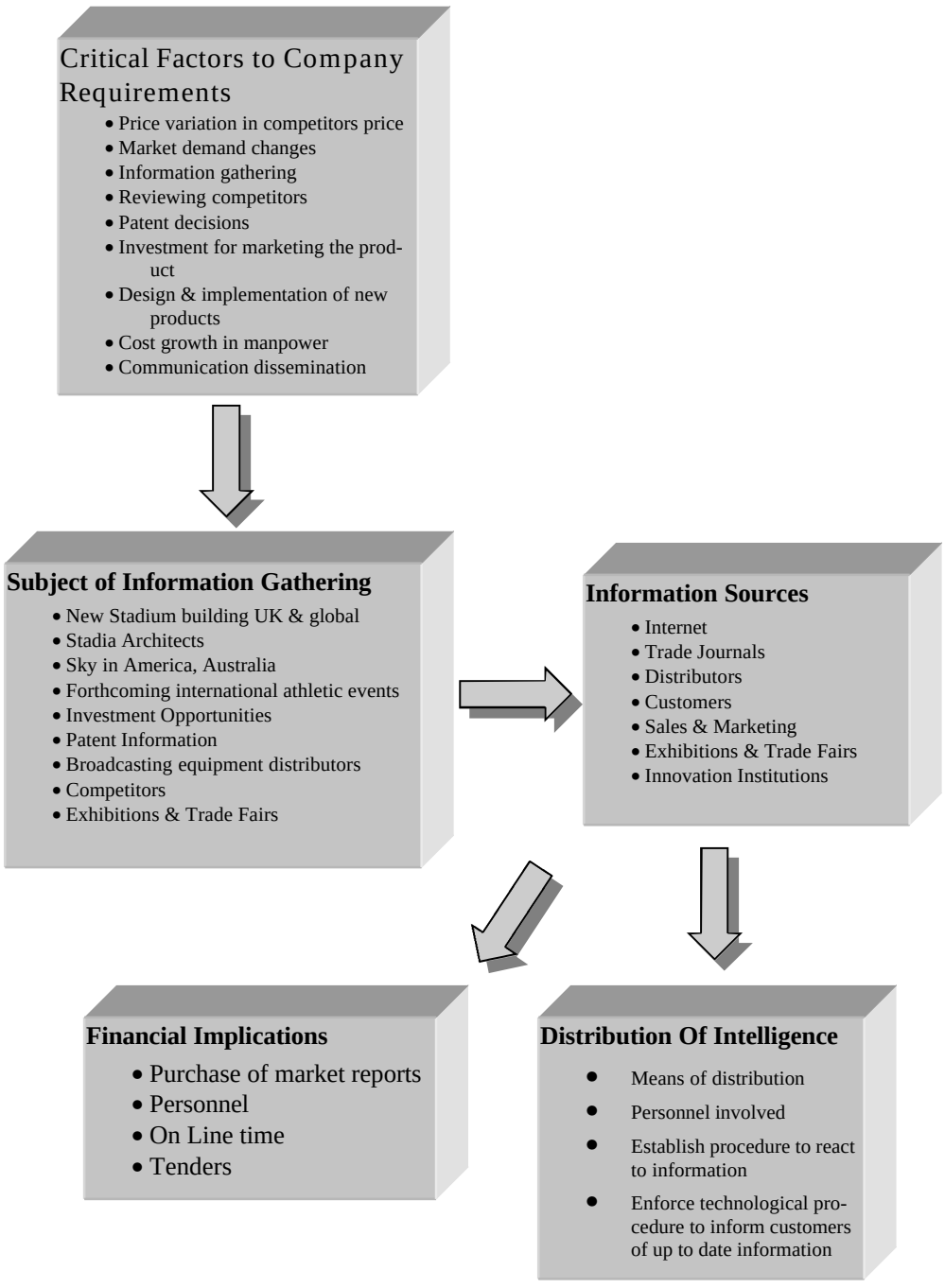
- The project gave them the opportunity to view the company as a whole in an easy format and identified problems which needed addressing. Some problems they were already aware of, so the project also acted as confirmation of existing areas that needed to be tackled.
- The company was given a simple structure to work from to build up their intelligence system in the future, and now has a positive route to follow.
- The company has now reached agreement with the marketing company, and the first articles & brochures have been produced. This will help with marketing the product in the future.

Concluding remarks

"The company agreed that the whole process has been useful with the PBI offering instant access to websites they may need in the future, and the critical analysis and flow chart giving them a simple tool to work from".

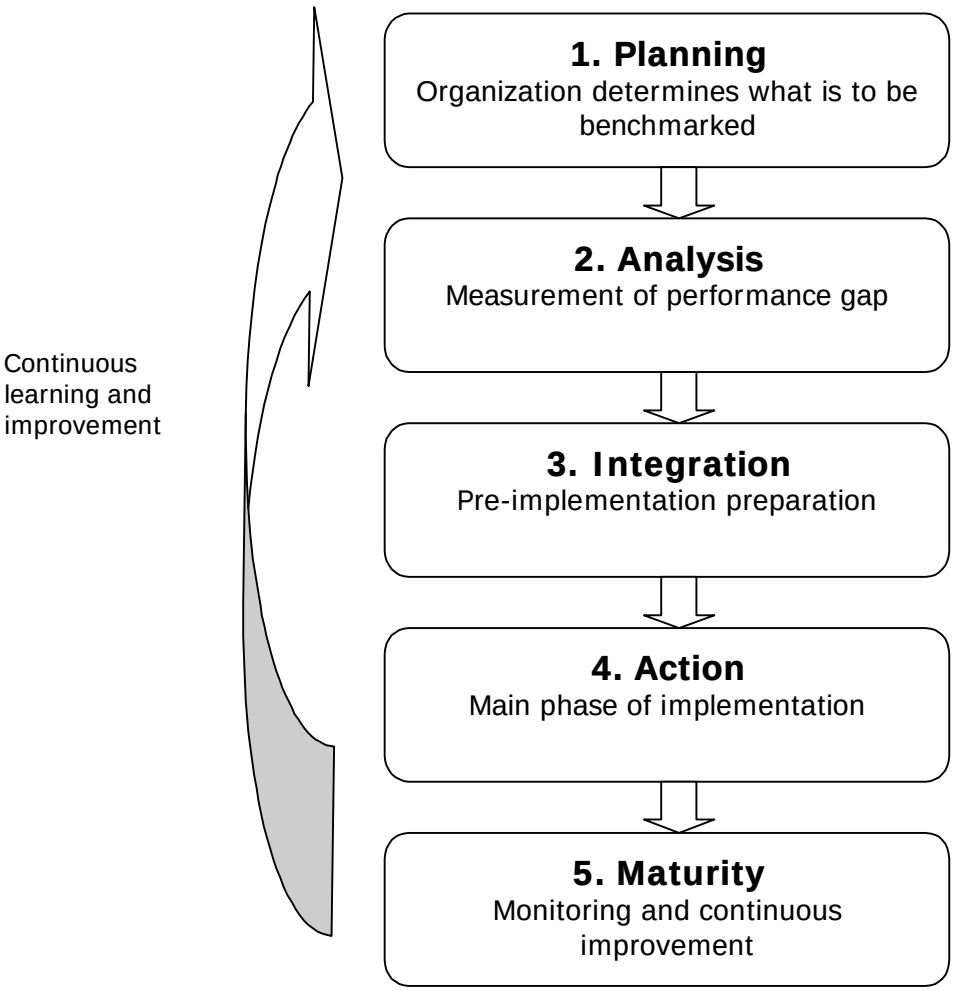
Camseat Ltd

Business Intelligence Diagram



BENCHMARKING

Benchmarking is the process of improving performance by continuously identifying, understanding, and adapting outstanding practices and processes found inside and outside an organization. Benchmarking should be looked upon as a tool for improvement within a wider scope of customer focused improvement activities and should be driven by customer and internal organization needs. Benchmarking is the practice of being humble enough to admit that someone else is better at something and wise enough to learn how to match and even surpass them at it.



Four types of benchmarking

COMPETITIVE BENCHMARKING
Benchmarking is performed versus competitors and data analysis is done as to what causes the superior performance of the competitor.

INTERNAL BENCHMARKING
This process could be applied in organizations having multiple units (for e.g. multinationals, companies with sale offices around the country, with multiple factory locations within the same country).

PROCESS BENCHMARKING
Here we look at processes, which may be similar, but in different organizations, producing different products, for e.g. airline industry & hospital industry looking at the process of catering their 'clients'.

GENERIC BENCHMARKING
We would look here at the technological aspects, the implementation and deployment of technology. How else other organizations do it? Hence the source organizations may be of same industry or from another industry.

Electra Vitoria

Http://www.electra-vitoria.com/

Basque Country

The Company

ELECTRA VITORIA, S. COOP is a co-operative society located in Vitoria – Gasteiz, Basque Country, Spain, with 140 workers, focused on design, production, assembly and maintenance of elevators. It is the absolute leader in the local market and has a wide net of distributors/collaborators with presence in both national and international markets such as Asia (China), America (Mexico and Cuba) and the rest of the European Union.

Aims and rationale

ELECTRA VITORIA, S. COOP collaborates in different R&D projects with the Foundation LEIA TDC; in fact it's one of its members. ELECTRA has taken part in different stages of INNOREGIO project and as a result it took interest in the implementation of the Benchmarking tool since it was looking forward to having a comparative analysis of its situation within the sector.

" The company was looking forward to having a comparative analysis of its situation within the sector"

Experts

As mentioned above, the company is frequently involved in R&D projects with the Foundation in a very close relationship. In this case, the idea of the participation was a result of the Technological Diagnosis made in a previous stage of the project.

Methods

The method is quite simple and it consists of filling in a questionnaire in which some data is requested; data that will be used as inputs for the making of the Competitive Profile Diagnosis. For the realisation of this task the company is supported by a consultant who helps the company to find the requested data among the company's information. The consultant has to check the data in order to make the report as well as to compare the company's data with the sector's data. The whole process (data retrieval, analysis and making of the report) takes three months.

Results.

The main result is that the company gets statistical based information which is relevant when planning its strategy. Also it is very useful when visualising the evolution in time by using the tool in a systematic way during concrete periods. In this case, the company has been able to know the situation of its products, processes, resources and results in comparison with the companies of the sector thanks to having got relevant data of its position. From this data it's been able to start an action strategy focused on two topics:

- To know its customers' satisfaction and
- To establish the management processes.

The company has also decided to repeat the diagnosis process in a systematic way and it foresees doing the next evaluation by the end of this year.

"The company has also decided to repeat the diagnosis process in a systematic way and it previews to do the next evaluation by the end of this year."

Conclusions.

The company managers are pleased with the results and they are confident that the operation of this IMT could help the company both to improve its strategy planning and to achieve the encouraging aims of its leadership position in the local market as well as to enlarge its number of customers.

QUALITY MANAGEMENT

With increasingly demanding customers, companies must ensure that their product and service delivery is optimised to achieve a competitive positioning in the market place.

Quality Management systems and tools concern all the processes within companies. With the internationalisation of products and markets, the number of tools and models of excellence has proliferated and many organisations and platform exist to support the implementation of quality management systems within SMEs.

Quality ISO 17025:1999
The standard specifies the general requirements, which determine the ability of laboratories to conduct measurements, calibrations and verifications. ISO 17025:1999 may be adapted to any laboratory conducting measurements and verifications, independently of the number of personnel or the type of measurements. The standard determines management and technical requirements. The management requirements specify aspects related to laboratory organisation, quality system procedures, documents control system, procedures for the treatment of clients requests, supplies management, complaints management. Technical requirements cover issues such as personnel, space, measurement methods, laboratory equipment, drafting results reports.

Laboratory of Telecommunications Department-School of Electrical and Electronic Engineers

Central Macedonia

Rationale and aims
The need to control the electromagnetic spectrum and to measure the density of the power of the electromagnetic radiation derived from different sources (antennas of mobile telephony, television etc.) consist basic issues for the proper development of telecommunications, in terms of effective operation of the communication installations and of maintaining public health and loyalty. The certification of the telecommunications laboratory ensures the accuracy of the measurements, reinforces the competitive position of the laboratory in the market of such services, and supports the exploitation of the specific equipment of the laboratory for the benefit of the society and the technological development of the region.

Experts

The application of ISO 17025:1999 within the Laboratory of Telecommunications was conducted by the consultancy company Q-PLAN S.A. The company was selected due to its proven expertise in the fields of management systems, and especially due to its experience in the establishment of quality systems in laboratories. The company has implemented a wide range of projects related to the establishment of management systems, including quality, environmental management, safe food management, safe data management, management of health and safety at work etc., in all types of companies and organizations of the private and the public sector.

Methods

The methodology of the application includes the following phases:
(1) Recording of the existing situation
(2) Formation and training of the working group for the development of the standard
(3) Comprehensive design of the Quality System
(4) Preparation of the system validation
(5) Application of the quality system
(6) Drafting the quality manual

The development of the quality system lasted for about five months, during which a working group of the laboratory personnel cooperated with the consultants, mainly on the following issues:

- Information for the recording of the existing situation before the implementation of the quality system.
- Formation of working group for the adaptation and diffusion of the quality system specifications and the co-ordination of the internal laboratory procedures related to the development and operation of the quality system.
- Corrections and modifications to the validation of the quality system
- Application of the quality system

Results

Main results of the application of the ISO 17025:1999 are:

- Improvement of the overall laboratory performance, operational reconstruction and optimisation of the resources management, including human resources, equipment and materials.
- Clear determination of responsibilities and duties of the personnel.
- Efficient and systematic management of laboratory equipment.
- Support the management to rationalize the decision making process, based on measurable data, which derive from the inspection mechanisms established with the ISO 17025.
- Standard and certified quality of services supplied to custom ers Efficient personnel training.

Concluding remarks

The application improved the reliability of the laboratory's measurements, through personnel training, observance of procedures and continual equipment verification. In addition, the management operations of the laboratory have been upgraded. Main benefit for the laboratory is the improvement of its position in the market place and the systematic personnel training.

"Main benefit for the laboratory is the improvement of its position in the market place and the systematic personnel training".

Del Valle Aguayo S.A.

www.sea.es/dvasa

Basque Country

The Company

DEL VALLE AGUAYO S.A., is a company located in Vitoria – Gasteiz, Basque Country, Spain, with 45 workers, focused on design, installation and maintenance of electric equipment and plants. It has a strong position in the local market and is a recognised supplier for the most important firms in the building sector.

Aims and rationale

DEL VALLE AGUAYO S.A and Foundation LEIA T.D.C. are partners in many R&D projects developed over the last years and it has taken part in different steps of the INNOREGIO project. As a result of this, the company has decided to use the IMT Quality Management implementation, using a reengineering method developed for LEIA T.D.C., called "Reingeis" that tries to decrease the bureaucratic load on the Quality Management System; it also allows the integration of environment and occupational health and safety management in the system itself.

"The main advantage of Reingeis method is that it gives SMEs an appropriate management system. "

Experts

LEIA Foundation
The company is frequently involved in R&D projects with the Foundation. The idea of the participation was a result of the Technological Diagnosis made in a previous stage of the project.

Methods

The main advantage of the Reingeis method is that it gives SMEs an appropriate management system. It is recommended for its easy to use tools in each area with tables and graphics that allow a decrease in the documentation to a minimum. By the implementation of this management system the company can obtain both the ISO 9001 and the ISO 14001 certification; it assures also the observance of the occupational health and safety norms.

In the process of implementation the company has the support of a consultant that develops it in four steps; methodological training, initial audit, implementation checking and finally audit.
This process takes about 9 months, from the initial audit to the final stage.

Results.

By the implementation of this IMT the company gets an integrated management system, which allows it to obtain the ISO certifications and an occupational health and safety management certificate. The company has now seen the possibility to focus the management system to the process management.

Conclusions.

The company directors are pleased with the results and they trust in the working of this management system could help the company both to improve its process and to increase the customer satisfaction indicators.

Samaria Hotel
Crete

The Company

"N. Perogiannis S.A. – Hotel and Tourist Enterprises" is a company whose main business activity is to provide services. The most important element is the Hotel Samaria, a city hotel in the centre of Hania.

Rationale and aims

The activities of a hotel demand high quality services, according to international standards (ISO 9000, AQAP, BS, DIN etc). It is commonly known that Quality Assurance Systems are more and more necessary for Greek SME's in the field of services provision. The Greek Tourist Industry remains under pressure from international tour operators to upgrade the total quality of tourist products provided in order to remain competitive.

Experts

The expert used was a consultancy company called "Mediterranean Quality Innovation Center". It was selected because of its reputation and the quality of its work.

Methods

According to ISO 9000 standard, for the development and establishment of the Quality Assurance System in order to certify from the competent Certification Body, the consultant follows the following steps:

- Informing the Hotel's Administration about the development of the Quality System.

- Official obligation of the company to apply Policy and Quality System. Object and strategic enactment for the application achievement. Publication of these to the personnel.
- Personnel information for their involvement in the action and the flow chart of the activities in order to finish the system application, the demand for the contribution of the personnel to the system.
- Department development named Control and Quality Assurance Direction, definition of the responsible person for the Quality System.
- Procedures enactment for the authorization and acceptance for several suppliers of the company, rules acceptance, development of registered suppliers list.
- Pilot application of Quality Plans.
- Quality manual development that contents the procedures and guidelines concerning the activities of the company.
- Audit - re-examination record development simultaneous with the Quality Manual.
- Audits of the Quality System, corrective actions on the certification procedures from the Certification Body.
- Application for certification from an international Certification Body.

Results

The application of ISO 9000 system is a significant Innovation for this company because of:

- New organization processes in order to provide quality services
- Quality customers' services as a competitive advantage and development of registered suppliers list

Concluding remarks

The company integrated successfully the above phases and now is a pilot operating period for the Quality System before the certification.

Lahanocosmos
Crete

The Company

It is a small food processing company that has been working for three years. Its main activity is the production and distribution of prepared and packed fresh vegetable products in the large markets of restaurants, hotel restaurants, catering, hospitals, cash and carry markets etc. It also functions as a wholesale trader for the same customers, selling products that have been produced by third caterers. The activation of this food workshop is being held in the county of Heraklion and Lasithi.

Aims and rationale

The cases of food poisoning are increasing all over the world rapidly. Customers demand safe food products so the safety measures for foods are very important. It is well known that the adoption of a system like HACCP (Hazard Analysis at Critical Control Points), dealing with biological, chemicals and natural hazards. The system of HACCP minimises or removes the possibility for hazards to appear.
These are the reasons why the company decided to develop a HACCP system.

Experts

The expert used was a consultancy company called “Notion consultants”. It was selected because of its reputation and the quality of its work.

Methods

According to HACCP standard, for the development and establishment of the system, the consultant follows the following steps:

- Preliminary Informing of the Administration
- Definition of the responsible person of the HACCP System
- Data collection – recording of the materials (vegetables)
- Recording of the final products after the production processing
- Specification of the inventory way of the first material according to the health legislation
- Flow charts Development for every product and verification of these by repeating audits
- Identification and recording of all the potential hazards in every different phase of the HACCP development at the flow chart process
- Determination of the critical control points with the use of suitable methodology
- Establishment of an observation system of the critical control points, with the use of records that are developed for this purpose
- Advisable definition for any circumstances corrective actions to apply when a critical control point deviate from critical limits
- Definition Procedures for the design and execution of verification periods
- Training seminars attained for the personnel in order to inform for the stages of the system that they are involved. After this they had the chance to be trained for the general rule of Health Industrial Practice
- Collaboration with other companies in order to apply applications in Sanitation Standard Operating Procedures and also a systematic programme for insecticide in inventories and in the production area too.

Results

The application of HACCP system is a significant Innovative procedure for this family company because:

- New organization processes are established in order to observe all the phases of the production and order - supply procedures.
- Quality customers' services with the supplying of certified safe food products.

Concluding remarks

- The customers claim for safe food products, so the safety measures for foods are very important
- HACCP system entering the control procedure in every point in the production can function everywhere is possible, dealing with problems from biological, chemicals and natural hazards
- The system of HACCP minimises or annihilates the possibility for these hazards to appear
- Quality customers' services are guaranteed with the supplying of certified safe food products.

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