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Enterprise Cultural Heritage Skill Gap - the study of established craft sector firms.

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**Objectives:** This paper aims to introduce a novel concept of Enterprise Cultural Heritage (ECH) which combines the company's own history and creations with the potential to transform information and materials into "extended products & services". Firstly, the objective is to explore the skills needed in established craft sector Small and Medium sized Enterprises (SMEs) to fully exploit the potentials of ECH and thus gain a competitive advantage. Secondly, we'll investigate the ECH Skills Gap and how it could be closed.

**Prior Work:** The concept of ECH draws insight from a broad range of literature including: Marketing, Product Development & Innovation, Organisational Culture and Knowledge Management. However, to date, this has achieved precious little attention in the academic literature as well as practitioners focused training courses. ECH can be regarded as part of company's knowledge capital, but as it has been argued the exploitation of knowledge of an organisation, resides not in the knowledge itself, but in the ways that knowledge is used and re-used.

**Approach:** The study is exploratory in nature. It introduces a new concept and reveals its potentials and usage in everyday business. It is based on telephone surveys of established (over 40 years old); craft sector SMEs in five EU countries. Some 370 companies, identified using standard commercial directories, were approached. A total of 77 interviews were completed.

**Results:** The results of the survey reveal that almost half of the companies interviewed were lacking ECH skills. The survey identified particular ECH related subject such as: brand management, heritage management, change management and Intellectual Property Rights (IPR) as the most vital for effective ECH management. There was a lack of skills mostly on the areas of ICT/heritage management and marketing among the interviewees.

**Implications:** Both the training and policy implications of the study are discussed, e.g., how to promote more effective usage of ECH in established craft sector SMEs. The study is part of a European project, which explores and establishes the field of Enterprise Cultural Heritage (ECH). Practical implications include training material development to better enable SMEs in exploiting their ECH and improving the quality of vocational education and training practices.

**Value:** The ECH concept is important as it is relevant to large number of SMEs, especially to older craft sector companies. Sustainability, authenticity, innovativeness and traditions are highly valued among many consumers worldwide.

## Introduction

Small craft sector firms are struggling to survive in an environment where large multinational companies produce similar kinds of products in higher volumes and cheaper prices. The surviving of small firms calls for creative thinking. There are many different ways to react to these challenges. Building your strategy on the authenticity and traditional production methods or products themselves, is one viable way to proceed. But this choice calls for appropriate skills.

This paper introduces a novel concept of Enterprise Cultural Heritage (ECH) which combines the company's own history and creations with the potential to transform information and materials into "extended products & services". Firstly, the objective is to explore the skills needed in established craft sector Small and Medium sized Enterprises (SMEs) to fully exploit the potentials of ECH and thus gain a competitive advantage. Secondly, we'll investigate the ECH Skills Gap and how it could be closed.

The paper is based on the findings of MNEMOS project (Quality & Innovation in Vocational Training for Enterprise Cultural Heritage), which is an European Commission funded project working in the developing field of Enterprise Cultural Heritage in five countries - the Czech Republic, Finland, Greece, Italy, and the UK. The project aims to enable SMEs to exploit their ECH and improve the quality of vocational education and training practices.

Organisations that have been trading for decades have a quality that no newcomer has: their history and knowledge makes them stand apart. This quality is seldom valued or rarely fully exploited. However, this could encompass means of enhancing the competitiveness of long established SMEs. Especially today, when sustainability, authenticity, innovativeness and traditions are highly valued among many consumers worldwide (Feagan, 2007, Sedera et al., 2004, Halweil, 2002).

Enterprise Cultural Heritage (ECH) is an innovative and complex concept combining the company's own history and creations (technical contents, industrial design, organization, marketing, etc.) with the potential to transform information and materials into "extended products & services". ECH is an asset which is made up of tacit and explicit knowledge. This knowledge focuses on products/services (and the overall brand identity of the firm), processes (and technologies), functions, and organisational structures. For a survivor of long established companies these assets can be vital. It is widely accepted that cultural heritage of an organisation can be used either as a resource itself or as a resource for innovations and change (Sedera et al., 2004, Urde et al., 2007). Moreover, the importance of innovation and firm's ability to react to changes in the business environment have been emphasised to be important for firms' survival in the literature already since the days of Schumpeter (1950; Cefis & Marcili, 2005).

Cultural heritage includes both the intangible elements, such as the practices, representations, expressions, knowledge and skills - as well as the instruments, objects, artefacts and cultural spaces associated therewith (Unesco, 2003, Nic Craith, 2007). In recent years, the potential economic values of cultural heritage have been raised into discussions and public policies (Nic Craith, 2007). It has been acknowledged that heritage can be used as an asset, which can have new meanings in new contexts and eras. Therefore, it can be used to serve contemporary purposes. Cultural heritage's both cultural and economic values have become more visible recently. The concept of ECH brings the concept of cultural heritage now closer to the everyday business practices regardless the field of industry.

As important as the ways of exploiting and reproducing the information inside the company is also recognizing valuable information of the company's past from the invaluable. Cultural heritage doesn't include all the traditions of the firm (Kockel, 2007). Heritage is that part of tradition, which is valued and nominated as heritage. In our definition of ECH is defined as an asset that can be transformed into different forms of capital. All of which at the end, when wisely managed and used - make the business more prosperous.

For the MNEMOS project the following definition for ECH has been constructed (Aaltonen et al., 2010):

*Enterprise Cultural Heritage (acronym ECH) is a company asset that is derived from its historical evolution. This asset is made up of tacit and explicit knowledge. This knowledge focuses on products/services (and the overall brand identity of the firm), processes (and technologies), functions, and organisational structures. It can be used to underpin future competitiveness through originality, innovation and quality.*

The objective of this paper is, firstly, to explore the skills needed in established craft sector Small and Medium sized Enterprises (SMEs) to fully exploit the potentials of ECH and thus gain a competitive advantage.

Secondly, we'll investigate the ECH Skills Gap and how it could be closed. Thus the following is the structure of the paper - literature related to the concept of ECH is presented first, followed by a methodological description and data analysis. Finally we compare and contrast the concept of ECH with other related concepts and present the skills gap as identified in our data collection.

#### Related literature

*How do we understand the key concepts of culture, craft and heritage?* Culture can be understood as "the way we do things around here" - or to be more precise "...culture is a constantly and actively developed framework of collective values held between individuals that allows these individuals to have understanding and communication through their everyday actions; producing inhabitable boundaries for shared identity, ethics, and aesthetics" (Francisco, 2007). The values are an important part of the culture, but even more important from the practical point of view are the shared perceptions of organisational work practices within organisational units that may differ from other organisational units (van den Berg & Wilderom, 2004). Culture has a number of both positive and negative meanings in organisations. However, combined with heritage in the current concept of ECH the meaning is focused on its positive attributes.

Craft culture is something slightly different. As Francisco (2007) defines, it "has a sense of both shared and guarded practice and knowledge. It refers to a level of skilled (i.e., learned and taught) precision work with "material" that is implicitly specified by traditions, held collectively by a community of craftspeople—to some degree excluding those outside this community".

By definition, heritage is something which is valued and named as heritage among those members of the culture who have power to define such things. Usually those are the professionals and experts, who are engaged in management and administration such as governments, ministries, museums etc (Throsby, 2001). But it is not uncommon to have negotiations over what cultural heritage consists of, because different communities may have placed contradictory values on the same cultural heritage (Nic Craith, 2007). In the business context it is important to recognise what is valued by the staff/owners of the firm and what is valued by the customers. And to concentrate on the latter.

Therefore, not all that is inherited from the past is part of cultural heritage. It is important to distinguish between cultural tradition and heritage. It has been argued that cultural heritage refers to 'cultural patterns, practices and objects that are either no longer handed down in everyday life'... 'or used in ways significantly removed from their historical trajectory' (Kockel, 2007). On the other hand, 'tradition' refers to living culture, which is transferred from generation to generation (ibid.). The aspect of socially constructed valuation is more permanent in heritage than in tradition. However, the definitions are in constant move, and far greater and thorough academic discussion has been called for (Kockel, 2007, 6).

As cultural heritage is something valuable, we can ask what kind of values it encompasses. Previously the cultural values such as building the national identity and a sense of self-continuity have been almost the only recognized values that cultural heritage has had. Cultural heritage has been closely linked with national and regional identities, and therefore actively used e.g. by the politicians. At that time, it might even happen that the linkage between nation's traditions and the elements which then were to become its cultural heritage were not strong at all. On other words, the heritage was made up for political and economical purposes. In recent years, the potential economic values of cultural heritage have been raised into discussions and public policies (Nic Craith, 2007). And with this project we aim to bring it to consciousness of European craft sector SMEs, as well.

*Where can we find this cultural heritage embedded?* It can be noticed that the conceptual level of ECH is quite complex. In order to denote an influence of ECH management on enterprise competitiveness it needs to be somehow captured or measured, even indirectly. Typically this can be achieved by utilising a relevant and reliable method. However, due to the fact that ECH is a relatively fresh concept stemming from practice rather than from theoretical advances, an effort was made to map its key characteristics and match them with established organization studies related theoretical frameworks. Considering the above definition of ECH, the following theoretical frameworks have been identified and mapped to the salient characteristics of ECH: organisational culture (Barney, 1986; Martins and Terblanche, 2003; Shein, 1984), organisational intelligence (Halal, 1999; March, 1999; Yolles, 2005), knowledge management (Alavi and Leidner, 2001; Nonaka, 1994; Schultze & Leidner, 2002) and organisational memory (Moorman and Miner, 1998; Nevo and Wand, 2005; Walsh and Ungson, 1991). As a result of the comparative matching, the organisational memory was chosen as the most closely corresponding framework

Organisational memory is a well-established concept grounded in information-processing theory. 'In its most basic sense, organizational memory refers to stored information from an organization's history that can be brought to bear on present decisions. This information is stored as a consequence of implementing decisions

to which they refer, by individual recollections, and through shared interpretations' (Walsh and Ungson, 1991, 61). Elaborating on the decades of preceding research, 'it has generally been recognized that organizational memory consists of mental and structural artifacts that have consequential effects on performance' (Walsh and Ungson, 58).

The main pillar of the organisational memory theory is based on the premise that 'organizations functionally resemble information-processing systems that process information from the environment. As information-processing systems, organizations exhibit memory that is similar in function to the memory of individuals' (Walsh and Ungson, 60). Our approach of using organisational memory theory to facilitate ECH management is concerned with information retrieval from the memory to contribute to the future competitiveness of SMEs.

The key constituents of organisational memory relevant to management of ECH are individuals, culture, transformations, structure and ecology. Each of these constituents is outlined here to draw implications for developing an innovative vocational training approach exploiting the potential of ECH management in SMEs.

Individuals have their own recollections of what has transpired in and about organisations, their products or services. In other words, individuals have 'their own capacity to remember and articulate experience and in the cognitive orientations they employ to facilitate information processing' (Walsh and Ungson, 63). Information technologies help individuals and organisations to keep records and files as a memory aid, and therefore, can be a support in constituting ECH.

At the 'culture' level past experience can be useful for dealing with the future challenges and can be embodied into language, existing processes, symbols and organisational artefacts (stories, sagas, and the grapevine). This past experience can be reinforced by including elements of cultural awareness in ECH training material.

The 'transformations' element refers to various activities performed by a company in order to transform any input (whether it is a raw material or a new recruit) into an output (e.g. a finished product, a provided service). These transformations are usually affected by technology company uses in its operations and are embodied in certain (operational) practices, which company may retain for a long periods of time. Rationalising these (transformation-oriented) practices may lead to innovating or enhancing quality of company's products or services. ECH training material needs to have a capacity to address the key factors of transformational process contributing to improving quality of existing products and creation of new products.

Organisational structure needs to be considered in light of its implications for individual role behaviour which may provide a repository where organisational information can be stored and reflected as the institutionalised myths of society that are sustained and legitimised by members of an organisation. The level of organisational design, where structure belongs to, is beyond the scope (VET) of training material to be developed as it usually lies down within top management competency.

'Ecology' in its essence refers to the actual physical structure or workplace environment of an organisation and thus helps to shape and reinforce behaviour prescriptions within that organisation. For instance, employees' interpersonal experiences can be affected by a physical layout of their work space and premises. Visitors subsequently can also be affected by the prescribed employees' behaviour and interior office design. As a result, the workplace ecology retains information about an organisation and its membership. Employees directly or indirectly may feel an impact of organisation's premises or interior design, thus, this aspect can be included into the ECH training material.

*And how to utilise ECH?* Heritage can be used as an asset, which can have new meanings in new contexts and eras. Therefore, it can be used to serve contemporary purposes. Cultural heritage's both cultural and economic values have become more visible recently. The concepts of heritage production and heritage as commodity have been introduced. First venues for this commercialization have been museums, travel and food industry. (Nic Craith, 2007, Kockel, 2007). The cultural heritage includes both the intangible elements, such as the practices, representations, expressions, knowledge and skills - as well as the instruments, objects, artefacts and cultural spaces associated therewith (Unesco, 2003, Nic Craith, 2007).

Realizing cultural heritage as an asset for companies has not been widely discussed yet. Company's cultural heritage can be regarded as part of company's cultural capital. And as all forms of capital it is transformable to other forms of capital such as intellectual capital or financial capital. But the exploitation of knowledge or the cultural heritage of an organization as an asset resides not in the knowledge itself, but in the ways to use and re-use it (Sedera et al., 2004, Urde et al., 2007).

The range of potential fields of management which could benefit from utilising cultural heritage is wide: marketing, product development and innovation, organisational culture and knowledge management.

However, to date, this has achieved precious little attention in the academic literature. In this paper we will report, how the established companies in craft sector themselves perceive the potentials of this asset.

As important as the ways of exploiting and reproducing the information inside the company is also recognizing valuable information of the company's past from the invaluable. Cultural heritage differentiates from the stock of traditions of the firm. Traditions include all the stories, working methods, habits, values and know-how which are passed from one generation to the next, whereas heritage is that part of tradition, which is valued and nominated as heritage. In our definition of ECH, enterprise cultural heritage is defined as an asset - an asset that can be transformed into different forms of capital. All of which at the end, when wisely managed and used - make the business more prosperous.

Unfortunately there are no ready-to-use procedures how to do this. However, it has been suggested that the valuation process should be linked with the whole strategic planning process of the business and based on cost-benefit analysis, which takes into account both the expected short-term and long-term benefits (Throsby, 2001).

Usually the cost-benefit analysis begins with the assessment of benefits. In some cases the benefits can be so unarguable that this phase can be avoided. Those cases a cost-effectiveness analysis is in order. When entering the cost-benefit analysis, there are three categories of benefits: use values, non-use values and externalities. Use values are the economic valuations placed on all the directly used goods and services which the project generates. Non-use values are of three types: existence value, option value and bequest value. The externalities from the project are the spillovers that affect other economic agents. The time span for predicted benefits must also be decided when evaluating the future benefits. (Throsby, 2001.)

What would then be the reasons to use company's cultural heritage in its present activities? Won't the utilizing of company heritage be in contradiction with being up to date, high tech and modern? As stated in Urde et al. (2007) there is no contradiction. Heritage gives the companies a possibility to differentiate from its competitors. The advantages of using and expressing ones heritage are:

1. Heritage can provide a basis for distinctiveness in positioning, which can generate competitive advantage which will be manifested in higher prices and retaining customers who value heritage.
2. Heritage can increase brand value bringing it more credibility, authenticity and meanings, which are important for the customers.
3. Heritage helps also to build a special relationship with non-customer stakeholders like the surrounding community. It may also help the HR activities of the company, like recruiting and retaining staff. It may also build internal commitment and pride among employees of the company. (Urde et al. 2007.)

Since the possibilities to exploit ECH in business activities are quite manifold, we conducted a desk research on the supply of training and education on the ECH related topics in VET organisations and higher education institutions in Finland, Greece, Italy and the UK. We were also curious to know which skills would be the most important for the SMEs to utilise their ECH. Therefore, we made a survey among established craft sector SMEs in Finland, the Czech Republic, Greece, Italy and the UK and asked their perceptions on the potential ways of utilising their ECH and the importance of both directly ECH related skills and more general business skills in relation to exploiting their ECH. The companies which had used their ECH to the extent that they had invested in it were supposed to have the best understanding of the skills needed. We were also interested in the perceptions of the companies without any or with some minor experience in the exploitation of their ECH.

## Methodology

### *Data*

A survey of established enterprises was conducted in early 2010 in order to gain an in-depth understanding of the processes involved in exploiting ECH. In order to identify established SMEs a number of selection criteria were used. These included: independence (i.e. the organisation in question was not a branch or subsidiary of another), size (using the EU definition enterprises employing only up to 250 people with annual turnover € 50 million or balance sheet total of € 43 million were selected) and age of the firm (identifying enterprises that have been in existence – at the time of the survey for a period of 40 years). The rationale behind the 40 years was that these companies are more likely to have had to pass on their product and services knowledge through at least one generation of employees. An additional stratification criterion used in the selection of the sample was sector. Thus, established SMEs surveyed were involved in craft activities. This is defined in the EU SME Observatory as artisan production in food, textiles, and other (ceramics & jewellery) industries. More specifically, regarding the sectoral breakdown of the established SMEs surveyed is concerned, the majority

(just over half) were involved in the food sector, with just over a quarter engaged in textiles and clothing manufacture (see figure 1). The remaining one fifth of the firms surveyed were in other craft activities. The choice of the craft sector is on account of the importance of cultural heritage (e.g. local products, traditional design etc) as a source of competitive advantage.

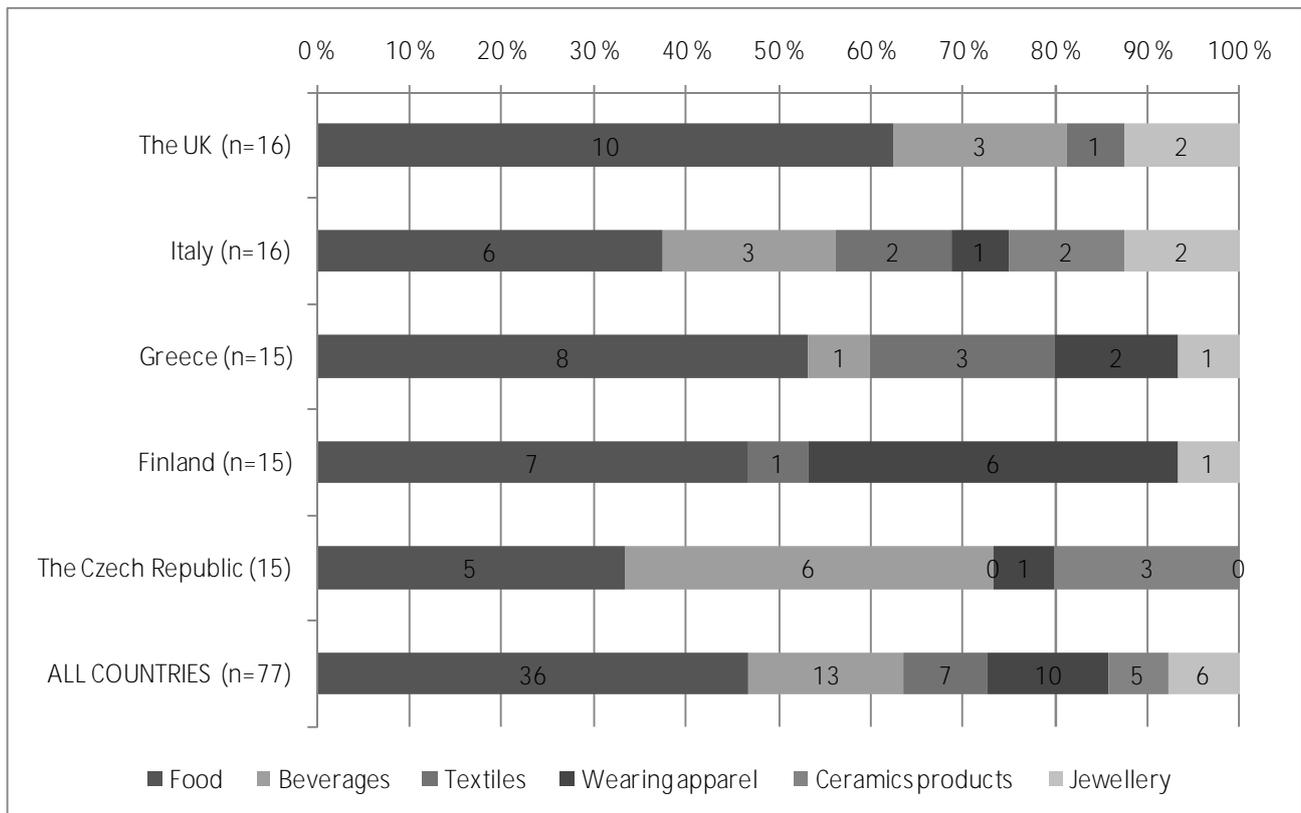


Figure 1. The companies interviewed by country and industrial sector (number of companies, n=77)

For the purposes of the survey a questionnaire that combined closed (mainly) and open-ended (to a lesser degree) questions was used. The questionnaire included sections on the firm's awareness of ECH, the skills needed in order to exploit ECH in the firm, obstacles to the use of ECH, and general information about the SME and its performance. Some 370 companies, identified using standard commercial directories, were approached in Finland, the Czech Republic, Greece, Italy and the UK. There were 16 companies interviewed in Italy and the UK and 15 in other countries. A total of 77 interviews were completed, each lasting between 30 and 45 minutes, between January and April 2010. This corresponds to a response rate of just over 20 %.

#### Variables and data analysis

The expected benefits of ECH management were measured with two questions. One asked the respondents to evaluate the importance of ECH in the various fields of business (eleven all together). The other one was an open question asking, which functions of a company would benefit most of the usage of ECH.

The perceptions of the skills needed in ECH management were asked with 15 Likert scale questions (from 1-4), where the respondents were to evaluate the importance of each skill in ECH management. Some skills asked are directly associated with the recognition and usage of the economically valuable elements of ECH. Those were e.g. the skills in usage of historical heritage or the skills in recognising the economically valuable elements of company's past. Along with these special skills, there were skills associated with the more general company functions. Such skills would be e.g. skills in brand management, knowledge management or change management. There was also a category of 'other skills' where the respondents were able to specify some skills not mentioned earlier. Then the companies were asked if they had lacked or are lacking any of these skills, and if yes, which ones. And if there was a skill gap, how are they planning to react on it.

The study is exploratory in nature. Due to the small number of respondents only descriptive data analysis methods were used to explore this novel field of ECH. The study introduces a new concept and reveals its potentials and usage in everyday business. But before the presentation of the findings some key limitations must be noted. Firstly, the data used are self-reported responses to a questionnaire. This raises two important considerations: self-report bias and self-selection bias. Considerable efforts have been made in the design

and implementation of the research to address these issues. Thus, a number of controlled questions have been introduced in the instrument to monitor the responses given. In some instances corrective action has been taken when individual respondents made contradictory statements. As far as the issue of the self-selection bias is concerned, the organization of the fieldwork and the ensuing satisfactory response rate provide a considerable degree of confidence in the results. Secondly, the survey instrument provides a snapshot of firms at the time of the fieldwork research restricting the ability to capture processes that evolved through time.

It is also worth pointing out that the data were collected in early 2010, a period of considerable economic adversity globally. This is a period of increased difficulty – for SMEs – to access finance and economic contraction. During the interviews the impact of hostile macro-economic conditions was raised extensively by interviewees. This may have affected findings somewhat, as levels of investment and growth levels may have been influenced as a result.

## Results

There is quite a high awareness of the value and importance of the company's past among the respondents. Of the interviewed companies, 10 have never considered their company's historical and cultural background as a way of adding value to their business, 43 have realised the potentials of ECH to some extent but not invested on it, and 22 companies have already invested in the utilisation of their ECH. There are no big differences by sector in the awareness of the value of the company's historical and cultural background to the business. From the sectors of jewellery, ceramics products, wearing apparel, textiles and beverages there are only one or two companies in the data set, which have not considered the benefits of utilising their ECH. In the food sector there were four companies out of 35. Naturally, those ten companies did not utilise their cultural heritage then either.

What are then the expected benefits of ECH management? Enterprise cultural heritage was seen most important for the brand recognition and quality management. Over 90 percent of the companies studied thought that exploitation of ECH could benefit those fields of business. Also over 70 percent of the companies found that ECH could be used in building customer loyalty, new product development and marketing old products. The usage of company history was seen to have least effect on pricing and marketing of new products. The companies see also that ECH can be used to enhance knowledge transfer from older workers to the younger and to increase employees' commitment to the company values and goals. The thought of ECH decreasing the costs of the company is quite rare.

The companies value enterprise cultural heritage as an important asset for many fields of business. However, using ECH to gain competitive advantage and profit isn't easy. It requires many skills. To get a better understanding of the skills needed at the company level, we asked the interviewed their perceptions and experiences on the matter.

Some skills needed are *directly associated* with the recognition and usage of the economically valuable elements of ECH (see figure 2). The skills in usage of historical heritage were seen either vital or important by over 80 percent of all respondents. Also the skills in recognising the economically valuable elements of company's past were important for over 70 percent of the respondents. Along with these special skills, there were skills associated with the more general company functions. As already reported, we found out that *brand recognition* was assessed to be the most relevant field of business where ECH could be used. In line with that is the result that most essential skills needed in order to use company's cultural heritage are the skills in managing the company brand in a successful way. Half of the respondents valued those skills to be vital in order to efficiently exploit ECH – and over 80 percent told it to be at least important. *Knowledge management* and *change management* were rated the next important general business skills in this context.

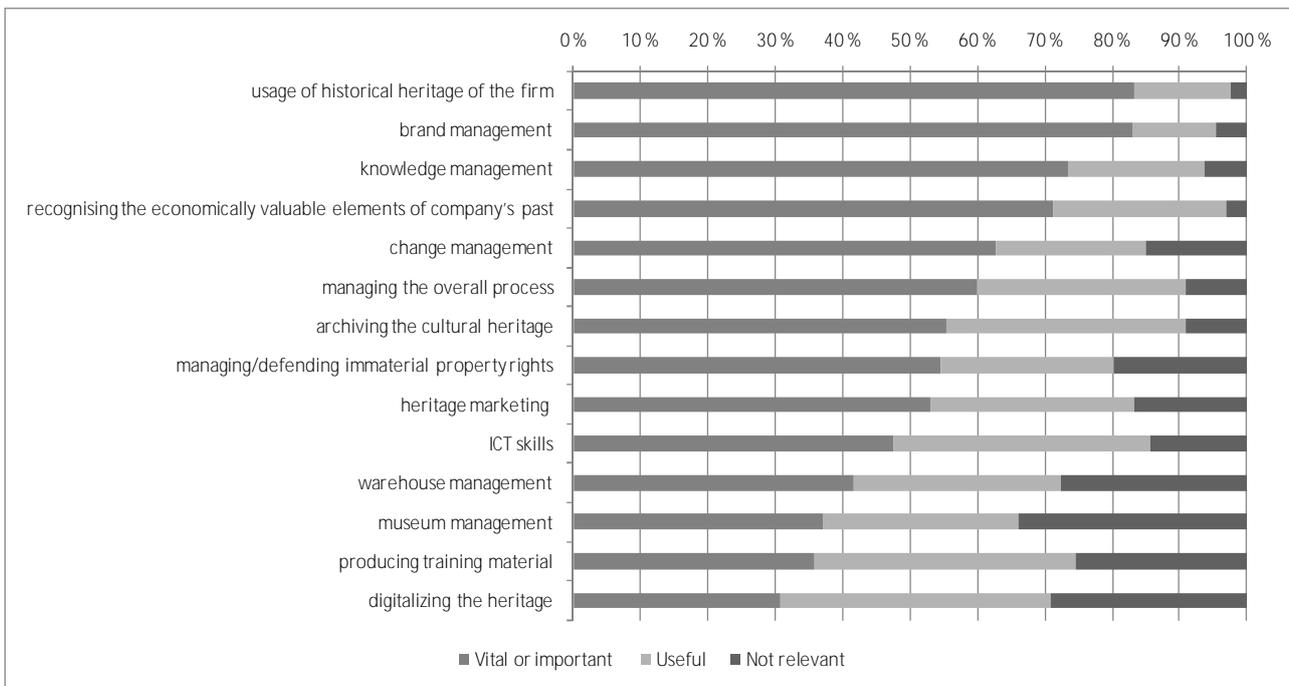


Figure 2. SMEs' perceptions of the skills needed in order to use company's cultural heritage to increase the competitiveness, all countries (% , n=66)

To get an experience based view of the skills needed we differentiated the companies which had already invested in the ECH from other companies. Compared to the skills needed by all companies, the skills needed by the companies which have already invested in the ECH are almost surprisingly similar. Skills in brand management, in ECH recognition and usage and in change management are rated important in both groups. In table 1 we can see that the companies, which have actually invested in ECH exploitation estimate all the skills measured more vital than the companies which are not yet as 'mature' in their ECH management processes. It can be argued that those companies may have more sophisticated conception what skills are actually needed and how important those skills are in ECM management tasks. The differences in perceptions between the groups are most significant in skills in change management, skills in producing the training material, skills in digitalizing the heritage, skills in warehouse management, skills in heritage marketing, and in skills in the usage of historical heritage of the firm.

Table 1 Perceptions of the skills needed in order to efficiently exploit ECH by investments in ECH (scale for skills needed is 1–4, 1= 'not relevant', 4= 'vital')

	Investments in ECH in the last 3 years	n	mean <sup>1</sup>	sd.	Sig.
Skills in recognising the economically valuable elements of company's past	No	43	2,86	0,675	
	Yes	21	3,19	0,928	
Skills in archiving the cultural heritage	No	43	2,51	0,827	
	Yes	21	2,71	0,845	
Skills in digitalizing the heritage	No	42	1,90	0,850	*
	Yes	21	2,57	1,076	
Skills in managing/defending immaterial property rights	No	43	2,47	1,077	
	Yes	21	2,86	1,014	
Skills in producing training material	No	43	2,02	0,831	*
	Yes	22	2,50	,913	
Skills in change management	No	43	2,51	1,032	**
	Yes	22	3,18	0,733	
Skills in project management	No	43	2,35	0,842	
	Yes	21	2,62	0,740	
Skills in brand management	No	41	3,22	0,881	
	Yes	22	3,32	0,839	
Skills in heritage marketing	No	42	2,45	1,109	†
	Yes	22	2,95	0,899	
Skills in enterprise museum management	No	41	2,12	1,053	
	Yes	19	2,37	1,116	
Skills in warehouse management	No	43	2,00	0,845	*
	Yes	21	2,52	0,873	
ICT skills	No	42	2,43	0,831	
	Yes	20	2,35	0,875	
Skills in managing the overall process	No	42	2,69	0,950	
	Yes	21	2,71	0,845	
Skills in the usage of historical heritage of the firm	No	26	2,96	0,774	†
	Yes	14	3,43	0,646	
Skills in knowledge management	No	42	3,00	0,883	
	Yes	20	2,75	,786	

\*\*\* p<0,001, \*\* p<0,01, \* p<0,05, † p<0,1

There is an evident shortage of skills needed in ECH management among established craft sector SMEs. Half of the companies had lacked some skills while utilising their ECH. In food sector and jewellery the majority of the companies would have needed some skills that they did not master well enough. There was less lack of skills in the Czech Republic and in Greece. The greatest need for training was in the UK and Finland. However, we must be cautious when interpreting these results, since there are so few respondents. The survey identified particular ECH related subject such as: brand management, heritage management, change management and Intellectual Property Rights (IPR) as the most vital for effective ECH management. There was a lack of skills mostly on the areas of ICT/heritage management and marketing among the interviewees.

<sup>1</sup> The bigger the mean the more relevant the skill.

Over 70 percent of the companies were willing to consider training of their staff in order to fill in these skill gaps. There were some differences across the countries. Every Italian and Greek company which was interviewed was also willing to train their staff in ECH management. In Finland and the UK the share was between 45 and 60 percent. The need for training was greatest in textiles, food and jewellery sectors.

About 80 percent of the companies would be ready to consider using new media for training purposes and sharing the information of the ECH to their staff. The most preferred new media platforms for training are the websites. Almost half of the companies were ready to use websites to share information of their past. Digital libraries and social web (web 2.0) were preferred by every fifth of the respondents.

### Conclusions and implications

This study has given strong indications that the older SMEs in craft sectors are interested in exploiting their cultural heritage. There are companies in different stages of the continuum from awareness to effective exploitation. There is some awareness of the potentials of ECH management among the companies, but the collection of the historical material is not systematic and there is a lack of skills in management of ECH and methods of transforming this asset into profitable business. One third of the companies had made investments concerning with enterprise history preservation or management for business purposes, which is already a strong indication of the awareness of the benefits of ECH management. However, there are clear differences in the familiarity of the subject in different countries. The Italian companies seem to be most aware of the concept and the Greek companies least aware. The Finnish companies argue to be aware of the potentials of ECH, but have made hardly any investments on it. Indisputably, there are some differences in the familiarity of ECH around Europe.

ECH has a potential to become an important asset for companies in those fields of business management if there are enough skills in the company to use the ECH in an effective way. The companies see most potential for ECH usage in marketing (brand building, customer loyalty), human relations and knowledge management, and quality management. Skills that are needed are also linked with the potentials of ECH management. More skills were needed in the fields of brand recognition, change and knowledge management as well as in general skills to realise the potentials and management methods for ECH management. The companies interviewed were also quite willing to learn more and train their staff in ECH management related skills.

Based on the results of our survey and the desk research on vocational and higher education training supply, on-line learning materials are designed. Our study indicated that even the established companies are willing to use new media for training purposes. The materials will offer an opportunity for SMEs to increase their skills in the fields of brand management, change management, IPR, and heritage management, which were on the other hand identified to be the most vital skills in ECH management and to have an evident lack of supply. Our study indicated that there is more training available in knowledge management than in ECH management related skills. Therefore, no training material on knowledge management was produced. The learning materials can be found at <http://training.enterprise-cultural-heritage.org/> (released from the beginning of October, 2011).

Since our study gives strong indications that more effective utilisation of ECH would give new competitive advantage to many small and medium sized craft sector companies, some further research on the concept and the skills needed in its commercialization will be needed. Until now the academic literature has mostly been studying the usage of cultural heritage only in the fields of museums, travel and food industry (Nic Craith, 2007, Kockel, 2007). However, the effective management of ECH has obvious benefits to all established businesses, regardless of the line of business.

Our analysis has shown that ECH is closely related to the concepts of tradition and organisational memory, but more like elaborated forms of like concepts than directly sub-concepts of them. The relation between the organisational memory and enterprise cultural heritage is more or less similar to the relation between idea and innovation in innovation process literature (see e.g. Shaw, O'Loughlin & McFadzean, 2005). The most essential topics of study might be to find out concrete and practical ways to identify ECH from the total repository of organisational memory (Walsh and Ungson, 1991). The appropriate steps in that process could include market analysis, recognition of company's own ECH and conduction an appropriate cost-benefit analysis, and finding the best ways to utilise the ECH in marketing, innovation and HRM (alike in innovation process the steps from idea generation to output through the steps of opportunity recognition, development of idea and commercialisation). Our study has shown that there is clear need for this kind of guidelines among the craft sector SMEs. And thus, further research is needed.

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