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IMPORTANCE OF KNOWLEDGE MANAGEMENT PRACTICES A CASE STUDY OF THE MATURITY OF SWISS COMPANIES

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Abstract:
Knowledge Management (KM) is vital factor to successfully undertake projects. The temporary nature of projects necessitates employing useful KM practices for tackling issues such as knowledge leakiness and rework.
The existing Project Management Maturity Models (PMMMs) have focused on discussing Project Management practices, however, the management of project knowledge is yet to be addressed, at various levels of maturity. This research project was undertaken to investigate the mentioned gap for addressing KM practices at the existing PMMMs investigating how the knowledge being captured, managed, redistributed, shared and stored in the interviewed companies and the identification of the tools used to ensure that this occurs correctly and properly timed, to pursue continuous improvement and the success of the projects with the aim of sharing and promoting the development of the Project Management culture and Knowledge Management starting from the academic sphere, encouraging company's growth and effectiveness thanks to:

- Improved business decisions thanks to facilitated access to expertise and to leading practices
- Increased efficiency, productivity and work smarter by reducing cases of "reinventing the wheel"
- Improved Innovation through wider and borderless collaboration.
- Reduced loss of know-how by capturing explicit and tacit knowledge
- Speeded-up productivity with on-board trainings and timely access to knowledge
- Increased client satisfaction by delivering value insights
- Enhanced quality and ability to collaborate by standardizing ways of working and enabling discussions with leading experts

Due to the exploratory and inductive nature of this research, statistical methods were chosen as the research methodology. The web and free tool have been chosen to distribute the survey across the selected list of participants.

Keywords: Knowledge Management (KM), Project-based Organization, Project Management, Project Management Office (PMO), Project Manager (PM).

1. INTRODUCTION

A multilingual and modelled electronic questionnaire has been developed to investigate the Swiss economic context and more in particular, the maturity within Swiss Enterprises of the KM practices.

Due to multicultural environment of the Swiss enterprises' reality, the electronic questionnaire has been developed in English, translated in Italian, German and French, among the Swiss national languages, and structured in four main parts:

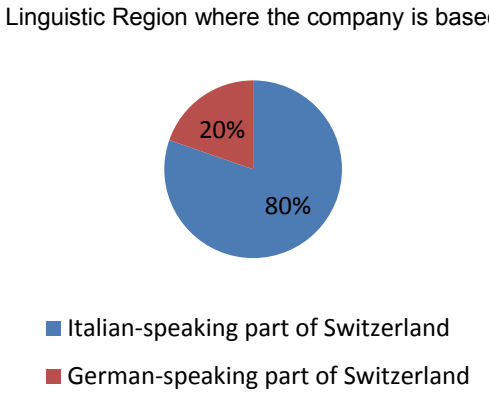
1. Enterprise's location, size and Industrial Sector of belonging
2. Overall assessment of KM Practices
3. KM Practices
4. KM Effectiveness

To be reported the minimum threshold represented by the questions up to third, thought to determine if proceed further in the investigation of KM practices.

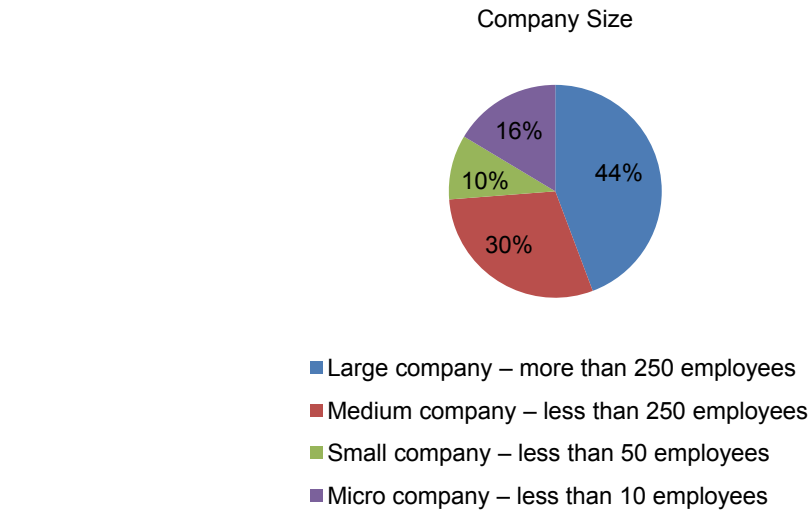
The survey was composed of 23 questions and focused on investigating the importance of KM practices, nowadays. The survey made it possible to get info and making consideration over 80 Swiss companies.

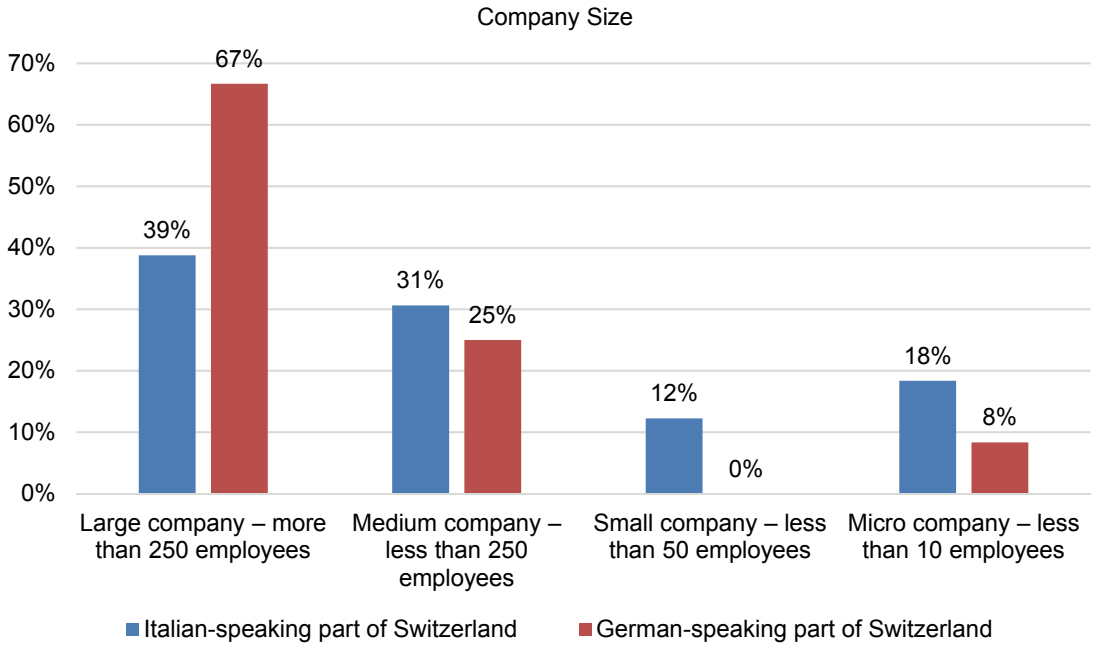
2. ENTERPRISE'S LOCATION, SIZE AND INDUSTRIAL SECTOR OF BELONGING

The survey has shown a pre-dominant participation of Italian-speaking users (80%) but also a significant participation of German-speaking users (20%). French-speaking users have been omitted, since their participation has not been considered relevant for statistical purposes.



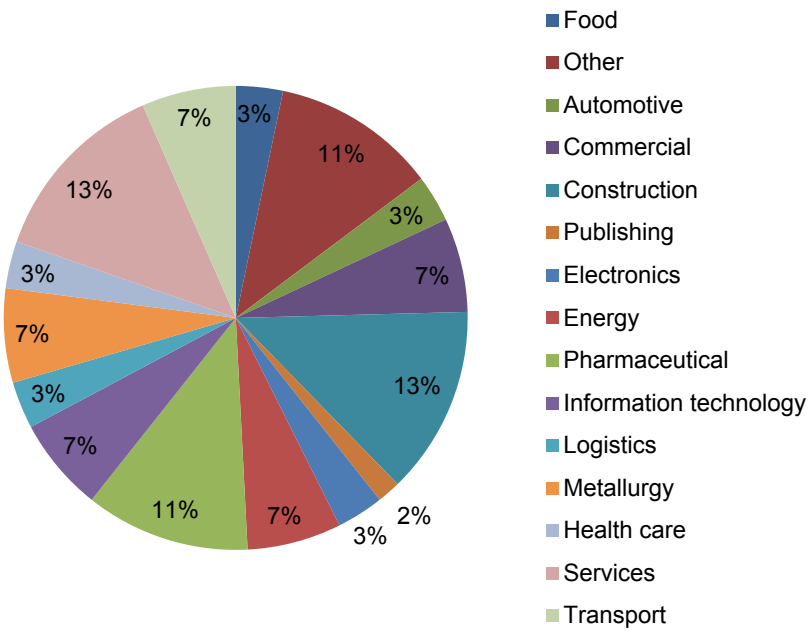
Considering the subject of the survey, namely the maturity of Swiss companies, "declined" in the management of knowledge, it is not surprising that as many as 74% of the people who took part in the survey are part of a big (44%) or medium (30%) company.





In the Helvetic confederation, German-speaking Switzerland is characterized by the highest presence in the territory of large companies. Italian Switzerland emerges as a reality mainly composed of medium and micro-enterprises.

Industrial Sector

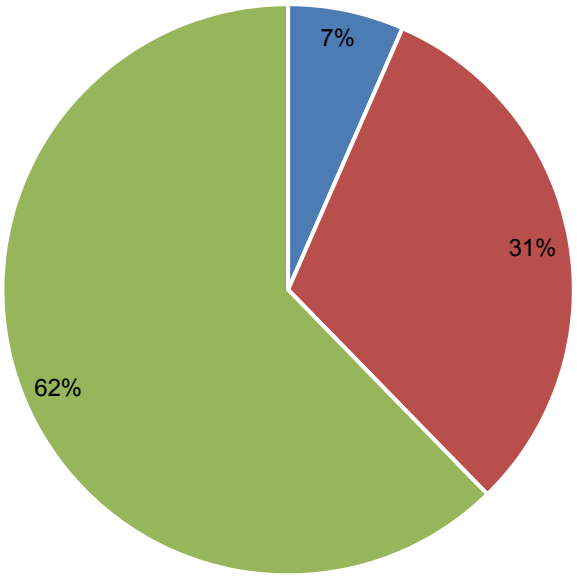


Analyzing the segmentation of the surveyed users according to the sector of belonging of their own company, we find a peculiarity of the Swiss productive fabric. Pharmaceuticals, Construction and Services are confirmed to be among the leading sectors.

3. OVERALL ASSESSMENT OF KM PRACTICES

It is interesting to note that although knowledge management practices are recognized as value-added activities (only 7% of respondents declare the total lack of a global / local knowledge management program), their implementation according to structured practices and through appropriate tools it is far from being implemented in 31% of cases.
While the large enterprise is predictable to be the most equipped with well-structured and well-defined practices for knowledge management, in the medium-sized enterprise, although acknowledged the importance of the KM topic, programs and practices for the management of it are under implementation and still not structured adequately.

Picture 1: Does your company have an enterprise-wide active, ongoing KM program, or elements of such a program to preserve institutional memory for future use?



- No. We have no enterprise-wide program or elements of a program.
- Yes. We have an enterprise-wide program, but at this point it is in the “roll-out” phase and is unevenly developed among divisions.
- Yes

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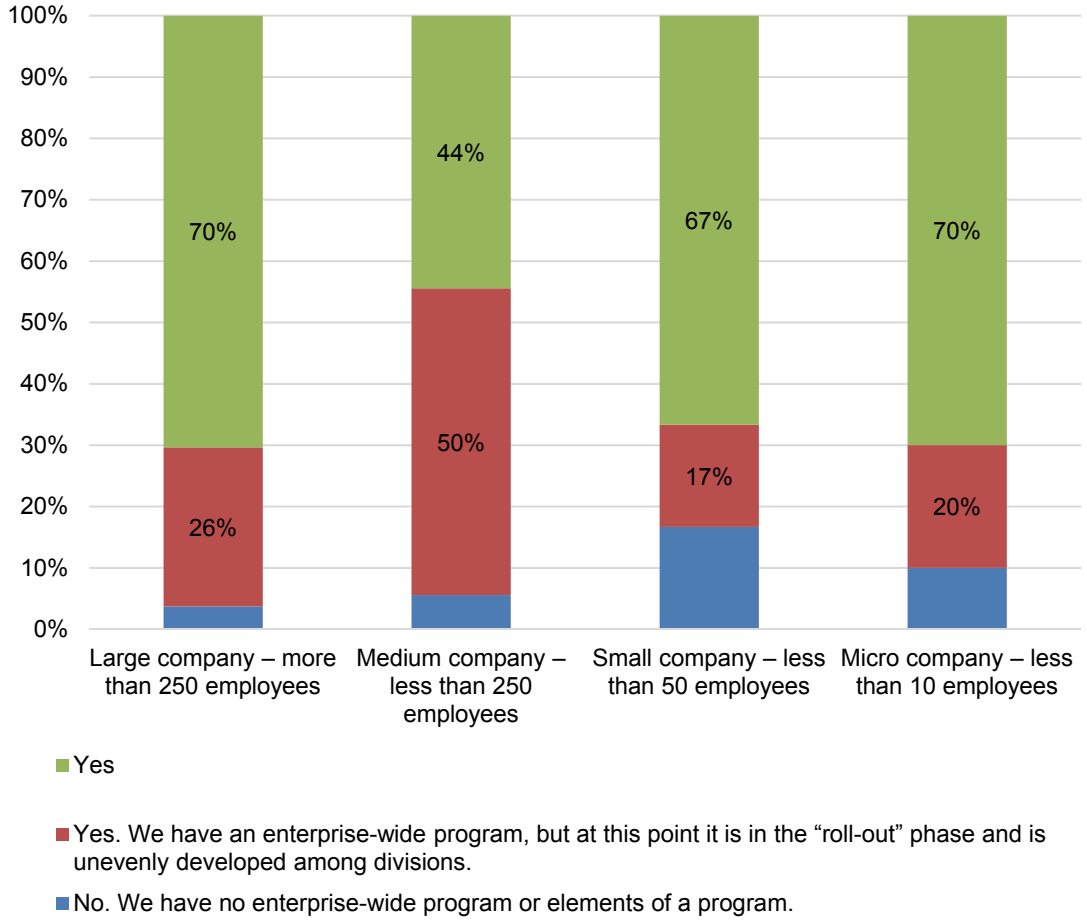
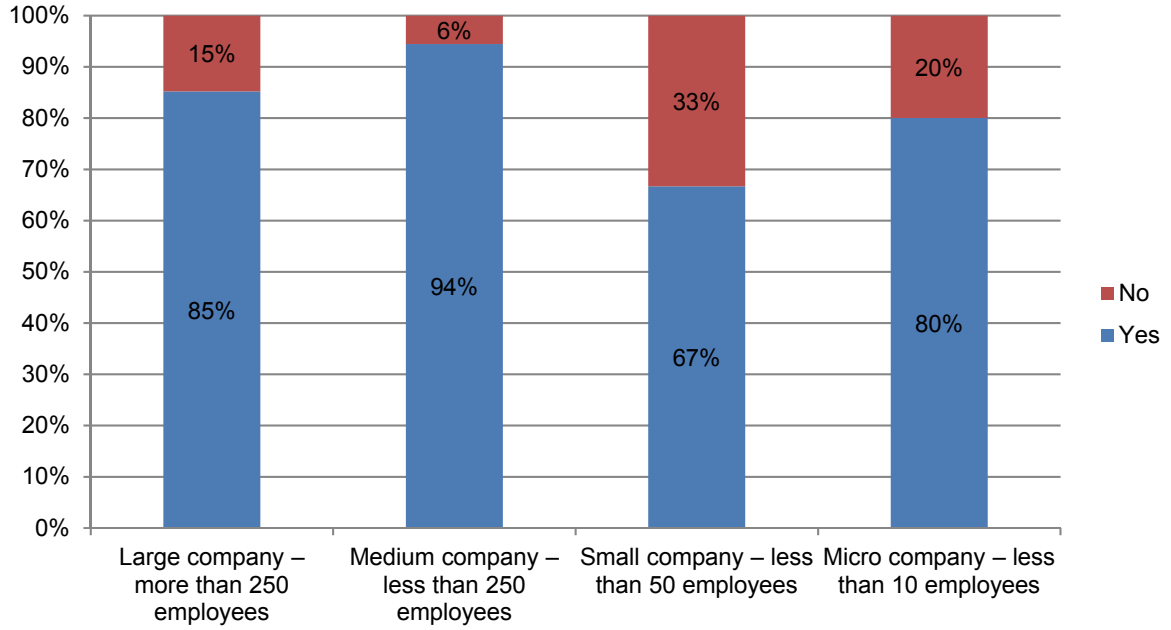


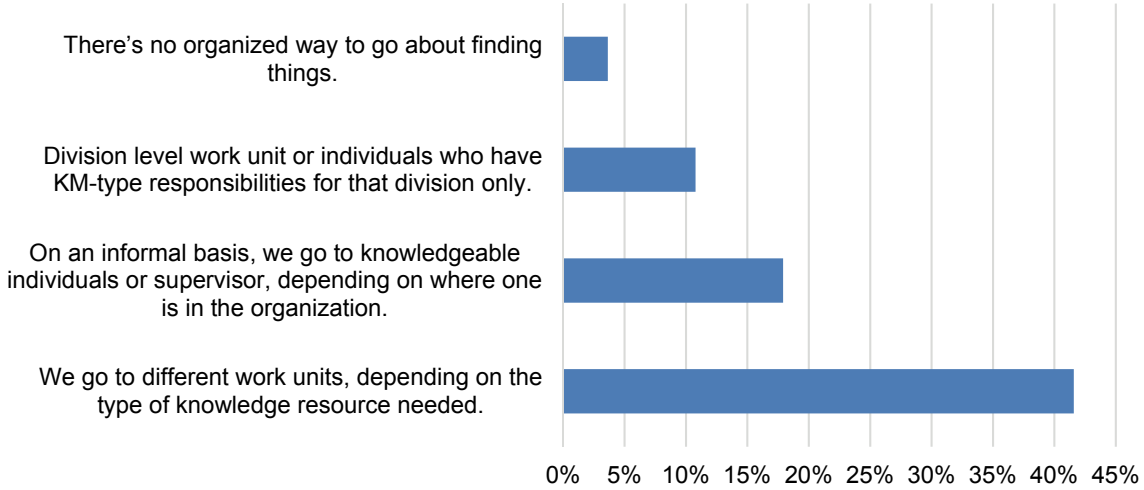
As many as 62% of respondents, to a punctual question about the presence of a centralized and structured archive for knowledge management, answered affirmatively.
Percentage however destined to reach a significant 93% if within the knowledge management practices is considered a local management of it.

Picture 2: Does your company have an active, ongoing KM program, or elements of a program, carried out by certain divisions or work units, but not at the enterprise-wide level?



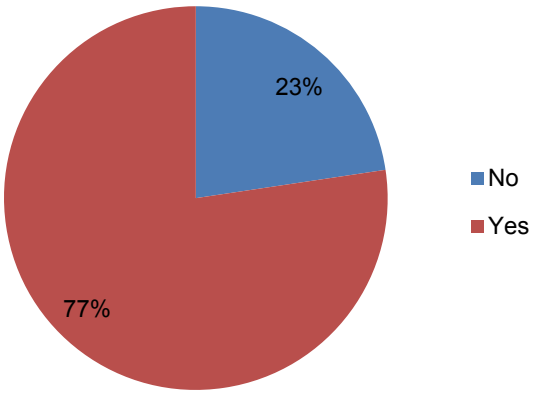
Finally, not considering the percentage of centralized and structured knowledge management, therefore focusing the analysis on a local knowledge management, the point of contact to access the knowledge resulted to be the teams - work units (42%) - and the individuals (18%).

Picture 3: Who or where is your institutional memory point of contact; that is, to whom do people go, or to whom are they referred, if there is a need for historical materials or documents about prior programs or projects?



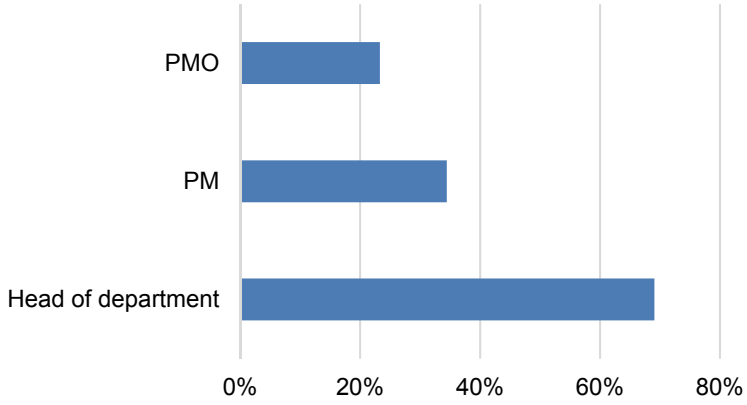
As previously pointed out, 77% of respondents recognize the importance attributed in their company to the management and archiving of knowledge, answering affirmatively to question 4 related to the expectations of the company management regarding the consultation by the employee of the archived knowledge.

Picture 4: Before beginning new projects or programs, does management expect employees to consult prior organizational experience as evidenced in documents, databases, knowledgeable people, and other resources?



Transversely to the size of the company, even in the presence of a centralized and structured knowledge management, the head of department / division is identified as the element exercising authority and leadership in the KM.

Picture 5: Who exercises overall authority over KM practices?



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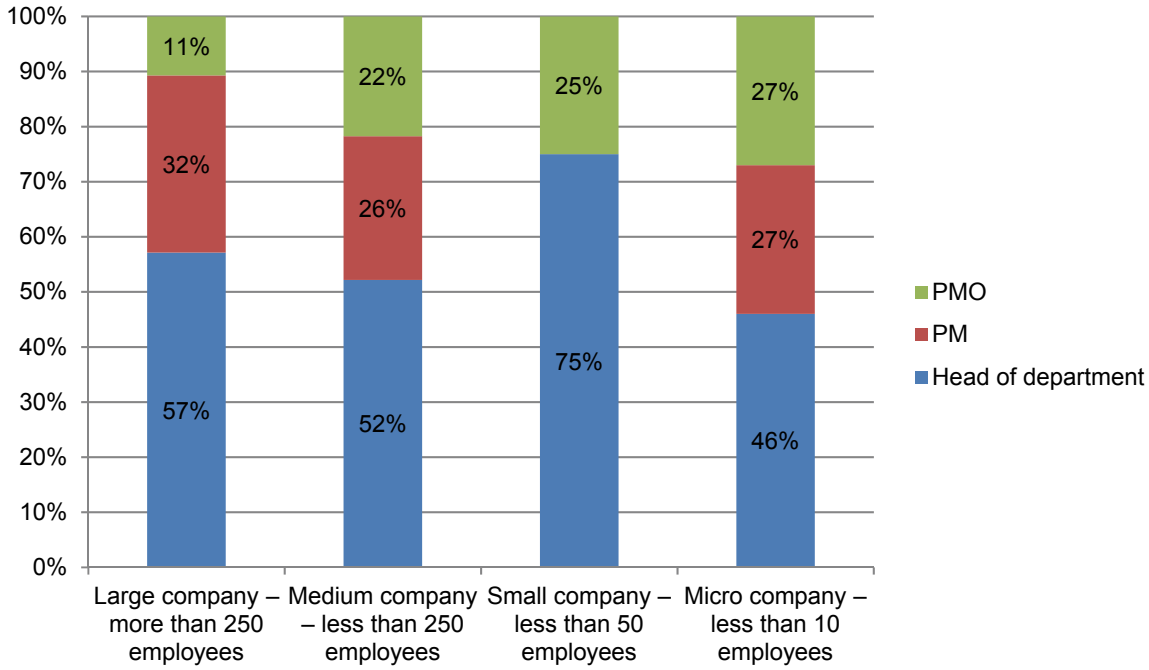
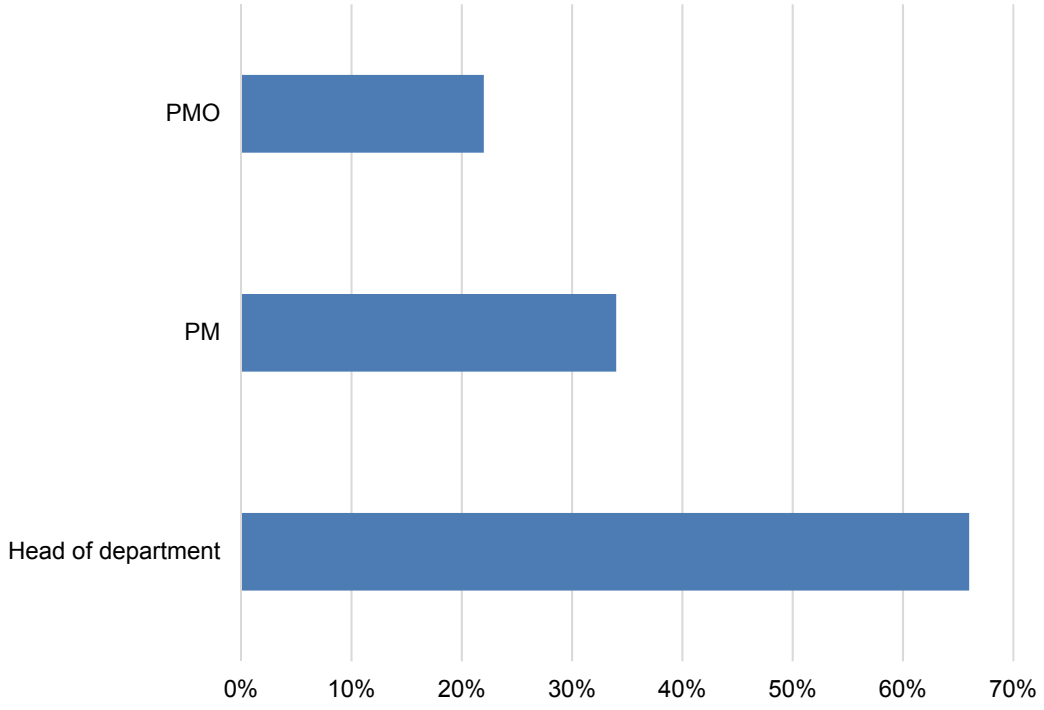


Picture 6: Who exercises the strongest leadership for KM practices?



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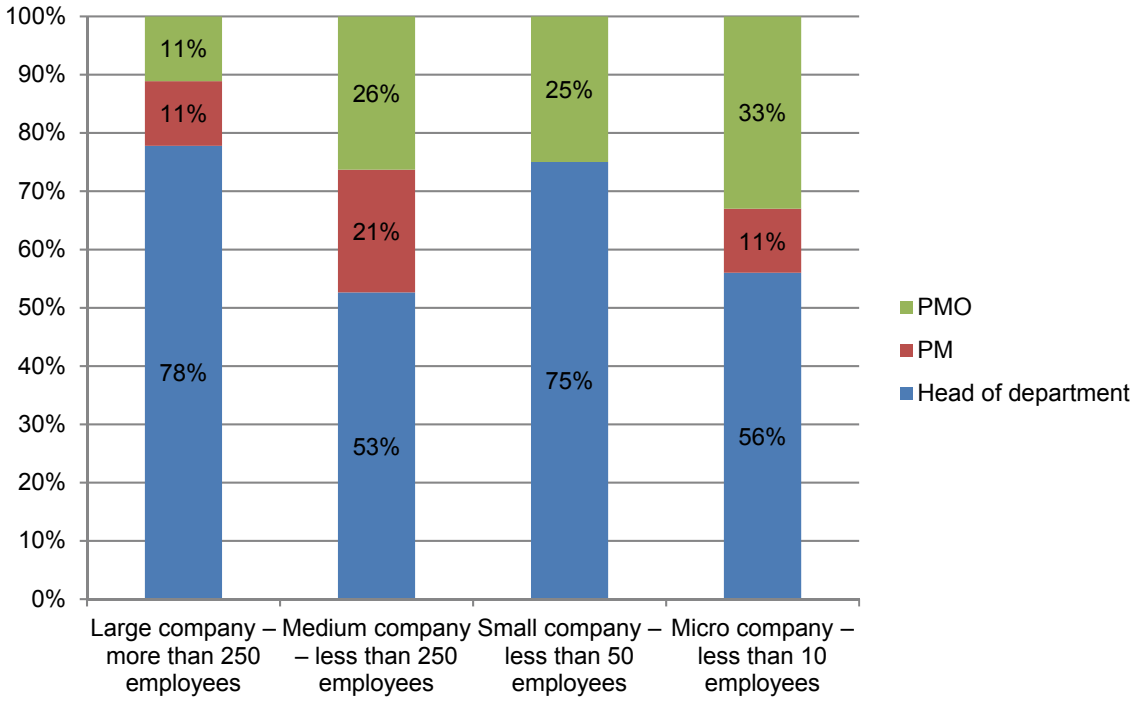
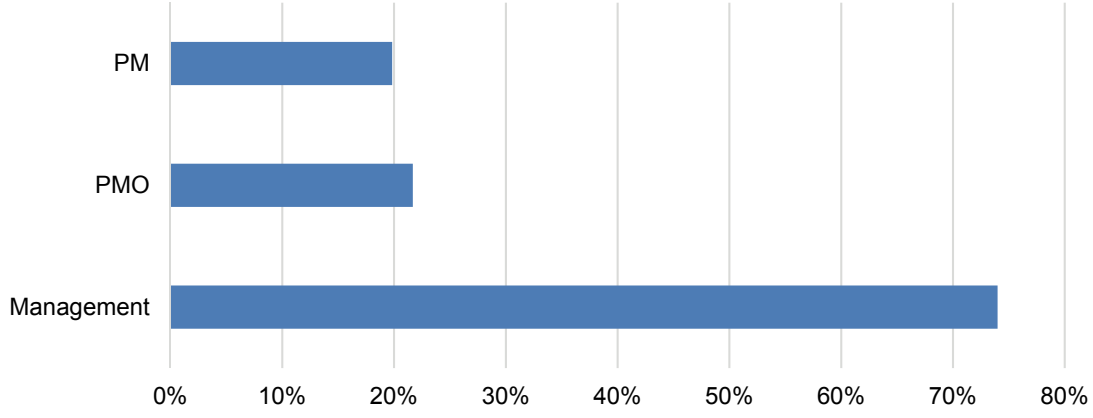


Over 70% of respondents identify the management as the responsible for knowledge management. The data would seem to imply, even in the more structured company realities, the non-definition of the PMO or a questionable assignment of responsibilities related to it.

Picture 7: Who has overall, day-to-day, enterprise-wide responsibility for KM practices?



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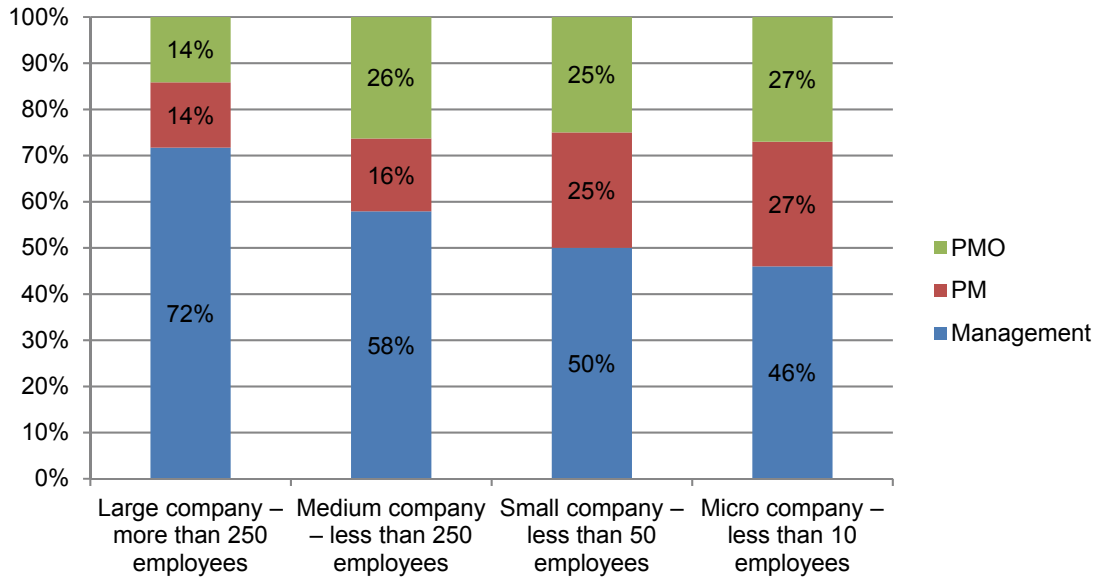
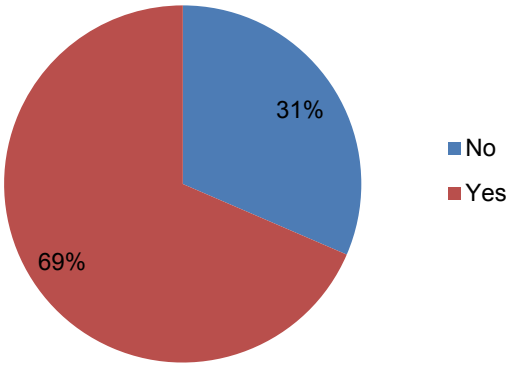


The presence of company procedures / regulations surveyed in question 8 (69%), denotes a congruity with what was surveyed in question 1 - where 62% of the interviewees confirmed the existence of a program for a centralized and structured or local knowledge management.

Picture 8: Do you have written policies or procedures for KM practices?



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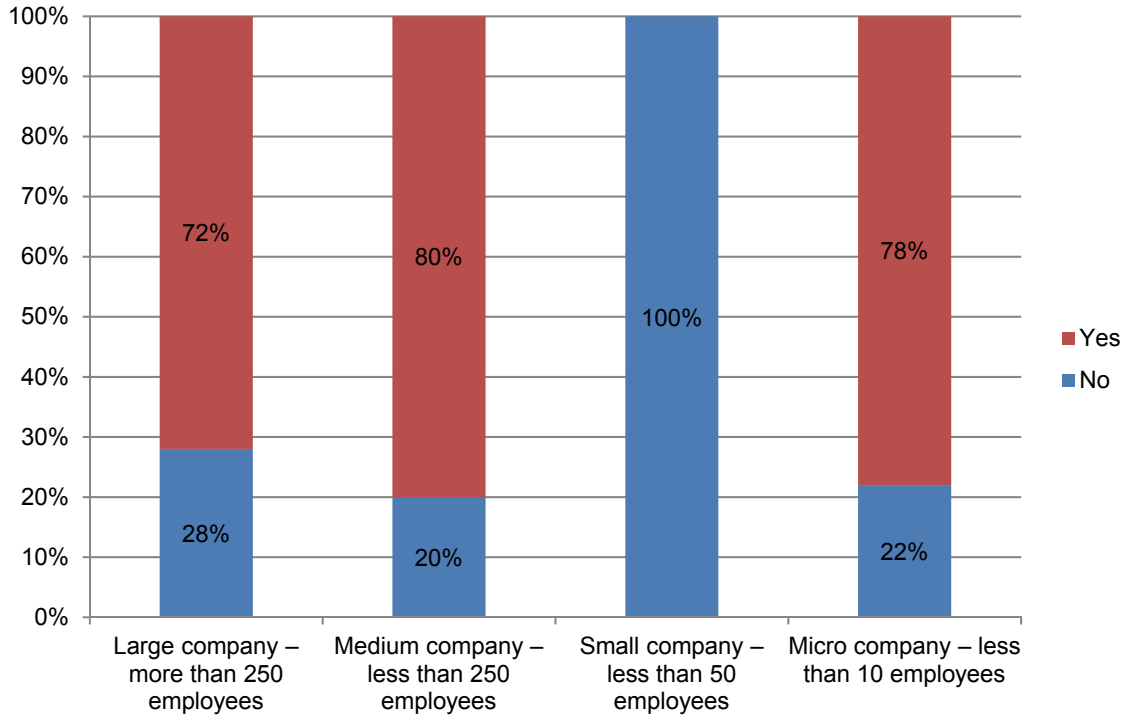
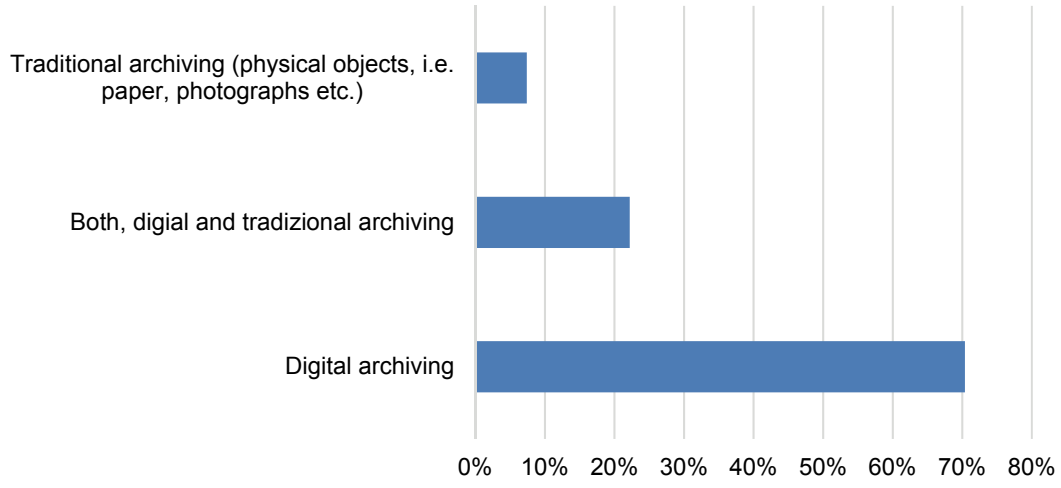


Where knowledge management and archiving being performed, in 7 companies out of 10 it takes place digitally. In less than 10% of cases, it only takes place on traditional media (paper, photographic, etc.).
In line with expectations, question 9 reports about digital archiving performed mainly in large and medium-sized companies and a transition phase which involves both, digital and traditional archiving, in the small enterprises.
On the contrary, a mutually exclusive choice characterizes the micro companies.

Picture 9: How do the KM practices being archived?



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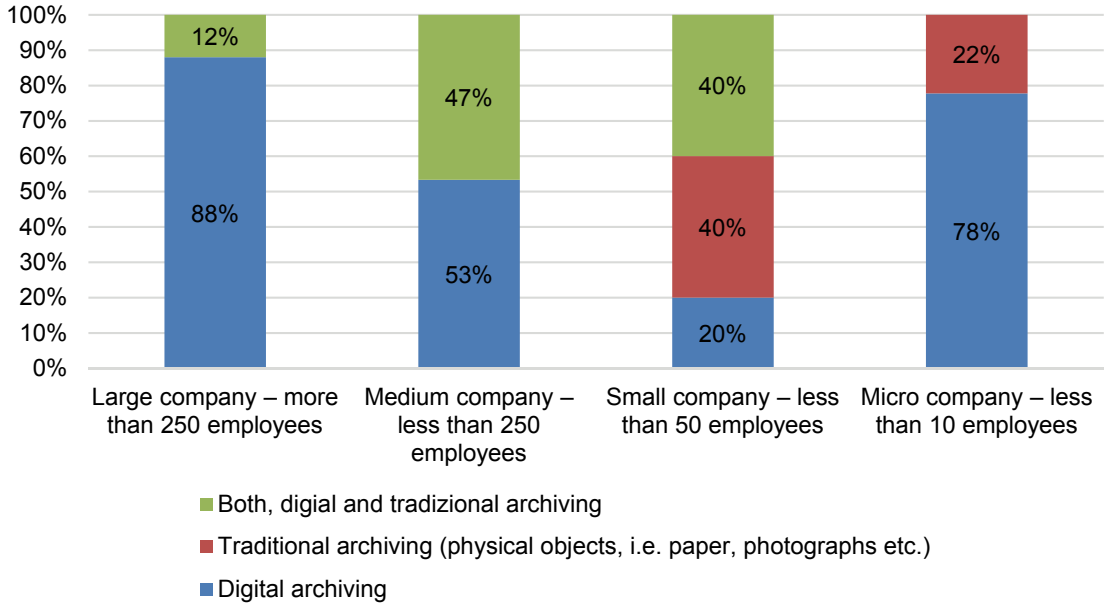
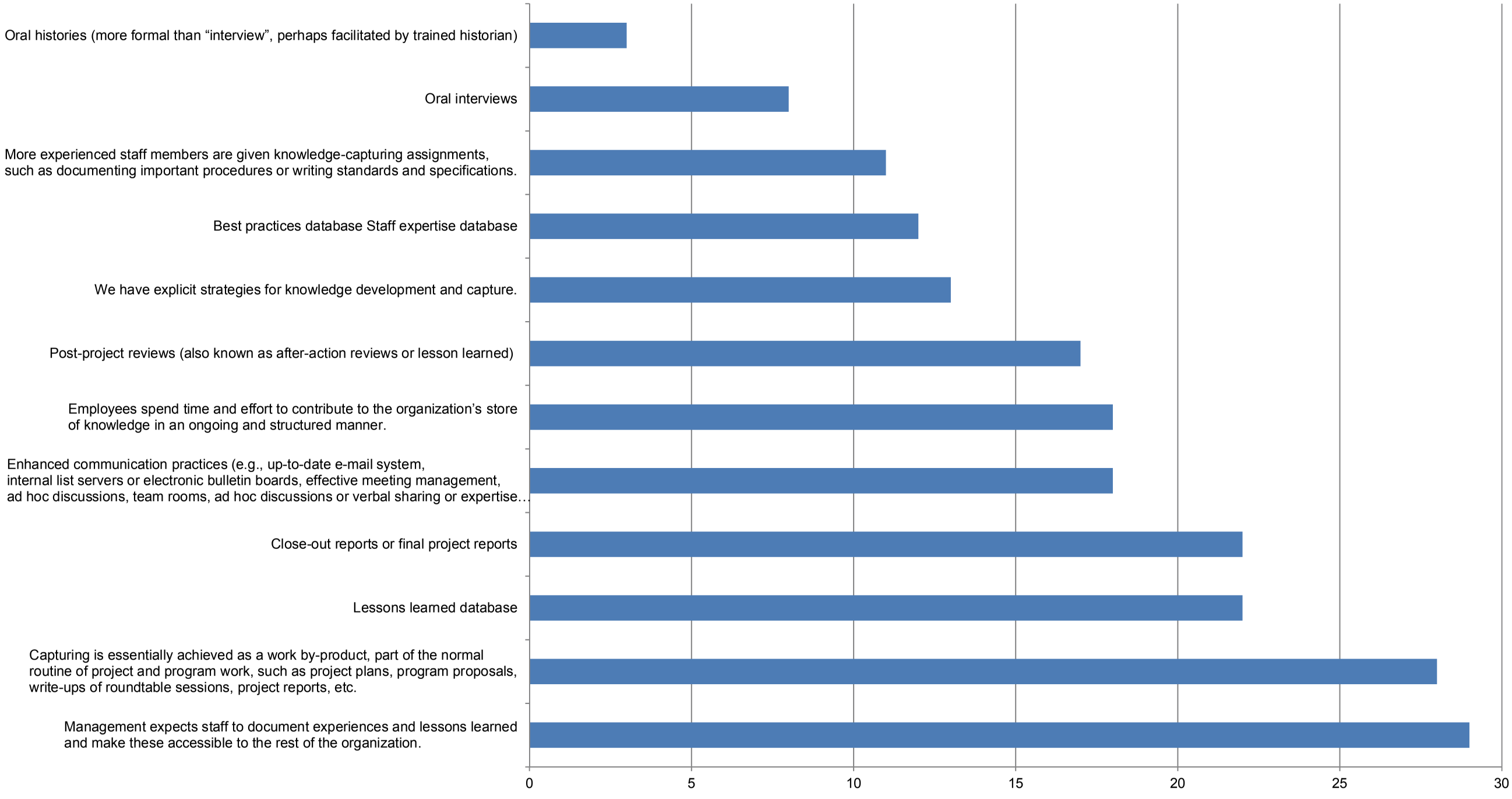
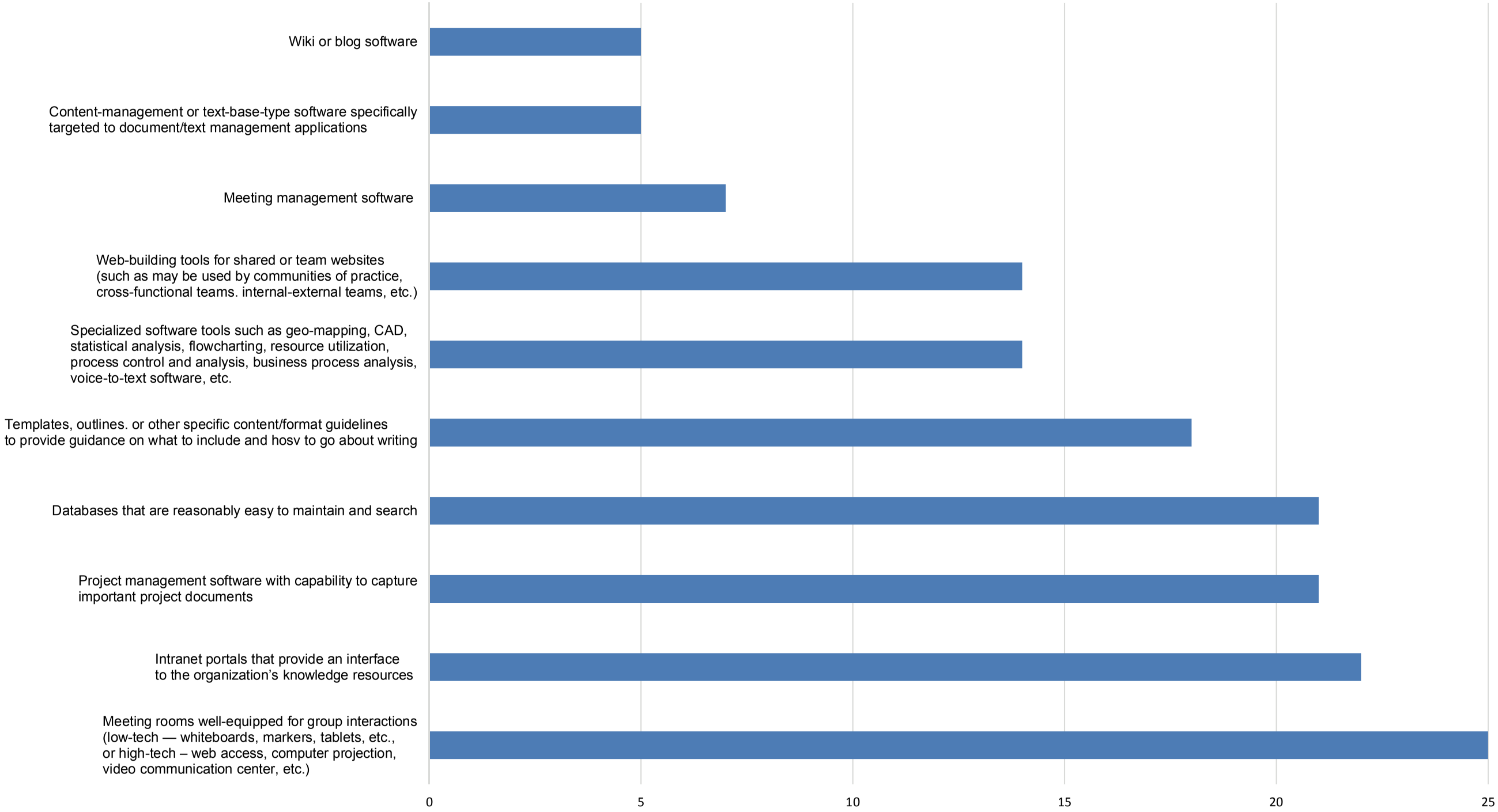


5. KM Practices

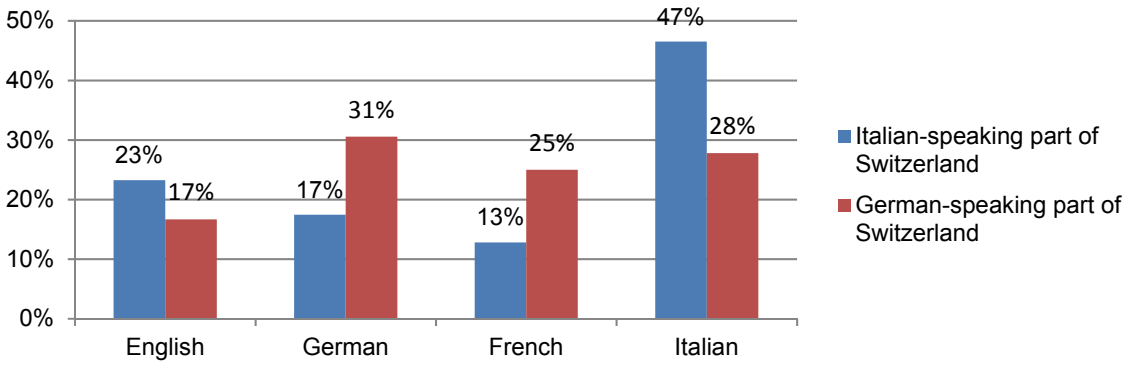
Picture 10: What methods are used to capture knowledge?
(Note: for this synthesis, “capturing” refers to the process of transferring knowledge from employees’ minds into tangible resources, such us text documents, maps, photos, databases, websites, etc.)



Picture 11: What tools are available for knowledge capturing?

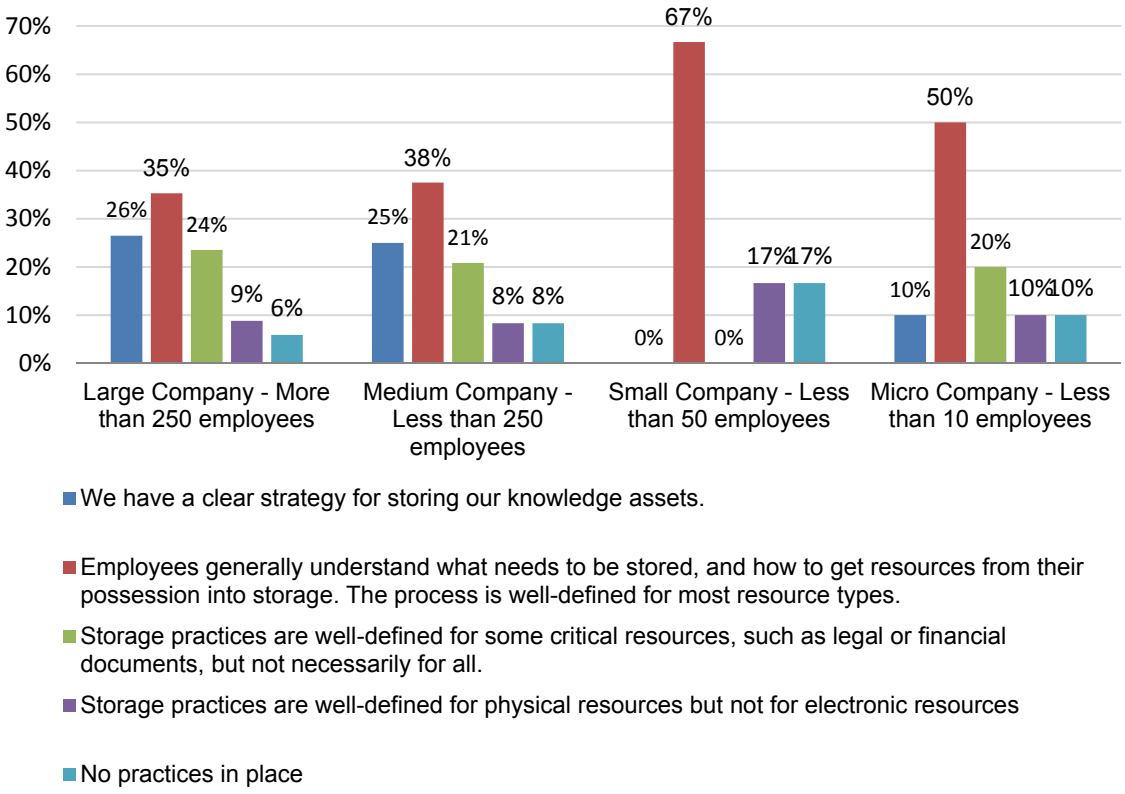


Picture 12: In which language is the knowledge archived?

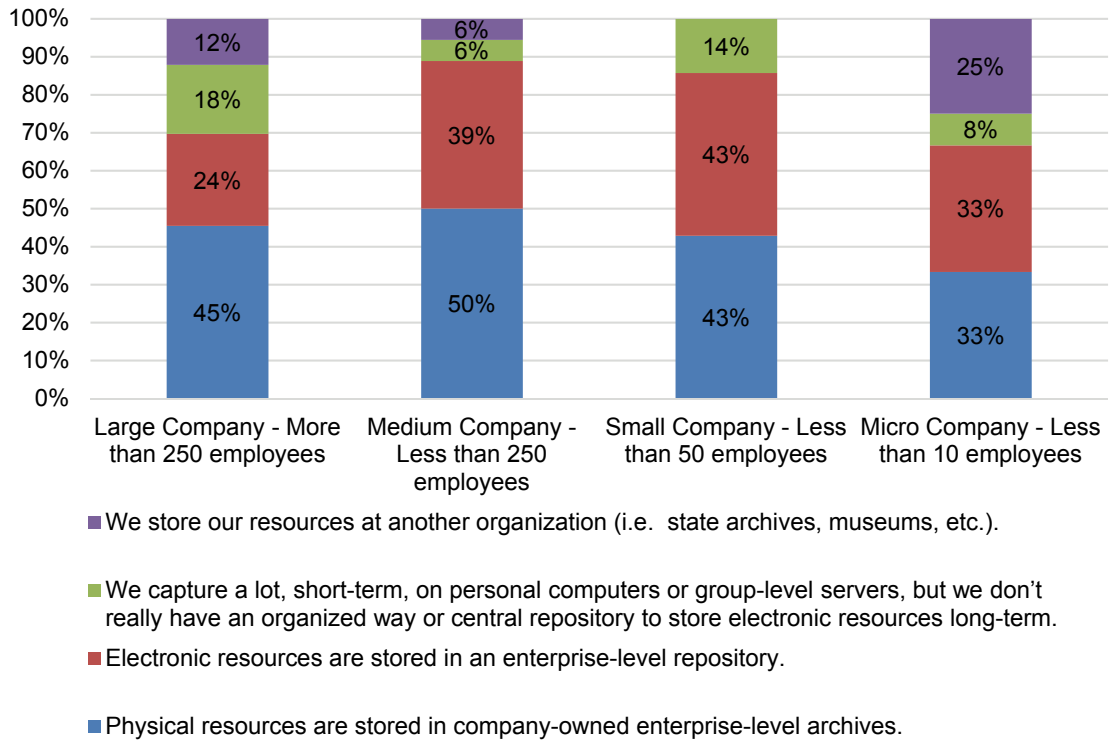


In one company out of two, employees declare that they generally know what needs to be archived and how to do it and that the processes for doing so are in most of the cases well-defined. For small and micro enterprises, the processes are known more than the strategies, which are rarely present (micro company) or even absent (small companies).

Picture 13: Are practices for storing KM resources in place?



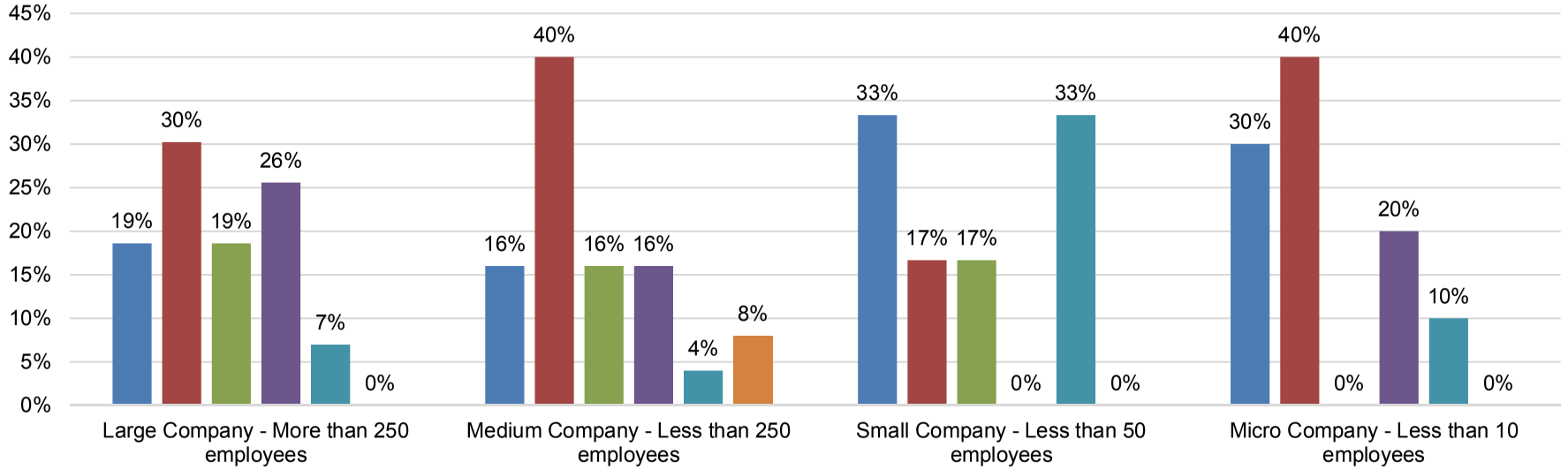
Picture 14: Where are captured resources sored?



What emerges in question 14, is in line with what was surveyed by question 1; one company out of two carries out a structured and centralized archiving and over the 30% of the companies performs at least a local digital archiving.

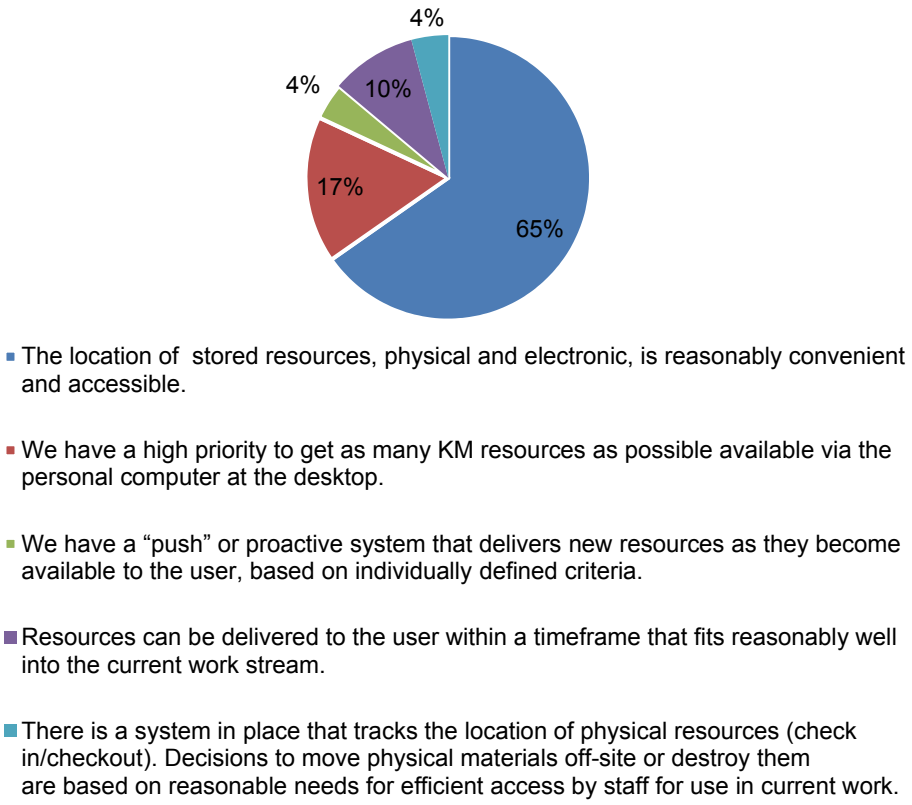
On the other hand, small enterprises outsource in 25% of cases.

Picture 16: How do employees identify and find knowledge resources?



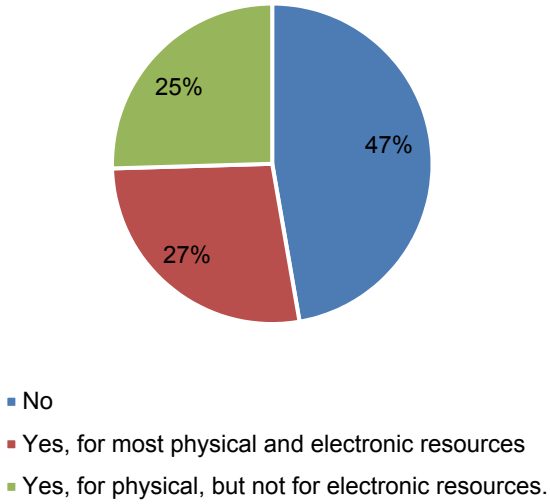
- We search an enterprise-wide database(s), populated with metadata, to find most resources that have been captured, stored, and preserved.
- Our intranet portal ties resources together and provides links or keyword-type index data to help find most resources, electronic or physical.
- We have a plethora of databases, clearinghouse type websites, and portal-type web pages, depending on the division/work group, resource type, or some other criteria. There is no central access point. One has to access each individually.
- We have various finding tools, depending on who is managing the resource (e.g., library, records management. knowledge management, archives, IT, division staff, etc.).
- We have a mixture of databases and manual (hardcopy) indexes.
- We mostly rely on knowledgeable individuals to help us find resources.

Picture 17: Are stored KM resources readily available for use in current work and decision making?



Transversely to the size of the company, in over 65% of cases, the access to the knowledge is reasonably convenient and easy while in 17% of cases, the knowledge is managed locally.

Picture 18: Is there an established practice for destruction of obsolete KM resources?



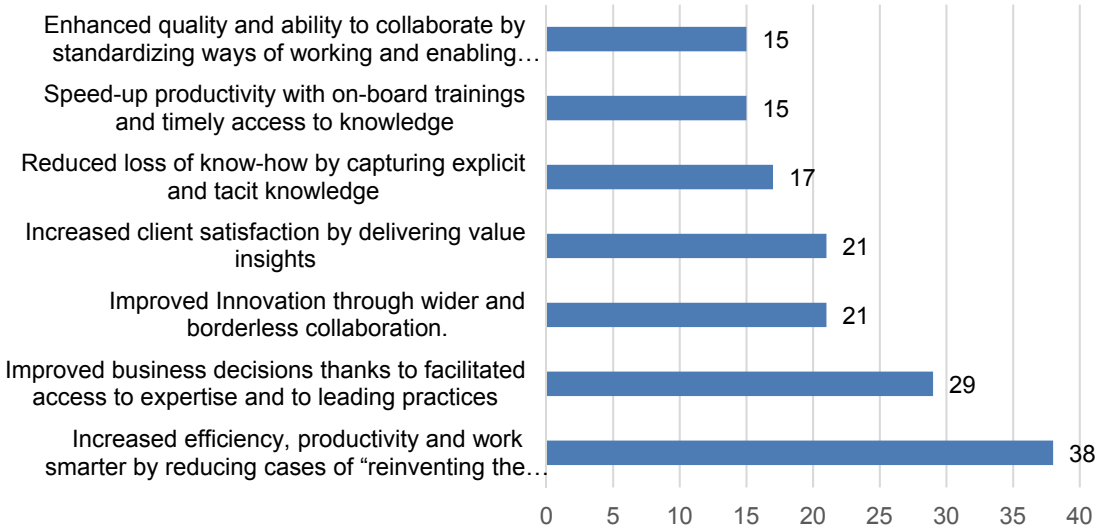
In one company out of two, there is no practice for the disposal of obsolete knowledge.

On the other hand, where it is present, it is more linked to the disposal of resources stored on physical rather than electronic media.

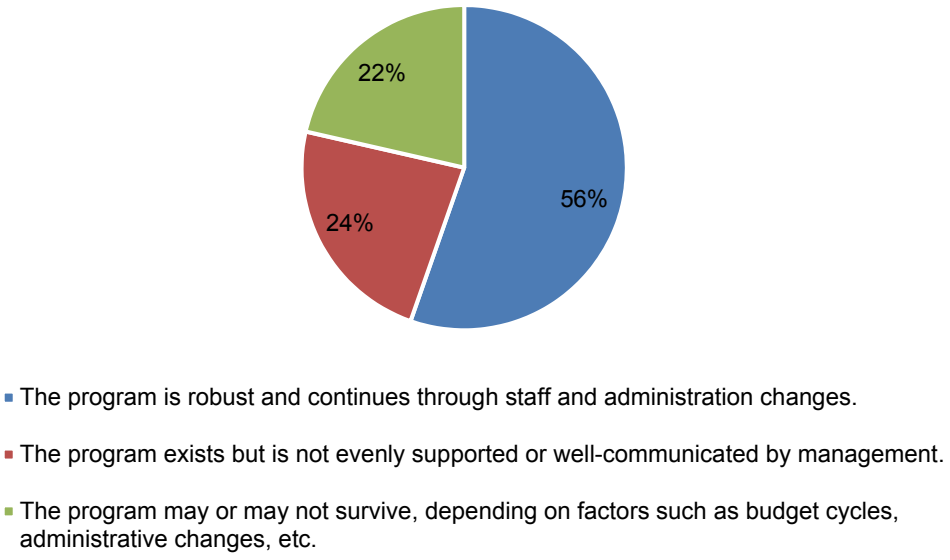
5. KM Effectiveness

For over 7 out of 10 respondents, proper knowledge management translates into greater efficiency, productivity and better work organization. One in two interviewees considers it an element that improves business decisions.

Picture 19: What are the benefits of an effective knowledge management strategy?



Picture 20: Do KM practices enjoy continuity and persistence over time?



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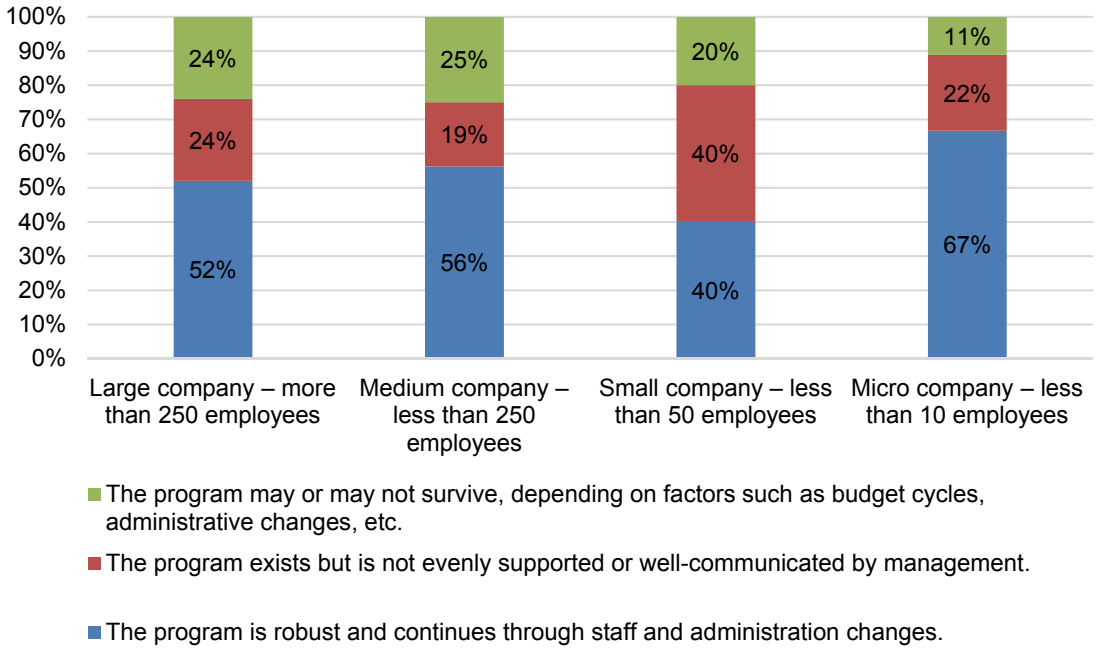
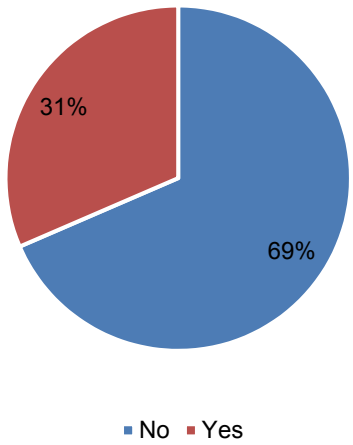


The maturity of Swiss companies shows a gap when KM is probed in terms of continuity and persistence over time. In only 50% of cases, the knowledge management program is robust, well-structured and continuous over time. In the other 50% of cases it exists but is not appropriately supported by the MGMT in terms of sponsorship and continuity of the program.

Picture 21: Does your company use metrics to gauge the value-added and/or effectiveness of the KM program, or to justify costs?



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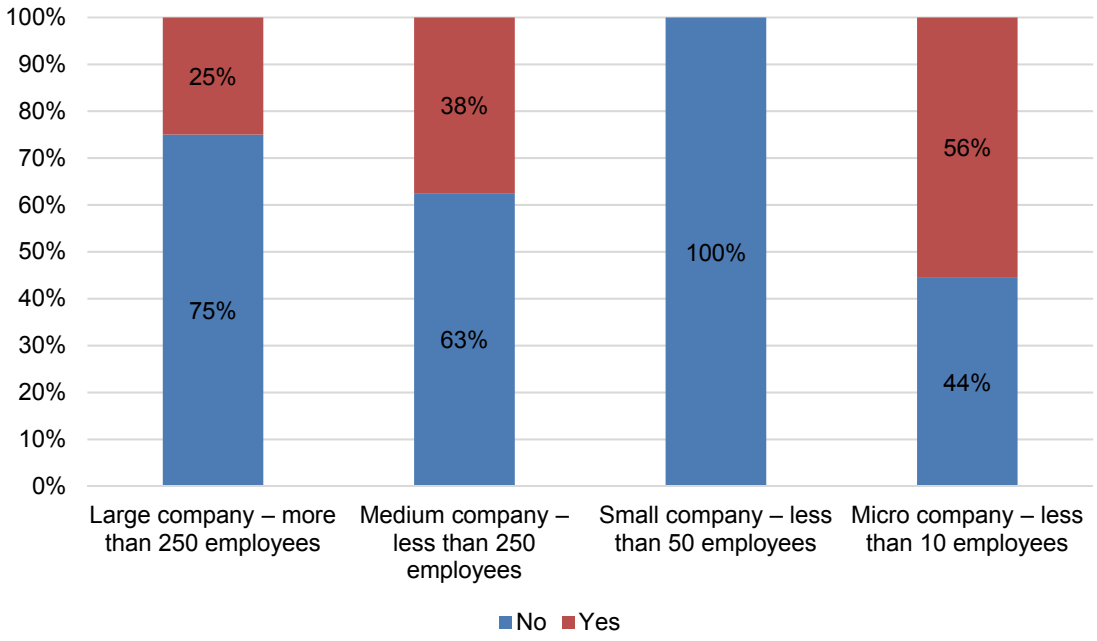

Consequently, what highlighted with question 20, is further reflected in question 21, where is given evidence of a lack of metrics for the evaluation of the benefits related to knowledge management. In seven out of ten companies, there are no metrics that allow its evaluation.

6. CONCLUSION

Nowadays, speak about KM in a company implies a level of maturity that leads to recognize the company itself as a place of creation and accumulation of knowledge, its immaterial resources (knowledge accumulated in the organizational memory or incorporated in human resources) are the key element in the analysis of the determinants of the creation and sustainability of the competitive advantage over time.

The competitive advantage no longer consists only in providing excellent products and services in the most attractive markets but also consists in building, making operational and defending those deep competences that differentiate a company from its competitors.
To succeed in all this, organizations must realize the importance of acquiring those skills that allow them to transform business knowledge into a value, or to make of everything that the company knows, but also what it does not know to know, a competitive advantage.

Knowledge therefore represents the basis on which the specific skills of each company are built, but above all, it is the basis for taking the best decisions at every level and for reducing errors.

Competitively, what makes the difference is having an innovative knowledge management system adapted to the characteristics of the company itself.
Generating, capturing, not dispersing and operating knowledge to offer value to the customer is an essential requirement for building and sustaining competitive advantage. However, the only introduction of a management system to nothing would be worth it if it were not accompanied by a cultural change that involves every aspect of the organization. These changes must be simultaneous and interconnected.
It is therefore essential for a cultural maturation of employees towards the exchange and dissemination of knowledge, with the aim of creating a shared vision. Employee motivation for change is the key to the success of a KM process. Internal communication, rewarding systems, human resources management and working practices are the best tools to create a learning organization and to motivate employees, encouraging them to take documents to be updated and periodically checked from the company intranet.

Management have to try to eliminate the obstacles to the change - posed by those who consider it risky because of uncertainty - through the explanation of the benefits obtainable by the entire organization and by those who make it up; it has also to promote an innovative knowledge sharing culture through direct actions, staff incentives, project financing and investments in technologies aimed making people work together.

With these guidelines and with the awareness of the fundamental role played by the knowledge in the creation and maintenance of competitive advantage, we have explored the reality of Switzerland, assessing the maturity of companies respect to the implementation of practices for knowledge management.

The picture that emerged has shown a transversal awareness of employees and MGMT, regarding the importance of generating, capturing and managing knowledge, aimed to provide value added to customer.

Indeed, KM has turned out to be a current topic in all the surveyed realities, large, medium, small and micro enterprise.

In large and medium-sized enterprise, one of the two pre-conditions linked to a successful implementation of knowledge management, namely that of possessing an innovative knowledge management system adapted to the characteristics of the company, was fulfilled or, as in medium-sized companies, closed to a complete fulfillment. Large and medium-sized companies have indeed turned out to be appropriately equipped from a technological point of view. As expected, small and micro companies, suffer due to conservative company policies, showing therefore a certain delay, especially in technological terms.
Small companies, even more than micro-companies, have shown a bigger delay on the issue of the existence of an appropriate knowledge management system in the company.

However, in all the surveyed companies, a full awareness about the cultural shift needed within the organization to make effective tools and policies for knowledge management, has emerged.

Swiss productive fabric seems to have understood, even at level of small and micro enterprises, the centrality of the topic related to the knowledge management.

The cultural shift in these realities is indeed ahead respect the technological one.
In large and medium-sized enterprises, the level of acquired corporate maturity is such that it determines the shift of the focus in terms of knowledge management, from the implementation of a KM policy, to the identification of metrics that allow an appropriate assessment of the benefits related to it.

Knowledge Management to make better decisions, reduce errors and increase efficiency.

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