

# Knowledge sharing practices in CEMS - global alliance of management education

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## Abstract

*This paper investigates the extent and type of knowledge sharing practices within the partner universities of the CEMS - Global Alliance of Management Education. An overview of knowledge sharing is followed by a discussion highlighting the changing role of the contemporary university, which goes beyond the traditional roles of teaching and conducting primary research to incorporate the high demand for science, technology, and innovation as the foundations of a knowledge-based economy. Universities are increasingly becoming business oriented, which is a change reflected in the development of the CEMS postgraduate degree program. This prestigious program provides an opportunity to study university knowledge sharing using the results of a questionnaire sent to CEMS partner universities. The research findings indicate that knowledge sharing within CEMS takes diverse forms, and is not solely confined to channels such as staff committees and faculty meetings. Student participation is very important, especially in the form of Annual Events which foster close links with the business world. Interdisciplinary links supported by teamwork are also important.*

**Keywords:** knowledge sharing, knowledge dissemination, modern universities, corporate sector.

## Introduction

Universities are knowledge based organizations with a crucial role in the development and management of that knowledge for both public and private organizations (Sizer, 2001). Knowledge may be abstract and complex, but is nonetheless critical to the development of the economy (Ismail & Chua, 2005).

Much of the research conducted about universities and knowledge management reflects on the ways in which universities differ from other working environments and the consequences for how knowledge might be managed and shared (Fullwood, Rowley, & Delbridge, 2013). Many commentators recognize the importance of accommodating specific organizational cultures in designing knowledge management strategies and more specifically in seeking to promote and facilitate knowledge sharing (Hislop, 2009; McDermott & O'Dell, 2001). Liebowitz (2008) suggested that any knowledge management initiative must seek to accommodate the existing culture.

Various commentators have discussed the individualistic nature of university research (Tippins, 2003), the “idiosyncratic and complex” nature of academic departments (Lee, 2007, p. 42), and loyalty to discipline rather than organization (Cronin, 2000). There has, however, been little empirical research devoted to the complexity of partnerships or knowledge sharing practices with

businesses or other universities. Instead, much existing research is devoted to knowledge management and knowledge sharing in commercial environments, and there is also a growing interest in knowledge management in public sector organizations (Brown & Brudney, 2003; Sandhu, Jain, & Ahmad, 2011). Due to the globalization of education, some researchers focus on the role of knowledge management in successful global enterprises (Boyle, McDonnell, Mitchell, & Nicholas, 2012). Given the overarching importance of knowledge to the university sector, the objective of this paper is to investigate the extent and type of knowledge sharing practices amongst universities using data collected from the CEMS - Global Alliance of Management Education.

The two research questions are as follows:

- 1) What is the extent of knowledge sharing within partner universities associated in CEMS?
- 2) In which form knowledge sharing practices are taking place within CEMS?

The remainder of the paper is structured as follows. The first section provides a literature review, followed by the presentation of the changing role of the modern university. Second., there is a discussion on channels by which universities engage in knowledge sharing. Third., the background information about CEMS is provided and its postgraduate program. Fourth, the research methodology is described along with the analyses of the research findings.. The final section provides conclusions and recommendations for further research.

### **Literature review**

Knowledge is a crucial asset to individuals as well as enterprises wanting to succeed in an increasingly changing environment (Abdel-Aziz & Bontis, 2010, p. 105; Aktharsha, 2011; Boateng, Dzandu, & Tang, 2014; Cohen, 2013; Drucker, 2002; Kowalczyk & Nogalski, 2007; Oinas-Kukkonen, 2008; Paliszkiwicz & Koohang, 2013, Tsai, Tsai, Li, & Lin, 2012; Ziemba, 2013;).

Knowledge sharing is defined as exchanging experiences, thoughts or understandings with an expectation of gaining further knowledge. This implies reciprocity among people wanting to increase their knowledge base (Gouldner, 1960) until this sharing becomes a norm (Rousseau, 1989). Knowledge sharing can also be seen as the communication of the “know-how” and “know-who” (Hawamdeh, 2003). At a fundamental level, knowledge-sharing takes place between at least two parties, or actors, (Lee & Hawamdeh, 2002). It occurs when an individual is willing to assist as well as to learn from others in the development of new competencies. The sharers of knowledge should ideally share it fully rather than selectively (Goh, 2002). The effectiveness of knowledge sharing will depend on many factors, including communication skills, absorptive capacity; documentation, type of communication (e.g. unmediated face-to-face or technology mediated face-to-face) and the organizational environment.

By uniting individuals’ knowledge, skills, and experience, knowledge sharing can increase an organization’s ability to solve problems, create further knowledge, and avoid repeating mistakes (Chow et al., 2008; Collins & Smith, 2006; Robinson et al., 2006). Organizations attain competitive advantages by encouraging and promoting knowledge sharing (Liebowitz, 2001). Thus, knowledge sharing is an important factor in organizational success, and is even more

desirable in knowledge-intensive organizations like universities. Such organizations need to share knowledge held by employees if they are to gain the most from their intellectual capital and compete effectively in the global marketplace (Swart & Kinnie, 2003). In the same vein, Steyn (2004) argued that to properly harness the power of knowledge in higher education; management should give an equal emphasis to people, technology, and structures. There is also a need for the careful transmission and absorption by the sender and potential receiver respectively, for such knowledge sharing to be effective (Hawamdeh, 2003).

Knowledge sharing is not an end itself, but a means to an end. A number of studies (Petrash, 1996; Gupta & Govindarajan, 2000; Olivera, 2000) support the view that knowledge sharing results in improved organizational effectiveness. The outcome of knowledge sharing is the creation of new knowledge and innovation that enhances organizational performance and business opportunities (Hawamdeh, 2003; Lin, 2006; 2008; Nonaka & Takeuchi, 1995; Yi, 2009).

Finally, organizations sometimes make deliberate efforts to encourage employees to share knowledge, which enables the organization to maintain its role as an intelligent organization in a technologically sophisticated environment (Jones, 2002).

### **The changing role of modern universities**

The role of universities since the Middle Ages was to deliver and share knowledge with students, a relatively straightforward process. But nowadays the role of universities has changed dramatically to encompass wider functions and responsibilities. It is expected that the modern university should play an active role in the life of not only students, but a much wider group of stakeholders including public organizations and private sector companies.

The positive role of the higher education sector in building knowledge-based economies is strongly promoted by international organizations such as the World Bank, because investment in quality training and higher education generates major external benefits that are critical for knowledge-driven economic and social development (Ramady, 2010).

“Today, the role of the university goes beyond teaching and conducting primary research. It incorporates the high demand for science, technology, and innovation as the foundations of a knowledge-based economy” (Salem, 2014, p. 1049). Universities are expected to move closer to an increasingly business oriented model that will prepare students to enter the business world, especially within the global context (Godin, 2004). Thus, universities strategically collaborate with business as well as the public sector with the aim of exchanging knowledge to increase competitiveness. Building close links with the business world is also a chance for promising students to be noticed (or headhunted) by managers.

Given that universities are increasingly viewed as key drivers of innovation and major agents of economic growth, many policymakers view them as “knowledge factories” with largely untapped reservoirs of potentially commercializable knowledge (Wolfe & Bramwell, 2008). Therefore the model of a modern university has evolved substantially, in line with the growing recognition of knowledge as an intangible factor determining economic growth and the related

rise of new concepts of knowledge production and innovation (Schillaci & Nicotra, 2010). Universities should be a melting pot, where all contacts are possible, a place where cultural and social capital is built (Symonds, 2014).

A key form of research commercialization is the human capital produced by universities. Students who become employed within local businesses and those who start up their own businesses are signs of this knowledge transfer. Recent research has found that graduate startups are now at least, of the order of magnitude as academic startups. In the recent past, governments have put pressure on universities by requiring them to conduct more applied research. These policy changes are characterized by three major trends: 1) the linking of government funding for academic research with economic policy, 2) the development of more long-term relationships between firms and academic researchers, and 3) the direct participation of universities in commercializing research (Harrison, Leitch, & McMullan, 2013). As a result, while universities continue to fulfill their traditional roles of performing primary research and training highly qualified people, they have expanded their basic research activities to include more applied research of greater relevance to industry and to diffuse technical knowledge and provide technical support to industry. This shift reflects changing government expectations that public investments in basic research should produce a measurable economic return (Wolfe, 2005).

Consequently, universities are more ready to interact with non-academic partners (Estabrooks, Norton, Birdsell, Newon, Adewale, & Thornley, 2008; Nagle, 2007), particularly in regional collaborations spurred by the advantages of physical and social proximity (Gunasekara, 2006). Universities seek more contact with industry in order to commercialize research outputs, access complementary skills and profit from interactive learning processes. Conversely, technology-driven firms recognize universities as important sources of knowledge that enhance their competitiveness and innovation (Cohen, Nelson & Walsh, 2002; Freel 2003; Laursen & Salter 2004; Weijnen & Bowmans 2006; Bekkers & Bodas Freitas 2008; van Beers et al. 2008; Eom & Lee 2010).

### **How universities share knowledge**

A high quality of education is widely seen as a prerequisite for the development of a knowledge-based economy. Institutions of higher education are regarded as the main cell of growth, around which can form the centers of technology, business and commerce. Creating intellectual potential within a region, universities generate knowledge and new technologies along with an innovative culture. This largely depends on the intellectual capital of their staff as well as an ability to grow and survive in a dynamic environment. The primary "product" of universities is knowledge which is "sold" in the form of educational services, research results, and expertise.

These fundamental university activities include:

- Training and preparation of students, according to the latest performance standards of certain professions
- Conducting scientific research
- Preparing teaching staff to deliver training to supplement the knowledge of professional people (in the form of short courses or postgraduate studies)

- Developing and disseminating technological progress

Within these activities, the need to share knowledge is not just desirable but essential for a knowledge-based organization wanting to compete effectively in the global marketplace (Steyn, 2004), and the pressure for this from the public and industry is becoming stronger (Hendzel 2005).

As previously noted, the role of universities is not limited to, providing knowledge to students. Knowledge management is gaining wider acceptance in the field of education (Petrides & Nodine, 2003). The process of knowledge sharing is an important aspect of this management, and universities in developed countries have received funding to implement knowledge management practices. For example, the National Centre of Science (NCN) is an organization promoting knowledge sharing between academic staff, and projects with an interdisciplinary team and content have higher chances of success.

For effective knowledge-sharing, it is important to create interdisciplinary teams, a structure not widely utilized in the traditional organization of modern universities. Wissema (2005) proposed that instead of the current situation, the roles should be reversed, where departments are the organizational axis and research teams play the coordinating role.

In summary, knowledge is an essential resource which a university must manage effectively, including the sharing of knowledge. In order to meet the numerous demands of the modern global environment, higher education organizations must become open and flexible, with an innovative organizational culture created in part by its staff and students.

### **CEMS - global alliance of management education**

CEMS - Global Alliance in Management Education was established by four European universities in 1988. The mission of the organization is to form a global alliance of academic and corporate institutions dedicated to educating and preparing future generations of global business leaders to enter into a multilingual, multicultural and interconnected business world. The flagship product of CEMS is the Master in International Management (MIM) program. The CEMS-MIM is intended to provide students with an opportunity to travel between various countries and partner schools, thus widening their national horizons.

Partnership between companies and universities is a unique feature of the CEMS, providing potential for networking and international cooperation. The partnership materializes in the joint development and teaching of the CEMS-MIM, which represents both a platform for academics and practitioners for knowledge creating cooperation in the field of management. In addition, this is a unique learning opportunity for students by giving them access to innovative course content, relevant international exposure and applied project work.<sup>1</sup>

More than 70 companies are involved in the CEMS-MIM program, among them are big players such as McKinsey and Procter & Gamble. They provide students with practical knowledge and in turn have an opportunity to recruit graduates directly from the Master's program. The CEMS

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<sup>1</sup> University Guideline for the CEMS Master's in International Management, internal CEMS materials.

network is a response to the complexity of managing in today's global economic landscape, where knowledge has to be gathered from universities worldwide.

The CEMS Master in International Management offers the best international students the theoretical and practical knowledge needed to succeed in an international business environment. Designed by academics and business leaders, the program combines academic education with business expertise to offer valuable insights into best management practices. The one-year program contains a 10-week internship abroad to prepare students for international careers. CEMS Executive Director, Roland Siegers explains "The more you discover mobility when you are young, the more you will be mobile later in your life." A distinctive feature of the program is that students are required to solve interdisciplinary problems and encouraged to take a critical approach in lectures, discussions and projects.

### **Research methodology and findings**

First, an in depth literature review was conducted to explore the concepts of knowledge sharing and the changing role of modern universities. Second, an analysis of the CEMS Alliance was carried out based on searching CEMS web pages and CEMS Universities web pages. Third, a questionnaire was developed and pilot tested (by the Academic Director and Programme Manager at the Warsaw School of Economics). The pilot testing resulted in improvements to some questions and new insights into the issue of open-ended questions versus closed questions. Fourth, the questionnaire was sent during the period January-March 2014 to all project managers of the 27 CEMS partner universities. Email addresses were obtained from the Internet page of the CEMS<sup>2</sup> and a database of CEMS academic directors was created. Two universities prominent in their research and teaching activities, HEC Paris and Boconii, declined to take part in the research. Responses were obtained from 17 universities, with a very reasonable 62% response rate (in some cases the partner universities preferred to answer questions online using Skype). Finally the questionnaire contained 16 questions, but four of them related to knowledge sharing practices, was analyzed to elicit findings and draw conclusions.

Given that knowledge sharing is a key part of the CEMS philosophy, it is not surprising that all partner universities answered yes to the question: Do you share knowledge with other Universities (regarding your best practices, ideas and so on)? .

Eighty eight percent of the respondents identified academic committee meetings and annual events as the most important (see Figure 1) forms of sharing knowledge.

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<sup>2</sup> <http://www.cems.org/academic-members/our-members/aalto-university-school-business>, retrieved January 30, 2014.



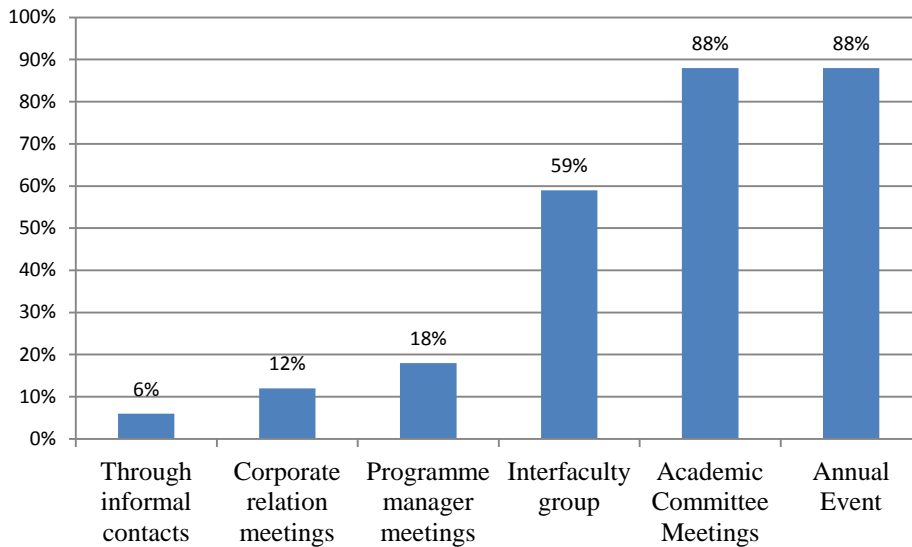


Figure. 1: Forms of knowledge sharing

There are five permanent committees: academic, quality assurance, corporate partners, globalization and membership, and research and doctoral education. These committees convene on a formal basis, with certain decisions and announcements made at the Plenary Session concerning academic and corporate affairs.

On the other hand the annual event is an occasion to meet the entire CEMS community, including students, alumni, corporate partners, social partners, and academics. The annual event includes plenary meetings, workshops, panel debates and dinners, and concludes with the graduation ceremony. Different forms of working in groups foster knowledge sharing. The annual events are organized on a rotating basis by member schools to enable the rest of the CEMS community to experience the host institution's local customs and surroundings within the unique international environment that characterizes the CEMS.

Students and alumni report on the year's activities, with changes to their respective boards made official over the course of the event<sup>3</sup>. This is a valuable occasion to share knowledge in the form of best practices. The importance of the annual event in knowledge sharing is consistent with (Weinberg, 2015) who argued that to enable knowledge sharing in organizations, members must have access to an arena in which to engage in interpersonal dialogues to share their experiences and knowledge with one another. Work team interactions also provide a context in which individuals can engage in such dialogue (Engström, 2003), as they involve a group of individuals embedded in a larger social system who work interdependently to perform tasks (Guzzo & Dickson, 1996). Work teams represent systems of interacting workers to form what Backström (2004) terms *collective learning*.

<sup>3</sup> <http://www.cems.org/events-services/annual-events>, retrieved February 10, 2015.

Interfaculty group meetings (59%) are also important. For team members who view knowledge as something that develops over time, the extensive personal contact and trust that develop as they work with their teammates over multiple occasions and across time will increase the effectiveness of knowledge transfer within that team (Hu & Randel, 2014).

Only 6% of academic directors reported sharing knowledge through informal contacts, mainly face to face. Interestingly, the program manager at the Warsaw School of Economics noted the importance of peer review, stating that the process is a form of knowledge sharing because reviewers sometimes learn more than the assessed University.

Other forms of knowledge sharing (see Figure 2) include student initiatives (59%) followed by joint research projects (53%). The importance of student initiatives is a very interesting and positive result, suggesting that students are aware that by being active during their student life, they will learn more and also have a greater chance of being approached by companies seeking future managers. Students also share information with each other about their internship experience through CEMS clubs that are located in each partner university.

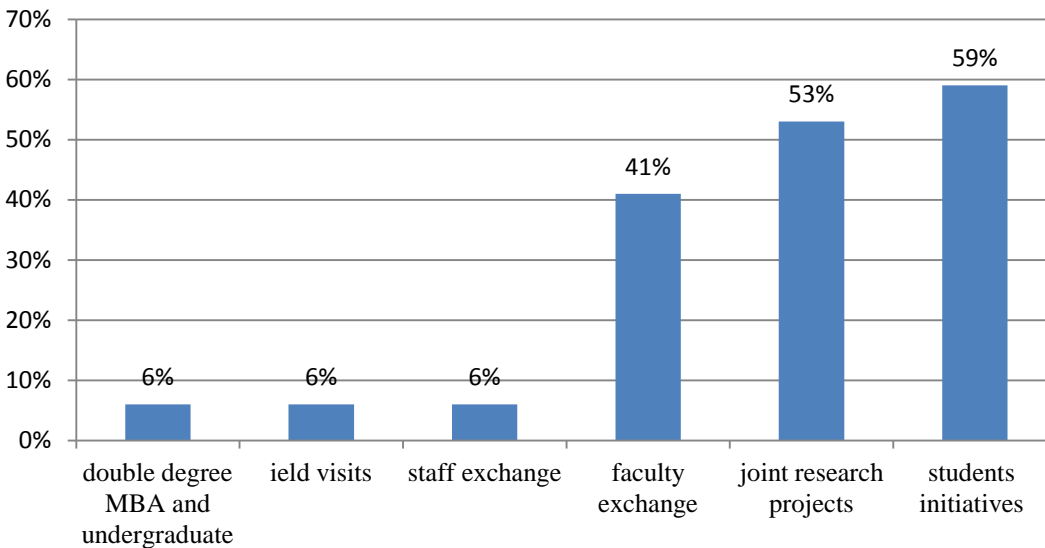


Figure 2: Other initiatives in which your University is involved

Given that best practices are shared amongst partner institutions, this prompts the further question of what best practices are introduced across the whole University and applied to other programs (see Figure 3). The results indicated that the most important was the business project organization (82%), followed by teaching quality control systems (65%). This suggests that one aspect of knowledge sharing is the process of bridging performance variations between organizational subunits (Davenport & Prusak, 1998; Szulanski, 1996, 2003). Only 6% of respondents highlighted student services, while 12% stated that everything necessary already existed in their university.



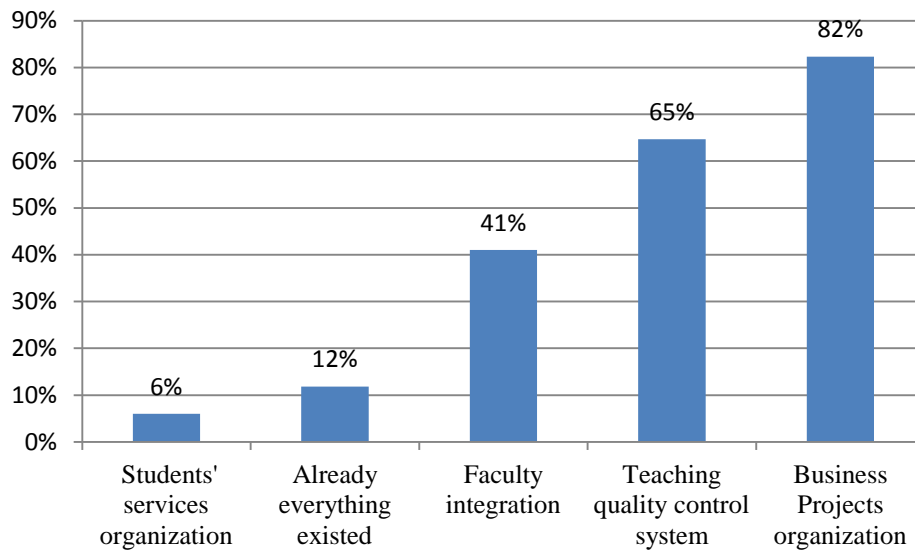


Figure 3: Best practices introduced across the university

One university noted that the CEMS-MIM Program was a key factor in its internationalization strategy. This is formalized through target agreements both with the Ministry of Education and its Departments, and documented through extensive internal and external PR efforts around CEMS application and program start. This is as an example to other universities by showing the strategic role of the CEMS program.

### **Discussion**

CEMS is an association of universities which offers students unique learning possibilities. Universities cooperate in terms of building their masters programs, but also compete for students by attracting them to study in a foreign university. Therefore, simultaneous cooperation and competition is a fundamental aspect of knowledge sharing (Loebecke et al., 1999).

The Annual Event and academic committees offer the best possibilities for knowledge sharing, particularly in terms of teams which have an important role in knowledge sharing (Becker, 2003). Academic committees or teams that work on particular tasks where different approaches and perspectives offer synergies. The research findings demonstrated that academic committees are much more important than informal contacts. This is consistent with the view that knowledge sharing among an organization's team members is critical for competitive advantage (Grant, 1996; Halawi *et al.*, 2006; Pemberton & Stonehouse, 2000).

The importance of student initiatives is a highly visible sign of CEMS success, confirming that students actively participate in knowledge sharing and benefit from the program. By taking part in different CEMS business events they are constantly preparing to enter the business world, and doing more than simply studying gives the potential employer a signal that the student will be fully engaged in his or her future job.

CEMS universities place great emphasis on business projects and teaching quality control as best practices to implement across the whole university. At the end of each year the best practices are grouped within themes according to the following structure: positioning of the program in the university, governance structure, student management, program management, corporate partners, and core networking. Although this may not seem contentions, Chistensen (2007) is very critical of the concept of “best practices”. Chistensen, (2007) noted that the literature on knowledge sharing is ”obsessed” with “business practices” and argued that they leave no room for other forms of knowledge sharing and may lead to the false conclusion that best practices are the only form of knowledge being shared. Notwithstanding this criticism, the research findings suggest that the concept seems to function well within CEMS.

### **Conclusions**

Knowledge sharing, as well as knowledge generation, is a fundamental part of the ethos of the modern university in a competitive global environment. Knowledge sharing brings significant benefits, including competitive advantages in the globalized business world. This is evident in the practices of the partner universities within the CEMS - Global Alliance in Management Education and its flagship masters degree.

The research findings demonstrated that knowledge sharing within CEMS takes diverse forms, and not solely via channels such as staff committees and intra- and inter-faculty meetings. Student participation is very important, especially in Annual Events which foster close links with the business world, and so are interdisciplinary links which improve the effectiveness of knowledge sharing. The concept of best practice, although not universally admired, is systematized within CEMS and spread across all the partner universities.

This study makes a contribution to the understanding of knowledge sharing and knowledge sharing practices within CEMS, but the research design has its limitations. The research findings are based on a relatively small sample. Although the questionnaire response rate was reasonably good, the total number of responding institutions was 17 out of a possible 29, so that the survey results are unlikely to be fully representative. Future research could benefit from a larger sample, and the use of more detailed case studies to supplement the survey approach used in this research. In addition to the academic perspective, it might also benefit from the analysis of knowledge sharing using the perspective of students and corporate partners.

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