The challenges facing corporate universities in dealing with open innovation

Louis Rhéaume and Mickaël Gardoni
École de Technologie Supérieure, Montreal, Quebec, Canada

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Abstract

Purpose – This paper aims to illustrate the quick rise in the popularity of corporate universities since the 1990s. Because knowledge management is becoming imperative to the survival and growth of firms in most industries, better management of corporate universities is becoming more and more critical. The purpose of this paper is to analyze three objectives: Why invest in corporate universities? Which model to adopt? and What are the key challenges facing corporate universities in dealing with the adoption of an open innovation approach?

Design/methodology/approach – The article provides a general review of corporate universities dealing with open innovation by using a creative synthesis.

Findings – This paper analyzes the challenges involved in the development of corporate universities and examines how they can deal with open innovation. While few corporate universities have a real strategic role, several initiatives have failed or have been seriously compromised. To create competitive advantages through a corporate university, upper management must dedicate significant resources and have a plan for building the corporate curriculum in order to deal with innovation management.

Research limitations/implications – Due to the lack of scientific articles on the topic, most of the published articles made by practitioners was used. Further studies are needed to test the recommendations and models.

Practical implications – This paper identifies some development models and growth avenues for corporate universities. It helps provide an understanding of the challenges associated with open innovation as well as their limits.

Originality/value – It is among the first papers to link the development of corporate universities with the open innovation approach. It also provides practical advice for managers and academics.

Keywords Innovation, Strategic management, Workplace training, Corporate universities, Knowledge processes, Workplace learning

Paper type Research paper

1. Introduction

One of the most evident consequences of the emergence of a knowledge economy is the critical role of learning and knowledge in the growth and survival of organizations (McKinsey, 2002). This evolution has driven organizations to manage knowledge in a more systematic and deliberate fashion. Thus, many innovations have been developed in at least three areas of knowledge management:

(1) the integration of new information and communications technologies to store and diffuse knowledge;

(2) the emphasis of human resources on competencies-building through continuous training; and

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(3) the evolution of business practices for individual initiative, innovation and collaboration.

Corporate universities (CUs) are situated within the intersection of these focus areas. We focus on CUs from the angle of knowledge management and its importance for business competition (Rhéaume and Viola, 2004). Our objective is to demonstrate the strategic justifications of a CU and its role in the development and diffusion of knowledge by examining the questions: Why invest in a CU? Which model should be adopted? What are the challenges facing a CU in adopting the innovation approach? While exist few scientific articles exist on CU, the field is starting to be covered mainly by practitioners. The contributions of the article are:

- the major advantages and disadvantages of CU; and
- the major challenges facing CU toward the adoption of open innovation approach for the development of its innovation strategy.

At a time when firms are ever more engaged in outsourcing and alliances, why invest in a resource-consuming CU? After all, traditional universities exist, as does the possibility of complete training through specialized seminars. However, the attraction of investing in a CU is very strong among organizations.

2. What is a CU?

There are approximately 4,000 CUs in the world (Global CCU, 2010), a number which effectively doubled over the past decade. This popularity is not just a fad, as there are real trends and strategic issues underlying this growth. The sharp growth of CU can be explained by the need to improve competencies for better competition, the desire to tailor training, the need to update knowledge and competencies, the movement toward downsizing, the shift from a manufacturing economy to a service economy and the retention of employees (Meister *et al.*, 1998). CU are an important way to appropriate the optimal transfer of knowledge and to develop competitive advantages. Renaud-Coulon (2002) proposes the term "globalization of intelligence", as information and knowledge become the only real sources of competitive advantages in the long term. CU can be real political instruments used to help manage complexity and disruptions, and to build up the identity and soul of a corporation, and thereby operationalize corporate strategy.

The term "corporate university" is a metaphor used to emphasize the desire to promote internal training in a systematic fashion. The term university is used to emphasize the learning process in organizations. However, some organizations are not comfortable with the term, and therefore purposefully avoid it, even those that actually have what can effectively be identified as a CU. The CU also exists in non-profit organizations. A CU can be defined as a corporate division promoting the development of individuals in a bid to improve teamwork business skills, leadership and relationships with suppliers and customers; furthermore, it can constitute a pathway for research.

A CU is a whole set of continuums, from physical to virtual, that comprises a few employees to all employees, which produces measurable advantages for well-being, which is a division coming from the training department extended into a knowledge management system, which is autonomous and relies also on alliances. Each organization can adapt its continuums based on its specific context (Blass, 2001). A CU

is the mechanism under which an organization tries to establish learning as a critical part of its daily activities in order to become a "learning organization". A CU is different from a training centre, as it systematizes the learning process. Appendix 1 provides the main differences between the two (Meister *et al.*, 1998).

The traditional training centre serves specific educational needs. Thus, it is more reactive, and the training location is less important. A CU aims to not only transmit previously identified knowledge but also to define and forecast organizational needs and build social knowledge. A CU, therefore, becomes an integral part of the organization, its structure and its strategy, as well as an increasingly vital part of its business performance.

One of the main factors underlying the decline of firms' innovation capabilities is the lack of priority accorded to training development. Wheeler (2002) estimates that a corporation must have a workforce of at least 2,000 employees to implement a CU.

2.1 Limits of CU

CUs have a very high failure rate. Their development necessitates several tangible and intangible resources, and some firms have had to significantly downsize their CU because of the recessionary economic climate. Five main errors in CU priorities exist:

(1) spending too much on physical infrastructures;

(2) spending too much on upper management training with little value added (not linked to corporate objectives);

(3) initially spending too much on information technology, instead of progressively;

(4) not spending enough on the development of internal experts to become teachers and mentors; and

(5) not spending enough on the curriculum and on content development (Mahmood and Minhas, 2006).

3. What is the rationale for a CU?

According to Nixon and Helms (2002), the main objective of a CU is to demonstrate to employees the value of ongoing learning and to provide them access to such learning. It exists mainly to transfer knowledge needed to stimulate, support and develop the business model (Meister *et al.*, 1998). Five main contextual factors can help explain the recent popularity of CU:

(1) employees need updated competencies to be more flexible with empowerment;

(2) the growth of the knowledge-based economy;

(3) the knowledge life cycle, combined with technological progress, necessitates more frequent updates;

(4) tenure is often no longer guaranteed, but access to ongoing training is provided with a CU; and

(5) the shift in technology, which now plays a major role in training.

A CU is an alternative not only in terms of acquisition of knowledge but also in terms of economy: lower tuition fees. The speed and flexibility of a CU can enable organizations to train all corporate divisions in a personalized and simultaneously fashion. Thus, the contents of a course can be adapted to different employee skill levels.

A CU can constitute a strategic leverage in the sense that it allows solutions of business problems, while also improving business performance. CUs that succeed are known for their direct contribution to corporate value creation (Renaud-Coulon, 2002).

Matthews (1997) suggests that CUs should create environments to nurture learning, knowledge creation, alignment with business models and coordination of academic partners. They should also take into account local needs and cultural diversities in the organization. A CU should identify the critical issues in the success of the organization and favour the development of practical knowledge to produce more efficiently and effectively (Dealtry, 2002). A CU should also assess the weaknesses in the key corporate processes and structures within the organization, since they represent learning opportunities. A CU can be a diagnostic and organizational intervention vehicle.

The immediate use of knowledge in workplaces and the fact that employees can practice what they actually learn, explains the popularity of training at work. The retention rate in CU is very high, compared to that for traditional courses in universities (Meister *et al.*, 1998).

4. What are the strategic issues related to CU?

The strategic rationale underlying a CU can be expressed across three main dimensions:

(1) the recognition of a competitive, knowledge-based environment;

(2) the critical role of largely intangible distinctive competencies; and

(3) the growing necessity to link the corporate competitive advantage with the development and transmission of a real corporate curriculum.

Firms must optimize their individuals, the holders of knowledge and creators of competitive advantage. Firms must recruit, train, offer career opportunities and gain loyalty. Organizations must learn, adapt, innovate and forecast experience curves on short notice. Managers must deal with diversity in many forms. Individuals are the key to knowledge management.

CU must adopt a systematic approach. They can be used to produce and develop the key resources for competitive advantage: resources that are specific, specialized, linked to social networks and are not easy to imitate. Knowledge can be generally associated with two main types of organizational competencies and competitive advantages (Table I).

(1) The capacity to identify and mobilize knowledge to solve organizational problems, while not reinventing the wheel, and the development of an organizational memory with a formalized capacity and storage. The role of the CU is to transmit a specific and collective knowledge. The ownership of knowledge is favoured. The challenge is to retrieve this knowledge and assume its actualization. It is more an organization of experts, with the main task being to exploit its knowledge. The risk is standardization, even though standardization may be the desired outcome.

(2) The collective capacity to solve new problems, to innovate and to do things differently. It can be built by sharing culture, nurturing social networks or by the development of individual expertise. The role of the CU is to develop specific competencies, foster socialization and identify experts. The diffusion of knowledge is prioritized. These are more organizations of experts whose main task is to discover new knowledge. The risk is an anarchic development with low links with business objectives.

Attributes	Expert organization	Organization of experts
Implicit strategy (Hansen *et al.*, 1999)	Economies in the reuse of knowledge	Differentiation by knowledge
Transfer	Employee as a knowledge receptor Closed curriculum	Employee as a knowledge receptor and transmitter Open curriculum
Culture	More knowledge brings more power	The position within a knowledge network brings more power
Role of CU	Transmit a specific or collective knowledge, skill or technique	Develop specific aspects, socialization, identification of experts
Examples	**BMO Bank of Montreal** Over 10,000 students, 25% training in class and 75% virtual. Goal: improve customer service and meet their financial needs. Lifetime learning. Partnerships with traditional universities. Upper management actively participating in mentoring and giving courses. **Cisco** To better integrate numerous mergers and acquisitions (culture and retention)	**Motorola** To foster the resolution of business problems, (e.g. shortening new product development). **Booz & Co.** Improve analytical capacities of consultants. Foster teamwork, develop social networks, transmit culture and ethical matters associated with corporate brand

Table I.
Competitive advantage and CU

The nature of the CU will depend on the approach selected. For dynamic knowledge management, the implementation of a CU is not enough. The CU must be seriously developed, animated and evolved. To reach that goal, managers of the CU must constantly question their approach as well as the nature of what represents critical knowledge.

4.1 Corporate curriculum

The metaphor of the curriculum is useful for understanding the extent of the CU (Garvey and Williamson, 2002). A curriculum is a study program, a group of structures and values that guide learning. Linked to strategic analysis, it allows the questioning of the nature of knowledge, its validity, its critique, its life duration and the mechanisms for its update and transfer.

A CU can have different functions, including education and culture creation. Some CUs insist on the tacit and social aspects of training, rendering them sites for information exchanges, network building and confrontation of business practices rather than outfits offering traditional training with explicit knowledge transfer. CUs can be transformation agents, as in the case of an organization looking to build its identity.

Following the strategic choices undertaken, organizations must consider several types of knowledge whose development may be supported by the CU:

- factual knowledge of techniques, methodologies and procedures;
- tacit procedural knowledge of skills and know-how; and
- useful, formal knowledge which is situated within an organization by the individuals who possess it (Foray and Lundvall, 1996).

The importance of these types of knowledge should be analyzed carefully, as they shape the educational structure of the CU. Analysis should address the following questions:

- What content should be reserved for the CU?
- What should be done in collaboration with traditional universities?
- When should partnerships be entered into?
- How should employees' learning, as a function of the program's training objectives, be measured?

Questioning the criticality begins to emerge as a major concern for organizations. This concern is emerging in response to the risk management of intergenerational knowledge at a time when the age of many organizations will lead in the next 10 years a major renewal of human resources. How organizations are thinking this will undoubtedly have a great impact on their future.

The criticality of the CU has become a major concern for organizations due to the numerous risks associated with intergenerational knowledge management (in many organizations, many managers and key employees are near retirement). How organizations retain such important knowledge may have a great impact on their future.

The need to create, develop, transmit and value knowledge can explain the fast growth of CUs. However, the term CU means different things among different organizations. There is not one model of CU but a multitude of educational combinations which must be analyzed.

5. What models for CU?

Dealtry (2001) identifies three phases of development to categorize a CU: operational, tactical and strategic (Appendix 2). These steps are linked with the place of knowledge within the corporate strategy:

- better knowledge to improve operations;
- knowledge necessary for the execution of the strategy; and
- knowledge representing the source of competitive advantage for strategic planning.

The operational model is the first level. It in fact constitutes a high-level training centre where employees can learn techniques (e.g. McDonald's Hamburger University). The tactical model favours knowledge management combined with strategic objectives. The CU is at the service of corporate strategy. The second and last levels are oriented more towards innovation and research. Few CU have reached this third level with the creation of competitive advantages (e.g. Alcatel-Lucent University), which remains the ultimate goal for many. This model often relies on the creation of a multitude of partnerships.

5.1 How to deal more effectively with an open innovation approach?

CU can be differentiated into two main categories:

(1) The first category plays a supporting role by maintaining good economic performance among employees and managers through effective knowledge management and sharing of corporate culture during the training process.

(2) The second category represents the CU and relies more on innovation and the promotion of effective performance.

This latter category also places the emphasis on consultation and action classroom learning. The two CU categories can offer training customised according to groups of jobs by developing leadership and by using a hybrid approach (and virtual space) with seminars and case studies (Wang, 2008).

5.1.1 What is open innovation? By adopting an open innovation approach, firms can develop their own ecosystem of suppliers, customers, partners and collaborators, while relying on technologies based on an innovation platform, to support their whole innovation ecosystem. This platform coordinates the conception, collaboration and innovation, while also influencing the future direction of coordination (Chesbrough, 2012).

A large part of open innovation is incremental innovation or innovation of processes. More broadly, we can include in open innovation the creation of business and economic models based on ideas copied from various domains, which can still be a coherent whole in the selected industry. The concept of open innovation is linked to usage innovation, accumulation of innovation, sharing of know-how, mass innovation and distributed innovation. The process of innovation is based on risk and reward sharing between partners. Knowledge is no longer solely owned by firms. It can reside in employees, suppliers, customers, competitors and universities. If a firm cannot use a particular piece of knowledge it has, it can sell it to other firms.

Managerial processes for the making of strategic choices in innovation could be identified as a "dynamic capability". The main challenges faced with this approach are accumulating assets by reducing the risks of reproduction and imitation. From this perspective, the selection process for strategic choices in innovation relies on technological and strategic trajectories that belong to the firm.

We can deduct from many schools of thought and typologies in competitive advantages that firms should not over utilize a given option versus the others. This leverage can positively influence the selection process for strategic choices in innovation with support for experimentation, the adoption of norms for risk taking, the formalization of external usage for idea generation, through open innovation with external partnerships and formalization of information research.

5.1.2 Partnerships and learning networks. A survey showed that 62 per cent of CUs had at least one alliance with a traditional university, and 42 per cent were offering courses with credit equivalencies (Hermes, 2001). Those partnerships aimed to legitimize the courses offered, to bring more credibility and to mobilize specific expertise from teachers of traditional universities.

CU are often financed in a hybrid fashion, with funds for infrastructures coming from the head office, while funds for training are provided by the other divisions within the firm, which send their employees for training.

Thus, directors who have already invested time and money in their CUs are motivated to open sections of their training programs to an external clientele such as suppliers, customers or the public at large. The main goal of companies with open registrations is to obtain the best possible return on their investments in training. To extend the number of courses offered, CU can also create partnerships with non-competitive firms.

5.1.3 Some examples from the best CU. A CU should redefine its role for three main reasons (Dufour and Wargnier, 2011):

(1) Strong acceleration in the rhythm of the economy and a higher velocity of competition combined with the need for a faster decision-making process influence the implementation and the objectives of a CU.

2) Management models have experienced deep transformations where traditional top–down decisions are less used, and bottom–up initiatives are encouraged. Leadership is more democratic: project management changed organizational and individual behaviours. Generation Y, combined with globalization, also influences management.

3) New technologies enable and invite people to think differently. The unity of time, space and action has been deeply affected. With new tools, work is more mobile, virtual, sequenced and multiple.

Motorola considers education as a right for every employee and also a responsibility. Thus, all employees are responsible for renewing their knowledge and skills (El-Tannir, 2002). A CU serves to propagate the concept of quality throughout the organization, to penetrate new markets and to launch new products. Educational priorities focus on leadership and the management of the corporate brand.

Innovation is at the heart of the educational approach of Intel University. The microchip industry is characterized by a very short product life cycle (less than two years).

A CU can create a common culture across all corporate divisions. The internal university can bring an opportunity to forecast the evolution of all sectors of the organization. It is a way to retain talent and to expand competencies and thereby prevent employees from quitting and heading to the competition. Moreover, a CU can represent a real competitive advantage and attract qualified employees in a tough job market. On the other hand, trying too hard to secure the commitment of managers runs the risk of "formatting" their consciences and creating a "behaviour mould".

At a time when organizations want to reduce hierarchical levels, promote lean management and become real learning organizations, a CU can be the engine of knowledge management. Dove (1999) recommends that organizations consider knowledge management from the perspective of a strategic portfolio of knowledge. Thus, firms must diffuse knowledge, share it inside the organization and experience it in a cooperative fashion. The concept of community of practice illustrates the transmission of informal knowledge across the organization. It represents an important cooperative learning mechanism. Employees with an extended social network that advocate the exchange of knowledge demonstrate higher productivity. Dealtry (2001) suggests that a collaboration culture increases common knowledge across the organization. Without the culture of collaboration, knowledge can remain unused and stuck between departments.

In 2008, Alcatel-Lucent received a prize from the European Foundation for Management Development for its CU, which consists of 20 smaller accredited CU around the world. Their role is to serve as interfaces with customers, allowing a better understanding of local markets, customs and languages, while also nurturing loyalty and satisfaction. For the chief executive officer (CEO), employee energy and

commitment are essential for reaching corporate objectives. To capture and maintain motivation and talents, organizations must invest in career development and in the development of key business skills. The courses offered at Alcatel-Lucent University cover various domains, products, solutions, technologies, business applications, professional development and business skills. The university is now an essential and integrated part of the firm, and it directly creates value for its external and internal customers. Less than two years following the merger between Alcatel and Lucent, the CU creates new competitive advantages; strengthens connections within the organizational structure; and puts the emphasis on innovation, quality and investments in human resources.

6. Advantages and disadvantages of CU

The advantages of the implementation of CU include the possibilities of creating synergies in training by opening up registration to non-competitive firms, customers and suppliers. This results in a diversity of participants, internal or external, in order to enrich training.

Another advantage is that its development can be adapted to suit the specific training needs of the firm. At Cisco, we saw that it served mainly as an integrator of mergers and acquisitions and to maintain a common culture, while at Intel, it also served to nurture a culture based on innovation.

When the CU reaches the third level of development, it can really serve as a strategic lever to reinforce or create new competitive advantages.

The disadvantages of the CU include the possibility of training becoming too rigid and dictating mental frames that can reduce initiative and creativity. To implement a CU, several winning conditions and efforts must be combined; otherwise, the CU can fail if it is not monitored carefully and insufficient resources are allocated for its development.

In a period of recession, an underdeveloped CU can easily be downsized by upper management. A CU must thus constantly justify its contribution to the performance of the organization. It must estimate the return on investment (ROI) of both intangible and tangible assets with good (qualitative and quantitative) performance measures.

Another disadvantage is the option to develop the CU as an independent profit centre instead of counting on value creation through effective knowledge management (managed as a business instead of serving the organization).

The CU also presents a disadvantage when operating in a high velocity or turbulent sector such as information and communications technologies (ICT), where a rigid CU could have a negative impact by minimizing the decision-making process and could be too slow in implementing organizational change to adjust to a fast-evolving environment.

6.1 Discussion of CU adopting an open innovation approach

Enkel *et al.* (2009) identified four main challenges linked to innovation activities and the open innovation approach: loss of knowledge, an increase in coordination costs, a lack of control and a higher complexity. Among the internal hurdles, we have the difficulty finding a good partner, a lack of equilibrium between daily activities and open innovation activities, a lack of time and resources.

6.1.1 The aim to find a better equilibrium is a key concept in this article. In training, a more hybrid approach towards virtual and on campus is generally more optimal in large organizations. A more balance stance in the development of a CU with the help of the

adoption of an open innovation approach through partnerships (traditional universities, professional associations, suppliers, complementors, customers) enables firms to become real learning organizations. Similarly, it seems that a more balance approach towards knowledge management strategies in the development of CU (exploration, exploitation and retention) may be also more optimal. It remains to be tested by scientists. CorpU Xchange[1] suggests that public firms with a CU tend to create more value than firms without a CU in general over a 10-year period (CorpU index).

Because CUs have a very high failure rate in general, firms adopting an innovation approach by getting external expertise from their network, or from some traditional universities, represent real opportunities to create value.

It is more difficult to assess the effectiveness of a CU at the first level ("School"), as its impact is more operational and is more similar to a simple training centre. At the second phase, the CU ("University") has a more direct impact on business processes, while at the third phase ("Academy"), a CU can have more influence on the overall performance by creating or sustaining some competitive advantages (Dealtry, 2001).

The development of a CU to the third strategic phase necessitates continuous investments in terms of money, human resources, commitment and planning. Poor coordination can be harmful to the organization by reducing its competitiveness. Furthermore, a CU at the third phase is not a guarantee for success. A great example is Motorola University, which helped to create new competitive advantages for the firm such as the famous Razr smartphone model around 2004. However, Motorola, like others major smartphone manufacturers, faced severe competition from Apple and Samsung, the sole firms earning profits in this sector. Those two leaders dominate the market shares of the sector and benefit from the adoption of an open innovation approach by developing their own ecosystem with suppliers, and complementors with applications. Motorola Mobility could not cope with the fast and intense "battle of architecture" innovation game that prevails in the smartphone sector. Thus, Motorola was sold to Google, which kept the patents and sold it again less than two years to Lenovo. Apple created its own CU around 2008. It still has no breakthrough innovation since the iPad I. The CU would help to institutionalized more the innovation strategy (and the processes) of Apple, since the death of its innovation leader and CEO, Steve Jobs.

An implementation of a CU necessitates a long-term perspective and commitment in term of sufficient resources to develop the business unit such that it thrives and survives in the next recession. Without sufficient development, a CU cannot demonstrate its value creation to business performance, and the whole experience may become a waste project for the organization, if abandoned or rationalize drastically later. The implementation of a CU may be done with the goal to develop it more intensively later, representing a growth option.

Two knowledge strategies related to the open innovation approach appears more critical for the survival of CU. Firms should spend enough on the development of internal experts to become teachers and mentors, and also invest in the transmission of knowledge from learners to other workers, and spend enough on the curriculum and on content development to build the future corporate strategy.

7. Conclusion

This article had three main objectives:

(1) to identify the justifications of an investment in a corporate university (CU);

(2) to state the different CU models; and

(3) to analyze the challenges of a CU willing to adopt an open innovation approach to create its innovation strategy.

We have analyzed the main drivers behind a knowledge-based economy: a dependency on strategies directed towards knowledge and the need to manage that knowledge in a more systematic fashion. In particular, we insisted on the link between knowledge and competitive advantage, and on how CUs can be formulation and mobilization tools for the corporate curriculum.

The trend is to consider CUs as business units with one of their main goals being to operationalize the corporate strategy. Some are also developed to become profit centres. However, if interest in CU is very high, their development faces two major challenges.

First, there are significant and easily measurable costs associated with a CU. However, ROI measures are more subtle and hard to evaluate. It is critical to identify and to measure its impact on the organization. Without such efforts, it would be tempting to proceed using the traditional way of outsourcing training to academic universities. Second, if a CU is built too closely and too specifically, there is a high risk for reinforcing narrow mental frames that can be harmful to creativity and innovation.

A review of the literature illustrates that there is not just one good business approach to innovation management. Rather, such management depends on factors that are both internal and external to firms. For instance, in ICT, the industrial context and the innovation "battle of architecture" game greatly influence the innovation strategies of the firms (Miller and Côté, 2012). Early adopters of an open innovation approach can create a lot of value (e.g. Apple and Samsung).

Chesbrough (2012) suggests that an open innovation approach enables a firm to better anticipate which of its dynamic capabilities are more critical in the future and which products will become commodities. Open innovation highlights the advantages of external collaboration.

Innovation necessitates more external knowledge, and with the decline of internal R&D laboratories, firms must make greater use of subcontracting universities for their work in innovation projects. The development of a CU supports this objective to integrate external expertise by building partnerships with traditional universities, professional associations, suppliers and customers.

CU can adopt an open innovation approach to deal more effectively with the development of its innovation strategy and the CU. The importance of knowledge exploration is largely recognized as a driver for innovations. The CU can become a real innovation centre by developing strategic partnerships with the whole organization and allowing organizational change, while developing its human resources.

The CUs that succeed support productivity and innovation while improving lateral knowledge sharing. Those organizations count on openness based on trust, equity, shared values of collaboration and integration of collective intelligence networks (Margherita and Grippa, 2009).

At a time when consultants are predicting continued strong growth in the number of CUs around the world, with an even faster rate in emerging countries, managers must seriously question their organizations on the ways this tool can help them reach their short- and long-term strategic objectives.

To retain and develop its activities, a CU must constantly demonstrate its contribution to organizational performance (quantitatively and qualitatively). However, this assessment is not trivial, and it must be done with a deep understanding of learning needs and how they figure into competitive advantage for the firm.

Note

1. CorpU Xchange. www.corpu.com/research/pillars-of-e-learning-success/?t=

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About the authors

Louis Rhéaume is a Lecturer in innovation management at École de technologie supérieure (ÉTS). He is also an Adjunct Teacher in management and finance at TELUQ (Québec-Canada). He is a PhD Candidate in innovation management at ÉTS. He has four scientific publications in strategy and finance, and one in a top journal. He is also consultant at Infocom Intelligence. He has published many professional articles in newspapers and websites in management, technology, innovation and finance. Louis Rhéaume is the corresponding author and can be contacted at: louisfbi@hotmail.com

Mickaël Gardoni is a Professor and Director of the innovation management program at ÉTS (Québec – Canada). He is also a Professor at INSA de Strasbourg and INP Grenoble (France) and Co-Director of the "French–Chinese PLM Centre for Innovation" in Tsinghua University, Beijing, China. He is an Engineer in industrial engineering and has done his PhD in EADS (European Aeronautic Defence and Space Company). His research interests include methodologies of creativity-innovation and knowledge management.

Appendix 1

Attributes	Training centre	CU
Focus	Reactive	Proactive
Organization	Fragmented and decentralized	Cohesive and centralized
Extend	Tactical	Strategic
Engagement	Low	Employees and management
Diffusion	Based on the instructor	Experiences from many technologies
Responsibility	Training director	Division director
Audience	Big, but limited to the depth in the level of learning	Program personalized by groups of jobs
Registration	Open	Just-in-time learning
Results	Improve working skills	Improve business performance
Operation	Based on the human resources	Corporate division
Image	"Go train"	"University as a metaphor for learning"

Table AI.
Differences training centre vs CU

Source: Meister *et al.* (1998)

Appendix 2

Phase	First: operational	Second: tactical	Third: strategic
CU as	**School**	**University**	**Academy**
Function	Advanced training department	Knowledge pivot of the firm	Knowledge pivot of the firm
Key role	Structure the training programs	Link training and strategy	Create a basis of strategic know-how
Key objective	Efficacy	Alignment	Competitive advantages
Relationship with strategy	Indirect and reactive	Direct and reactive	Direct and proactive
Main activities	Regroup the training activities of the firm	Derivate from training and corporate strategy	Create and form strategy concretely by education and research

Table AII.
Development phases of CU

Source: Dealtry (2001)

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