Master's Program for Service Management at Helsinki Polytechnic Stadia

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ABSTRACT / SUMMARY

Globalization, accelerated time-based competition, qualitative dynamics, rapid development of technology and especially ICT (Information and Communication Technology) developments are bringing significant change to societal, business and organizational structures and our ways of working and learning [see e.g. 1and 2]. The role of service management has become more important for companies and societies. The success and the competitiveness of companies are increasingly based on their employees and new skills to address business and technology in service business environment. This has created a challenge for current engineering and management education transformation. Service management challenges both educational institution and business to create new multi-disciplinary curricula. The paper describes current results of a new Master's degree program focusing in service management at the Helsinki Polytechnic Stadia, which is designed and implemented in active collaboration with practitioners. The curriculum structures, themes, selection process, student profiles, and selected pedagogic approach activity based learning is discussed in detail in this paper. Contribution of practitioners has made the program successful.

INTRODUCTION

The Institute of Industrial Management at Helsinki Polytechnic Stadia has a radically different approach to engineering and management education. Since early 1990's the education model has been developed around real-life development projects carried out in collaboration with industry. Students learn real business issues and contemporary solutions as a part of the project work. The themes and contents of the projects are selected, formulated and coordinated to meet the competence requirements of ICT-industry. The paradigm fosters learning of practical social skills like networking, project management, collaboration, team working and responsibility, which are relevant in a global, dynamic environment. Experiences gained in industry-university collaboration among Helsinki Polytechnic Stadia, high technology firms and High-Technology Association of Finland in bachelor education level has been successful.

Initial planning for a Master level program started with the Advisory Board[1] of the Institute in 2005. The several members of the Advisory Board raised up a need for a Master program focusing on service business management. In the end of 2005 decision was made to start a new kind of program: a Master's degree in Industrial Management focusing in international telecom and service business management.

The program aims at developing competencies for business management and international marketing as well as technology. The program is conducted in English. Due to the flexibility of the program the studies can be carried out along with regular work. It is a one-year program with 60 ECTS (European Credit Transfer and Accumulation System) credits. There is no tuition

[1] The member companies of the Advisory Board are: IBM, SAP, Siemens, Metso, Bearing Point and Nokia.

for participants since the program is funded by Finnish national education system.

PROGRAM CURRICULUM AND THEMES

The high level program curriculum is described in Figure 1. The curriculum covers both business management and technical aspects related to services. Structure of the program curriculum is flexible, and it provides possibility for participants focus in different service areas based on their own interests and their future career aspirations.

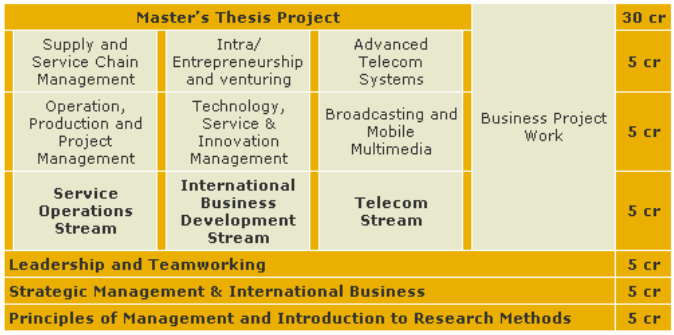

Figure 1. The high level program curriculum

The program consists of several themes. The main themes related to services are the following:

- Principles: Business in a services economy, and business research methods
- Customers, business models and innovation
- Services in an international context
- Service leadership, organizational development and teamwork
- Service delivery and technology architectures
- Strategic management, intra /entrepreneurship, alliances and venturing

Principles: Business in a services economy, and business research methods

Advanced societies globally have shifted from industrial, product-oriented economies to become services economies. Managing service-based businesses requires a different mindset and perspective than managing product-based businesses. This shift represents the primary motivation and foundation for an integrated curriculum on service business management. In support of a Total Project Learning approach, program research methods (e.g. action research) are established as ways for managers to support fact-based decision-making and strategies.

Sub-themes are:

- Service businesses in a global economy
- The nature of services businesses
- Research methods

Customers, business models and innovation

The management of a services business should have intensive focus on customer requirements and needs. Active listening and development of offerings and/or customer responses are important in both business-to-consumer and business-to-business relationships. The relevance of the services business to customers is maintained through business model and operational innovation. Scalability, reuse and efficiency may be continuously improved by monitoring and innovating business processes.

Sub-themes are:

- Customer experience design and the voice of the customer
- Client management and relationship alignment
- Business model innovation
- Business process modeling and operational innovation

Services in an international context

The dawn of the 21st century has been characterized by the rise of globalization, and the struggles of businesses in advanced societies having to compete with businesses in emerging economies. Globalization is, however, a result of blending business styles from a variety of cultures. While the culture within a service business is not necessarily bound to geographic region, common business practices often have foundations in local predispositions. One way to deepen an understanding of varying philosophies on services is to focus on cases where a business supports its local and/or regional society well.

These discussions are paired with concepts complementary to the prevailing business practices.

Sub-themes are:

- Service quality; examples from Japanese-style business
- Outsourcing; examples from Indian-style business
- Enterpreneurism; examples from Chinese-style business
- Telecom services; examples from European-style business
- Ventures; examples from Anglo-American-style business
- Alliances; examples from Latin-style business
- Industrial policy; examples from Scandinavian-style business

Service leadership, organizational development and teamwork

Although many organizational and leadership skills from managing product-oriented businesses are transferable, the impact of services businesses as people businesses is more immediate. A wide range of behaviors – from sharing expertise across knowledge professionals, to encouraging empathy on customer-facing roles – can be coached and influenced by managers. In addition, service workers may be encouraged to be self-organization, increasing productivity through the exchange of experiences and/or contributions to organizational learning.

Sub-themes are:

- Solution design; examples from financial services
- Service encounters and capacity management; examples from hospitality services
- Human capital and communities of practice; examples from health services
- Service leadership; examples from education services
- Service delivery teamwork and collaboration; examples from knowledge-intensive business services

Service delivery and technology architectures

Maintaining consistent and high-quality service delivery requires establishing standards for performance. These are enabled by information and communications technologies, which themselves continue to advance. The persistent delivery of excellence in service and high customer satisfaction requires establishing procedures and infrastructure that enable and improve productivity.

Sessions include:

- Technology architecture; examples from information technology services
- Service supply chains; examples from logistics and transportation services

Strategic management, intra/ entrepreneurship, alliances and venturing

Service businesses may not directly follow the economies of scale common in industrial businesses. Modularity and interdependence in cooperative arrangements may provide better service to end-customers, as well as higher profitability to services organizations. Service providers may establish relationships with peers, with upstream and/or downstream partners, with universities, and/or with governmental agencies. These may enable greater immediate or future competitiveness for an independent service business, or an ecosystem of complementary service providers.

Sessions include:

- Economic development; examples from third world-style business
- Sustainability and competitiveness
- Business networks, strategic balance and governance

PEDAGOGIC APPROACH

The program uses Total Project Learning (TPL) as the pedagogic approach. This means that studies are integrated into real business and projects are carried out in teams. Faculty is multidisciplinary from several institutions and practitioners with many years of practical experience and Ph.D. degrees.

The Total Project Learning method incorporating real-life learning projects (often with the students' employers), combined with a class schedule accommodating near-full-time work is innovative for graduate education.

The program content is delivered through mainly by project work, which is supported with lectures, selected readings, examples from industry, group work, and special workshop sessions. Virtual learning environment with applied wiki-pages and blogs provides possibility for co-creation and peer-to-peer sharing during the program. Participants are encouraged to suggest topics for project work and act as real customers for project work. Some project work will be carried out with School of Management in New Jersey Institute of Technology.

The participants own experience in business world will be actively used during the program. Continuous feedback, evaluation and reflection are conducted together with participants. Coaching and mentoring provide possibility to develop leadership skills during the program.

SELECTION PROCESS AND STUDENTS

The first group of students will start in September 2006. The application process was organized during spring 2006. The initial selection criteria were the following: a B.Sc. Tech/Eng, Degree in Industrial Engineering and Management, work experience at least three years and excellent conduct in English.

The new program attracted applicants with both commercial and technical interests. Most of the applicants are working in large enterprises. Also some entrepreneurs were seeking admittance. There were 115 applicants from 20 countries. Based on pre-selection by application documents 84 candidates were invited to exams and interviews in May 2006. 30 candidates were accepted to the program and are expected to start their studies in September 2006.

SYSTEMATIC PRACTITIONER PARTICIPATION

Systematic and active co-operation with practitioners in the different phases of program creation and implementation is very important for the program. The Advisory Board initiated the program, the curriculum was conducted in active co-operation with practitioners and part of the teaching faculty comes from business world. The participants of the program work in the business world, and the project topics during the program are based on contemporary issues and challenges in reality. The program is concluded with a thesis project, which is also looking solutions for challenging, yet practical problems. Close co-operation with companies has long traditions in engineering education in Finland. This dimension has been emphasized in the program design.

CONCLUSIONS

The service management Master's program at the Institute of Industrial Management in Helsinki Polytechnic Stadia is renewing service management education curricula and pedagogic approach by cooperating with practitioners systematically and intensively.

The program provides an exciting opportunity for developing new kind of service management curricula and for renewing the engineering and management education to meet the challenges of the ICT-industry.

The program provides practical framework to develop service management education internationally. Major share of the recommendations are applicable to other universities in renewing their respective curricula.

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