Operationalizing a New Business Model at the HEC Montréal Library

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Plan of the Presentation

• Introduction
• The mandate
• Overview of the new business model: the paradigm change
• Operationalization Framework
• Key dimensions: Required Expertise, Technology, and Space Management
• Fundamental Decisions: Human Resources, Technology, Space Management
• Conclusion
HEC Montréal Library

• Largest bilingual business library in Canada
• Surface area: 5,000 square metres
• Seating capacity: approximately 850 persons
• 20 group study or collaborative rooms
• Staff of 22, including 5 professional librarians and 2 data analysts
• Approximately 150 specialized databases
• Subscription to WRDS
• Agreement with Harvard Business School
HEC Montréal: A Century-Old Learning Institution

• Canadian business school with AACSB, AMBA, and EFMD accreditation

• Offers a BBA (with bilingual and trilingual streams), numerous MSc specializations, an MBA (in French and in English), an EMBA, a LLM, a PhD, and a wide variety of executive education programs

• 9,000 full-time students
• 300 faculty and full-time lecturers
• 600 administrative and support staff
“A revision of the Library’s business model will also be undertaken so that it can better meet the needs of professor-researchers and students, in particular with respect to their use of the important digital resources that the Library possesses.”

Michel Patry, Reinvent, Renew, Reinforce Our School: The Essential Priorities for 2016-2019
Presentation to the Faculty Assembly, Montréal, October 19, 2016

“The new library administration was asked to give more priority to the services offered to researchers.”

Academic Council, August 31, 2016

“We have invested a lot of money in the Library over a period of many years, but the use of its resources (content, expertise, space) is not as high as expected.”
A Roadmap

Phase 1

December 2016 – April 2018

(A) Understanding client needs

(B) Defining the New Business Model

Phase 2

May 2018 – April 2020

Implementation of the New Business Model
Business Model Canvas

1. Client Segments

2. Value Propositions

3. Channels

4. Client Relationship

5. Revenue Streams

6. Key Resources

7. Key Activities

8. Key Partners

9. Cost Structure

- Researchers
- Instructors
- PhD Students
- Graduate students
- Undergraduate students
- MBA students
- Business Community
- etc.

Business Model Generation / Yves Pigneur and Alexandre Osterwalder
“The more help we have with data availability and, above all, data mining and data manipulation, the more effective we are as researchers.”

“Investing a part of the Library budget in acquiring expertise on research data would offer a better return on investment.”

“Data mining and manipulation expertise is very important added value for the Library service offer.”

“The research data model is the way of the future for the Library.”
Toward a New Business Model – Some Statements from Professors and PhD Students

• “In my view, the Library should play a role in the management of internal knowledge at the School. In a word, it should become a knowledge access center. That would mean having knowledge scientists!”

• “It would be necessary to have keywords that define our teaching, our fields of research . . . That would make it possible to put some order into the multitude of different types of knowledge at the School. The Library should be a knowledge portal.”
Our value proposition for researchers (professors and students) consists in offering a full range of data services. It is designed to meet these library clients’ needs in data identification, acquisition, and management and to help reduce the amount of time that they devote to preparing data, a factor that gives it a great deal of added value.

The key is to provide a one-stop service point that allows them to access data easily and to take full advantage of a wide array of interconnected data support services: data computing services, data analysis services, data visualization services.
“A strategy without action is only a daydream, but action without strategy is a nightmare.”

Japanese proverb cited by

Value Creation

Staff

Management

Clients

1

2

3

HEC Montréal
Operationalization Framework – People First

Operationalization Framework – Summary

• Increasing customer loyalty is the surest way to make an enterprise profitable
• Customers only remain loyal as long as they remain satisfied
• A firm builds customer satisfaction by consistently delivering valuable services to its customers
• In service industries, exceptional value is created by innovative, loyal, and productive employees
• Satisfied employees are productive employees, and employee satisfaction can be enhanced through effective management practices

People First – The Competency Issue

• The most important issue for our clients: the competency of frontline service providers.
  

• Essential competencies for the new business model: data science, statistical analysis, programming, data and text mining
Key Dimensions

1. Required Expertise
2. Technology
3. Space Management
Key Dimensions – Required Expertise

Computer Science/IT

Math and Statistics

Data Science

Domains/Business Knowledge

Machine Learning

Traditional Research

Software Development
Key Dimensions – Technology

Tools used in DATA SCIENCE

Types of data Science tools


https://dimensionless.in/top-10-data-science-tools/
Key Dimensions – Space Management

- Cost
- Lack of space in the Library
- Lack of space at HEC Montréal
- Water damage caused by burst pipe (April 2019)
Fundamental Decisions

1. Human Resources
   • Hiring new personnel with required expertise
   • Training current staff

2. Technology

2. Space Management
1. Human Resources – New Personnel

- Essential to begin by hiring new personnel with required skills
- Time constraints: impossible for current staff to acquire required skills rapidly
- Reduction of training costs
- Easier to redefine job tasks and qualifications with new personnel
- New personnel will participate in training current staff
1. Human Resources – Current Staff

• Current staff have an essential role in maintaining traditional library services and assuring the continuity of operations and knowledge management services
• Training to acquire new skills
• Empowerment through new tasks and responsibilities
• Change management to highlight that current staff still have a role to play
2. Technology

- Critical resources for the Library’s new business model
- Integration of HEC Montréal Computing and Data Mining Laboratory into the Library
- Integration of the HEC Montréal Mathematics and Statistics Help Center into the Library
- Added value: hardware and software infrastructure and expertise
- New personnel use their technological skills to create advanced research data services
Fundamental Decisions – Space Management

3. Space Management

• Creation of an ecosystem for research data services
  • Installation of the HEC Montréal Computing and Data Mining Laboratory
  • Installation of the HEC Montréal Mathematics and Statistics Help Center

• Opportunity to add a wide range of new study areas

• Opportunity to redesign service counters and administrative offices
The Next Stage

• Development of an operations strategy
  • Competitive analysis of service delivery system: service offer
  • Action plan and assessment (PKI)
  • Service prototyping:
    • Intermediate R: Functional Programming Workshop
    • Intermediate R: Data Visualisation and Presentation
    • SAS workshop: Data cleaning and preparation with SAS
    • Microsoft Excel: Data wrangling and data organization in spreadsheets
    • Academic writing and research workshops
    • Etc.
Conclusion: Big Challenges and Huge Opportunities

Important challenges such as

- Managing the transformation of the Library’s role
- Making the right trade-offs
- Maintaining the distinction between effectiveness and efficiency
- Moving forward without a benchmark to set the standards and without a model to show the way
Conclusion: Big Challenges and Huge Opportunities

A fantastic opportunity to

- Re-establish a positive image and a constructive partnership with faculty
- Demonstrate the Library’s relevance to the research community
- Prove that the Library has a fundamental role to play in the HEC Montréal community as a whole and in society in general
- Reinvent other important dimensions of the Library service offer (utilization of space, training programs, resource access, etc.)
Thank you for attending the presentation!