CS3004: Research Methods

Introduction

Assessment
Useful Information

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Course Materials:

- **Slides:** [https://www.sccs.tcd.ie/Nina.Bresnihan/teaching/cs3004.html](https://www.sccs.tcd.ie/Nina.Bresnihan/teaching/cs3004.html) and Blackboard
- **Journals:** [http://www.tcd.ie/Library/collections/databases.php](http://www.tcd.ie/Library/collections/databases.php)
- **Books:**
Today:

- Course Introduction – aims, outcomes, structure
- Expectations and Assessment
Learning Outcomes

By the end of this course you will be able to:

- Design, plan and conduct business research
- Critically analyse academic research
- Define good research questions
- Know how to do research for a new business idea
- Write and Present your findings
Course Objectives: SUMMARY

1. Critical Thinking

2. Evidence-based analysis
How:

- Lectures
- Labs
- Individual assignment
- Group project
My Expectations:

- Actively participate
- Work well in teams
Assessment

20% Literature Review (individual assignment)

20% Participation
  - Participation during lectures
  - Good team work

60% Business Plan (group assignment)
Business Plan

- You will (in groups of 4) come up with a business idea.

- You will write a business plan and a research report.

- You will present the plan.

- Step 1 – Form your groups!
What?

- “Research is formalized curiosity. It is poking and prying with a purpose.” Zora Neale Hurston

- “Research is to see what everybody else has seen, and to think what nobody else has thought.” Albert Szent-Gyorgyi
What?

- Data are collected *systematically*.
- Data are *interpreted* systematically.
- There is a clear **purpose**: to find things out.
What?

- **Systematic:**
  - will involve an explanation of the methods used to collect the data,
  - will argue why the results obtained are meaningful, and
  - will explain any limitations that are associated with them

- **To find things out:**
  - you have *a clear purpose* or set of ‘things’ that you want to find out, such as the answer to a question or number of questions.
What is Business and Management Research?

- Transdisciplinary – uses knowledge form other disciplines
- Engages with both theory and practice.
- All business and management research projects can be placed on a basic \( <---- > \) applied continuum according to their purpose and context.
Applied versus Basic Research

- **Basic research:** generates a body of knowledge by trying to comprehend how certain problems that occur in organizations can be solved.

- **Applied research:** solves a current problem faced by the manager in the work setting, demanding a timely solution.

- In practice this is a continuum.
Applied versus Basic Research

**Basic research**

*Purpose:*
- Expand knowledge of processes of business and management
- Results in universal principles relating to the process and its relationship to outcomes
- Findings of significance and value to society in general

*Context:*
- Undertaken by people based in universities
- Choice of topic and objectives determined by the researcher
- Flexible time scales

**Applied research**

*Purpose:*
- Improve understanding of particular business or management problem
- Results in solution to problem
- New knowledge limited to problem
- Findings of practical relevance and value to manager(s) in organisation(s)

*Context:*
- Undertaken by people based in a variety of settings including organisations and universities
- Objectives negotiated with originator
- Tight time scales

*Source: © Mark Saunders, Philip Lewis and Adrian Thornhill 2006*
The existing e-commerce website for a software company has had failed so many times that sales have suffered. The website has to be replaced. Because of heavy investment costs, a careful recommendation as to whether it is more beneficial to buy an off-the-shelf software package or to develop it in-house is needed.

The incredible growth of the iPhone over the past nine years has finally come to an end, at least for the time being. In April 2016, Apple reported the first ever year-over-year decline in iPhone sales, with the company selling 16% fewer units compared to the same period the previous year. So the question is what are Apple going to do about this?
Why?

Fields Where Business Research is Often Used:

1. General Business Conditions and Corporate Research
   - Short- & Long-Range Forecasting,
   - Business and Industry Trends
   - Global Environments
   - Inflation and Pricing
   - Plant and Warehouse Location
   - Acquisitions
Why?

2. **Management and Organizational Behaviour Research**
   - Total Quality Management
   - Morale and Job Satisfaction
   - Leadership Style
   - Employee Productivity
   - Organizational Effectiveness
   - Structural issues
   - Absenteeism and turnover
   - Organisational Climate
Why?

3. Financial and Accounting Research
   - Forecasts of financial interest rate trends,
   - Stock, bond and commodity value predictions
   - Capital formation alternatives
   - Mergers and acquisitions
   - Risk-return trade-offs
   - Portfolio analysis
   - Impact of taxes
   - Research on financial institutions
   - Expected rate of return
   - Capital asset pricing models
   - Credit risk
   - Cost analysis
Why?

4. Sales and Marketing Research
   - Market Potentials
   - Market Share
   - Market segmentation
   - Market characteristics
   - Sales Analysis
   - Establishment of sales quotas
   - Distribution channels
   - New product concepts
   - Test markets
   - Advertising research
   - Buyer behaviour
   - Customer satisfaction
   - Website visitation rates
Why?

5. **Information Systems Research**
   - Knowledge and information needs assessment
   - Computer information system use and evaluation
   - Technical support satisfaction
   - Database analysis
   - Data mining
   - Enterprise resource planning systems
   - Customer relationship management systems

6. **Corporate Responsibility Research**
   - Ecological Impact
   - Legal Constraints on advertising and promotion
   - Sex, age and racial discrimination / worker equity
   - Social values and ethics
Examples of Real-Life Situations in Which Business Research Methods are Used

- A firm wants to produce and market a new product but first wants to ascertain if there is a potential **consumer demand** for this product in markets $x$, $y$ and $z$.

- A multinational firm wants to establish a production facility in another country after determining its **technical and economic feasibility**.

- A government agency wants to ascertain the satisfaction level of its **employees**, the causes for any possible discontent, and propose a scheme for enhancing this level.

- A financial institution wants to invest in commodities and commissions a study to determine the past trends and **forecast** future returns in a portfolio of commodities.
Importance of Business Research Knowledge to Managers

Knowledge and experience of applied research methods enables managers to:

- Make evidence-based decisions
- Identify and effectively solve problems in the workplace
- Discriminate between good and bad research
- Appreciate the multiple influence and factors impinging on a situation
- Take calculated risks in decision making
- Commission research projects
- Work with researchers and consultants