# Integrating Learning of General and Research Competences into a Master's Degree Program. Tools Used

Case: International Master's Degree Program in Industrial Management

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University of Applied Sciences
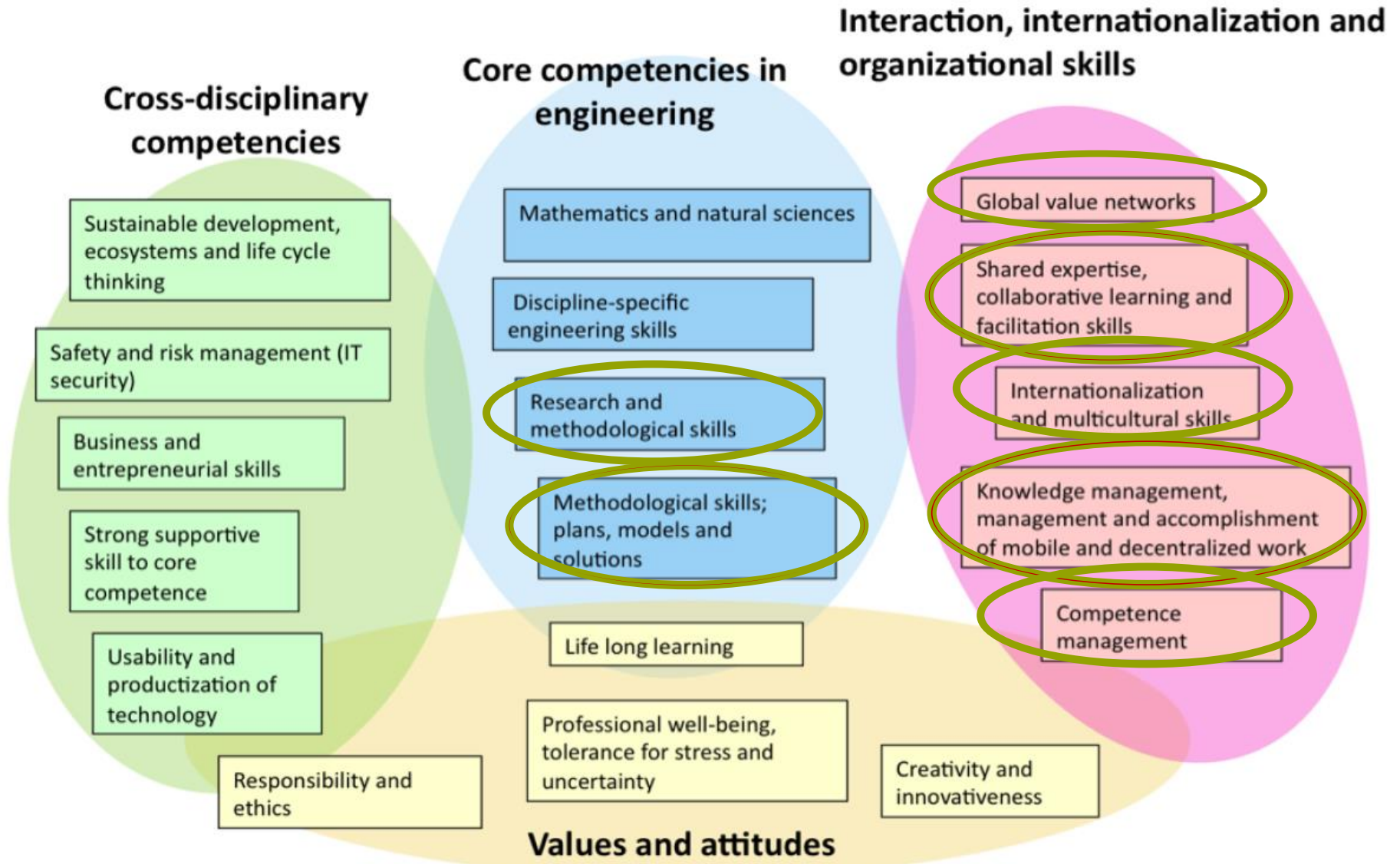
Metropolia Master's Program in IM (MEng)

- Started in 2007
- Student intake: 30 people
- International students, mostly from large companies (Nokia, NSN, Kone, Ericsson, etc)

- Graduates: 2011 (24), 2012 (19), 2013 (17)
- Web-page: http://www.metropolia.fi/IM-MEng
- Coordinator: Dr Marjatta Huhta

- Period of studies: 1 year, 60 cr
- Language of instruction: English
- Final project: Master's thesis in
- English (60-100 pages)

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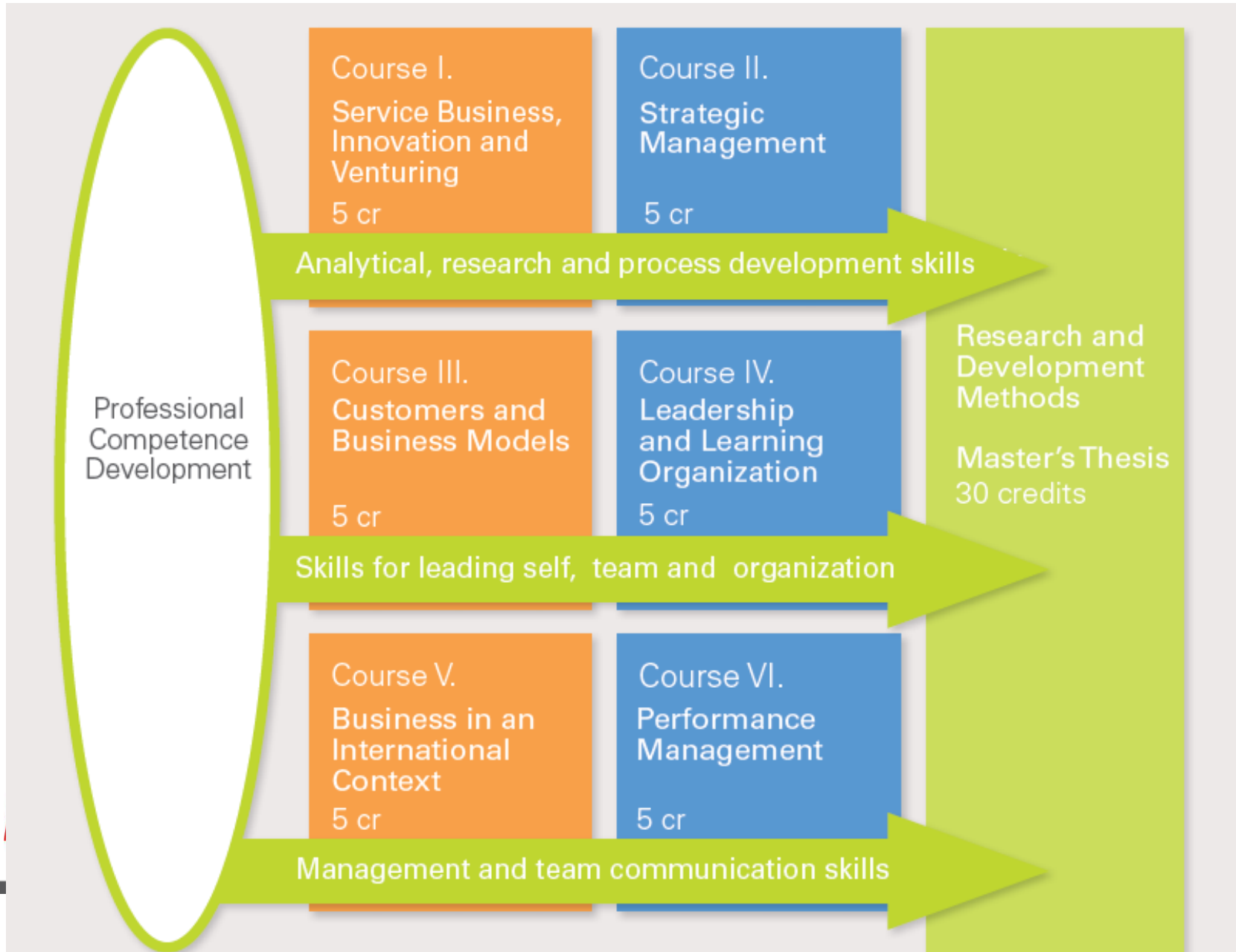Case: *International Master's Degree Program in Industrial Management*
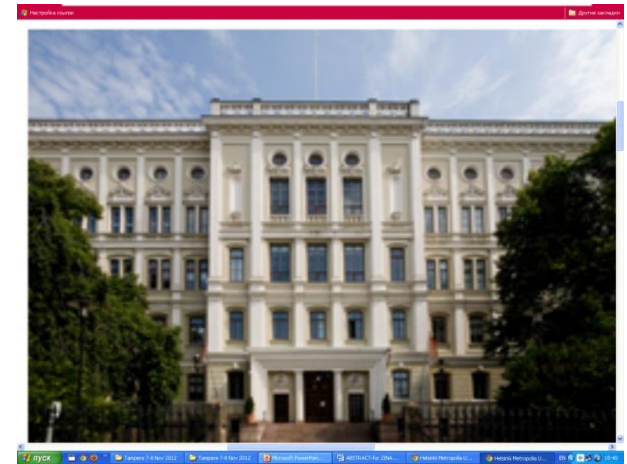
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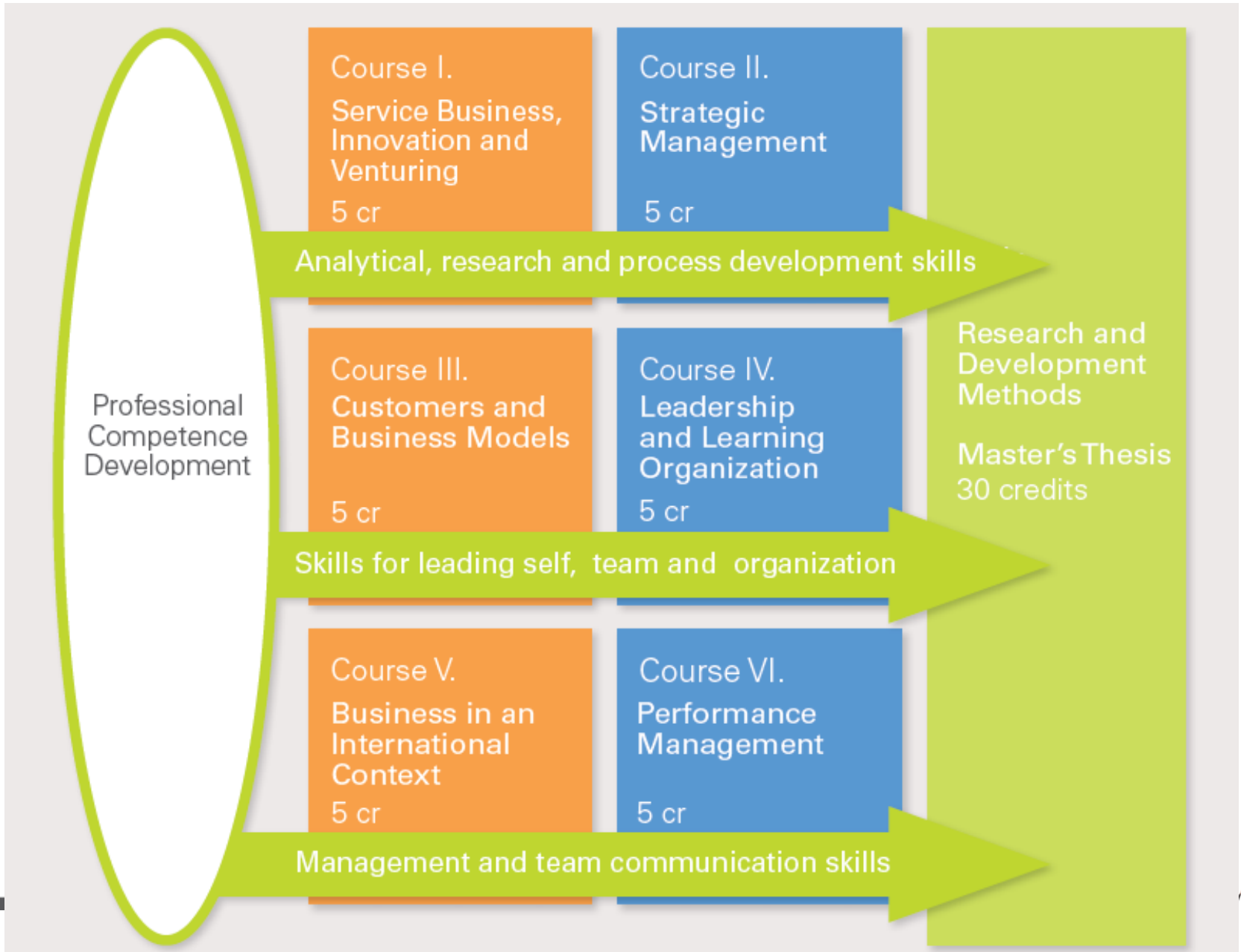
Various approaches to competences, e.g. in engineering

© **Ida Mielityinen** (2010). Finland Needs to Educate World-class Engineers.

Metropolia IM Master's Program: **General + Research Competences**

Professional Competence Development

Course I. Service Business, Innovation and Venturing 5 cr	Course II. Strategic Management 5 cr

Analytical, research and process development skills →

Course III. Customers and Business Models 5 cr	Course IV. Leadership and Learning Organization 5 cr

Skills for leading self, team and organization →

Course V. Business in an International Context 5 cr	Course VI. Performance Management 5 cr

Management and team communication skills →

Research and Development Methods

Master's Thesis 30 credits

I. Analytical, Research and Process Development Skills

Skills as a researcher and project manager

- On the example of ***"New literacies"*** *(Coiro et al. 2008; Kiili 2012) competences to use new information and communication technologies and related skills, strategies, and social practices*

- Example 1. 100% online curriculum (readings)
- Example 2. Search for readings (activated)
- Example 3. A tool for merging available knowledge into a review (applied in a Master's thesis, assignments)

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Example 1. IM Curriculum (Readings, 100% online)

- Friedman, T. L. (2005). *The World Is Flat: A Brief History of the Twenty-First Century.* Farrar, Straus and Giroux.

  - Also see http://www.thomaslfriedman.com/worldisflat.htm .

For counterpoint, see:

- Florida, R. (2005). The World is Spiky. *Atlantic Monthly.* October, 48-51. Available at http://www.creativeclass.org/acrobat/TheWorldIsSpiky.pdf

Topic 2. Dynamics of service business. Required readings

- Grönroos, C. and Ravald, A. (2011). Service as Business Logic: Implications for Value Creation and Marketing. *Journal of Service Management.* Vol. 22 (1), 5-22.

- Grönroos, C. (2008). Service logic revisited: who creates value? And who co-creates? *European Business Review.* Vol. 20 (4), 298-314.

- Lusch R. F., Vargo, S. L., and O'Brien, M. (2007). Competing Through Services: Insights from Service-dominant Logic. Journal of Retailing. Vol. 83 (1), 5-18.

- Edvardsson, B., Ng, G., Min, C. Z., Firth, R., and Yi, D. (2011). Does Service-Dominant Design Result in a Better Service System? *Journal of Service Management.* Vol. 22 (4), 540-556.

- Merz, M.A., He, Y., and Vargo, S.L. (2008). The Evolving Brand Logic: A Service-Dominant Logic Perspective. *Journal of the Academy of Marketing Science.* 37 (3), 328-344.

  - Abstract: Should innovation units be separated from mainstream business operations? This article suggests that exploratory businesses need to be distinct from exploitative businesses. But is this true in services organizations, how knowledge and practices can

Example 2. Search for readings (activated)

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Curriculum Guide 2011-2012 (Routes for Library Search)

General guidelines

- Follow the example of Topic 1. Keep formatting and naming as suggested in this Template.
- Indicate the person who found the article and give the date when it was accessed.
- Fill in and upload the Template in Tuubi, under Discussion (in "Master's Thesis in IM 2012-2013" workspace).

Guidelines for Library search

- Log on to Metropolia web-site (Tuubi) using your *user name* and **password**.
- Go to the *Library* (Kirjasto, e.g. through *For Students* column).
- Choose **Database** and either type in the name of a particular database or choose one from the list (in **Databases by the field of study: Business and Administration**).
- Try to find your article in that particular database, first, *by its title* or, if unsuccessful, by *the author's surname and the date* of publication. (Try the most popular databases: ABI, EBSCO, ScienceDirect, Emerald. Additionally, SpringerLink (for book chapters) and Ebrary (for online books).
- As a pre-search, you can try and *google* the article. The article may be free or you may get a hint in what database to find it.

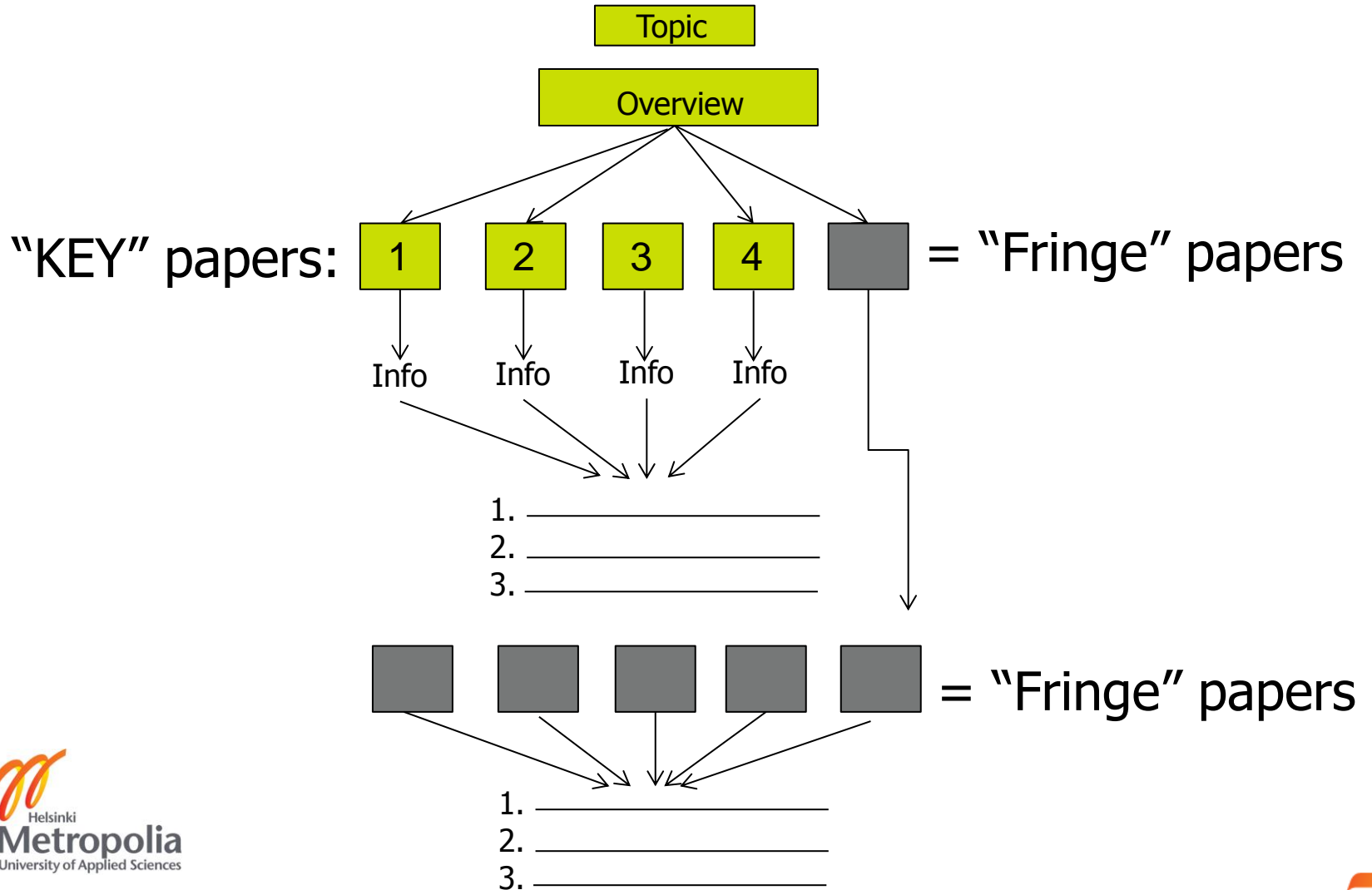**Topic 01. Global economy and company strategic operating environment – challenge for the service business?**

I.	Required readings	Database	Pages of text	Who found	When found
1	Karmarkar, U. (2004). Will You Survive the Services Revolution? *Harvard Business Review*. Vol. 82 (6), 100-107.	EBSCO: Business Elite	7 pp.	Zinaida	8.9.2012
2	Ballantyne, D. and Varey, R. J. (2008). Service-Dominant Logic and the Future of Marketing. *Journal of the Academy of Marketing Science*. 36 (1), 11-14.	ABI Inform: ProQuest	3 pp.	Zinaida	8.9.2012

12	Beaujean, M., Davidson, J. and Madge, S. (2006). The 'Moment of Truth' in Customer Service. *McKinsey Quarterly*. Vol. 1, 62-73.	Through the journal web-site. Please, register there! https://www.mckinseyquarterly.com	pp.		
13	Ostrom, A. L., Bitner, M., Brown, S. W., Burkhard, K. A., Goul, M., Smith-Daniels, V., Demirkan, H., and Rabinovich (2010). Moving Forward and Making a Difference: Research Priorities for the Science of Service. *Journal of Service Research*. February. Vol. 13 (1), 4-36.		pp.		
13	Look for more descriptions of day-to-day business practices from: http://www.cocreation.info/?p=101	*open access*			

Topic 3. Towards a customer-focused organization

I.	Required readings	Database	Pages of text	Who found	When found
1	Heinonen, K., Strandvik, T., Mickelsson, K.-J., Edvardsson, B., Sundström, E., and Andersson, P. (2010). A Customer-Dominant Logic of Service. *Journal of Service Management*. Vol. 21 (4), 531-548.		pp.		
2	Helkkula, A. (2010). Characterizing the Concept of Service Experience. *Journal of Service Management*. Vol. 22 (3), 367-389.		pp.		
3	Helkkula, A., Kelleher, C., and Pihlström, M. (2012). Characterizing Value as an Experience: Implications for Service Researchers and Managers. *Journal of Service Research*. Vol. 15 (1), 59-75. http://jsr.sagepub.com/content/15/1/59.full.pdf+html		pp.		
4	Payne, A.F., Storbacka, K. and Frow P. (2008). Managing the Co-creation of Value. *Journal of the Academy of the Marketing Science*. Vol. 36 (1), 83-96.		pp.		

Example 3. Tool for merging available knowledge into a review (applied in a Master's thesis, assignments) (1)

Topic

Overview

"KEY" papers: 1   2   3   4   ☐ = "Fringe" papers

Info   Info   Info   Info

1. ――――――――
2. ――――――――
3. ――――――――

☐ ☐ ☐ ☐ ☐ = "Fringe" papers

1. ――――――――
2. ――――――――
3. ――――――――

KEY papers

1. the most frequently cited papers = "the classics"
2. the most frequently cited authors = "the big names"
3. the most relevant to the topic = "the hits"
4. the most recently dated = "the latest status reports"

INFO

- aim of research, methods, key findings, keywords, original data
- + *own comments on the margins*

Skills as a leader and an agile learner

- On the example of **leading and participating in a short research project**

- Example 4. Simulation of a Master's thesis process (a team assignment)
- Example 5. Business/research interviews (as a tool in conducting projects)
- Example 6. Evaluation of group communication

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Example 4. Simulation of a Master's thesis process (a team assignment)

A 2-day team assignment *(to resolve a business problem by applying a research process. Additional goal: "to rehearse" the Master's thesis process)*

Topics:
1. Offshoring, 2. Allinces
3. Mergers and acquisitions

Preparation in advance:
- **Interviews** (search for a problem, data for the current state analysis)
- **Readings** (2-3 articles for "theory" = = best practice)

| Business Problem |
| DATA |
| "THEORY" |
| Method |
| Outcome |

2012

2012

2012

2012

Example 5. Interviews (as a tool for leading a project) (1)

Research Interviews   *vs Sept 2012*

Assignment 3. Deliverables

Course III. Services in the International Context

Deliverable 1: Field notes of research interview(s).

Deliverable 2: Two articles on the subject of your team report *(individually)*

- o   Assignment & grading by Marjatta Huhta. This assignment is prepared both, individually and in teams, and presented in teams. *Deadline: Oct 21, Sun. 23:55.*

Specifications for deliverables:

1) each researcher conducts **a minimum of 3 interviews/discussions** in his company, with the persons that possess knowledge and experience in view of your team topic.
2) the researcher prepares for the interview(s) and formulates questions (see examples below)
3) a minimum of 5 - 10 questions are recommended
4) during the interviews, the researcher takes accurate **field notes** (Table 2). The researcher also gives the details of each informant (Table 1) and later checks the field notes with the informant to make sure you have understood correctly
5) the field notes are formatted as part of Assignment III and **uploaded in Tuubi** under Course III, Assignment 3 **as three separate tables in one document** (use the Template below). Code the file in this manner: **Assignment 3-First name-Last name-Interviews-21 Oct.doc.**
6) each researcher finds and uploads in Tuubi two articles on the subject of your team report.

Example 5. Interviews (as a tool for leading a project) (2)

Research Interview (Discussion)

Fill in this form and upload it in Tuubi, under Assignment III

TOPIC: _____ **(one of three)**

Information about the informant (Interview 1)

Table 1

Details	
Name (code) of the informant	*TIP: Develop your own system of codes.*
Position in the case company	
Date of the interview	
Duration of the interview	
Document	Field notes

Field notes (Interview 1)

Table 2

* Think of formulating your own questions; these are suggestions for you to start

	Topic(s) of the interview	QUESTIONS *<Your questions to the informant(s)>*	FIELD NOTES *<Your brief accounts of their answers>*
1	**Starting point: describe experiences in view of the topic problem**	Formulate your question(s) to identify the interviewee's experience in the question. It is important to talk *specifically* about events, not generally about what colleagues think. That will come later. For example: **How have you been involved in our x (e.g. offshoring) processes?** **How do x decisions impact your work?** **Please give an example of x from your experience**	

Example 6. Evaluation of group communication

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Peer evaluation form

Group communication

Topic & date: _____

Contribution by: _____

Evaluated by: _____

1. Role in the group mainly	Ø facilitator, Ø leader, Ø harmonizer, Ø record keeper, Ø reporter,	Ø dominator, Ø free rider Ø detractor, Ø digresser, Ø airhead, Ø socializer Ø isolated
Comments		
2. Facilitation To what extent were you using your facilitation skills?	Ø Commenting Ø Asking Ø Summarizing Ø Comparing Ø Adding additional input to previous comments Ø Compromising Ø Utilizing intercultural diversity effectively	

III. Management and Team Communication Skills

- **Communication skills** of a manager and a team member *(to get your message through, facilitate, write, report and explain yourself, and most importantly, structure your communication)*

- On the example of **research communication and research discourse** (templates to structure communication, evaluation of Discussion Leaders)

- Example 7. Research paper evaluation
- Example 8. Presentation evaluation
- Example 9. Peer and self evaluation (of research discourse)

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Example 7. Presentation evaluation

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Peer evaluation form

Professional Presentation

Topic: _____

Presenters: _____

Evaluating person: _____

1. **Impact** Did the presentation make an impact? Did voice, intonation and body language support the impact? Was professionalism communicated? Did all of the team contribute evenly?	
2. **Objective** Was the objective of the presentation clear? Well stated? Well argued? Was the research question/s clear? Did the team respond to the research question clearly? What *was* the main point of the research?	
3. **Interest and research value** Did listeners get *new knowledge*? Which part gave new knowledge? Were the 'old knowledge' parts necessary to report on? Was data collection carefully done? How?	
4. **Contents and planning**	

Example 8. Research paper evaluation (in www.theseus.fi)

Evaluate a research study (Master's Thesis) and specify the following:

	Describe	Evaluation: OK /Unclear
1. Subject (title)		
2. Goal 2.1 Objective of the study	The objective is to ... *(develop/ build/ test/ improve/ design/ re-engineer...)*	
2.2 Importance (Why important? What are the results to be used for?)		
2.2 Research question (What question do the results of this study reply to?)		
2.3 Method or methods Has the method been described? Where? What is it? (How have the data been collected? What are these data?)		
2.4 Outcome (model, proposal, test/ pilot, solution, process, recommendations, experiment, framework, etc)		

Example 9. Research discourse evaluation

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MASTER'S THESIS WRITING: Peer Evaluation / Self Evaluation

Title of the assessed Master's thesis: _____

Name of the evaluator: _____

Evaluate an assignment paper and specify the following, if necessary:

	Evaluation: OK/Unclear	Comments
1. What is the research objective?		
2. Content in general: Does the paper communicate what it claims? (= Does the paper deliver *what was promised* in the Introduction)?		
Does **the title** correspond/explain *exactly* what the paper is about?		
3. Structure of the paper Do all the parts communicate the *intended content*? Do the parts have clear and appropriate *headings*?		
Preface		
Abstract		
Introduction		

4.4 Style		
Academic mode of writing (the author does *not preach or teach*, but defines, describes, evaluates, and communicates his results). The style is **descriptive, not instructive.**		
The author **avoids asking and answering** his own **questions** (only research question(s) are OK).		
The author **avoids You(we)-style** in his text (*"if you/we need to choose a strategy, you/we do it.. ".* Instead, use *"if one needs..."*, or the sentence is Passive).		
The author avoids **magazine style** (as if selling something: "*best solutions, best features*") and **manual style** (with min. words and long lists/bullet points).		
The author **avoids value statements** (It is *great, better...*; It is *obvious, easy, always...*; *of course, no need, indeed*).		
The author **avoids "bold" statements** and **generalizations** (statements which may seem ungrounded, not evidence-based; and statements incorrect in certain environments, but applied to all situations).		
Choice of words (expressions). The author **avoids colloquialisms,** which include: *"blank" words:* to be, to have, to do, to get; *vague references:* that thing, it, they, this. *everyday* and *emphatic language:* so much, that's why, it's like that, etc. *replacements/contractions:* can't, it's, hasn't, wouldn't.		
The author uses **diverse, rich, vocabulary** appropriate **for publications.**		

Integrating Learning of General and Research Competences into a Master's Degree Program

Tools Used

International Master's Degree Program in Industrial Management

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Expertise and insight

for the future

Thank you!

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