# POTENTIAL OF GRADUATED ENGINEERS

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Yrkeshögskolan Novia, May 22 - 23, 2014

#### Contents

- Introduction
- Alumni graduated engineers
- Workplace orientation = what in fact
- Examples
- Discussion

### Alumni – updated addresses

- Guest speakers for students (unpaid/paid), members of support groups/board members, marketing agents in social media, testimonials, commissioners of projects, progressing to Master's level EQF7, add-on training programs, get-together visitors & network members, invitees to Speakers' Forum /Studia Generalia
- How do we know who graduated, when, address?
- Population Register Centre
- Lists of those graduated from different degree programs
- Väestörekisterikeskus, Esko Kirjalainen
- Good collaboration is a two-way street: give-take, the take only does not work

### 'Workplace orientation'

- Level 1. Course content relevant to work
- Level 2. Visiting alumni + related work (example Case Ericsson)
- Level 3. Projects working at the company (Case ITSM)
- Level 4. Integrating Bachelor's and Master's competence sharing

- Easy
- Requires customer case
- Requires commitment
- Requires teacher collaboration & cocreation

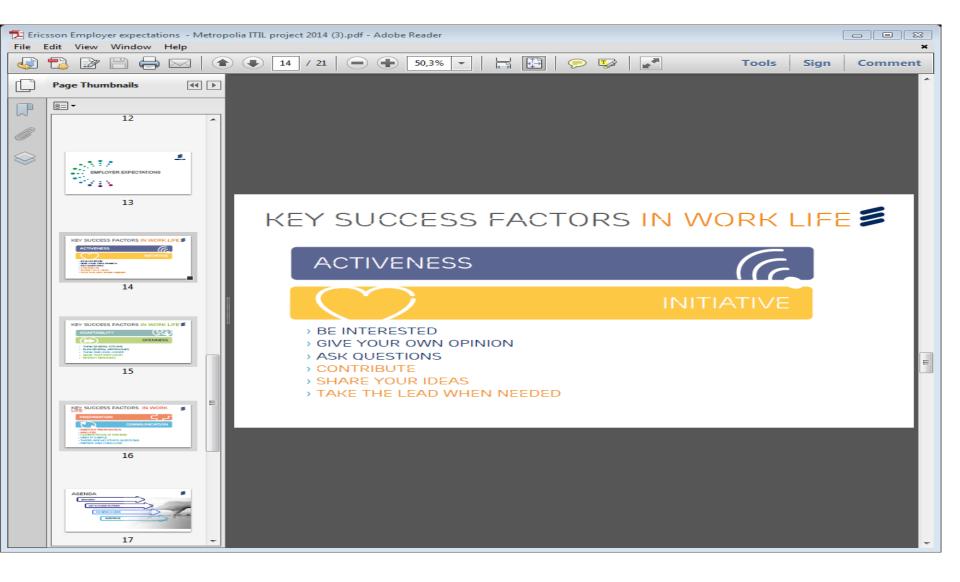
#### Level 2. Case Ericsson

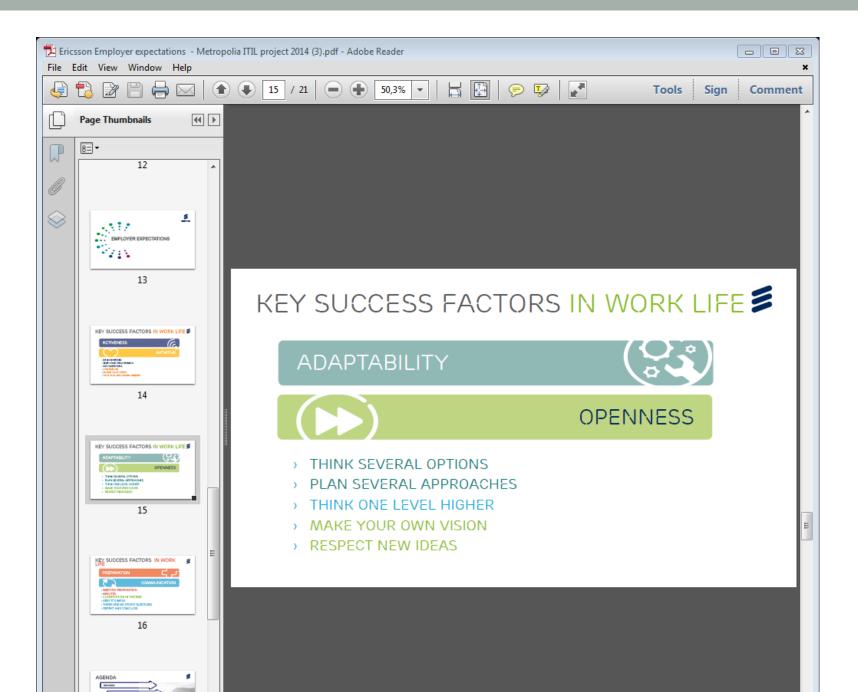
- Graduate: Bachelor of IT and Master of Industrial Management, 7 years work experience
- Topic: What does it mean to act as a professional in a company project?
- 2.1 Visitor session from Ericsson
- 2.2 Organize a world café session
- 2.3 Allow anchors report
- 2.4 Agree and document common code of conduct/ guidelines for the project

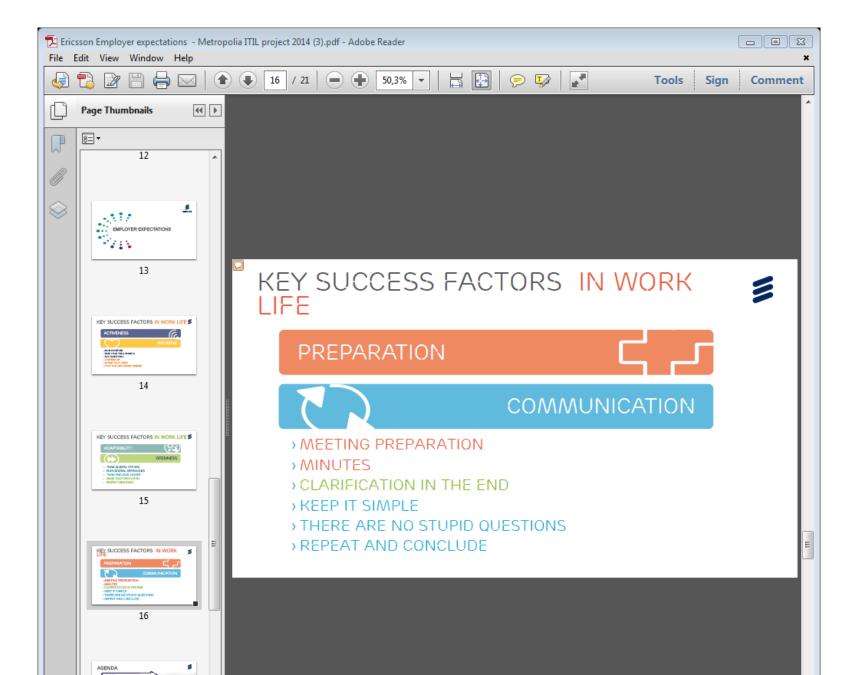
### 2.1 Case Ericsson

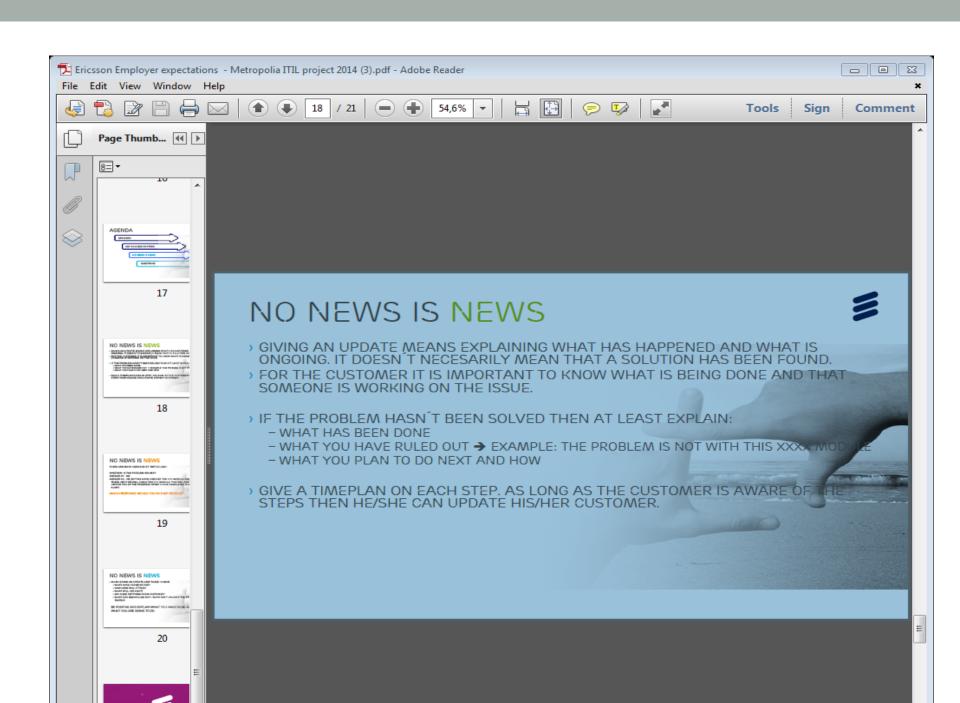


### Case Ericsson









# 2.2 World Café on the topic of: Professional business code?

- Planning?
- Thinking?
- Communications?
- Behaviour?

# 2.2 World Café Principles

- Set the context
- Create hospitable space
- Explore questions that matter
- Encourage contributions
- Connect diverse perspectives
- Listen together for insights
- Share collective discoveries
- Document ideas on a chart

Juanita Brown with David Isaacs: The World Café

# The World Cafe, 7 principer

- Sammanhanget
- Skapa en trivsam miljö
- Fråga betydelsefulla frågor
- Sporra alla att delta
- Korspollinera och kombinera olika åsikter
- Lyssna tillsammans till underliggande strukturer, insikter och djupare frågor
- Skörda resultaten och dela med dig de gemensamma fynden
- Dokumentera era fynd (translation by Matti Willamo)

# The World Café, 7 periaatetta

- Asiayhteys
- Luo ystävällinen ympäristö
- Kysy merkittäviä kysymyksiä
- Rohkaise kaikkia osallistumaan
- Ristipölytä ja yhdistele erilaisia näkemyksiä
- Kuuntele yhdessä rakenteita, oivalluksia ja syvempiä kysymyksiä
- Korjaa tulokset ja jaa yhteiset löydöt
- Kirjaa tulokset (translation by Matti Willamo)

#### Classroom instructions 1

- Arrange room into 4 groups of 3-6 members, 1 flip chart/ table
- Give task (4 perspectives)
- Groups have one flip chart (named: planning& thinking, communications& behavior). Groups to jot down all they think of in words or images in 20 min.
- ▶ Ring a bell. All change to a different group. One anchor stays to report to the next group of what the previous group thought. New members add to the current ideas.

#### Classroom instructions 2

- ▶ Second round: 15 minutes. The bell rings for group change. Again anchor explains and others add.
- Members of the second round groups hold the flip chart visible to all as the anchor reports the key points.
- Class secretary writes down the points.
- This becomes the project's principles for PROFESSIONAL BUSINESS CODE

# Practical results by students: Planning 2013

- Systematic, with preparation, beforehand
- SMART: Specific, measurable, achievable, realistic, timetable
- Good time management
- Documented, schedules
- Tools
- Knowledge of area to be planned
- Flexible
- Someone to manage planning

# Thinking 2013

- Genuine interest in the company
- Active, motivated
- Creative, innovative, out of box, in team
- Consider multiple point of view
- Results oriented
- Process oriented
- Gut feelings, backed up by previous experience
- Rational, logical, thoruogh, specific
- Benefit, value first

#### Communication 2013

- ACTIVE
- Accurate
- Enough (not too much)
- Confirmation: Verify that all have understood
- Open-minded
- Bring in own opinions
- Clear, understandable
- Approachable
- Consider cultural aspects (national, company)
- Meetings effective, planned
- ▶ E-mails
- Conferences, calls

#### Behavior 2013

- ▶ Thinking then doing, not dependent on feelings
- Tolerant, respectful, good manners, polite, equal
- Dress code, Nice presentation
- Punctual
- Learn from mistakes
- Keep your personality
- Hard-working, smart-working
- Coach others, give feedback, be constructive

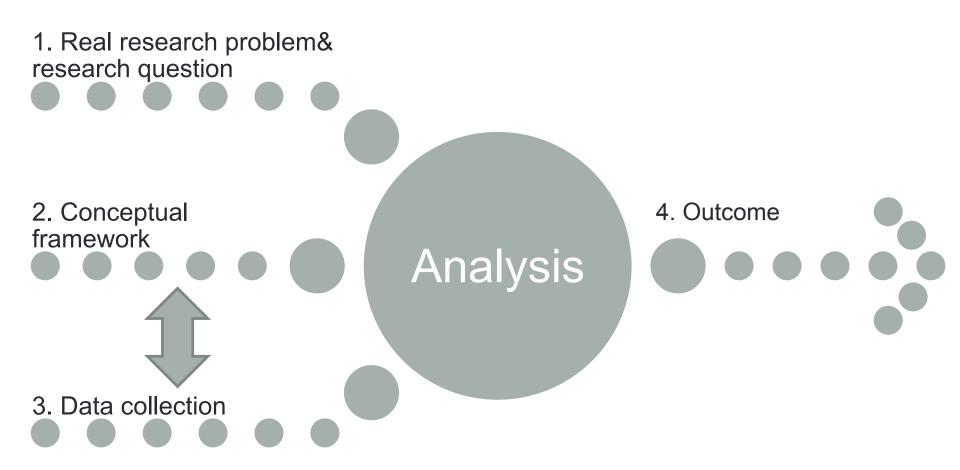
# Some contribution of this activity (+ other factors)

- Students were very professional towards case companies
- Students prepared well agendas, memos, notes
- Students' activity could be labelled as professional
- Students gained confidence
- Students sent update messages each week
- Companies' feedback was overwhelmingly positive (more poisitive than teachers')
- (Product: solution to the company, 40-50 page Bachelor's Thesis type report, company presentation, school presentation)

# Level 4. Integrating Bachelor's and Master's competence sharing

- 20 credit project: 4 teachers involved
- ITSM & Project Management, Nina (7,5)
- Professional Services & Quality Management, Anna (7,5)
- Communication Skills Zinaida, (2)
- Research Skills Marjatta, (3)
- 5-6 projects/ year > alumni, other companies as customers
- This year: One project: Graduated Bachelor as customer; did at the same time his Master's Thesis

#### The four constituents of a Thesis



## Graduated engineers

- Love to be contacted by their old institution
- Come and speak for free (2-3 times, no more for free)
- Need attention, regular contact, careful feedback, gained reputation, boost in their careers, courses/ Studia Generalia guest speakers, get-togethers, members in advisory councils, marketing...
- If served well, want to continue...
- The UAS gets current knowledge, news about current developments...
- USE ALUMNI for your students' benefit!