


Software Product Value and Stakeholders

Zheyang Zhang and Lulu Zhang

Day 4: Case study

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Agenda

- Case study and discussion, by Ms. Lulu Zhang, Head of Enabling Technologies 
- Day 3 group work presentation
- Summary

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Day3: Group assignments, due at 12pm, Aug. 8 2020

- With your group members, continue working on the proposed software development project (20 points)
 - Analyze the context of use of the software product – 5p
 - How are requirements extracted from the needs? Prepare for a plan to include the selection of techniques (at least two) for elaborating on requirements and the steps. -10p
 - Follow the plan to conduct the requirements elicitation and select one prototyping technique to report the requirements. – 5p
- In addition, Groups 5, 7, 8 and 9 prepare for a presentation (including 3 or 4 slides) of your answers to the above assignment, and present it tomorrow (Aug. 8) in the course (五七同城, 喇叭组, 就这组, 秃头小队)

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Presentation of Day 3's group work

- Group 5 - 五七同城
- Group 7 - 喇叭组
- Group 8 - 就这组
- Group 9 - 秃头小队

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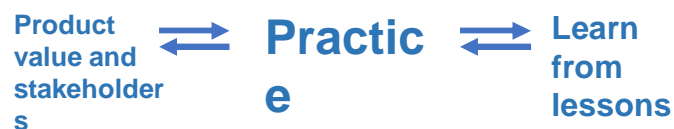
Individual essay, due at 12pm, Aug. 10 2020

Please select one from the following three topics, and write a 2-page essay (~ 800 words) (29 points)

1. Watch the video clip "expert", use the knowledge you learnt in the course to analyze it
2. Analyze the group work retrospectively, and summary the knowledge and lessons you learnt in the group work
3. Explain the takeaway of the case study given by the guest lecturer, and discuss how it matches the theory we have discussed in the class

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Making good wine is simple but not easy.



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Welcome to study in the Master's degree programmes in **Computing Sciences**, taught in English

- Data Science, MSc
- Machine Learning , MSc (Tech)
- Statistical Data Analysis , MSc
- Human Technology Interaction, MSc
- Human Technology Interaction, MSc (Tech)
- Software, Web & Cloud (SWC), MSc
- Software, Web & Cloud (SWC), MSc (Tech)

<https://www.tuni.fi/en/study-with-us/programmes/masters-programmes>

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Thank you!

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Software Product Value and Stakeholders

Lulu Zhang

Day 4: Case Study – KONE

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Agenda

- KONE introduction
- Who am I
- What am I doing in KONE
- What will I share with you & Why
- Case analysis
- Way going forward

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KONE – 通力

- At KONE, our mission is to improve the flow of urban life. As a global leader in the elevator and escalator industry, KONE provides elevators, escalators and automatic building doors, as well as solutions for maintenance and modernization to add value to buildings throughout their life cycle.

<https://www.kone.com/en/company/>

<https://www.kone.cn/zh/>

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Who am I



- Lulu Zhang, Head of Enabling Technologies, KONE IT
- M.Sc in Information System Science, University of Jyväskylä, Finland
- Living in Finland for 18 years, have rich IT work experience from different international companies in various industries: Nokia, Basware, Outokumpu, KONE, etc.

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What am I doing in KONE

- In KONE IT, I am responsible for a team called *Enabling Technologies*
- My team takes care of software and application management for:

Integrations, APIs



Robotics Process Automation (RPA)



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What will I share with you & Why

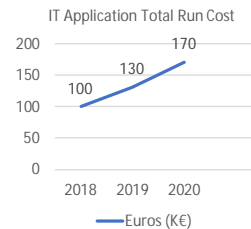
- I will share with you a few project execution stories in real life in KONE IT from the perspectives of:
 - a) Correctly understand the problem domain, sufficiently grasp business needs, realize the value you are trying to deliver
 - b) Identify your stakeholders and effectively manage the relationship
 - c) Examples of typical challenges during the planning phase
- Why I want to share these stories with you:
 - a) Apply the theory into practise
 - b) Save your time, learn from our experience and apply to your next job

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Case Analysis 1 – IT operation harmonization

- Background

IT application cost has kept increasing from 2018 to 2020. This increase rate is not aligned with company development plan, hence, group finance controlling department starts to ask the reasons.



- What is the goal

CIO requested IT to investigate the reasons for IT cost increase, meanwhile, do optimization, in order to not only control the cost, keep the current spend flat, but also to make cost saving for the coming year. Target is to save 10M€.



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Case Analysis 1 – IT operation harmonization

- Let us analyze the problem domain

- Ø IT Application cost increase is not aligned with company development plan, it is too much (*something is wrong ?*)
- Ø What factors contributed to the extra spend beyond planned budget (*is it necessary?*)
- Ø Due to excess spend, this year, cost has to keep flat, no growth (*can we survive?*)
- Ø In the coming year, optimization has to reach 10M€ saving target (*what has to be cut?*)
- Ø IT operations must not be compromised, business continuity must be ensured (*is it possible?*)

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Case Analysis 1 – IT operation harmonization

- From problem domain analysis, we can identify some needs.

Saving €

This is a business needs, simply want to save IT cost, so that company/business can use the saving to invest on other needs, i.e Marketing Campaign.

No growth

This is a HR needs. It was planned to hire 2 more software developers this year, but due to cost control, this needs to be re-evaluated.

Application Optimization

This is a IT needs, IT needs to check all these € spent on keeping IT applications running, are they necessary? Example, if all customer data are saved in company CRM application, why do we need another application having same data? This is redundant, can be decommissioned.

Critical Business Applications must continue

This is a customer needs, no matter what KONE wants to do, end customer can not be impacted. Example, if there is customer reviewing the elevator service contract from our portal, then, portal must stay available 24*7 for customer

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Case Analysis 1 – IT operation harmonization

- Stakeholders are meanwhile also getting clear to the project team:

CIO and
group
finance team



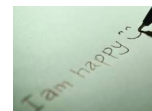
IT operations head



IT operation
Different application team



Customer



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... ..

- Take a pause now, let us recap ... what did we just now do:

1. Understand the problem domain
2. Identified the key stakeholders
3. More or less understand stakeholder needs



Next, is to plan what should we do in this project.....

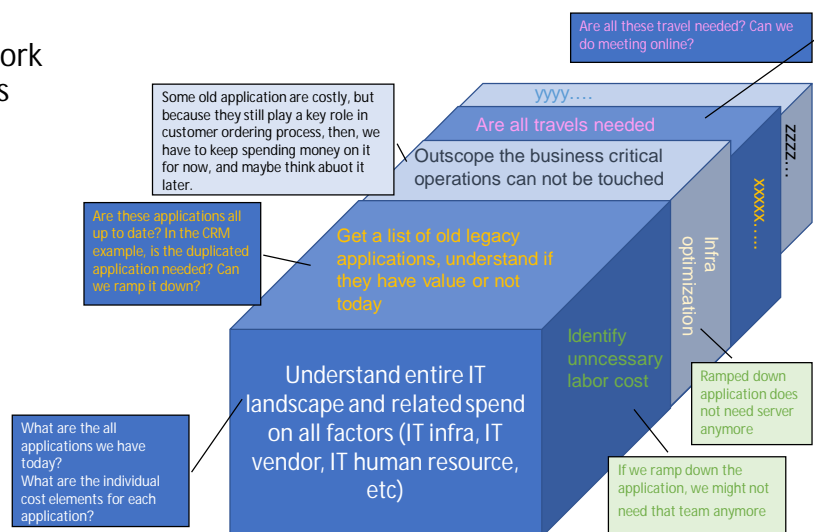
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Case Analysis 1 – IT operation harmonization

- Plan the "scope" of the work and investigate the details

- Get the correct priority

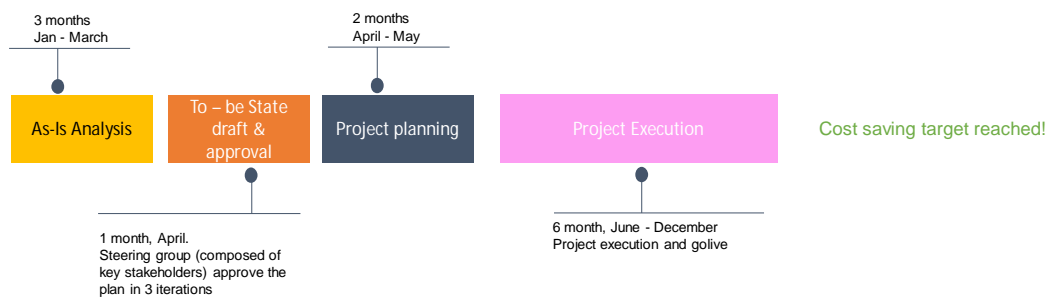
- Cost
- Business criticality
- Complexity
-



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Case Analysis 1 – IT operation harmonization

• Execution



What was done (some examples)

- Simplified IT application landscape, decommissioned x amount of redundant applications
- Successfully negotiated with software and application vendors, to get better license and service deal for KONE

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Case Analysis 1 – IT operation harmonization

• Important techniques used in this project

- Interview Stakeholders, document it, let stakeholder verify it
- Get stakeholder buy-in, especially the case where you want to optimize their application
- Do the math calculation, all the calculation needs to be accurate
- Keep the communication channel open with all of the stakeholders and project team members



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Questions?

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BREAK – 5 minutes

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Case Analysis 2

-- IT Application Development Project

- Background

KONE has thousands of technicians working on the field. In the past, these technicians get the elevator maintenance tasks to their Pager. If Pager beeps long, then, it is a normal maintenance needs. If the pager beeps short and harsh, then, it is a critical incident that somebody is stuck in elevator. Technician needs to call call-center, get the location and then go to the place.



- What is the goal

Create a new digital task dispatch solution, this solution is running on technician's mobile device. Application will send technician the maintenance task customer location and task details, so that technician does not need to always call call-center to get needed information.



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Case Analysis 2

-- IT Application Development Project

- Understand the problem domain, i.e what is "as is" situation

- No digital solution
- Technician does not carry laptop everywhere, they have just a pager, can receive only signal beep notification, that is all
- Technician needs an efficient fast solution to get to know more about the reported maintenance task without calling call-center: location, problem details, customer information, service contract items, agreement, etc.
- Technician wants such solution to be running on his/her mobile device.
- Technician wants the solution to provide reminder when the scheduled task is coming in 2 hours time, so that they have enough time to go to location.

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Case Analysis 2

-- IT Application Development Project

- While trying to understand the problem domain and needs, stakeholders are also identified naturally, in this case, Technician is our biggest stakeholder and also end users.



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Case Analysis 2

-- IT Application Development Project

- Is there any other stakeholders in this case?
- Who pays the cost? J

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Case Analysis 2 -- IT Application Development Project

- Scoping and Planning

What do we want to achieve, for whom - scope

When is this needed

What are the functionality required for this application, i.e how to log in the appliaction

When and how to involve technician since they are very busy on the fields, they are not office worker

When should be the testing time that technician can perform the test offline or online

Steering to approve the Budget request and Schedule request

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Case Analysis 2 -- IT Application Development Project

- Typical challenges during the planning phase:

- Unclear Roles and Responsibilities



- As a team, feel the ownership



- Communication, really understand what does customer mean

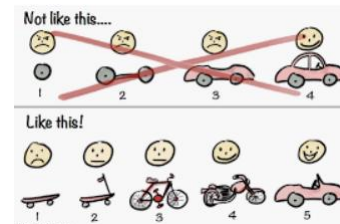


Tip:
F2F meeting is better than remote meeting;
Remote meeting is better than sending email;
Sending email is better than guess.

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Case Analysis 2 -- IT Application Development Project

- Efficient methodology during the development execution phase:
 - Define the Minimum Viable Product (MVP) – what is the minimum required functionality to make such solution work & Document it
 - Prototype and Demo the MVP with stakeholders
 - Decide the MVP release with stakeholders and final users



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Case Analysis 2 -- IT Application Development Project

- Prototyping Example:



This is an application user registration process example. In this example, what you see is how can we use a simple UI sketch tool to get the near-real effect of the UI prototyping before actual programming is done. The purpose is to get the immediate and concrete user feedback fast before time consuming tasks start.

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Summary

- Key take away from these 2 case analysis:



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What is the way going forward

- Practise makes perfect
- Remember to Pause & Think
- Continue practising
- If you need advice or suggestions, feel free to contact me:
Lulu.Zhang@KONE.com

Thank You!
❤️

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