



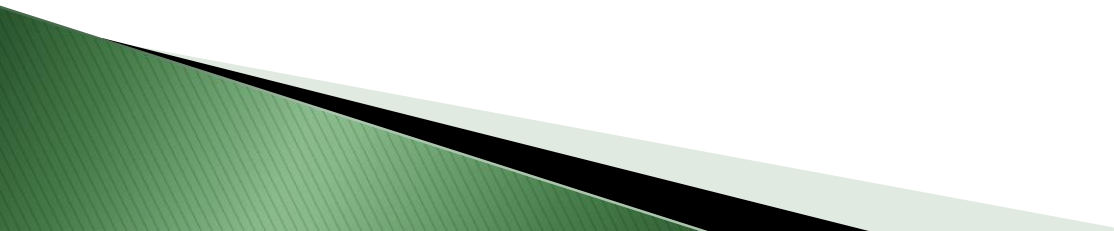
# 24th XBRL International Conference

**“Transparency: with Available, Reliable, Comparable and Re-usable Data”**

**March 20-22, 2012  
Abu Dhabi, UAE**

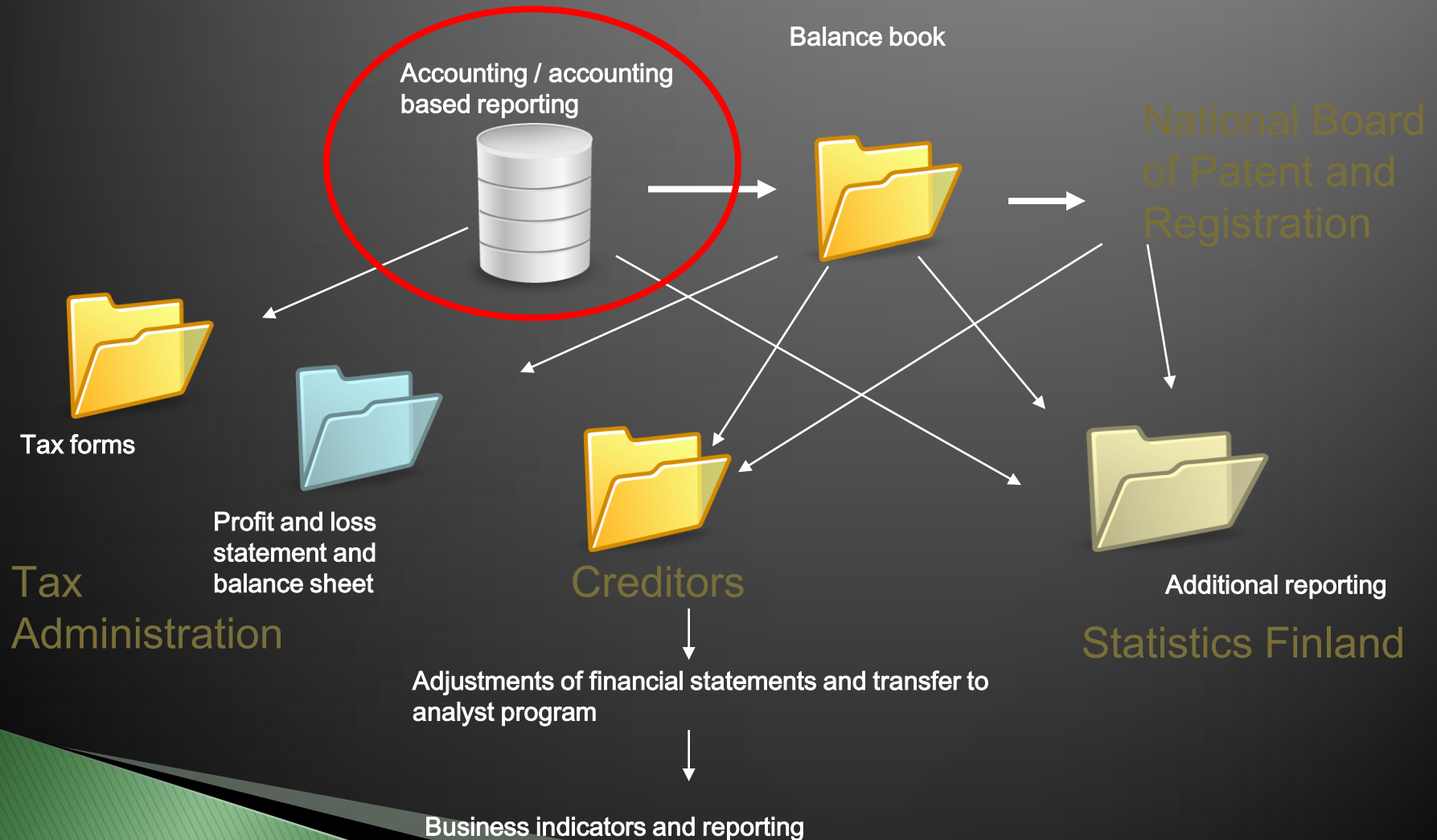
Academic track, The Critical Success Factors in the National Innovation Process of XBRL and their fit to actor network theory, Esko Penttinen, March 22 2012

# Outline

- ▶ Finnish Standard for Electronic Financial Reporting
    - XBRL basics and adoption in Europe and Nordics
  - ▶ Methodology: Grounded action research and critical success factors
  - ▶ Analysis of interviews
  - ▶ Interpretation of the results using Actor Network Theory (ANT)
  - ▶ Conclusions
- 

# NEED TO IMPROVE FINANCIAL REPORTING?

## Current stage of accounting based reporting in Finland



# WHAT HAS ALREADY BEEN DONE?



Standard for Electronic  
Financial Reporting  
- Reporting Codes -

Chart of accounts

		<b>Aineet, tarvikkeet ja tavarat</b>		
		<b>Ostot tilikauden aikana</b>		
		<b>Aine-, tarvike- ja tavaraostot</b>		
	4000	Ostot		
	4001	Aineiden ja tarvikkeiden hankinta (pl.		
	4002	Kauppatavaroiden hankinta		
	4003	Pakkausaineiden hankinta		
	4004	Sähkön hankinta omaan käyttöön		
	4005	Lämmön hankinta omaan käyttöön		
		<b>Tavaraostot</b>		
	4100	Tavaraostot Ahvenanmaalta		
	4200	Yhteisöhankeinnat		
	4201	Palveluiden osto yhteisöstä		



Tax forms

6B	Y-tunnus	
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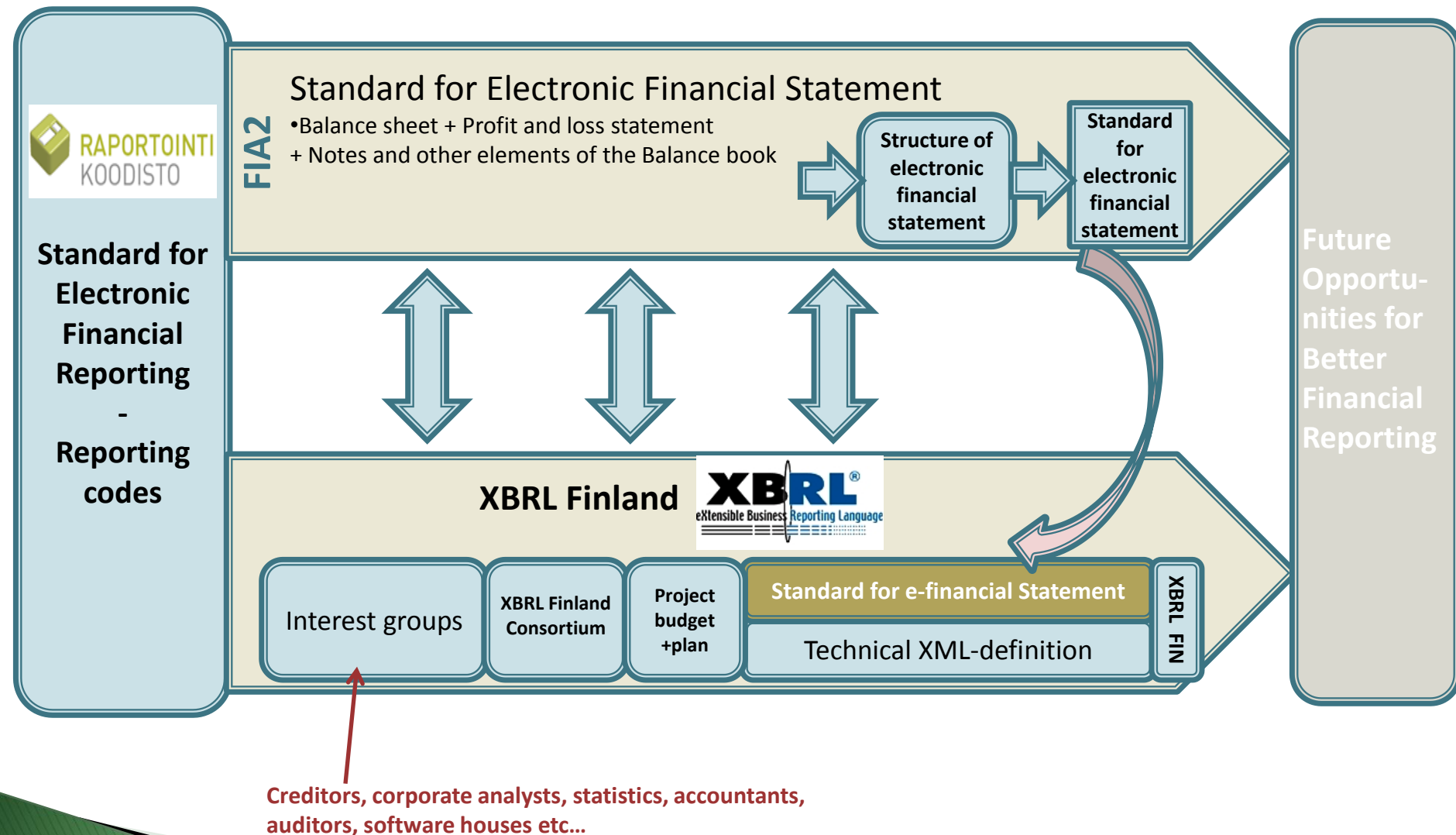


CSV/txt.



Profit and loss statement  
Balance sheet

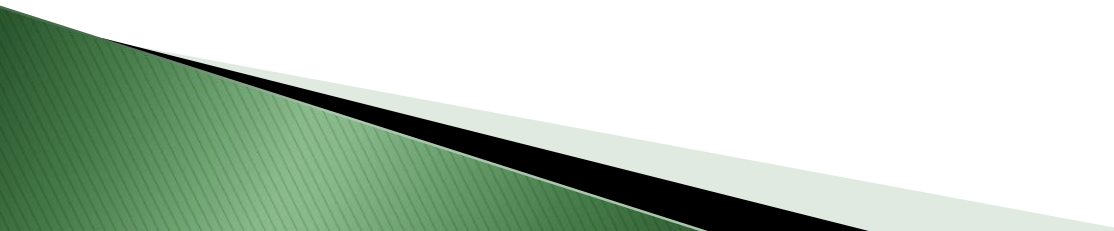
# WHAT IS IN PROGRESS AND COULD BE DONE NEXT?



# XBRL basics

- ▶ eXtensible Business Reporting Language provides an identifying tag for each individual item of data (instead of treating financial information as a block of text – as in a standard internet page or a printed document)
  - XBRL allows information modeling and the expression of semantic meaning commonly required in business reporting
  - For example, company net profit has its own unique tag
- ▶ XBRL tags enable automated processing of business information by computer software, cutting out laborious and costly processes of manual re-entry and comparison
- ▶ Computers can treat XBRL data “intelligently”: they can recognise the information in a XBRL document, select it, analyse it, store it, exchange it with other computers and present it automatically in a variety of ways for users
  - XBRL greatly increases the speed of handling of financial data, reduces the chance of error and permits automatic checking of information.
- ▶ XBRL (eXtensible Business Reporting Language) is a freely available, market-driven, open, and global standard for exchanging business information
- ▶ XBRL is XML-based and the XBRL Specification is developed and published by XBRL International, Inc. (XII)

# XBRL in Nordics

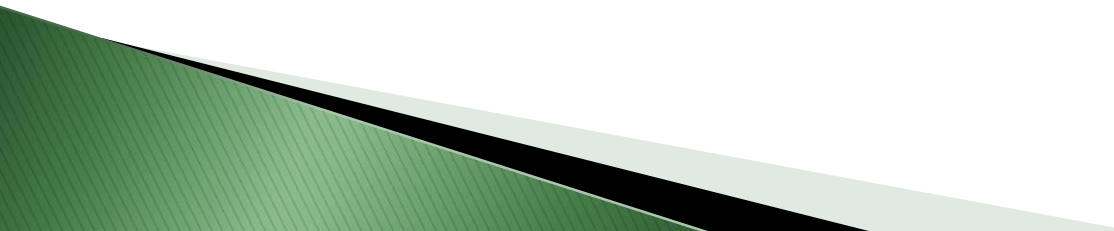
- ▶ XBRL Finland consortium to be established 1.2.2012
  - ▶ XBRL Sweden consortium established in 2005, very low penetration
  - ▶ XBRL Norway consortium not yet established
  - ▶ XBRL Denmark consortium established, mandatory filing beginning 2013
- 

# Research question

- ▶ What are the success factors in a public-private standardization effort?
  - Large collaboration involving numerous organizations
  - Case: XBRL platform



# Literature

- ▶ Existing literature on innovation/standardization mainly focusing on diffusion of innovation/standard (e.g. Alcouffe et al. 2008)
  - ▶ XBRL literature on impacts of XBRL on quality of financial information (Baldwin et al. 2006), quality of data standards (Zhu and Fu 2009), business value and adoption of XBRL (Valentinetti and Rea 2011)
- 

# Methodology

- ▶ Grounded action research (Baskerville, Pries-Heje, 1999)
  - Based on grounded theory (Glaser and Strauss, 1967; Strauss and Corbin, 1990) which is data driven methodology; begins with an area of study and allows the relevant theory to emerge from that area (Strauss & Corbin 1990)
  - Means for improving and refining the practice of the action research method
- ▶ Critical success factors method (Rockart 1979)
  - Collected factors which were mentioned in the interviews to have an effect on the success of the development project
  - to uncover the reasons why the development project was a success

# Empirical study

- ▶ Conducted 19 semi-structured interviews (14 interviewees) with the key players of the project, representatives of business enterprises, and auditors
- ▶ The first stage consisted of 14 interviews (9 interviewees) covered four experts in accounting firms, two experts from accounting software vendors, and finally three experts working for operators transmitting mandatory financial data. One part of the interview focused on the success factors of the development project.
- ▶ The interviews in the first stage of data gathering took place in 2009. The second stage of data collection consisted of 5 interviews (5 interviewees) involving decision makers in key stakeholder organizations. The second stage interviews were conducted in 2010. All the interviews in the first and second stage lasted, typically, one hour and all interviews were recorded and transcribed

# Critical success factors (1 / 3)

## 1 Win-win-win vision

"I think that the most important success factor is to have a vision. To have a strong vision and to be able to communicate and share it. All too often we fail there. If you don't know where you are going any road will do and we have seen that happen, that people have gone in odd directions because a vision has not been strong enough." (Director A, operator transmitting mandatory financial data)

"The project management must sell the vision and the potential benefits of the innovation to the stakeholders. That is the way to get their interest." (Director, accounting software vendor)

"Innovativeness is key here, benefits to all the parties involved must be somewhere there in the horizon." (CEO, Association of Accounting firms)

"The harmonization of the mandatory business reporting helps to reduce the amount of manual interventions, thus decreasing the risks involved in it. When manually inserting information into the system, there is always the risk that something goes wrong. So we perceive this project positively." (Expert A, accounting software vendor)

## 2 Execution

"Execution is critical." (Director B, operator transmitting mandatory financial data)

"How to run the project, how to ensure acceptance procedures, and finalizing proposals is crucial in these kinds of private/public collaboration projects." (Director, accounting software vendor)

"Critical mass of participants, enough people to be convincing and interesting" (Director, accounting software vendor)

"Combining the efforts of business and academia, credibility aspect, education aspect" (Director A, operator transmitting mandatory financial data)

"To make the market you have to get a lot of people involved: players, regulators, research and you can go a little bit further, which we should be doing, education, which grabs what you are creating so that even the young people who are studying this things, get engaged with their brains." (Director A, operator transmitting mandatory financial data)

"The networking aspect is one thing that follows from the common vision to create the markets gradually from the vision to create the network that will deliver the solution, the innovation and, the ideas. You cannot do these things alone." (Director A, operator transmitting mandatory financial data)

# Critical success factors (2 / 3)

## 3 Track-record

“We felt that it was important to have the RTE program, leveraging from earlier projects of Full SEPA (Single Euro Payments Area), FVC (Full Value Chain), and FIA (Fully Integrated Accounting)” (Director, accounting software vendor, Tieto)

## 4 Commitment

“Common will is often more important than content.” (Director, accounting software vendor)  
“There is of course always a challenge in networking because, when you create a network, people within it may have totally opposing interests.” (Director A, operator transmitting mandatory financial data)

## 5 Scope definition

“First thing that came to my mind was that accounting firms have been, in the past, very reluctant to changes in account charts and everything related to account charts, what was positive about this initiative was the fact that this initiative decreases the reporting burden of accounting firms” (Expert in accounting firm)  
“I see that it is important that the scheme uses most common account chart structures, making it easier to adopt by accountants and other experts in the field of financial administration. The scheme is very intuitive and the structure seems logical.” (Expert in accounting firm)

# Critical success factors (3 / 3)

## 6 Communication

“Active promotion of the results to those who implement is important, we have to find ways how to activate the service providers to give services to the stakeholders” (Director, accounting software vendor)

“Communication is very important. When the Tax Office makes modifications to its systems, it must communicate these changes to the users of the systems. The Tax Office should organize informative meetings to the users of their systems.” (Expert in accounting firm)

## 7 Passion

“Without a vision there is no enthusiasm and without enthusiasm there are no innovations” (Director A, operator transmitting mandatory financial data)

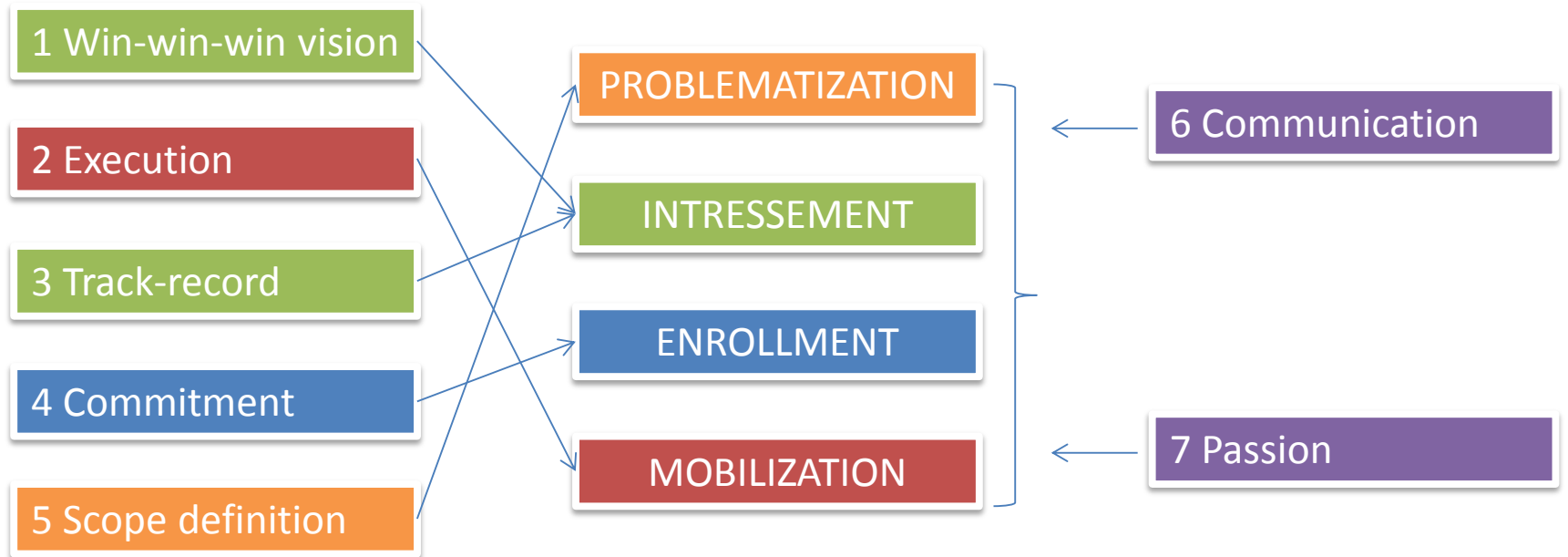
“We receive a lot of requests to participate to various development projects and it is hard to make a decision on which project to participate. Therefore, if the project management can build a positive attitude and passion around the project, that affects our intention to participate to the meetings and to contribute to the project.” (CEO, Association of Finnish Accounting firms)

# Actor–Network Theory

- ▶ **Sociology of translation**, in which innovators attempt to create a *forum*, a central network in which all the actors agree that the network is worth building and defending
- ▶ **1. Problematisation**: What is the problem that needs to be solved? Delegates need to be identified that will represent groups of actors. The primary actor tries to establish itself as an obligatory passage point (OPP) between the other actors and the network, so that it becomes indispensable.  
Actors' efforts to convince others to subscribe to their own view by showing they have the correct solutions (Alcouffe et al., 2008)
- ▶ **2. Interessement**: Makes other actors interested and accepted the definition of primary actors. The primary actor works to convince the other actors that the roles it has defined for them are acceptable.  
Construction of the interface between the interests of the various stakeholders and to the strengthening of links between these various interests (Lowe, 1997)
- ▶ **3. Enrollment**: Where other actors receive interests defined by the main actors.  
Creation of alliance networks, the aim of which is to build up agreement among the stakeholders concerning their interests (Alcouffe et al., 2008)
- ▶ **4. Mobilization of allies**: Do the delegate actors in the network adequately represent the masses? If so, enrollment becomes active support.  
Monitoring of the various interests so that they remain more or less stable (Mouritsen et al., 2001)

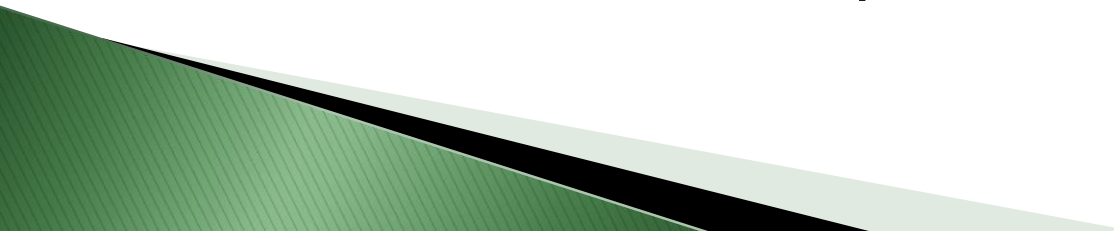


# Analyzing the results





# Discussion and conclusions

- ▶ The role of R&D in the western world
    - Increasing number of public/private collaboration projects (e.g. standardization of processes driven by increased competition)
  - ▶ Academic focus on the diffusion which has been succesful
    - TAM & DOI aim at explaining innovation adotion and diffusion
    - Little is known about the early innovation process
    - As academics we would like to understand the whole picture
  - ▶ The fit of empirical factors to the ANT (except for communication and passion as general factors)
- 

- ▶ Questions?
- ▶ Thank you for your attention!

