## **International Software Product Management Association**



### ISPMA:

## The first international standard for education and certification of software product managers

Dr. Samuel A. Fricker
Blekinge Institute of
Technology (BTH), Sweden

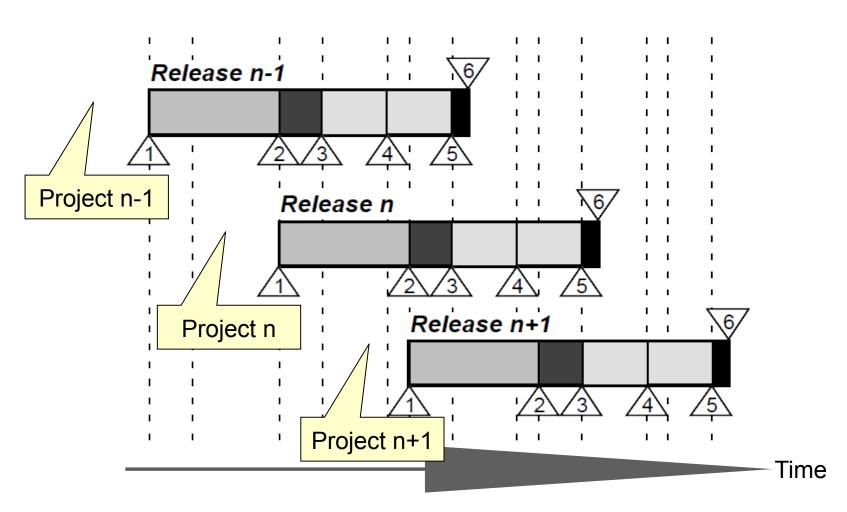
Hans-Bernd Kittlaus
InnoTivum Consulting
Germany

CEE-SEC(R), Moscow, Russia November, 2011



## Product Management in the Business of Software







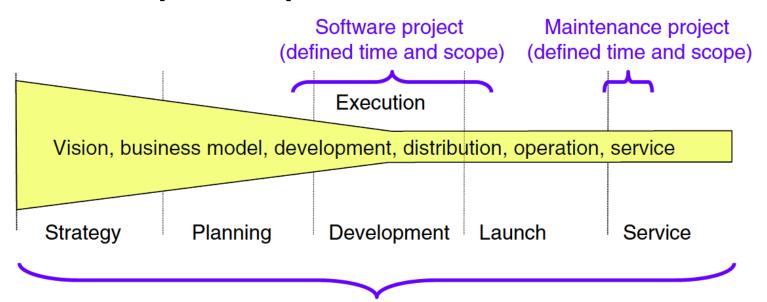


- Strategic decisions are already made before the project, and not during the development project
- The release is delivered, but with little consideration of maintenance and evolution
- Software is documented in many deltas, making it difficult innovate

## Software Product Management



 The product manager is responsible for the software product across development projects, from inception to phase-out



Product management (covers several projects, no time limits )

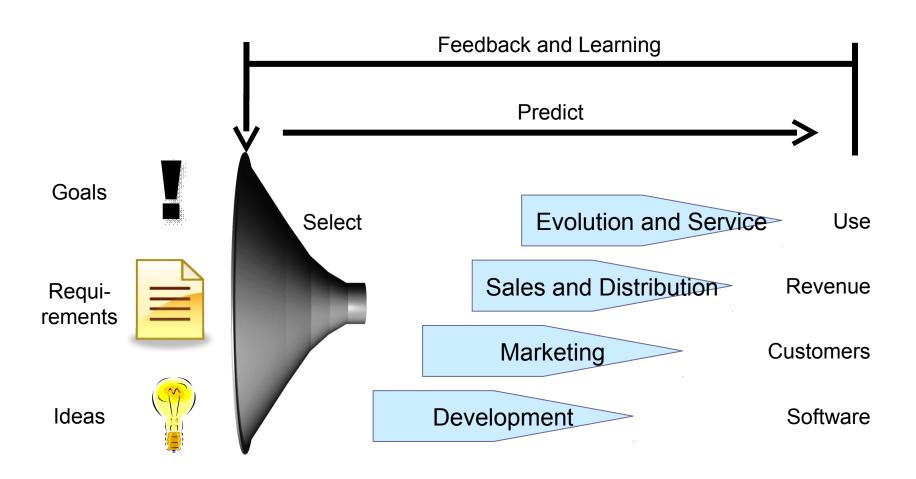




- Vision of a unified body of knowledge (SPMBoK)
  - What is Software Product Management (SPM)?
  - How ISPMA works an overview?
- International Software Product Management Association (ISPMA)
  - Curriculum and certification
  - Opportunities for participation

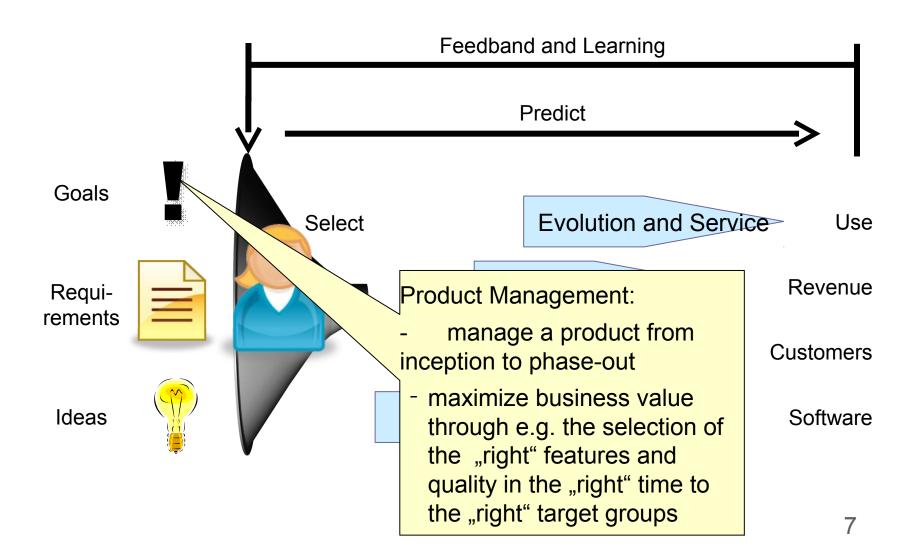
# Product Management (Simplified and Stylized)





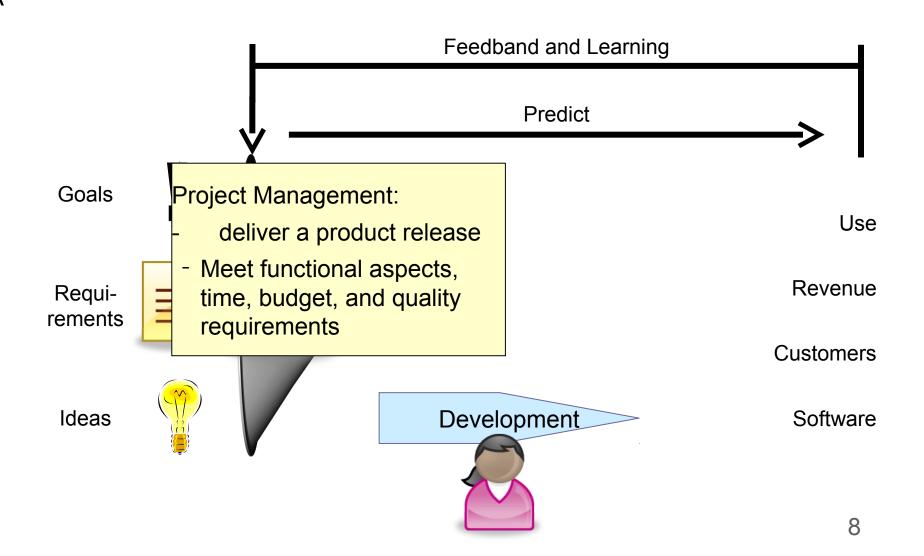






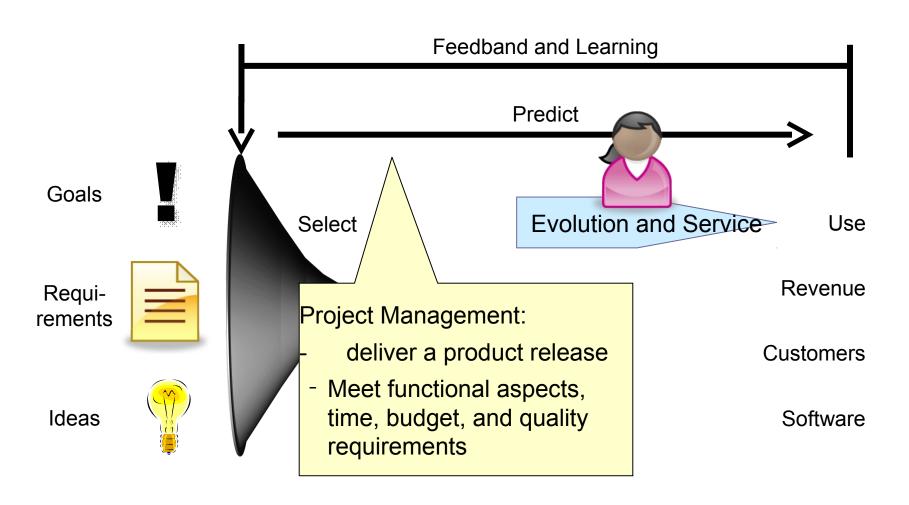
## Project Management: Development





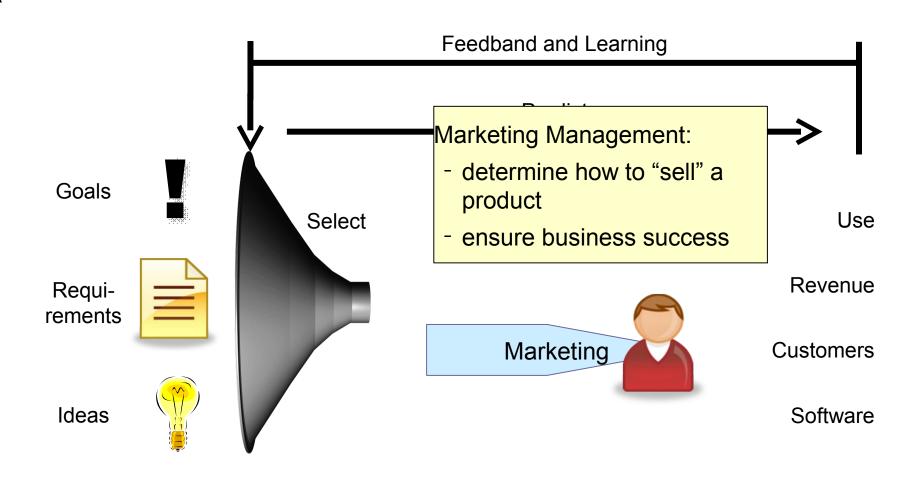
# Project Management: Customer Projects





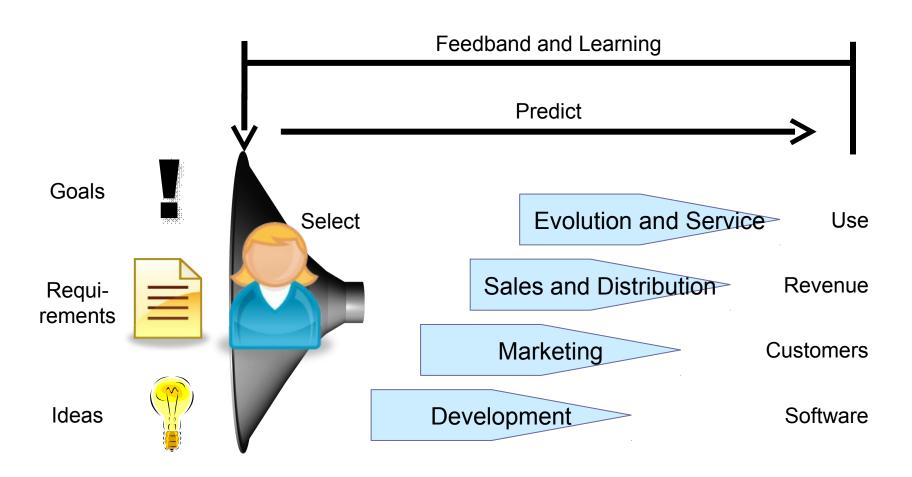


## **Marketing Management**





## **Product Management**



## Product Management Competence Development



- Basic (e.g.)
  - Apply Skills and Techniques
  - Feature Focus
  - Write Business Case...
- Advanced (e.g.)
  - Optimize SPM Efficiency and Effectiveness
  - Product Focus
  - Sell Business Case, Negotiate...
- Expert (e.g.)
  - Facilitate Product Management
  - Product-Line, Portfolio Focus
  - Monitor and Influence

## The People Certification Approach



### Curriculum

- Partition body of knowledge (BoK) in learning units
- Agree on learning objectives

## Training

- Present BoK in a learnable form
- Accompany learning process

### Examination

- Prepare criteria, indicators, and standards
- Perform assessment in a repeatable manner





- Vision of a unified body of knowledge (SPMBoK)
  - What is Software Product Management (SPM)?
  - How ISPMA works an overview?
- International Software Product Management Association (ISPMA)
  - Curriculum and certification
  - Opportunities for participation





### Vision

Foster software product management excellence across industries by establishing software product management as a discipline of its own in both academia and industry

### Mission

Establish, disseminate and maintain a certifiable body of knowledge on SPM (SPM BoK) that is recognized as the premier source on SPM by all stakeholders

## International Software Product Management Association (ISPMA)



### Academia















Industry











Software. Process, Management software processes that fit your business needs



INNOTIVUM







## Differences to Other SPM Trainings



### • Approach:

Non-proprietory, international, non-profit, based on experts from both academia and industry

### • Contents:

Clear separation between SPM and Marketing due to different time horizons

### • Certification:

Clear separation between training providers and certification agencies

**→** Higher value of certificate

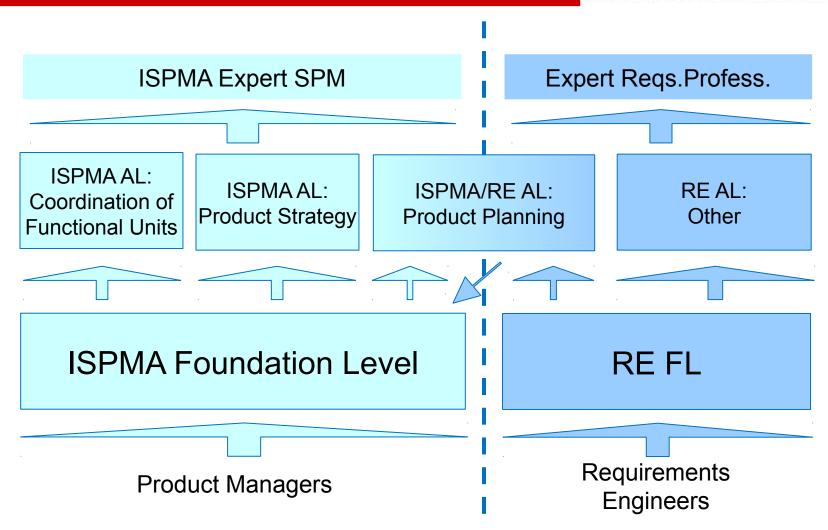
# Partition SPM BoK in Learning Units



Strategic Management	Product Strategy	Product Planning	Development	Marketing	Sales and Distribution	Evolution and Service
Portfolio management	Positioning and Product Definition	Product Life-Cycle Management	Project management	Marketing mix optimization	Customer relationship management	Technical support
Corporate Strategy	Delivery model	Product Requirements Engineering	Engineering management	Marketing planning	Sales strategy and planning	Marketing support
Innovation Management	Sourcing	Release Planning	Project requirements engineering	Product launch	Channel preparation	Sales support
Resource Management	Business Case and Costing	Roadmapping	Quality management	Customer analysis	Sales management	Services preparation
Market Analysis	Pricing			Opportunity management	Operational distribution	Services provisioning
Product Analysis	Performance and Risk Management			Operational marketing		
	Ecosystem Management					
	Legal and IPR Management					







# How the ISPMA works: Step-wise process

1 SPM V

- 1) Review topic-specific literature (books, state-of-the-art)
- 2) Define learning objectives (Understand vs. Know)
- Assemble into syllabus with other learning units
- → Continous input and reviews from partners (industry + academia)

#### **EU6** Product Release Planning

- Release Planning Process and Release Plan Structure
- Requirements Prioritization Criteria, Methods, and Visualization
- Win-Win Release Negotiations

www.ispma.org/certification/

→ Product Planning

### (Example Release Planning)



Syllabus: Product Requirements Engineering – Advanced Level – Contents

#### EU1a Requirements Engineering: Introduction and Foundations

- Inquiry Cycle: Elicitation, Analysis, Validation
- Abstraction Levels: Goals, Functional and Quality Requirements, Constraints
- Requirements Specification: Natural Language, Models

#### EU1b Software Product Management: Introduction and Foundations

- Scope and Effects of Software Product Management
- Software Product Management Overview (Framework)
   Software Products, Releases, Families, and Product Lines
- Role of Requirements Engineering in Software Product Management

#### EU2 Product Visioning and Strategy Definition

- Product Strategy
- Product Vision
- Business Case

#### 113 Product Roadmanning

- Product Lifecycle
- Long-term Planning: Product Roadmaps and Lines
- Development and Communication of Roadmaps

#### U4 Innovation and Market Requirements Elicitation

- Product Innovation
- Creativity and Elicitation of Innovation Candidates
- Market Requirements Elicitation

#### EU5 Product Requirements Management and Triage

- Requirements Lifecycle
- Requirements Interdependencies
- Requirements Triage

#### EU6 Product Release Planning

- Release Planning Process and Release Plan Structure
- Requirements Prioritization Criteria, Methods, and Visualization
- Win-Win Release Negotiations

#### 7 Tendering and Dialogue with Development

- Tendering Process
- Requirements Communication
- Support and Controlling of Development

#### FUS Performance Improvement

- Process Improvement and Tool Support

@ ISPMA.org DRAFT - April 16, 2011

# Perform Assessment in a Repeatable Manner

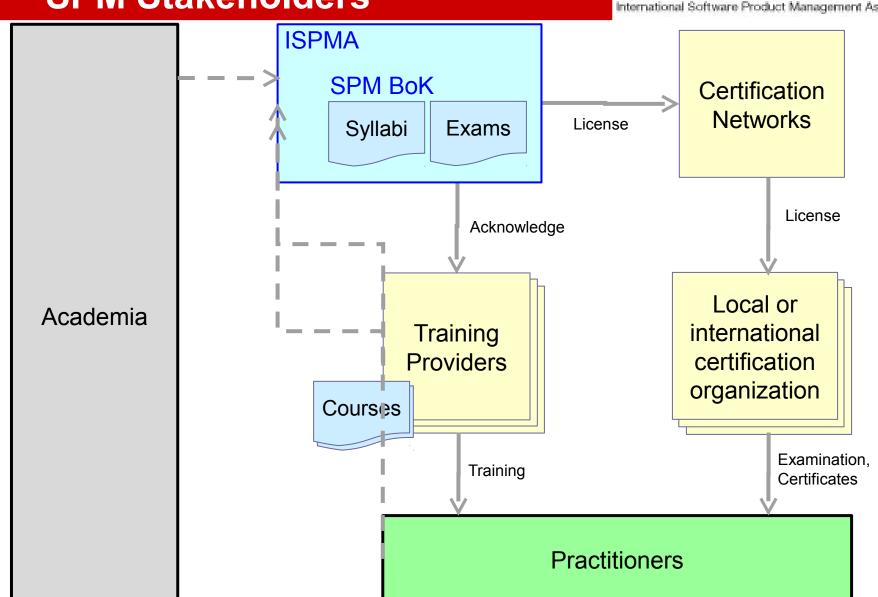


- Established Certification Networks and Bodies
  - Future Network Cert, iSQI, SAQ, etc.
- Typical forms of examination
  - Multiple-Choice
    - Class-room examination
    - Online examination
  - Expert review of
    - Work results
    - Work report

A number of criteria are used to determine development priority. Which three of the following criteria are likely to be most useful for selecting features for a new high-end variant of an existing software product?

Status of competitors with respect to the feature Support for education and training Cost and benefit of implementing the feature Impact on the current product's architecture Volatility of the feature Issuer of the feature

### 



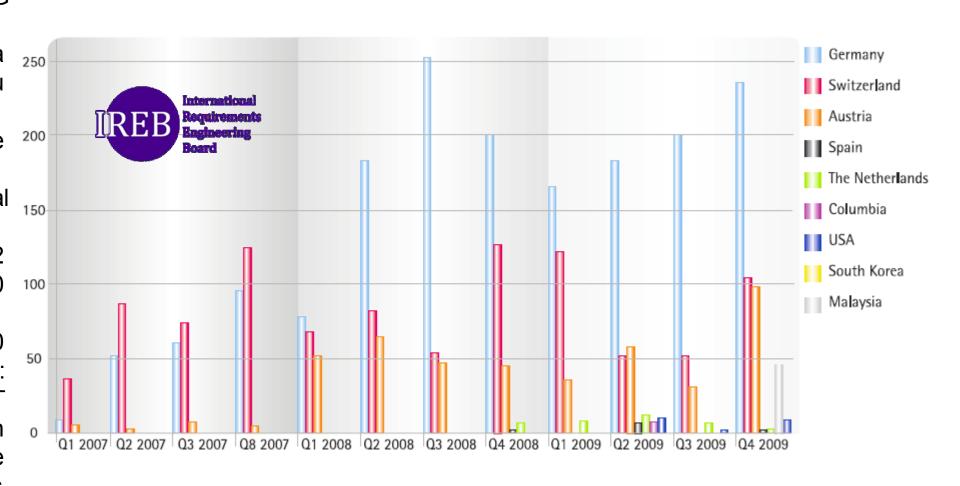
## **Status**



- SPM Reference Architecture V. 1.0 available
- SPM Foundation Level Syllabus V. 1.0 available
- Certification will be available in early 2012
- First trainings based on ISPMA will be conducted in Stockholm, Zurich, Utrecht, Copenhagen, Cologne
- Work on SPM Advanced Level Syllabi under way
- Growing number of members

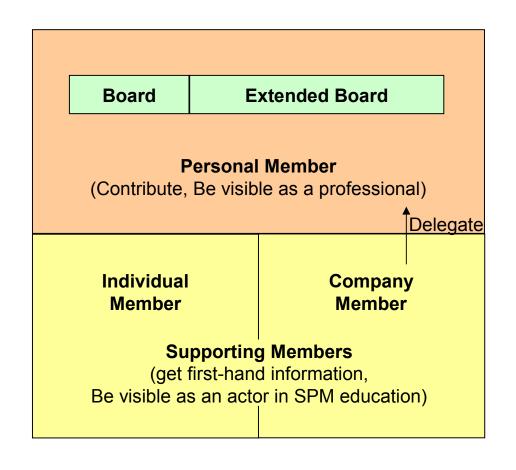


## **Training and Certification Volumes**





## **ISPMA Membership**





## Contact

To get further information or request participation:

www.ispma.org

info@ispma.org