

1

*Selected Topics in Project Management*

# Project Management as a Body of Knowledge

Dr Marc Conrad

<http://perisic.com/stpm>

2

## An apocryphal joke in Project Management.



You can have it:

- *Good*
- *Fast*
- *Cheap*

**Pick Two**

Picture from [http://www.cvr-it.com/PM\\_Jokes.htm](http://www.cvr-it.com/PM_Jokes.htm)

# What is a Project?

- A project is a **temporary** endeavour **undertaken** to create a **unique** product, service, or results.
  - Temporary (*see next slide*)
  - Unique Product, Service or Result
  - Stakeholders

## 4

# Temporary

- A project has a **definitive beginning** and **definitive end**.
- Possible reasons for end:
  - Objectives have been achieved.
  - It becomes clear that objectives will not be achieved, or the need for the project no longer exists.
- *Temporary does not mean short in duration!*

Begin of project

End of project



*product or service created by this project*

## More Project Attributes

- Seen: Temporary, Unique Product, Stakeholders
- Requires resources from various areas
- Has a customer or sponsor and other stakeholders.
- Involves uncertainty (*risk management!*)
- Progressive Evaluation (*see next slide*)

# Progressive Elaboration

- Means developing thoroughly in steps and continuing steadily by increments.
- Example:
  - Object Oriented System Design (Use Case, Analysis, Design, Implementation, Testing)
  - Agile Strategies (Customer collaboration, Working software, Responding to change...), see <http://agilemanifesto.org>.
  - Any life-cycle models in Software Engineering

# Why are there Projects?

- Projects are typically authorized as a result of one or more of the following strategic considerations:
  - A market demand
    - E.g. software for mobile phones.
  - A customer request
    - E.g. Extension of an existing web service because of increasing demand.
  - A technological advance
    - E.g. Migration from tape backups to CD/DVD/RAIDs.
  - A legal requirement
    - E.g. Accessibility for web sites.

# The PMBOK®

- Main source of this lecture series: PMBOK® Guide:
  - Full name: *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*, by the Project Management Institute ([www.pmi.org](http://www.pmi.org))
  - *IEEE Std 1490-1998* adopts the PMBOK® Guide as standard for project management.
- Well documented on the Internet:
  - <http://www.google.co.uk/search?q=pmbok>
- Not a methodology but rather a framework or knowledge base for Project Management.
- 2013 Edition: there are 47 processes (see <http://perisic.com/pm/ITTO/> ) that, taken together, “define” Project Management
- (2008: 42 processes; 2004: 44 processes)

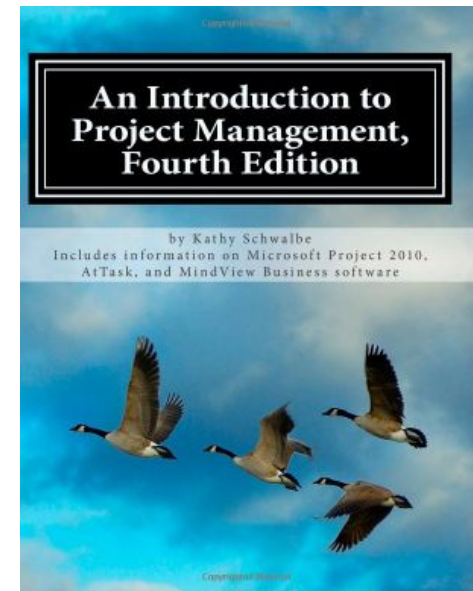


## Further Reading: Kathy Schwalbe



<http://www.augsburg.edu/ppages/~schwalbe/>

- Kathy Schwalbe, *An Introduction to Project Management*
- Based on the PMBOK, but easier to digest.



# Process Groups and Knowledge Areas

- The PMBOK defines Project Management as a series of *processes* that each reside within
  - A Process Group
  - and*
  - A Knowledge Area

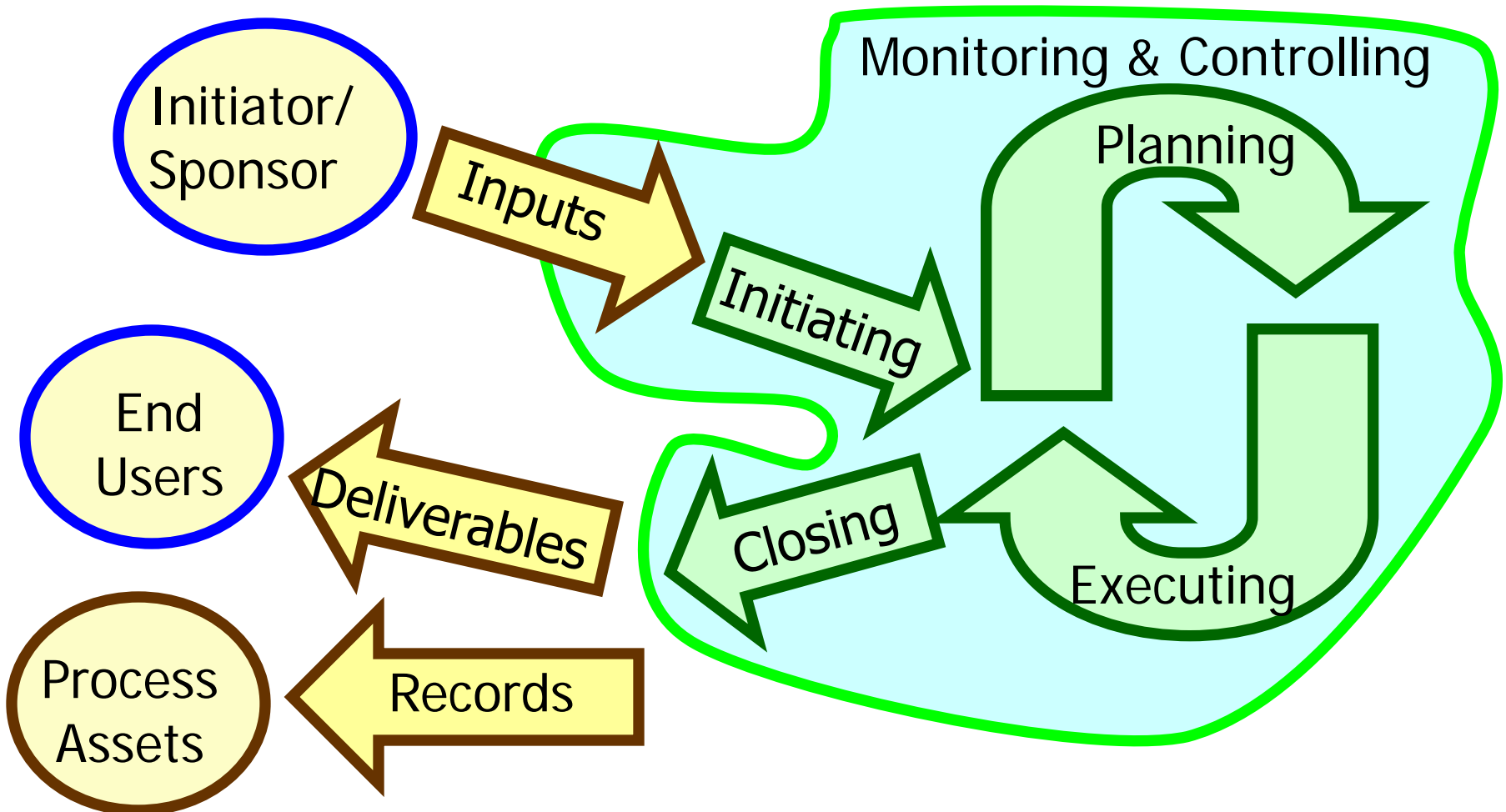
# Project Management

- Project Management is accomplished through the use of the processes of
  - Initiating
  - Planning
  - Executing
  - Monitoring & Controlling
  - Closing

Process  
Groups



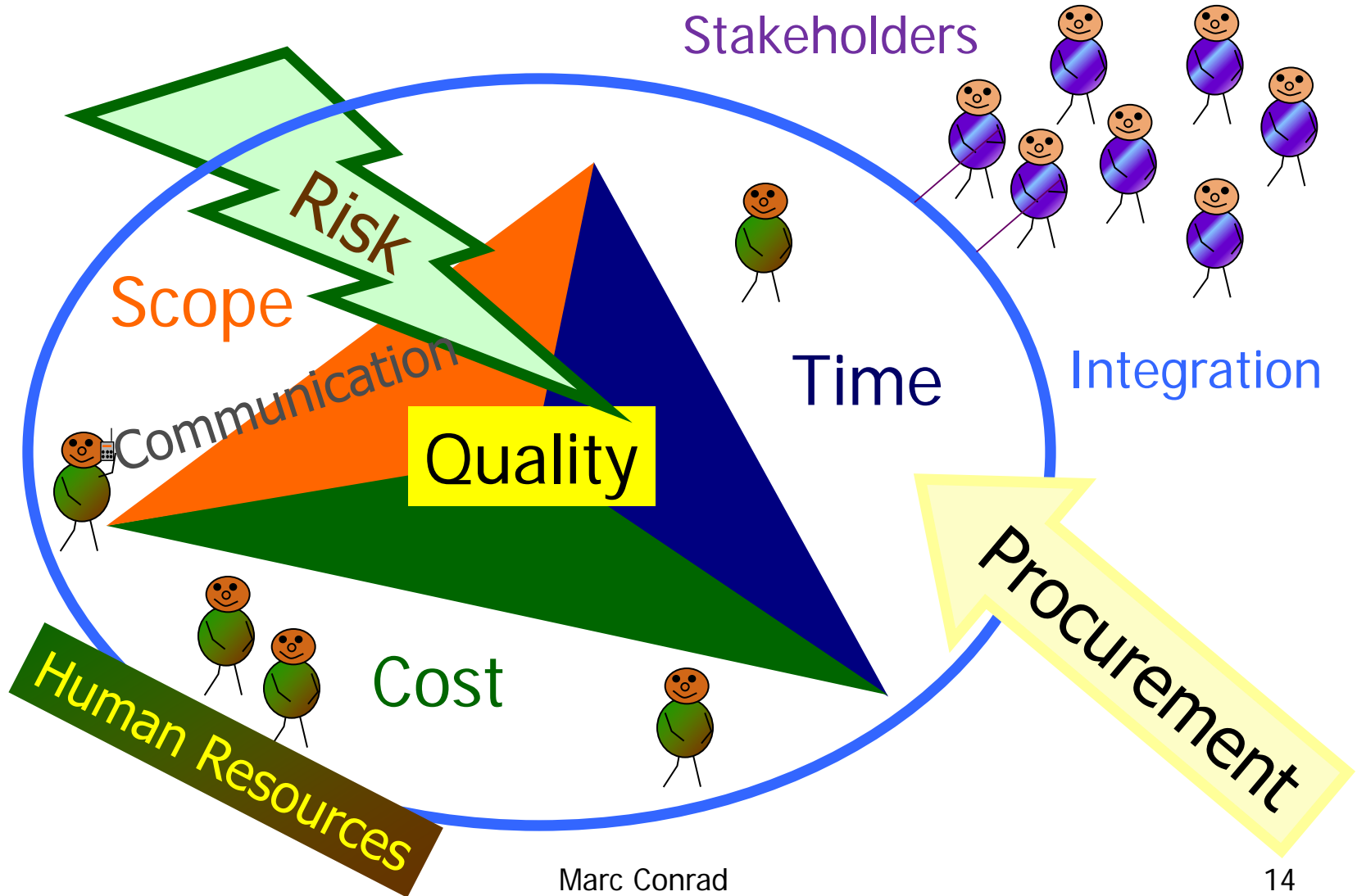
# Relationships of Process Groups and Project Boundaries



# The Triple Constraint

- *Only* 16.2% of projects met the **project goals** on **time** and on **budget**.
- More than 32% of IT projects were cancelled before time and budget.  
(from Kathy Schwalbe, Project Management)
- *Identifies* **Cost**, **Time** and **Scope**.

# Knowledge Areas of Project Management



# The Ten Knowledge Areas of Project Management

- Scope, Time, Cost & Quality
- Human Resources, Communication, Stakeholders
- Procurement
- Risk
- Integration