

Project Management

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5 min [Video](http://video.bilkent.edu.tr/arcms_bilimg.php?category=3&lang=english_slides) about
(http://video.bilkent.edu.tr/arcms_bilimg.php?category=3&lang=english_slides)

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Project Management



Winchester Mystery House

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Questions - First

Think about your projects from PM perspective



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Agenda

- The need for Project Management
- Defining a “project”
- Main characteristics of a project
- Project management & project life cycle
- Success, Challenges and Failures
- Project Management Areas
- Project Documentation Templates
- Some Practical Issues (From experience)

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Is it a new concept ?

Limited resources


Financial limits

Stakeholders' request

Unclear outcomes

...

➔



Planning
Coordination
Leadership

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So what is new?

	A few decades ago	Today
Change in technology	Slower	Faster
Competition	Lower	Higher
Individual time	Higher	Less
Stress	Less	Higher
Need for new ways to complete a task	No/Less	Higher

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Today

Can we survive by doing the same thing?

We are forced to change

1. New products and services
2. Existing products and services

↑ Efficiency
↓ Cost
↑ Quality

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Today

“Project Management” is **mandatory**.

What about the some facts?

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The Reality

Projects can be

- Consistently late
- Over budget
- Half-cooked

☹️

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The Reality

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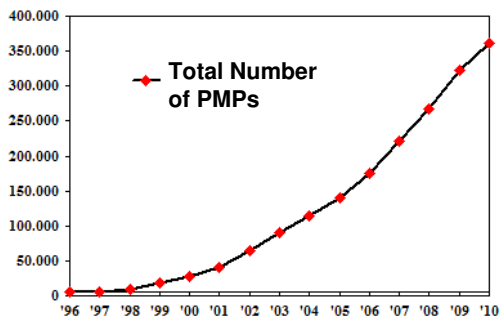
PM is about

- Leadership
- Integrity
- Decision making
- Planning
- Time management

Hidden

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Result: Need for Professionals



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To understand Project Management

What is a project?

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A Scenario

Let's assume that
you are working in an IT company
which produces SW for the health sector,

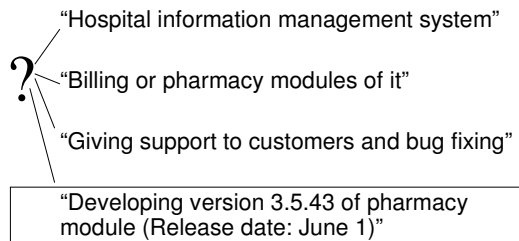
you are dealing with "hospital information
management systems".

What can be the projects?

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A Scenario

What can be your projects?



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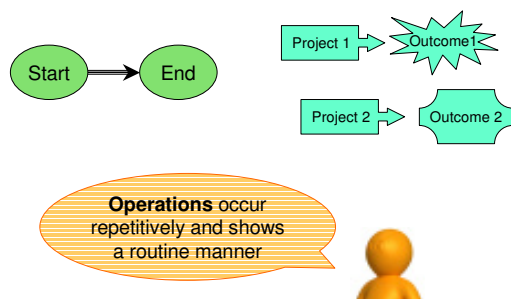
What makes a project different?

Work	"Hospital information management system"
Task	"Billing or pharmacy modules of it"
Product	"Giving support to customers and bug fixing"
Operation	"Developing version 3.5.43 of pharmacy module (Release date: June 1)"
Project	

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Main characteristics of a project

- Temporariness
- Individuality



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Other characteristics of a project (I)

- Non repetitive enterprise
 - Something new for the people who work on it.
- Clear and logical sequence of events
 - Allows accurate tracking and controlling the execution
- Beginning, Middle and End
 - End of Prj-1 may coincide with beginning of Prj-2
 - No completion → not a project but a routine activity

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Other characteristics of a project (II)

- Clear and defined objective
 - Every project must have well defined targets
- Conducted by people
 - Even when modern tools are available
- Projects use resources
 - Specifically allocated to certain works

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Other characteristics of a project (III)

- Predefined parameters
 - Requires establishment of rates for time, costs, personnel, material and equipment involved, desired quality of project
 - Impossible to establish with total accuracy
 - Needed as a reference point for the project and its evaluation



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Definition of “project”

A project is
a **nonrepetitive** enterprise,

characterized by a **clear and logical sequence**
of events, with a beginning, middle and end,

focused on the **accomplishment** of a clear and
defined objective on **deadline**, with **costs**,
resources and **quality** parameters specified.

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So

What is Project Management?

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Project Management

The application of

knowledge, skills, tools, and techniques

to project activities

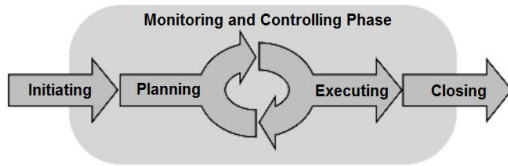
in order to meet or exceed

stakeholder needs and expectations.
(PMI, PMBOK-Guide)

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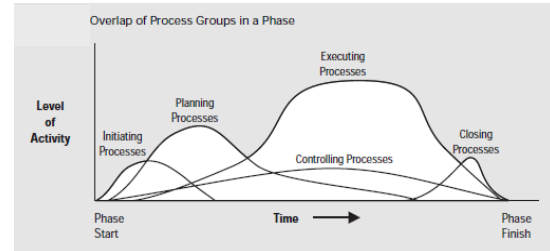
Project Life-Cycle: Phases

1. Initiating phase
2. Planning phase
3. Executing phase
4. Monitor and controlling phase
5. Closing phase



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Project Life Cycle: Overlappings



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Three Resolution Types (from Chaos Report)

1. Project success → **16.2%**
– completed on-time and on-budget, with all features and functions as initially specified.
2. Project challenged → **52.7%**
– Completed and operational but over-budget, over the time estimate, and offers fewer features and functions
3. Project impaired (canceled) → **31.1%**
– The project is cancelled at some point during the development cycle.

<http://www.projectsart.co.uk/docs/chaos-report.pdf>

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Chaos Report → Why projects succeed?

Project Success Factors	% of Responses
1. User Involvement	15.9%
2. Executive Management Support	13.9%
3. Clear Statement of Requirements	13.0%
4. Proper Planning	9.6%
5. Realistic Expectations	8.2%
6. Smaller Project Milestones	7.7%
7. Competent Staff	7.2%
8. Ownership	5.3%
9. Clear Vision & Objectives	2.9%
10. Hard-Working, Focused Staff	2.4%
Other	13.9%

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Chaos Report → Why projects challenge?

Project Challenged Factors	% of Responses
1. Lack of User Input	12.8%
2. Incomplete Requirements & Specifications	12.3%
3. Changing Requirements & Specifications	11.8%
4. Lack of Executive Support	7.5%
5. Technology Incompetence	7.0%
6. Lack of Resources	6.4%
7. Unrealistic Expectations	5.9%
8. Unclear Objectives	5.3%
9. Unrealistic Time Frames	4.3%
10. New Technology	3.7%
Other	23.0%


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→ Why impaired and ultimately cancelled?

Project Impaired Factors	% of Responses
1. Incomplete Requirements	13.1%
2. Lack of User Involvement	12.4%
3. Lack of Resources	10.6%
4. Unrealistic Expectations	9.9%
5. Lack of Executive Support	9.3%
6. Changing Requirements & Specifications	8.7%
7. Lack of Planning	8.1%
8. Didn't Need It Any Longer	7.5%
9. Lack of IT Management	6.2%
10. Technology Illiteracy	4.3%
Other	9.9%

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Sydney Opera House



Original estimates in 1957
Cost: \$7 million.
Completion date: 26 Jan.

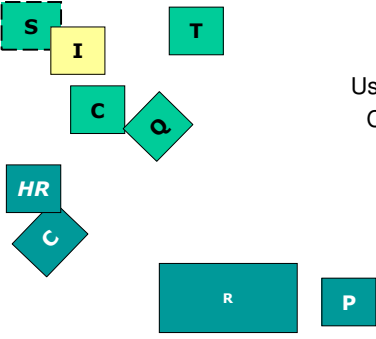
Formal completion

- Over time
 - completed in 1973
more than 10 years late
- Over-budget
 - \$102 million
which is 14 times greater

**Is it successful?
What is successful?**

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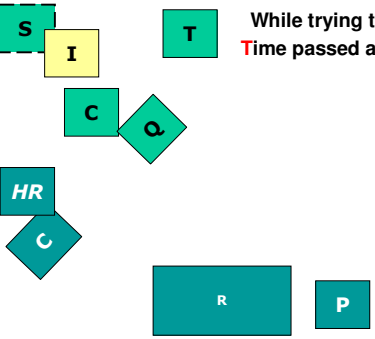
Project Management Areas



Using these clues
Can you guess?

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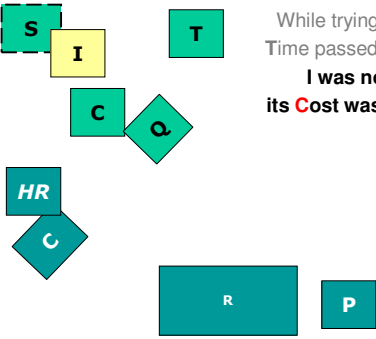
Project Management Areas



While trying to set the **S**cope,
Time passed away, so quickly.

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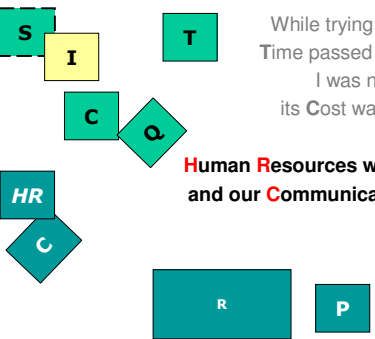
Project Management Areas



While trying to set the **S**cope,
Time passed away, so quickly.
I was not **I**ntegrated and
its **C**ost was the low **Q**uality.

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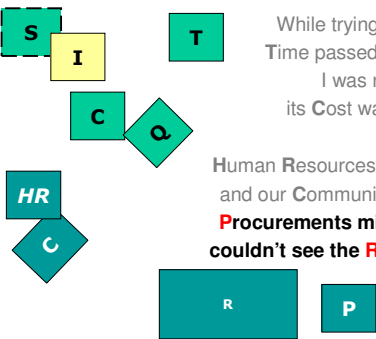
Project Management Areas



While trying to set the **S**cope,
Time passed away, so quickly.
I was not **I**ntegrated and
its **C**ost was the low **Q**uality.
Human **R**esources was complaining,
and our **C**ommunication was failing.

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Project Management Areas



While trying to set the **S**cope,
Time passed away, so quickly.
I was not **I**ntegrated and
its **C**ost was the low **Q**uality.
Human **R**esources was complaining,
and our **C**ommunication was failing.
Procurements might help me but,
couldn't see the **R**isks of delaying.

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Project Management Areas

S	T	C
Q	I	HR
C	R	P

Then, I put myself at the center
To manage them all together.

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Project Management Areas

Then, I put myself at the center
To manage them all together.

S	T	C
Q	I	HR
C	R	P

When setting the **S**cope correctly,
Time estimations become healthy.

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Project Management Areas

Then, I put myself at the center
To manage them all together.

S	T	C
Q	I	HR
C	R	P

When setting the **S**cope correctly,
Time estimations become healthy.
Although the **Quality was higher,
my project **C**ost become lower.**

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Project Management Areas

Then, I put myself at the center
To manage them all together.

S	T	C
Q	I	HR
C	R	P

When setting the **S**cope correctly,
Time estimations become healthy.
Although the **Q**uality was higher,
my project **C**ost become lower.

Sometimes used **Procurements,
to overcome the **R**isks of failure.**

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Project Management Areas

Then, I put myself at the center
To manage them all together.

S	T	C
Q	I	HR
C	R	P

When setting the **S**cope correctly,
Time estimations become healthy.
Although the **Q**uality was higher,
my project **C**ost become lower.

Sometimes used **P**rocurements,
to overcome the **R**isks of failure.
And getting support of **HR expert,
Communications turn into a concert.**

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Project Management Areas

Core functions

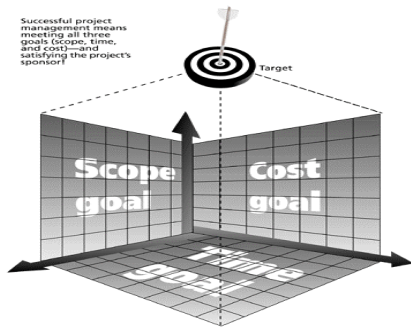
Scope management	Time management	Cost management
Quality management	Integration management	Human Resource management
Communication management	Risk management	Procurement management

Facilitating functions

What to expect from a project manager?

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Three major goals



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Project Management Framework

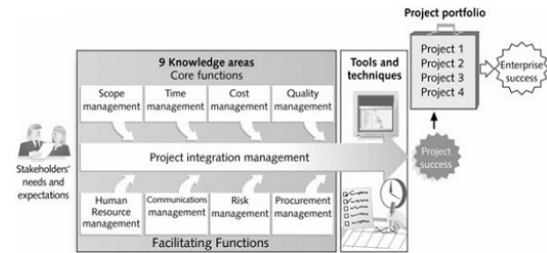


Figure 1.2 Project Management Framework (Schwalbe, 2006, p9)

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Tigris ReadySet Templates

readySET

We have completed our second beta release and are currently working on adding more of the functionality described in the specification and fixing defects.

The next major milestone is a third beta release with nearly complete functionality and a wider set of testers.

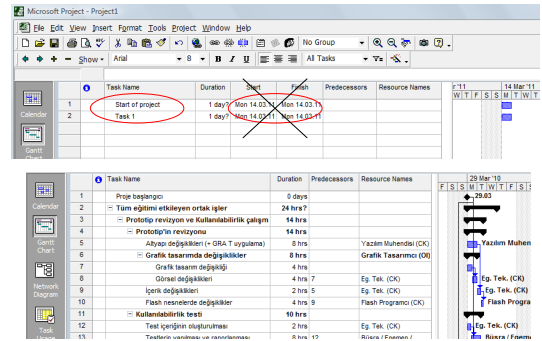
Project Documents

Project Documents	For Everyone
Inception: Project overview, Project proposal, Target audience and benefits, Target audience, Statement of user needs, Software requirements specification, Project plan, Release checklist	Project overview, Project proposal, Target audience and benefits, Statement of user needs, Software requirements specification, Project plan, Release checklist
Elaboration: Project plan, Software requirements specification, Feature set, Use case suite, Design, QA plan, User interface worksheet, Test suite, Test cases	For Developers: Design, Review meeting notes, Status report For QA: QA plan, Review meeting notes, Status report For End Users: Install / Quick start, User guide, Release notes For Support and Ops: Implementation notes, Release notes, Troubleshooting guide For Sales/Legal: Demo script, Legal issues
Construction: Review meeting notes, Implementation notes, User guide, FAQ / Troubleshooting guide, Release notes, Release checklist	
Transition: Install / Quick start, Demo script, Release notes, Release checklist	
Continuous: Status report	

[Go to the web site](#)

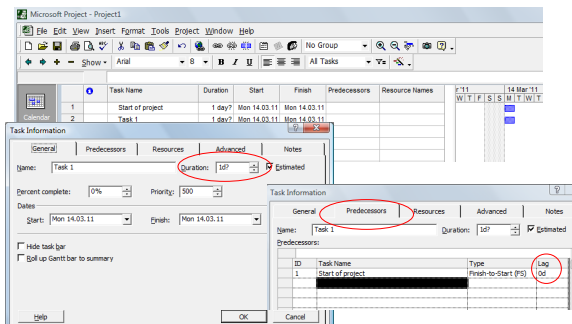
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MS Project (Angel or Evil?)



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MS Project (Angel or Evil?)



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An advice



Management Lesson
Never start a project unless all resources are available

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Expect Change



- Being on the other side is different
- Being a project manager after years of software development
- Be ready for the traps

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To Get Certified

- PMI
Project Management Institute
- PMP
Project Management Professional
- PMBOK
Project Management Body of Knowledge

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References

- “Practical Guide to Project Planning”, by Ricardo Viana Vargas
- “Herkes için proje yönetimi” by Hayal Şenyurt
- Chaos report
- PMBOK Guide

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Questions



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