

406027 / 407703

**IT Project Management &
IT Project Practice**

Semester 2, 2015

Teaching Team

- ▶ Dr Kelly Blincoe: kblincoe@aut.ac.nz (City)
- ▶ Dr Ramesh Lal: ramesh.lal@aut.nz (South)
- ▶ Teaching assistants:
 - Sam Madanian, smadania@aut.ac.nz
 - Monjur Ahmed, monjur.ahmed@aut.ac.nz
 - Jaimes Booth, dhy1071@aut.ac.nz
 - Luke Adams, zcg8856@aut.ac.nz
- ▶ Office hours: by appointment

Open Lab Mentoring/Academic Support

- ▶ City: Mon, 10am to 12pm, WT202 and WT203
- ▶ City: Wed, 12pm to 2pm, WT202 and WT203
- ▶ South: Mon, , 12pm to 2pm, MC209 and MC212
- ▶ South: Fri, , 10 am to 12pm, MC209 and MC212

- ▶ There will be 6 to 7 tutors with a range of skills including programming, Maths and Stats.

Lectures & Lab Times

Lecture:	Monday	10am – 12pm, WE230 (City Campus)
	Thursday	4 pm – 6 pm, MD210 (South Campus)
 Labs:		
	Tuesday	8am – 10am, WT202 (City, 51)
	Tuesday	10am – 12pm, WT307 (City, 50)
	Tuesday	2pm – 4pm, WT301 (City, 53)
	Tuesday	2pm – 4pm, WT204 (City, 54)
	Friday	8am – 10am, WT204 (City, 52)
	Friday	3pm – 5pm, MC213 (South, M6)

Paper Goals

- ▶ To provide students with the understanding of:
 - core competencies of project management
 - professional and ethical practices in undertaking/
managing IT project
- ▶ To enable students to produce a successful
project proposal for their R & D paper (30 points)

Academic Integrity

- ▶ This course regards most seriously any acts of academic dishonesty. Any such acts will result in appropriate adjustment of the assessment mark and may lead to disciplinary action.
- ▶ Academic dishonesty includes:
 - Plagiarism
 - Collaboration without approval
 - Copying from another person
 - Any other unfair means
- ▶ You will be held *jointly liable* if you allow others access to your work.

Assessments

	Worth
Assessment 1 (Group)	40%
Assessment 2 (Individual)	30%
Final Exam	30%

To pass the paper:

- ▶ the student must get at least 35% on each assessment.
- ▶ the student must get an overall total of 50% or more.

Assessment Schedule

	Handed Out	Due
Assessment 1 (Group)	Week 2	Part 1: Week 6 Part 2: Week 7
Assessment 2 (Individual)	Week 8	Week 10
Final Exam		Week 13 or 14

Must spend about 10-15 hours per week of your own time on this paper

Assignment 1: team project

- ▶ Choose a team
 - 4 students per team
- ▶ Choose a project manager for your team
 - makes decisions
 - deals with all communication
 - allocates tasks
 - coordinates team's effort on this project

Assignment 1: team project

- ▶ Project manager must email team list by Thursday next week to:
 - Sam Madanian, smadania@aut.ac.nz (City campus)
 - Ramesh Lal, ramesh.lal@aut.nz (South campus)
- ▶ Include full name, student ID, email address, and mobile phone number of all members

Assignment 1: team project

► Team member qualities

- Trustworthy
 - Flexible
 - Motivated
 - Creative and critical thinkers
 - Proactive
 - Ethical and professional
- Do your friends have above qualities?

Text Book

1. Information Technology Project Management, 7th Edition,
Kathy Schwalbe
 2. A Guide to the Project Management Body of Knowledge (PMBOK Guide)
5th Edition

<http://www.pmi.org/pmbok-guide-and-standards/pmbok-guide.aspx>



Information Technology
PROJECT MANAGEMENT | 7e

Kathy Schwalbe

Course Schedule

See the Handbook on AUTOnline

Introductions

Chapter 1: Introduction to Project Management

Information Technology Project
Management, Seventh Edition



Information Technology
PROJECT MANAGEMENT | 7e

CONTENTS • APPENDIXES • INDEX • GLOSSARY • REFERENCES • CREDITS
INFORMATION • SCOPE • TIME • COST • RESOURCES • RISK
ACTIVITIES • PROJECT • TEAM • TEAMWORK • TEAMWORK • TEAM
TIME • COST • QUALITY • INTEGRATION • COMMUNICATIONS • RISK
PROCUREMENT • STAKEHOLDER • INTEGRATION • RISKS • TIME • COST
QUALITY • HUMAN RESOURCES • COMMUNICATIONS • RISKS • PROCUREMENT
RISKS • TIME • INFORMATION • RISKS • TIME • COST • QUALITY • TEAMWORK

Kathy Schwalbe

Note: See the text itself for full citations.

What Is a Project?

- ▶ A **project** is “a temporary endeavor undertaken to create a unique product, service, or result” *
- ▶ Operations is work done to sustain the business
- ▶ Projects end when their objectives have been reached or the project has been terminated
- ▶ Projects can be large or small and take a short or long time to complete

* PMBOK® Guide, 5th Ed., 2013

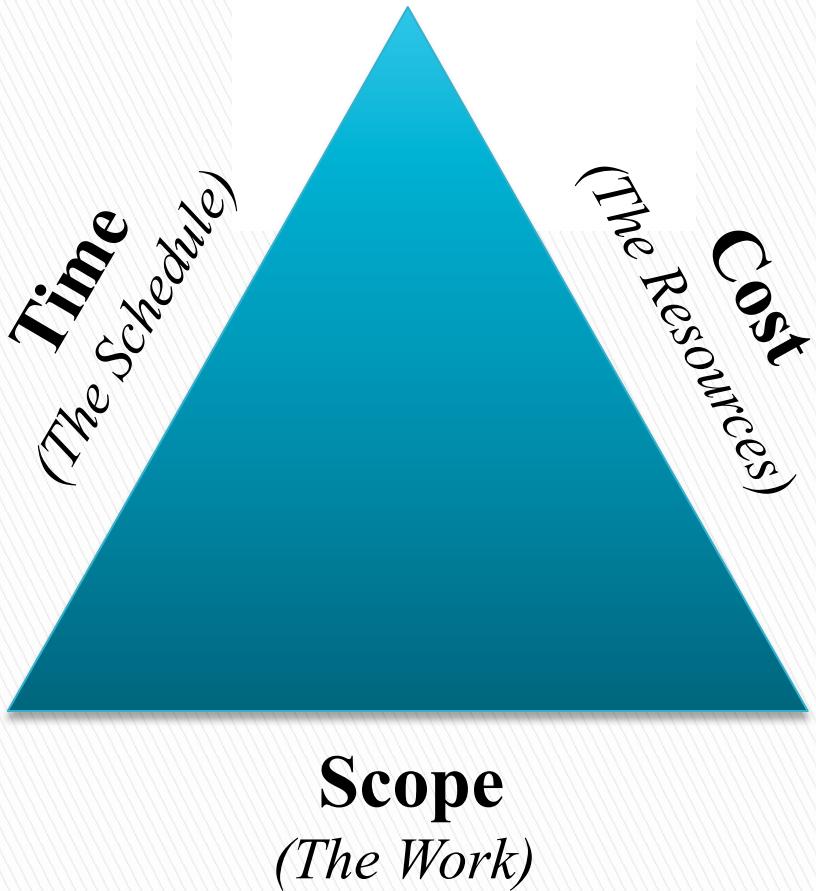
Examples of IT Projects

- ▶ A team of students creates a smartphone application and sells it online
- ▶ A company develops a driverless car
- ▶ A small software development team adds a new feature to an internal software application for the finance department
- ▶ A college upgrades its technology infrastructure to provide wireless Internet access across the whole campus

Activity – 21st Birthday Party

- ▶ Project: Plan a birthday party for your friend's 21st
- ▶ Requirement: The party must be tomorrow
 - What needs to change?
- ▶ Requirement: Your budget is \$100
 - What needs to change?

The Triple Constraint of Project Management



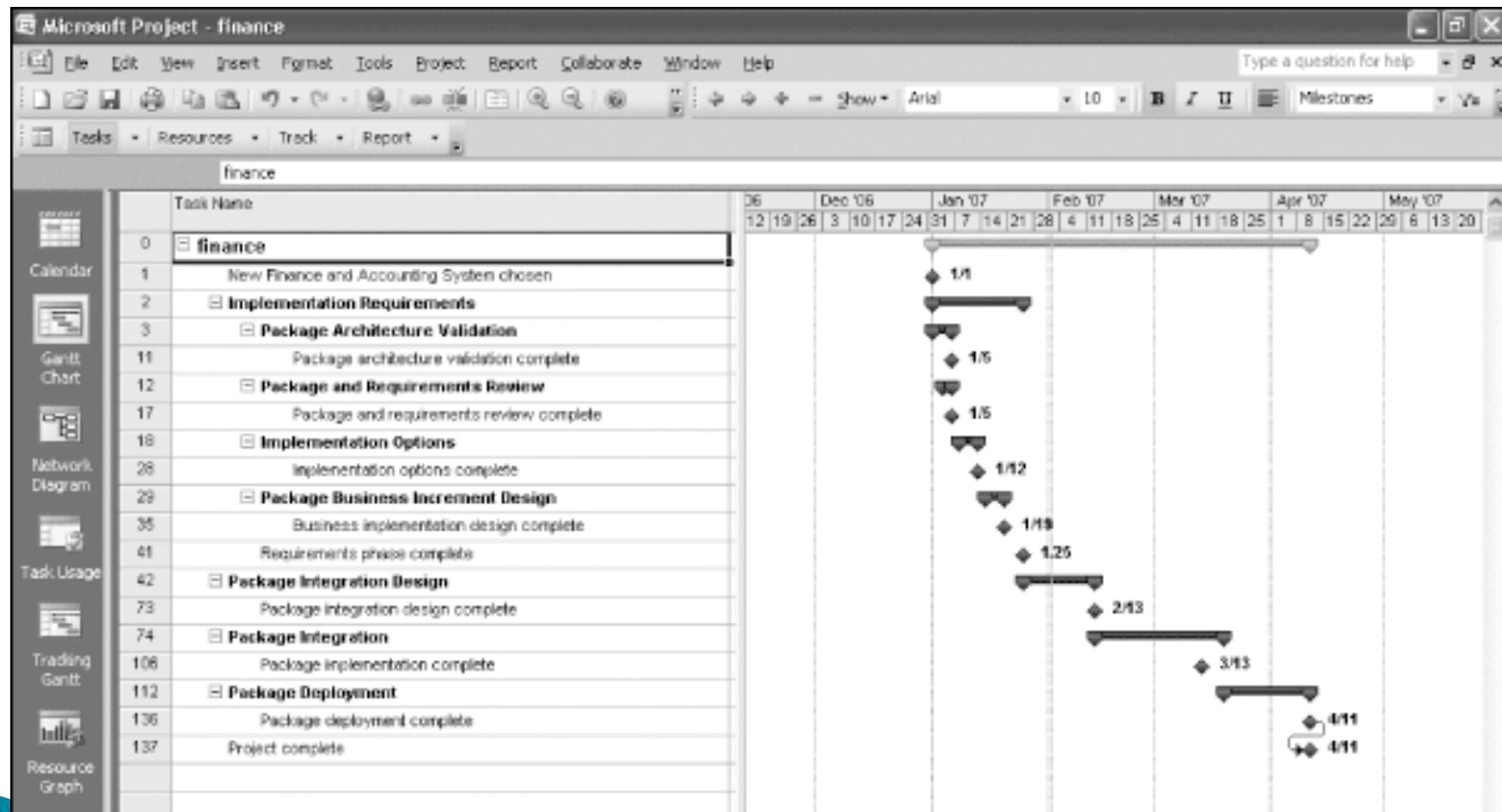
- ▶ What was the scope for our 21st?
- ▶ How did it change when we considered time and cost?

What is Project Management?

- ▶ “The application of knowledge, skills, tools and techniques to project activities to meet project requirements” *
- ▶ Successful project management means meeting all three goals (scope, time, and cost)
- ▶ There are hundreds of different tools to assist in performing project management

* PMBOK® Guide, 5th Ed., 2013

Sample Gantt Chart Created with Project 2010



What is Project Management?

- ▶ Successful project management means meeting all three goals (scope, time, and cost) – **and satisfying the project stakeholders**

Project Stakeholders

- ▶ **Stakeholders** are the people involved in or affected by project activities
- ▶ Stakeholders include
 - the project sponsor
 - the management
 - the project manager
 - the project team
 - support staff
 - customers
 - Users
 - suppliers
 - opponents to the project



Engage your stakeholders.

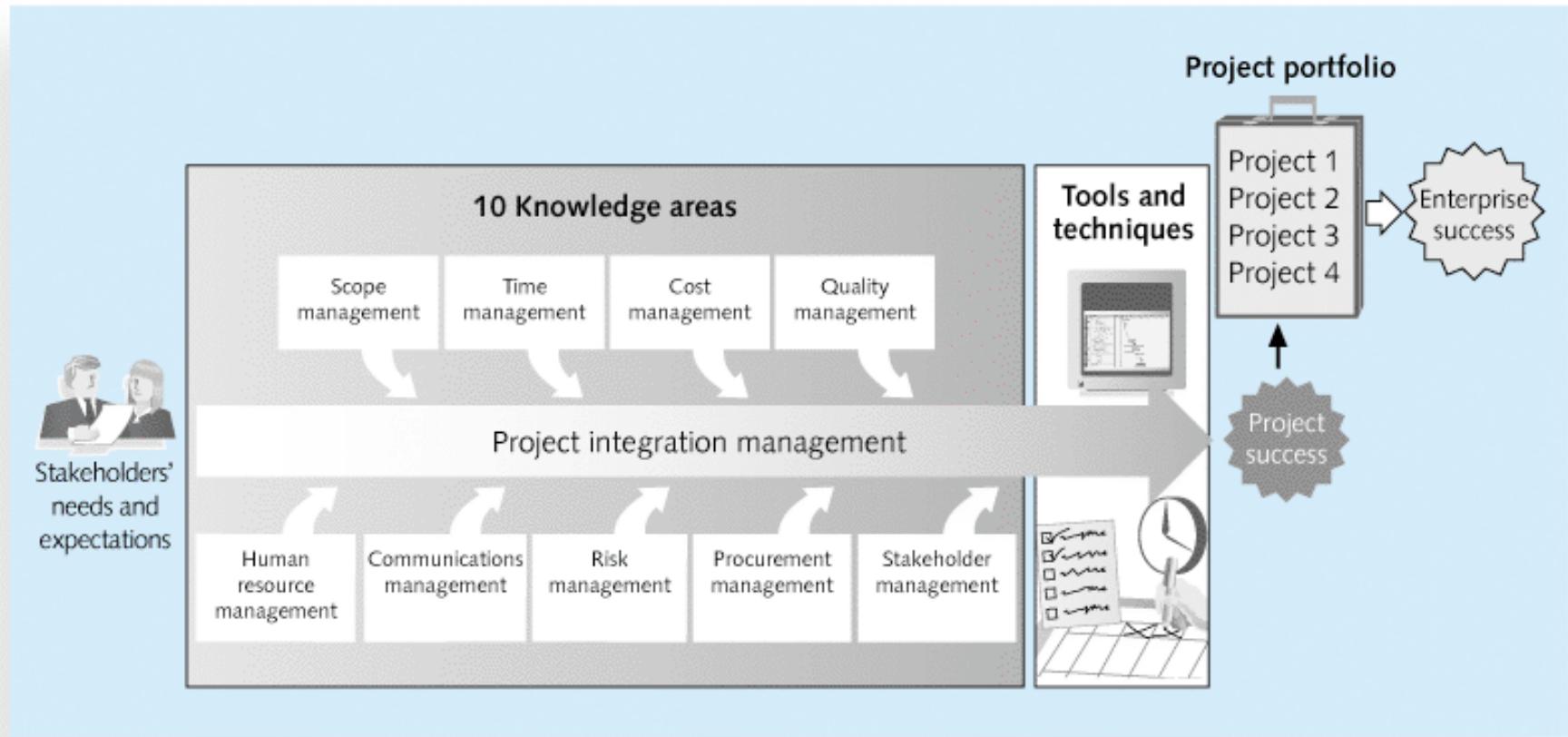


Ignoring stakeholders often leads to project failure

Activity – 21st Birthday Party

- ▶ Who are the stakeholders for our 21st party project?
- ▶ How could ignoring some of these stakeholders cause project failure?

Project Management Framework



10 Project Management Knowledge Areas

- ▶ **Knowledge areas** describe the key competencies that project managers must develop
- ▶ Project managers must have knowledge and skills in all 10 knowledge areas (project integration, scope, time, cost, quality, human resource, communications, risk, procurement, and stakeholder management)
- ▶ Lectures will be based on each knowledge area

Project Success

- ▶ There are several ways to define project success:
 - The project met scope, time, and cost goals
 - The project satisfied the customer/sponsor and end-user
 - The results of the project met its main **objective**, such as
 - making or saving a certain amount of money
 - providing a good return on investment
 - simply making the sponsors happy

Activity – 21st Birthday Party

- ▶ How can we measure the success of our 21st party?
 - Did the party meet its objectives?
 - Did the plans meet cost constraints?
 - Did the plans meet time constraints?
 - What about scope?
 - Did the plans satisfy our stakeholders?

What Helps Projects Succeed?*

- ▶ User involvement
- ▶ Executive support
- ▶ Clear business objectives
- ▶ Emotional maturity
- ▶ Optimizing scope
- ▶ Agile process
- ▶ Project management expertise
- ▶ Skilled resources
- ▶ Execution
- ▶ Tools and infrastructure

*The Standish Group, “CHAOS Activity News” (August 2011).

Project and Program Managers

- ▶ **Project managers** work with project sponsors, project team, and other people involved in a project to meet project goals
- ▶ **Program:** group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually *
- ▶ Program managers oversee programs; often act as bosses for project managers
- ▶ Examples of common programs in the IT field include infrastructure, applications development, and user support

* PMBOK® Guide, 5th Ed., 2013

Project Portfolio Management

- ▶ As part of **project portfolio management**, organizations group and manage projects and programs as a portfolio of investments that contribute to the entire enterprise's success
- ▶ Portfolio managers help their organizations make wise investment decisions by helping to select and analyze projects from a strategic perspective
- ▶ *Be able to demonstrate how each project you undertake fits your business strategy, and screen out unwanted projects as soon as possible*

Project Management Compared to Project Portfolio Management



IT Project Failures

- ▶ USA Healthcare.gov
 - >\$2B spent
<http://www.forbes.com/sites/lorenthompson/2013/12/03/healthcare-gov-diagnosis-the-government-broke-every-rule-of-project-management/>
- ▶ Novopay System of New Zealand Ministry of Education
 - NZ\$100M over budget and delays

IT Project Success

- ▶ IT Projects have a bad track record
- ▶ In 1994
 - ▶ Only 16% of IT Projects were successful (on target, on time, on budget)
- ▶ In 2010
 - ▶ 37% of IT Projects were successful
- ▶ Reasons for improvement
 - ▶ average cost of a project is now lower
 - ▶ better tools to monitor and control progress
 - ▶ **better skilled project managers with better management processes**

*Standish Group, "CHAOS 2011: A Recipe for Success" (2011).

Ten Most Important Skills and Competencies for Project Managers

- ▶ 1. People skills
- ▶ 2. Leadership
- ▶ 3. Listening
- ▶ 4. Integrity, ethical behavior, consistent
- ▶ 5. Strong at building trust
- ▶ 6. Verbal communication
- ▶ 7. Strong at building teams
- ▶ 8. Conflict resolution, conflict management
- ▶ 9. Critical thinking, problem solving
- ▶ 10. Understands, balances priorities
- ▶ *Ensure your team chooses the right PM!*

Source: Jennifer Krahn, “Effective Project Leadership: A Combination of Project Manager Skills and Competencies in Context,” PMI Research Conference Proceedings (July 2006)

Different Skills Needed in Different Situations

- ▶ **Large projects:** Leadership, relevant prior experience, planning, people skills, verbal communication, and team-building skills were most important
- ▶ **High uncertainty projects:** Risk management, expectation management, leadership, people skills, and planning skills were most important
- ▶ **Very novel projects:** Leadership, people skills, having vision and goals, self confidence, expectations management, and listening skills were most important



Leadership and people skills

Importance of Leadership Skills

- ▶ Effective project managers provide leadership by example
- ▶ A **leader** focuses on long-term goals and big-picture objectives while inspiring people to reach those goals
- ▶ A **manager** deals with the day-to-day details of meeting specific goals
- ▶ Project managers often take on the role of both leader and manager

The Project Management Institute

- ▶ The Project Management Institute (PMI) is an international professional society for project managers founded in 1969
- ▶ PMI has continued to attract and retain members, reporting more than 380,000 members worldwide by 2012
- ▶ Project management research and certification programs continue to grow
- ▶ Students can join PMI at a reduced fee and earn the Certified Associate in Project Management (CAPM) certification(see www.pmi.org for details)

Project Management Certification

- ▶ PMI provides certification as a **Project Management Professional (PMP)**
- ▶ A PMP has documented sufficient project experience, agreed to follow a code of ethics, and passed the PMP exam
- ▶ The number of people earning PMP certification is increasing quickly

Ethics in Project Management

- ▶ **Ethics**, loosely defined, is a set of principles that guide our decision making based on personal values of what is “right” and “wrong”
- ▶ Project managers often face ethical dilemmas. Some examples:
 - Hiring
 - Contracts
- ▶ In order to earn PMP certification, applicants must agree to PMI’s Code of Ethics and Professional Conduct

Chapter Summary

- ▶ A project is a temporary endeavor undertaken to create a unique product, service, or result
- ▶ Project management is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements
- ▶ A program is a group of related projects managed in a coordinated way
- ▶ Project portfolio management involves organizing and managing projects and programs as a portfolio of investments
- ▶ Project managers play a key role in helping projects and organizations succeed
- ▶ The project management profession continues to grow and mature

What's next

- ▶ No lab this week
- ▶ Chapter 2: The Project Management & Information Technology Context
- ▶ Chapter 3: The Project Management Process Groups: A Case Study
- ▶ Lab: Microsoft Project 2013 Exercise
- ▶ Assignment 1
 - available on AUTOnline
 - Team lists due by 4pm Thursday