



## Project Management Advanced Diploma



## Computers & PM – Josephine Coffey

## Computers & PM – Week 3

- Overview of Computers & Project Management
- Guidelines for Procuring PM Software
- Project Management using MS Office applications

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## Introduction to Computers & PM

- Role of Software in PM:
  - All types of Projects throughout project lifecycle
  - PM software: tools that store, process and output project data
  - Complexity varies – simple calendars to PPM suites
  - Software\Tools developed specifically for PM profession

## History of Computers & PM

1900 - 1949

- Pioneers recognised repetitive nature in work. Japanese concept of “kaizen” or continuous improvement.
- Gantt chart introduced by Henry Gantt
- Some early critical path network analysis

1950 - 1969

- PM emerged as a specific discipline
- Mainframe computers can run PM software
- Critical path network analysis exploited

### History of Computers & PM

70s

- Workers right
- PM science further developed and professional associations created
- More PM software available

80s

- Personal computers to run PM software
- Precedence network diagrams become the norm
- Much quicker to create and update schedules

### History of Computers & PM

90s

- MS Project for Windows released
- Project risk analysis
- Communication & Collaboration
- PM applied to all industries
- Programme and Portfolio Management

### History of Computers & PM

2000 +

- MS Project still dominant
- PM Certification and Training
- Web based PM tools
- Agile PM methodology evolving
- Cloud Computing

### Project, programme and portfolio

- Definition of project
- Wide choice of tools for single project management
- Related projects managed in Programme
- Mature organisations manage a Portfolio of projects using PPM software
  - Project Portfolio Management (PPM)

### Benefits of PM software

- Single app to manage timelines and calendars
- Management of tasks
- Budgeting information
- Team members can access all task lists
- Reports

### Benefits of PM software

- Planned vs. Actual
- Single tool to manage and track progress
- “What if” scenarios capability
- Integrated functionality

### Downfalls of PM software

- Too Complicated
- Expensive
- Not suitable
- Over reliance by PM

### Common features of PM Tools

- [Gantt Charts](#)
- Work or Product Breakdown Structures
- [Critical Path Diagrams](#)
- Resource allocation
- [Organisation Structure](#)
- Cost loading
- [Network diagrams](#)
- Budget Tracking / Cash Flow

### Common components of Project Management Tools

- Risk logs
- Issue logs
- 'Baselining'

### Software Tools

Stand alone\small projects

- MS Office (~€550 single user, Server €5,500 + €180 per user)
- Project in a box (free)
- OpenProj (free)

Web based

- Clarizen (subscription)
- Basecamp (subscription)
- LiquidPlanner (subscription)
- GanttProject (free)

### Software Tools

Portfolio Project Management

- MS Project & Portfolio Management (€1500+)
- Oracle Primavera (€2k)
- HP Project & Portfolio Management
- IBM Rational Project Manager (€2k)
- Project .net (web)

### Summary

- Most projects use computers in PM
- Many benefits for Project, Programme and Portfolio management
- The more complex the project the more likely to use specialised PM software
- Huge choice of software available