



Everyone's Smart
University

Global Project Management

Lecture 10

PMG 661

Collaborative Project Management software

Collaborative Project Management software



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Collaborative project management software is the technology platform that provides global project managers and project office administrators with the automated tools to create the project management plan, to monitor the execution of the deliverables, to control the issues, risks, quality, cost and time and to obtain approval for the project closure.

Collaborative Project Management software



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Project management software is an important tool for traditional projects during processes that include calculations and diagramming techniques, such as 'activity sequencing', 'activity resource estimating', 'schedule development', 'schedule control', 'cost estimating' and 'cost control' (PMI, 2004).

Collaborative Project Management software



For global projects, the implementation of collaborative project management software is also essential for all processes that require effective collaboration between the project manager and the team members in different locations when defining activities, identifying and analysing risks, directing and managing project execution, monitoring progress and controlling project work.

Collaborative Project Management software



This lecture considers the collaborative project management software as the subset of the Project Management Information System (PMIS), which is composed of the essential tools, methods and processes that ensure successful management of global projects.

Collaborative Project Management software



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Collaborative project management software can also help to satisfy the organisational governance requirements, by providing program managers, portfolio managers, project managers and executive stakeholders with summarised project performance measurements and consolidated metrics, simplifying the reporting preparation and information distribution activities.

Evaluating collaborative project management software tools



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

The main objectives of collaborative project management software tools are to centralize the project information (including project plan, schedule, risks, issues and cost) and create automated rules for project administration.

Evaluating collaborative project management software tools



These rules will trigger the distribution of project reports, remind project team members of due actions and issues, alert the project manager of imminent risks and raise the project management awareness of deviations in schedule, cost or quality. International companies can follow the steps below to evaluate the various software alternatives, and compare with the existing system:

Evaluating collaborative project management software tools



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

1. Define the main objectives of the project management software, together with the company senior management and a representative number of project managers and stakeholders from different countries. Agree on measurable success criteria for the implementation.

Evaluating collaborative project management software tools



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

2. Analyse past and ongoing global projects in a representative number of company locations, to create an inventory of the different project documents, reports and tools. This will result in a comprehensive view of the various types of project information.

Evaluating collaborative project management software tools



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

3. For each type of document, report and tool, classify the information items into mandatory, beneficial or optional.
4. Identify the main information items that can trigger alerts and require actions from the project manager or stakeholders.

Evaluating collaborative project management software tools



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

5. For each software solution being evaluated, identify the items completely or partially available.
6. Evaluate the integration of each solution with other knowledge-sharing and project management tools, such as timesheet allocation, scheduling diagrams, cost tracking mechanisms and quality assessment.

Evaluating collaborative project management software tools



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

7. Compare the percentages of information available for each PMIS solution and determine which alternative best fits the company requirements.
8. Complete this information with the items in the mind map you created at the beginning of this chapter.

Evaluating collaborative project management software tools



Table below provides an example of an evaluation sheet for three collaborative project management software solutions, illustrating a possible output of the steps above.

To increase the adoption of the new tool by the project team members across the globe, a survey can be prepared to gather various opinions on the software solutions being analyzed.



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Table 20.1 Collaborative project management software – comparison matrix

Documents, reports and tools	Existing software	Software A	Software B
Network diagramming tool (mandatory)	Yes	Yes	No
Schedule network analysis (beneficial)	Yes	Yes	No
Project detailed schedule (mandatory, with automated 'red' warning to the activity owners on due actions, and 'green' when all predecessors are completed and the activity can initiate)	Yes	Partial (no warnings)	Yes
Automated milestone schedule (mandatory)	Yes	Yes	No
Online risk log (mandatory, with automated warnings to the risk owners)	No	Partial (no warnings)	Yes
Risk bubble chart (beneficial)	No	No	Yes
Online issues log (mandatory, with automated warnings to the issue owners)	No	Partial (no warnings)	Yes
Change control system (mandatory, with online approval)	Yes	Partial (no warnings)	Yes
Progress report (mandatory, with distribution to executive stakeholders)	Partial (distribution manual)	Partial (distribution manual)	Yes
Integration with project request system	No	Yes, by scripts	Yes, by scripts
Integration with timesheet (time allocation) systems	No	No	Yes, by scripts
Integration with financial systems	Yes	Yes, by file transfer	Yes, by scripts

Evaluating collaborative project management software tools

This survey can be used to collect information on the existing software tools, providing additional criteria for the evaluation of the new solution. Table below shows an example of this survey.



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Table 20.2 Survey to identify efficiency of the collaborative project management software

Question	Strongly agree	Agree	Disagree	Strongly disagree
It is always easy and quick to enter the project information in the project management software				
It is always easy and quick to obtain information from the software tool				
All global project managers consistently use the tool to ensure the project information is up-to-date				
The method used to inform me of my due items is very efficient				
It is always easy and quick to update the action and risk items assigned to me				
I know how to find and update the items assigned to my colleagues when they are absent				
General comments about the collaborative project management software				
Suggestions on how to improve the collaborative project management software				

Defining procedures for the collaborative project management software



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

All global project stakeholders must know how to prepare their computers to access the collaborative project management systems (for example, by installing client software or plugins), how to obtain access to the applications (for example, by requesting user identifications, passwords or access rights) and how to use all the basic functions of the different software components.

Defining procedures for the collaborative project management software



The structure of the documentation might show how the various components are integrated, how the software is integrated with other company tools, how to update the information and how to extract reports and perform consolidations. You can use the checklist on Table below to produce and publish the documentation required by all project stakeholders who need to access and use the collaborative project management software.



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Table 20.3 Checklist: documentation and procedures for the collaborative project management software

	Information available	In electronic format	Published	Accessible by all locations
How to request access to the project management software				
How to request installation of desktop software, add-ons and plug-ins required by the project management software				
How to access the project management software				
How to update project information				
What information is synchronised with other company systems				
How to produce consolidated reports				
How to find and update the items assigned to my colleagues when they are absent				
How to request support				

Implementing the new collaborative project management software



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Perform a trial installation to validate whether the required functions perform as expected and allow a number of project managers and stakeholders from different countries to use the selected tool. Discuss their impressions on the ease-of-use, intuitiveness and completeness of the different alternatives.

Implementing the new collaborative project management software



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

You can use the survey (Table 20.2) to evaluate the new software and compare with the existing solution, and detect what the real improvements are, from the perspective of the project team members.

Evaluating the implementation

Some time after implementing the new collaborative project management software, preparing and publishing the documentation, announcing the new solution to all project team members and providing training, you may evaluate the improvements and detect if corrections are required by deploying the same assessment survey (Table 20.2)

Evaluating the implementation



and comparing the new results with the initial findings. The results will serve as a basis for the preparation of a strategy to correct the problems, improve the usability and increase adoption.

Part IV: Key concepts

There are different types of technologies that can improve collaboration during global projects: basic infrastructure (telephones, e-mails, directories and remote access tools), solutions for interactive audio and video conferencing, solutions for interactive exchange of text and images (chat and web conferencing), knowledge-sharing packages and collaborative project management software.

Part IV: Key concepts

- The main steps to select and deploy collaborative tools for global projects are the understanding of the technological alternatives, the evaluation of existing technologies, the implementation of changes, the preparation of documentation and procedures and the post-implementation evaluation.

Part IV: Key concepts

- Surveys can help to identify problems with the existing technologies and the lack of documentation.
- Well-prepared trial periods and pilot groups are extremely helpful for the evaluation of new technologies.

Part IV: Further reading

- Edwards, A. and Wilson, J.R. (2004) Implementing Virtual Teams: A Guide to Organizational and Human Factors The authors provide a good analysis of current and future technologies for communications in virtual teams.

Part IV: Further reading

- Khazanchi, D. and Zigurs, I. (2006) Patterns of Effective Management of Virtual Projects: An Exploratory Study The authors present a comparison of tools for virtual collaboration and project management.

Part IV: Interactive section

Share your experience of collaborative tools during global projects ([www. GlobalProjectManagement.org](http://www.GlobalProjectManagement.org)):

- How did you adapt the checklists to your situation?
- How did you adapt the surveys to your organization?
- What is your opinion on the tools available on the market, do you have positive or negative experiences to share with other people?
- Are you using a different category of tool not covered in this book?
What feedback can you provide on these tools?

Resources:

Global Project Management

Communication, Collaboration and Management Across Borders

© Jean Binder 2007

Chapter 20