

Joint Application Development

Katie Abbott
Ryan Abbott

Agenda: Joint Application Development

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Introduction

- What is Joint Application Development?
- Joint Application Development, or JAD, is a process originally developed for designing a computer-based system. It brings together business area people (end users) and IT (Information Technology) professionals in a highly focused workshop. The advantages of JAD include a dramatic shortening of the time it takes to complete a project. It also improves the quality of the final product by focusing on the up-front portion of the development lifecycle, thus reducing the likelihood of errors that are expensive to correct later on.

Introduction (Cont.)

- JAD centers around a structured workshop session.
- Participants get together in a room to discuss the problem/project.
- Everyone hears what the rest of the group has to say.
- JAD can eliminate many of the problems with traditional meetings.
- Meetings are not well regarded as a productive forum.
- JAD turns meetings into workshops.
 - They are less frequent
 - More structured, and productive
 - An agenda provides the structure
 - The facilitator directs the process
 - Visual aids clarify concepts being discussed and the group dynamics, with constant feedback, stimulates creativity

Introduction (Cont.)

- **JAD Purpose:** to define the project, design a solution, and monitor the project until it reaches completion.
- **JAD Philosophy:** The JAD process is based on four simple ideas:
 1. People who actually do a job have the best understanding of that job.
 2. People who are trained in information technology have the best understanding of the possibilities of that technology.
 3. Information systems and business processes rarely exist in isolation -- they transcend the confines of any single system or office and effect work in related departments. People working in these related areas have valuable insight on the role of a system within a larger community.
 4. The best information systems are designed when all of these groups work together on a project as equal partners.

Introduction (Cont.)

- **JAD Scope**

1. The JAD should cover the complete development life cycle of a system.
2. The JAD is usually a 3 to 6 month well-defined project.
3. For large-scale projects, it is recommended that the project be approached incrementally, and that separate JAD's be used for each increment.

Systems Development Lifecycle

- Conception
- Requirements
- Design
- Implementation
- Integration
- Test
- Maintenance

Origins

- JAD was developed by Chuck Morris and Tony Crawford of IBM
- Crawford led several workshops to prove the concept
- JAD became widely accepted in many companies, including the data processing industry
- JAD definition according to Crawford: **an interactive systems design concept involving discussion groups in a workshop setting**

Evolution

- **As JAD attained popularity in the 80's, people started to use the term to describe different things.**
 - **Workshop Techniques**
 - **Brainstorming Sessions**
 - **Motivational Meetings**
- **As the popularity of JAD grew, its usage expanded to functions other than the requirement gathering in the system development life cycle(SDLC). It is now used in all phases of SDLC and is defined as a system development method.**

Evolution (Cont.)

- **Who uses JAD?**

- 1. JAD was originally designed to address information system development.**
- 2. A JAD session usually involves some aspects of system design, or development.**
- 3. In recent years, JAD has become a joint venture among people who need to make decisions affecting multiple areas of an organization – it is used even in non-IT related projects.**
- 4. In this case, JAD is defined as a structured workshop where people come together to plan projects, design systems, or make business decisions (whether IT related or not).**

Evolution (Cont.)

- **Who uses JAD?**
- **Today, JAD is commonly used in several areas**
 1. **Strategic Business Planning,**
 2. **Strategic IS Plans**
 3. **IS Architecture Definition**
 4. **Re-engineering Business Processes**
 5. **Detailed System Design**
 6. **Process and Data Modeling**
 7. **Project Management.**

Evolution (Cont.)

- In the earlier days, the definition of JAD required users and developers to be together in the same physical location
- Due to new improved technology Physical location is no longer a limit
 - Virtual meetings
 - Remote sites with packaged software

Other Names

- **As the use of JAD expands from the requirement gathering to other phases of system development life cycle, many people now refer to JAD as Joint Application *Development*. Some of them stick to the original definition of Joint Application Design and still primarily use it as system requirement gathering technique**

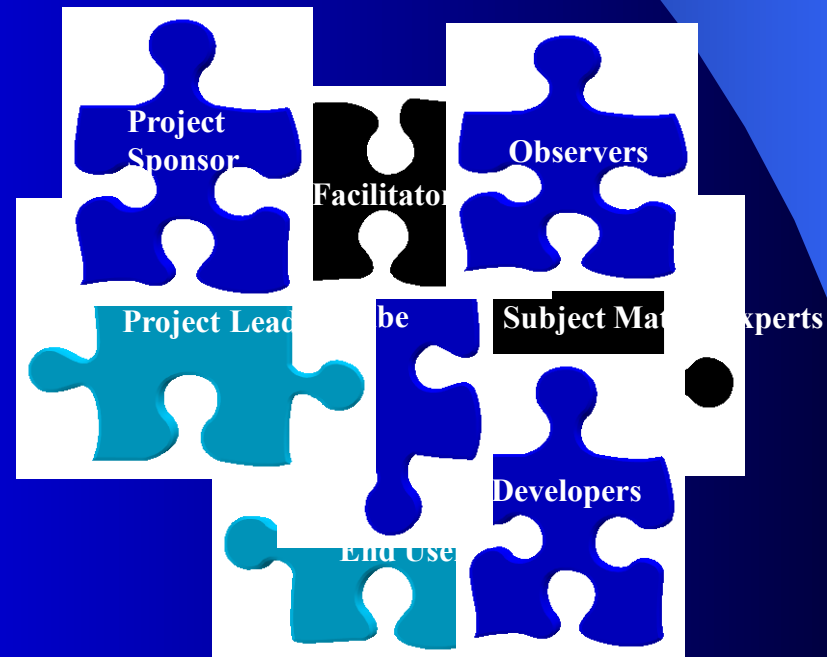
Other Names (Cont.)

- **JAD sessions, whether for Joint Application Design or Joint Application Development, have many other names, including:**
 1. **Accelerated Design**
 2. **Facilitated Meetings**
 3. **Facilitated Sessions**
 4. **Facilitated Team Techniques**
 5. **Facilitated Work Sessions**
 6. **Group Design**
 7. **Interactive Design**
 8. **Interactive JAD**
 9. **Joint Sessions**
 10. **User Centered Design**

Basic Components of a JAD Session

- JAD sessions:
 1. Are more focused.
 2. Are conducted in a dedicated environment.
 3. Quickly drive major requirements.
 4. Help better develop the "look & feel" of the interface.
- JAD participants typically include:
 - Project sponsor
 - Project lead
 - Facilitator
 - Scribe
 - End users
 - Developers
 - Observers
 - Subject matter experts

All participants come together in a joint forum.



Guidelines for a Successful JAD

- A clear purpose shared by all team members - the project charter
- A diverse team, representative of all areas effected by this project.
- Every person in the group has equal responsibility and decision making power.
- Every idea is valuable. Throughout the JAD, listen and acknowledge each idea and concern. Evaluating ideas during a brainstorming session will shut down the creative process. The best idea may never get said out of fear of being shot down.
- Participation by everyone is very important. Encourage quieter members to speak, they often have the best ideas. Don't allow 1 or 2 members to dominate. This is the facilitators responsibility as well as the whole teams' responsibility.

Guidelines for a Successful JAD (Cont.)

- Listen when others speak, don't interrupt or talk while others are talking (side conversations may have great ideas...we don't want to miss them).
- Maintain a parking lot to record important issues that are not within the scope of this project.
- Don't hold meetings, just to hold meetings. Only meet when there is something substantial to talk about.
- Don't let more than 3 or 4 weeks pass between meetings, you will lose momentum. Remember, each meeting is a motivation for the team to complete tasks assigned. It is no fun to come to a meeting and admit you didn't finish your task.
- Decisions are reached by consensus. We are here to create a win/win solution...win/lose solutions aren't good enough.

Guidelines for a Successful JAD (Cont.)

- ***Questions to ask***

- Are your meetings well attended?
- Are all affected parties involved/aware of decisions being made?
- Did you solve the true underlying problem?
- Is your solution accepted and used by your clients?
- Is the solution available on time?

Guidelines for a Successful JAD (Cont.)

- **Pitfalls:**

- Sponsor not really committed - no resources
- Unclear goals or objectives - lack of direction
- Too many or too few members
- Not enough communication with outsiders affected by decisions
- Timelines aren't kept
- Project Creep - project grows beyond the original definition and scope
- Meetings aren't well facilitated
- feels like nothing is accomplished in the meeting - old items not within scope keep getting revisited over and over
- 1 or 2 members dominate discussions

Automated JAD

- **JAD can be coupled with use of computer aided software engineering(CASE) tools**
- **Some of the JAD tasks can be automated and various software tools are available today to assist with Automated JAD (AJAD) sessions.**
- **Traditionally, word processors are used by the scribe to record the essence of JAD sessions. Sometimes, CASE tools are used to capture models in real time.**
- **However, due to its complexity, the use of CASE tools usually slows down the process and becomes the bottleneck.**

Automated JAD (Cont.)

- **JAD sessions can also benefit from the use of Group Support Systems (GSS) or Electronic Meeting System (EMS)**
 - Parallel communication
 - Group Memory
 - Anonymity encourages participation
- **However, communication through GSS is less "rich" than face-to-face verbal interaction and it is more difficult to resolve differences among participants with GSS. So the combination of JAD with GSS and traditional JAD might be the best solution.**

Automated JAD (Cont.)

- **The Internet and the Web have created many new opportunities for group work. It is now possible to include participants from many remote locations, so that, in theory, the size of the user group can become quite large, including participants from anywhere in the world.**

Examples

Summary

- **BENEFITS OF JAD**

- Enhanced communication and relationship between business end users and IT personnel
- Build consensus and ownership
- Reduced system cost and development time
- Reduced function creep
- Improved system quality and productivity
- Design cross-functional solutions
- Helps project teams get focused and stay focused
- Helps you get the right job done at the right time!

References/ Where to Get More Information

Data Warehouse Training: Development Methodology - Joint Application Development (JAD)

<http://www.datawarehouse-training.com/Methodologies/joint-application-design.htm>

Human Resource Services: Joint Application Development (JAD) What do you really want?

<http://www.utexas.edu/hr/is/pubs/jad.html#why>

Bauhaus Consulting Group: Fundamentals of Joint Application Development (JAD)

<http://www.bcgrp.com/JAD4.htm>

Netmation: Joint Application Development (JAD)

<http://www.netmation.com/docs/bb12.htm>

JAD Sessions

<http://www.thehathaway.com/Workshops.html>

Joint Application Design/Development: Mei C. Yatco

<http://www.umsl.edu/~sauter/analysis/JAD.html>