Executive Summary

We are all familiar with the traditional JAD (Joint Application Design) session: A group of too many people gathered in a room to discuss requirements for a project. Someone is usually tasked with capturing, documenting, and tracking discussions, side conversations, whiteboard drawings, flip charts, ideas, and images. All too often the outcome of a JAD session is a tall stack of convoluted and ambiguous requirements that are delivered weeks or even months later. Depending on the project there might be some diagrams, use cases, and maybe even some wireframes. Stakeholders are expected to read these documents, understand them, and approve that everything meets their needs.

We have found through research and years of hands-on experience that stakeholders cannot fully understand or embrace how an application will work until they actually see and experience it functioning. This reality comes at a high cost and occurs much later in the lifecycle, which is far too late and far too expensive to change. The reason this occurs is because the JAD approach is mostly a left-brain (logical) exercise. That is not a bad thing of course, but when people talk about their needs, they typically try and visualize them in their mind first. Because everyone visualizes things differently, ambiguity and misunderstanding are introduced. It is long understood by educators that people learn more effectively when both the left and right brain (creative) regions are engaged.

What if you could engage both halves of the brain and move that moment of understanding to the beginning of the process? OneSpring's Joint Application Modeling Session, or JAM Session, uses visualization techniques and technology to bring clarity at the beginning of the project, not the end. Facilitation, physical environment, process, design, and technology all play a part in making this successful. Visualization is a unique and rapidly spreading discipline for defining complex applications through interactive visual mock-ups. At OneSpring, we use visualization during a JAM Session to elicit and capture requirements in real-time. Stakeholders not only see but experience their requirements right before their eyes by creating an interactive visual model - at the start of the project. We believe that you cannot truly understand your project requirements by reading documentation alone. Stakeholders must also experience their requirements prior to development to fully understand what will ultimately be developed. The primary idea here is to reduce cost by reducing changes later in the lifecycle. This is accomplished by gaining a consensus early in the lifecycle by visualizing a shared vision of an application prior to building it.

There are four essential ingredients to a JAM Session:
- Small Group Collaboration
- Rapid Iterative Design
- Visualization
- Flow

Small Group Collaboration

While your project may have many stakeholders, it may not be effective to have them all in a room at the same time. We try to limit participation to a maximum of 10 people. This is in addition to our own team: The Producer, who facilitates the experience; the Analyst who elicits and documents requirements; and the Designer who crafts the experience.

Rapid Iterative Design

The iterative cycle allows us to rapidly visualize the "big picture", gain stakeholder consensus, and then drill-down to specific features. The iterative nature of a JAM Session allows it to fit in perfectly with Agile software development. We use observation to gain valuable knowledge and context on the business, customer, and technologies for the project. Design activities allow the team to solidify these insights to form a visual model of the experience. Socialization and measurement of the experience are used to provide continuous improvement and validation. This all happens in real-time over the course of two to three days.

Visualization

From initial sketches to detailed information design, visualization incorporates the use of dynamic imagery and interaction to effectively communicate requirements. Visualization not only enhances a "shared understanding" but is critical in helping stakeholders organize their thoughts and work through problems to collectively build a solution. It engages the right-brain. However, visualization by itself is not enough. To engage the left-brain, documentation is paired with visualization so that the requirements written by the Analyst reflects the wishes, wants, and needs of the stakeholders. It aligns (traces) directly to visualized pages of the future system. The documentation coincides with a rich interactive vision of the future system, and eliminates ambiguity of elicited requirements. Both the visualization and documentation is captured in real-time and displayed in front of users via dual screens.

Flow

This is where the magic happens! In our seven years of using visualization we have become masters in generating Flow. In the sports world, this might be called "being in the zone". Generating Flow depends on both the environment in which the JAM Session takes place and the mental investment made by the stakeholders. In our sessions:

- Goals are clear
- Feedback is immediate
- Opportunity & capacity are balanced
- Concentration deepens
- The present is what matters
- Control is no problem
- Sense of time is altered
- Egos do not interfere with group process
- The requirements cycle is reduced by at least 35%
- Requirements defects are reduced by at least 80%

And because we employ a user-centered design approach to everything we do, the user experience and innovation of the project are significantly improved.

JAM Session Case Study

The March of Dimes (MoD) is headquartered in White Plains, New York and operates 250 local and regional offices. The mission of the March of Dimes is to improve the health of babies by preventing birth defects, premature birth, and infant mortality. As with most not-for-profit organizations, one of the biggest challenges is the management of fundraising and the events associated with raising funds. In order to manage a multitude of data facets these organizations rely on complex systems that often lack solid user-centered design principles and rarely fit the needs of all users. As a result, users rely on multiple applications with disparate data across geographical locations or make do with one system that only meets the needs of a few select users.

OneSpring worked with MoD to structure an Agile definition and development lifecycle for the redesign of MoD's most comprehensive internal application, which consisted of several hundred pages across varying workflows.

The application needed to:

- Support 9 separate user personas (both internal employees and volunteers)
- Allow the management of Campaigns (i.e. March for Babies or Bikers for Babies)
- Provide reporting capabilities

To accommodate the agile nature of the development cycle and to capture upfront user feedback, we established a project style of working in 1 – 2 week cycles, or sprints. The cycles included a 2 - 3 day JAM Session followed by remote user testing. After analysis of the feedback, the team made instant iterations on the visualization so that developers could start coding the following week. Using this process, MoD went from concept to production in less than 8 months. The project team used a centralized data store accessed through a web application by both the users and the technology team while supporting a more usable system. The new fundraising and events management application dramatically improves user experience and provides innovations not found in off the shelf products.

Conclusion

The JAM Session is a powerful way to elicit and capture project requirements regardless of the development methodology. We have used this technique across a wide spectrum of projects from simple web site redesigns to mobile applications to multi-year mainframe modernization efforts. It engages the analytical thinking of the left brain and the creative thinking of the right brain. The key to visualization is having the right people and process. The tools are important, but without the process and the people of a JAM Session, you are not getting the full value. At OneSpring, we have pioneered the industry's first requirements methodology, the Stream Process. The JAM Session is a major component, which enables our clients to experience their project months or even years before it will is built.

About OneSpring

OneSpring is the first Requirements Agency and works to empower and inspire you to create the very best and most successful software applications. They do this by leveraging visualization to better capture, connect, and deliver application requirements. The OneSpring Stream Process™ with its JAM Session is the first and only methodology to bring project requirements to life. For more information, contact us at evolved@onespring.net, or visit www.onespring.net.

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With over a decade of experience in successfully delivering both commercial and government IT projects, OneSpring has leveraged the power of Design Thinking and Visual Communication to address these common project mistakes and more. Learn more about how to avoid these roadblocks and deliver better results than ever before by visiting OneSpring.net