

The JAD Methodology In Practice Over The Life Of An Information System

Christopher T. Street, Queen's School of Business, Queen's University, Kingston, ON 613 533-8157
cstreet@business.queensu.ca

George E. McMaster, Brandon University, Brandon MB 204 727-7460
mcmaster@brandonu.ca

The Rapid Application Development / Joint Application Development (RAD/JAD) methodology was formally described in a 1992 text (Martin, 1992), and has been in practice for over a decade. With notable exceptions (e.g. Hunton & Beeler 1997), few, if any, have studied IS development methodologies past the delivery stage of an IS. This paper presents a longitudinal case study describing use of the JAD process over the full history of an IS. The case focuses on the full system lifecycle, from the IS requirements stage through to eventual retirement of an IS in a large Canadian corporation which was used for a period of five years and then replaced by another system.

The research question guiding this analysis is “What are the challenges and benefits of using the JAD process over the life of an IS?” More specifically, how does the use of the JAD process influence both the people using and the people maintaining the IS over time, and what does this tell us about JAD in general? In doing so, we contribute to improving the practice of software development by illuminating how JAD processes positively and negatively affect both users and developers during the IS maintenance stage. We present a longitudinal case study analysis of the initiation, development, launch, and ongoing development cycles of a single business-unit level IS that had a lifespan of just under five years, describing the challenges and advantages of the JAD process, as well as implications for practice and future research.

Our initial results indicate at least three areas of potential significance to JAD methodology. First, we find that the steady movement of individuals into and away from the JAD teams for external business reasons during the ongoing maintenance cycles of the system poses benefits as well as barriers to relationship between developers and users. Second, we find that business forces, such as business unit changes to organizational strategies, also pose challenges and benefits to a JAD team. Finally, the expectations jointly created during the system development stages at the beginning of the project impacted later management decisions differently when certain members of the original JAD team were still involved versus when they were not. Overall, we discovered that the influences of JAD membership extended well past the system delivery stage of the SDLC.

References

- [1] Hunton, J.E. & Beeler, J.D. (1997) “Effects of User Participation in Systems Development: A longitudinal Field Experiment” *MIS Quarterly* 21(4) pp359-388
- [2] Martin, J. (1992) “Rapid Application Development” Prentice Hall, Englewood Cliffs