

A Brief Introduction of DSDM

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Dynamic System Development Method (DSDM) is a generic agile project management and delivery framework that is independent of vendors, tools and techniques. DSDM was originally released as some disciplines to Rapid Application Development (RAD) method in 1994. DSDM Atern, which was launched in 2007 as a new version of DSDM, is replaced by DSDM Agile Project Framework (dsdm.org, 2014, ch.1.2, para.4). As DSDM Atern is still available and most widely used, discussion in this short paper will focus on DSDM Atern.

From project management perspective, DSDM focuses on information systems projects that are characterized by tight schedules and budgets. However, as an agile methodology DSDM also focus on helping people to work effectively together to achieve the business goals. For delivering the right solution at the right time and ensure an early return on investment, DSDM requires all stakeholders focus on the business outcome, all people collaborate on prioritized work with high business value, and guarantee the quality (dsdm.org, 2008, ch.2.1, para.1). DSDM takes the features in project management triangle as the only

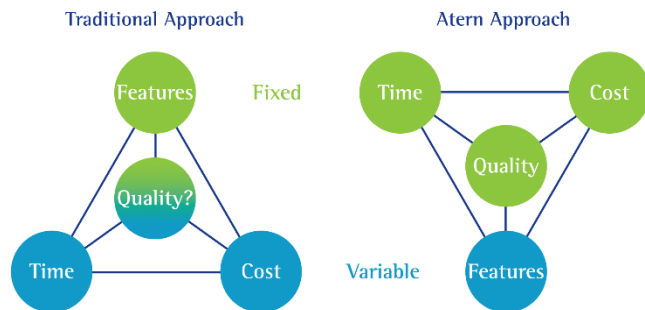


Figure 1: Project Variables – Traditional and DSDM Atern (dsdm.org, 2008, ch.2.2, para.6)

variable, while taking other factors of time, cost and quality as fixed. “When contingency is required, lower priority features are dropped or deferred with the agreement of all stakeholders in accordance with MoSCoW rules

(dsdm.org, 2008, ch.2.2, para.7)”. Strict control on time and cost distinguishes DSDM from other traditional program management methodologies.

Under the philosophy which says “any project must be aligned to clearly defined strategic goals and focus upon early delivery of real benefits to the business (dsdm.org, 2008,

ch.3, para.1)”, DSDM framework details eight principles with the support of a three-phases life-cycle (process), neatly defined project roles (people) and several recommended techniques (practice).

The eight principles of DSDM are “focus on the business need”, “deliver on time”, “collaborate”, “never compromise quality”, “build incrementally from firm foundations”, “develop iteratively”, “communicate continuously and clearly”, and “demonstrate control”. These principles are crucial for DSDM not only because “compromising any principle undermines Atern’s basic philosophy (dsdm.org, 2008, ch.4, para.1)”, but also because their tight relationship with the other components of of DSDM. For example, the techniques of Timeboxing and MoSCoW Prioritization support the principle of “focus on the business need” and “deliver on time”. Workshops that enable stakeholders to share their knowledge and discuss the project supports the principle of “collaborate”. Testing, which DSDM advocates throughout each iteration, follows the principle of “never compromise quality”. Modelling and Prototyping that make early instances of the solution available for scrutiny are particularly contribute to the principle of “communicate continuously and clearly”. Besides techniques, DSDM life-cycle and roles definition also contribute to the principles. A solid base of knowledge about the project is delivered during the Feasibility and Foundation phase in DSDM life-cycle, which supports the fifth principle with a “firm foundation”. Principles about “build incrementally” and “develop iteratively” are achieved by DSDM life-cycle. Clearly defined roles and their according responsibilities help people working together effectively, which also form the foundation for a successful project. All of the principles, especially the ones about collaborate, communicate and control, are benefited from the clearly defined roles. Principles are the essence of DSDM. They deliver a collective value that outweighs

their individual benefits. They should be combined together in the implementation of DSDM to accommodate and be supported by the process, people and practices of DSDM.

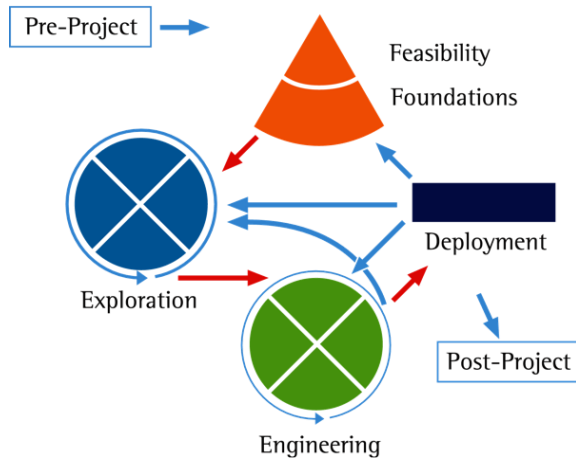


Figure 2: DSDM Altern Lifecycle process (dsdm.org, 2008, ch.6.1, para.1)

DSDM life-cycle has three phases in general, the pre-project, project and post-project. Among which, the project phase has five sub stages for creating an implemented system. Its first two stages of Feasibility Study and Business Study are sequential, while the following three stages of Functional Model Iteration, Design & Build Iteration and Implementation, just like their names indicate,

develop the system in an iterative and incremental way. Pre-project phase identifies candidate projects, realizes project funding, and ensures project commitment. Post-project phase maintains, enhances and fixes the system to keep it effective and efficient. Based on the iterative and incremental nature of DSDM, project in post-project phase can return to previous phases or stages for product refining through the course of continuing development.

People in DSDM are classified into three kind of roles. The figure on right uses three kinds of color to distinguish them. Orange stands for the business personnel, blue for the project management, and green for the technical development. The Business Sponsor controls strategic direction and provides funding, while the Project Manager ensures its effective usage. The Business Visionary and the Technical Coordinator hold the customer and supplier visions of solution excellence. The development team that propels the project are composed by

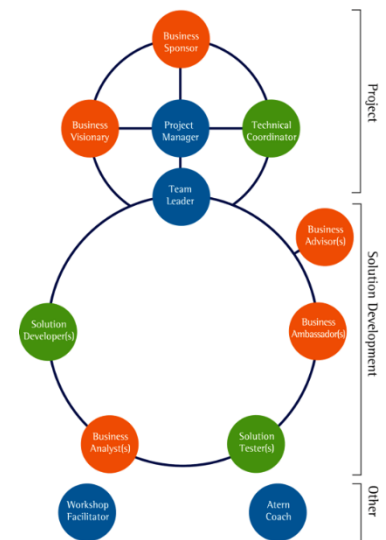


Figure 3: DSDM Team Model (dsdm.org, 2008, ch.7.1, para.1)

Team Leader, Business Ambassador, Business Analyst, Solution Developer and Solution Tester. The other roles of Business Advisors, Workshop Facilitator and Atern Coach provide assistance and guidance to the project on a more ad hoc basis. These roles are not defined on a one-to-one basis, which means one person may cover several roles in a small project and one role may be split between several individuals in a large project.

Techniques of DSDM contain Timboxing, MoSCoW Prioritization, Prototyping, Testing, Workshop, Modeling, Configuration Management. Some of them are already mentioned above or popular and well known in other agile methodologies. The MoSCoW is DSDM specific and worth a special notice here. MoSCoW prioritizes requirements with MUST, SHOULD, COULD and WON'T, which are in descent order for their relationship with business needs. With such definitions of priorities, relative importance of requirements becomes clear. This directly contributes to making progress and keeping the project to deadline.

In conclusion, DSDM provides a tool and technique independent framework that could be filled with user specific techniques and software aids of choice. For a successful project, DSDM requires the acceptance from senior management, the involvement of end-user, an empowered team with skillful and stable members and a supportive relationship between customer and vendor.

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