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## **Business Driven Software Development**

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The belief in the paradigm that a business strategy aligns with a product strategy which in turn aligns with the IT strategy does not say anything about the value a product has on business goals. In the usual sense it is the IT strategy that relates to the product strategy, which relates to the business strategy. This says nothing about the business goals of the project. The business goals or objectives should be the most important aspect of a project.

According to Mitra Tilak (2005) "IT departments must move away from creating IT-centric solutions and move toward creating solutions that realize one or more business processes. Business-driven development (BDD) is a methodology for developing IT solutions that directly satisfy business requirements and needs."

From this we might gather that emerging technologies should be the determining factor when considering business strategy and processes. The business goals must align with these emerging technologies because these technologies are gaining momentum in all aspects of business today. If this momentum in technology and the business goals are aligned then profits are sure to follow.

The business goals or objectives and the IT project must have behind them business drivers. To determine a projects effectiveness on a business there are four business drivers (motivations) Machavarapu (2006) that a project should adhere to.

- **Expense Reduction:** An example is reusable components. Although expensive, can drive down costs because of the time saved on developing new components.
- **Revenue Increase:** An example is the product itself, where the eventual outcome of the product should increase profits.
- **Strategic:** Strategically the project should help the competitive advantage of a business, adding value through the quality of the product.
- **Legality, Regulatory, Security:** In taking on a project there are certain rules and regulations that govern a project. Security is also important especially with the flow of data through some projects.

These drivers would differ if the organization is a non-profit entity as opposed to a for profit company. Expense Reduction would not differ that much because a profit as well as a non-profit company deals with and tries many ways to improve Expense Reduction. Revenue Increases for a non-profit organization would differ from the revenue increases of a for profit company because the non-profit company does not emphasize revenue

increase. Rather they put value on services with no compensation. Strategically a non-profit would put value on the service they offer rather than monetary value of a product.

The drivers mentioned above are not independent of one another. They are related to enable process prioritization (discussed below), a type of model.

Business Driven Development again “is a methodology that satisfies business requirements with respect to IT solutions” (Wikipedia, the free encyclopedia, no date), ultimately using measurements and metrics to create a Business Process Model (BPM) which aligns IT solutions with Business needs by keeping score on important, versus non-important requirements..

A prioritization model, a type of BPM, is comprised of breaking down the drivers into parameters or smaller parts according to the business requirements. Executives add their expertise about which statements are important prioritization parameters. For example the expense reduction driver can be broken down into customer service expense, customer acquisition and retention expense, and back office efficiency gains expense, among others.

From the bottom up the prioritization parameters are then given a score by the executives on a scale of 1 to 10 from the results of a contingent of requirement related questions. The higher the number the more important is the parameter. As each high score is noted the project becomes prioritized by parameter. That is the project takes shape in terms of what is important to the business requirements and hopefully the IT solution.

The two sets of parameters, the original drivers as set 1 and the parameters as set 2 are then given weights according to business priorities. As business priorities change so do the weights. This makes sure business strategy is always aligned with the weights or IT strategy.

As different projects have different weights they are thus measured against one another to determine project priority. The BPM then is a determinate of a projects success or failure where low scoring projects may not be undertaken as are high scoring projects.

So continuous evaluation of a project with respect to the business drivers must happen in order to determine weather a project will succeed or fail. If the drivers are not watched for changes then the project will be of little value.

If during the iterative and changing steps of software development; Requirements Analysis and Definition, System Design, Program Design, Program Implementation, Unit Testing, Integration Testing, System Testing, Deployment, and Maintenance the project is not aligned with business goals the project will again be of little value.

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