

# On-Time and On-Budget? So What?

## The Secret Is In The Design

JustIQ, A SUBSIDIARY OF INTEGRANT INC.

What is software? Software is made up of “code” written in one or many different languages. The “code” instructs a computer to complete a given task. That’s it! When you break it all down, software is a set of instructions on how to solve a problem.

Companies are driven to build software or custom implement pre-packaged, off-the-shelf solutions by the need to solve a problem. When the business problem is unique and the solution must help a company overcome a very specific barrier, tailored software is the only answer. Commercial software tools are designed to appeal to the masses and solve standard, generic issues. Readily available software does not solve core business problems, and certainly will never provide a competitive edge.

It’s not a simple task to build and implement enterprise solutions that can solve today’s problems and scale to meet future needs. Companies have tried it all. Some opt to challenge their internal staff to deliver the right solution. Others believe an outside opinion is valuable and choose to outsource projects to consultants. Currently, many companies hire offshore resources to reduce the high cost of building these complex solutions. Still, no matter what strategy companies choose, the failure rate is high and the percentage of suffering projects is astounding.

According to the Standish Group<sup>1</sup>, nearly one in five software projects fail. A failed project is one that is never completed and delivered. Additionally, almost half of all projects are classified as ‘challenged’ or suffering from overrun costs and timelines. A handful of common errors are the cause for late and over-budget projects. Here are the top five mistakes:

1. Limited or non-existent user involvement
2. Lack of executive management support
3. Incomplete or shifting requirements and specifications
4. Inadequate planning and resources
5. Unrealistic expectations and milestones

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Realistically, project failure can be eliminated with proper planning and most detours are avoided by hiring an experienced project manager and a solid development team. This can be achieved whether the team is in-house or outsourced. The most detrimental mistake is delivering a solution that is on-time and perhaps, under budget, but does not meet business objectives nor provide real business value. In our experience, projects suffer when teams fail to answer three important questions:

1. Does the solution meet business objectives?
2. Does the solution provide real business value?
3. Does the solution meet the organization's criteria for success?

In order to reach both short-term and long-term success, companies must not only answer the above questions, but also plan and execute development strategies to deliver the perfect fit solution.

### **Hire a BSA to Craft the Perfect Fit Solution**

Okay, so we've established that the basic function of software is to provide a computer with instructions to solve a problem. Like any ailment, the symptoms of a business problem are not difficult to identify. However, failing to diagnose the illness or root of the problem and simply treating the visible symptoms can lead to the death of the "patient," or in the case of software, the project or system. The first and most important step is to identify the problem. Only then can we effectively create a plan to deliver an answer.

A skilled and experienced Business Solutions Architect (BSA) is the best person for this job. Like a knowledgeable physician, the BSA quickly asks the right questions to gain an understanding of the client's pains and needs. Analysis of why the organization is unsatisfied with their current system (or lack of) is crucial. Knowing the business goals, understanding the pain and unearthing the root of the problem is a prerequisite for crafting the perfect solution. From the start, a strong BSA will ensure that the solution actually solves the real problem, fits the business objectives and provides business value.

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### **Discovery and Design**

The critical first phase of the project is dedicated to discovery. The BSA interviews a team of key staff members to define the scope of the project, document current processes and develop use cases. During this stage, procedures are scrutinized and requirements are defined. It's important to ask the following types of questions:

- What are the business objectives?
- Who are the key players? Departments?
- What are the major functional areas?
- What are the individual roles for each functional area?
- What are the steps for each process?
- What steps are valuable and which are repetitive or redundant?
- How long does it take to complete these tasks today?
- Does the system need to be scalable? In what way?

Once the BSA has an understanding of the current process, the next step is to establish concrete and specific success criteria. While the BSA envisions and designs a solution, the success criteria matrix is used to ensure each specification meets business objectives. Inefficiencies are streamlined. Data flow is mapped. Efficient workflows are designed. Repetitive tasks are automated. Redundancies are eliminated. Errors are snuffed out.

As part of the design phase, the BSA works with the client to calculate the return on investing in the project. The following factors are considered and carefully planned:

- Does the solution reduce processing times?
- Are inefficiencies eliminated? Does the solution skip automation of irrelevant or minute inefficiencies?
- Does the new system enable a reduction in headcount or reallocation of staff to critical business functions?
- Will the system eliminate costly errors?
- Does the new solution enable us to provide better service?
- Are we able to capture previously lost opportunities?

Let's map it all back to our first statement. Software solves problems. Many teams overlook the importance of accurately calculating the business value of the project. If the new system is slower than the current processes, it's not a solution. If the new system requires extensive training for new hires or continued training for senior level users, it's not a solution. If the new system solves one problem, but creates ten more issues at the same time, it's not a solution. If the new solution looks sleek, but doesn't allow you to capture new data, quickly create new products or identify new opportunities, it's not a solution. Always construct a solid business case for every project and ensure the design allows you to reach your goals.



Many inexperienced teams do not know how to successfully complete the critical discovery and design phase, opt to cut corners or worse yet, decide to skip it altogether. Every winning project begins with the support of both management and the business users. Both must agree on the scope and support the design of the solution to guarantee the success of the project. This cannot be achieved without a discovery and design phase led by a strong BSA.

### Success Factors

There are four “ingredients” every project must have to ensure a perfect fit:

1. Clearly defined business objectives and business value
2. Accurate calculations to determine positive ROI
3. Definition of specific success criteria and through an iterative development process, mapping of each specification back to business objectives and success criteria
4. Continuous feedback from business users throughout development

As mentioned previously, many of the common mistakes outlined in the Standish report can be avoided by building an experienced and knowledgeable team. Solid project managers drive teams of talented engineers to deliver on-time, on-budget and on-target with client expectations. With agile development, there are no surprises. Each phase of every project is delivered in cycles of approximately two week iterations. An iterative approach ensures clients are fully informed and as the project progresses, valuable feedback is incorporated to ensure the solution always maps back to the vision.

Recently, IBM surveyed over 1000 CEOs from around the globe. The study concludes that the top traits of successful businesses include a hunger for change, constant innovation and a disruptive nature. As consultants, we are constantly looking for better, improved ways to work. We disrupt the status quo and always push the envelope. Our best clients know there is a better way to operate their business. We at Integrant Inc. work to identify innovative methods to improve efficiency and help clients realize their goals and aspirations to grow their business.

#### About Integrant Inc.

*The key to our 100% success rate is starting with an innovative solution design. Integrant Inc. specializes in the design, development and delivery of custom software and customized packaged solutions. Every Integrant Inc. solution fosters the dreams of visionary companies.*

1 David Rubenstein, Standish Group Report: There's Less Development Chaos Today, <http://www.sdtimes.com/content/article.aspx?ArticleID=30247>, March 1, 2007

