Take Control of Your Project!

Using Expectation Alignment As a Leading Indicator to Avoid IT Project Failure

By

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Foreword

As an auditor specializing in information technology and internal control I spent a lot of time with IT Project Teams on a wide variety of application development and implementation efforts. Often those efforts were less than stellar success stories. In fact numerous studies have shown that a staggering seventy percent of IT projects fail.

I can identify many different conditions and situations that make or break an IT project. The big determinant is always whether or not the customer got an application that satisfied the requirements, and functioned as desired and expected. (Next to that big determinant were: did I get it within budget, and did I get it on time?) Organizational change management and lack of sponsor's endorsement are two other major issues that often appear.

If a project didn't meet the above criteria, my question was, "Why not?" So I'd drill down with the customer, and with the rest of the development team, with a few more "why" questions, only to find too often what I already knew. Customer requirements weren't adequately defined or became a moving target, and acceptance testing was slim to non-existent. How can that happen within a group of professionals on both sides of the design effort? Were they not in the same meetings? Did they not agree on the requirements document? Did they not agree on the testing regimen? Did they not keep up with change requests?

Of course, they did all those things. What they didn't necessarily realize is they ran into a major problem with human communication; believing they fully understood each other when they really didn't. The IT professionals and the business professionals each assumed that the other understood precisely what was meant with each communication; each assumed specific activities were part of the other person's normal routine in a development project. But in reality their expectations were not made specific to the project or explicit to each other; tasks weren't done as expected, functionality wasn't provided, requirements weren't met, and the project ultimately failed to achieve the desired results. Their expectations were, quite simply, not aligned.

Can every project failure be traced to ineffective communication? Of course not! A second major factor mentioned in so many studies and articles on IT project failure is Poor Project Management. Included in that topic were: failure to adequately define roles, failure to actively manage the team, failure to hold people accountable, and failure to provide timely and detailed progress reports to executives just to name a few. And you'll note that once again expectations were not aligned.

Complicating matters, there are many trailing indicators that a project has gone off the rails. Too many change orders, late deliverables, attrition, to name a few. What we lack is a tool to diagnose this in advance; one that tells us when the train is about to jump the tracks. We need a tool that can determine the health of the lines of communication most critical to a project's success; a tool that then also provides a real time method to open those lines of communication and align the interest of the two parties to their common goal.

- Terrance L. Merriman

Introduction

Whether large or small, IT Development projects are complex change events in an organization. They require coordinated cross-functional activity between two or more departments or teams. Their success or failure reverberates throughout the organization and often impacts the organization's external customers. Countless studies and papers on reasons for IT Project Failure cite two critical factors: poor interpersonal communications, and failure to actively and professionally manage the project.

In the construction industry a big pressure point is the connection between the owners, architects, and contractors on a capital project. Inside an organization there is a similar and significant tension between the business owner, the application architect/designer, the programming team, and when they're involved, external consultants. Aligning expectations between these groups greatly improves the chances for IT project success.

Limited resources mean today's projects often engage only skeleton teams that are less trained and less experienced. Business stakeholders face the same realities. Without a tool to tell us about the presence of these conditions, we have little indication that a project is in danger of failing. Communicating effectively by aligning expectations and reporting on the state of alignment is essential to project success. The alignment process and related reporting provide reliable leading indicators of developing conditions which can lead to failure of IT projects.

Why do Projects Fail?

There are many reasons why projects fail, among them are:

- Organizations are not prepared for and are not accepting of the change brought on by new and upgraded processes, systems, and technology.
- Responsibilities of the individual departments or functions are often not understood by the other departments.
- Roles of the individuals on the project team are not clearly understood by all team members and the executives responsible for the project.
- The IT team doesn't understand the functional activity's business model sufficiently to design and create a new application or make significant changes to an existing application.
- The functional area doesn't understand the development model to be employed, or how IT teams design and create applications, and how to perform acceptance and production testing of new and updated applications. In short, IT does not speak "business" and Business does not speak "IT".
- There are many places in the process where communication breakdowns can lead to less than optimal results, a blown budget, missed deadlines or complete failure of the development effort.
- Other consultants have reported that the organization is just not "ready" for the change the project is introducing, whether it is a system or a process change.

Underlying each of these conditions and many others is a failure to communicate effectively.

Five of the most critical activities in any IT project, no matter its size are:

- 1. Organizational change management and adoption
- 2. Project team creation and role definition
- 3. Requirements definition and change processes
- 4. Acceptance and production testing
- 5. Go-live or rollout

These activities are critical to the development work the team does and how it's evaluated. What does each of these activities have in common? *They're group activities requiring effective communication.*

Critical Success Factors

Let's briefly discuss each of those critical junctures identified above, and why they are so important to project success.

Organizational Change Management and Adoption

Significant change in organizations is only successful when it is effectively managed, fully accepted and completely integrated into the workflows, processes and culture of the organization. Integration depends on buy-in from the entire team, from leadership to the shop floor, from operations to HR, from sales to finance.

A big challenge is that resistance to change is inherent in any large group of people. Trying to get "buy-in" after the go-live date is both difficult and far less effective than managing this issue early in the design phase. Leadership must set the tone, communicate the nature of and reasons for the change, and engage in active, let's say aggressive, team building so every team member understands and accepts the role he or she is expected to play in the impending change.

We've all seen projects that failed to achieve the desired result because one or more people or departments weren't entirely on board, and even intentionally sabotaged the project. That happens when expectations aren't established, discussed, agreed, and monitored between all team members from top to bottom in the organization.

Project Team Creation and Role Definition

The appointed project manager must have the requisite project management skills to assemble and oversee a team of designers, developers, customer representatives, and possibly consultants and vendors, and ensure that each understands and accepts his role in the project's success. Each participant needs to understand what every other team member expects, and what must be delivered to meet each expectation. Since communication is a two-way street each member also needs to communicate his expectations of every other team member and gain agreement on all deliverables.

This process takes the role definition found in individual position profiles one step further and customizes it for each specific role on the project team. Based on the IT development model to be employed and the business model specific to the customer function, unique expectations arise for each programmer, designer, consultant, vendor, and customer representative on the project team.

For example, it's particularly important for customer representatives on the project team to understand that effective requirements definition and acceptance testing is their responsibility and will contribute directly to the success or failure of the project. It's not the architect's responsibility to define requirements, it's the customer's. It is the architect's responsibility to understand precisely the needs of the customer and ensure that those requirements are incorporated into the design. It's also the architect's responsibility to ensure the customer understands the capabilities and limitations of the technology to prevent defining requirements that cannot be satisfied.

An often overlooked but essential role is that of a Business Analyst who can thoroughly document the existing process; this 'As Is' document becomes the baseline. The 'To Be' document must respond to every requirement and address gaps between the 'As Is' and 'To Be' states of the process. Expectations surrounding this role are quite substantial and also directly related to successful requirements definition.

These are complex, role defining expectations involving specific behaviors on the part of each team member and they exist between each member of the team.

Requirements Definition and Change Processes

At this critical juncture, customers must understand the capabilities and limitations of the technology. IT team members must understand the business model, the specific requests of the customers, and customer expectations about what the result will look like. Requirements themselves can be defined as detailed customer expectations about the outputs that will be delivered by the application, and how the application will function. These expectations exist between the customer and designer or application architect.

Think of how many requirement change requests you have seen that are both significant and late. They have a material impact on many parts of the system and increase the risk of time and cost overruns. How often are these changes agreed to due to a lack of a formal and universally understood criteria and evaluation framework? Or these processes are in place but are not applied.

Acceptance and Production Testing

It is vitally important that users understand how to test elements of the new or updated application, outputs, and functionality, particularly the functioning of error handling within the application, and have a well-documented plan for the entire testing process. Testing must be comprehensive enough to ensure all interfaces with other customer systems operate correctly, all errors are handled correctly, and all outputs appear as expected. If the acceptance and production testing process and roles are not clearly understood and responsibilities accepted by the customer, testing will be ineffective and increase chances for project failure. Tester roles are defined by

specific expectations between the testers and the IT professionals on the team, as are the testing process and test results.

Go Live or Rollout

One true test of success on an IT project is not whether the go live date is met, but whether the users of the system are competent, but not necessarily proficient, and can run the application successfully at go-live. Too often go-live is treated as nothing more than a production test; the application does not run successfully, and roll back to the prior system is necessary. Oh by the way, we didn't test the roll back process either and we can't go back so we're stuck with a new system that must be fixed fast in production and on the fly, to the ire of the company's internal and external customers! Expectations here exist between the development team and non-team member end users and include training activities and trainers, and documentation specialists.

At each of these critical points in the development effort there are many expectations between every team member. If all of these critical expectations are not explicitly documented, discussed, agreed, and monitored, in other words thoroughly communicated, people cannot perform their roles effectively. Nor can they deliver the desired results. A failed IT project is the outcome. *This is why ineffective communication is a root cause of so many unsuccessful IT projects.*

Improving Team Interaction for Success

IT project development and implementation is obviously a team effort. That team effort boils down to development of productive and effective working relationships between all members of the team. Those relationships can only be built on a clear understanding of what each member expects of the other.

How do we get that clarity and acceptance of accountability for delivering on each expectation? We ensure that each important expectation is documented, communicated, agreed, and monitored throughout the project team; the most important attribute is *agreement*. Each set of expectations for each team member becomes a performance contract for which that member has accepted accountability. It is called *Expectation Alignment* and it addresses both the structure and content of individual communications.

When a team uses expectation alignment, its many team and individual communications are not just heard, but they are documented and progress monitored. That data becomes the source of information in team progress reports that provide leading indicators of potential problem areas before they break the budget, blow the deadline, or fail to meet critical customer requirements.

Not only can expectation alignment address many internal aspects of IT Project Management, it can also address the ongoing Organizational Change Management issue that exists on IT projects. When the project identifies its stakeholders it is important to understand the type and frequency of communications they expect from the project team.

From a different perspective, expectation alignment is a skill to be learned and employed; it's a personal core competency that everyone should cultivate. But, to our knowledge it's not a skill that is taught in public education at any level. While general communication skills are part of most K-12 curricula, and communications and media are a part of many college degree programs, we're not aware of any education system that teaches expectation alignment to document communications and gain the agreements necessary to hurdle the common barriers to effective communication.

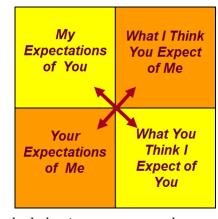
Expectation alignment has been used in many situations requiring effective communication. From implementation of a new customer relationship management system to a new sales strategy that closed over USD \$50 million in new business in nineteen weeks, from cutting a project's contingency fund burn rate from USD \$50,000 per day to zero, to bringing a major construction project in on time, within budget, and with no legal challenges, expectation alignment has proved its value. So how is it applied to an IT project?

Applying Expectation Alignment

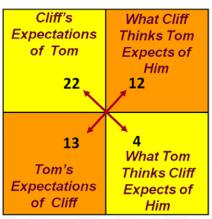
What do we mean by expectation alignment?

Expectations are the tasks to be carried out and behaviors to be demonstrated by one person in response to the needs of another person. Expectations always exist between two people within two channels. Productive working relationships do not exist and work is not accomplished without aligned expectations.

Too often expectations are unspoken and merely assumed. Occasionally they are dictated without reply, or directed by leadership without team member input. Many times they are not understood or are misunderstood. Sometimes the person expected to deliver is not qualified, inadequately trained,



unprepared, or lacking in the necessary resources to demonstrate the behavior or carry out the



task. In other words, expectations are not aligned. In the example to the left Cliff's and Tom's expectations are not aligned. What Tom expects and what Cliff thinks Tom expects are close. What Cliff expects and what Tom thinks Cliff expects are far apart.

Expectations are aligned when they are explicitly expressed to, and understood by the other party, match what the other party believes is expected and will agree to, are accepted by the other party with agreed evidence on what constitutes success in meeting the expectation, and monitored for progress and eventual completion by the holder of the expectation.

The Nature of Expectations Relevant to IT Projects

For each of the critical junctures described previously, we suggested the nature of relevant expectations. Specifically:

Expectations for Organization Change Management

For an IT related change in an organization to be successful requires a clear understanding of the implications of the change within all departments and functions impacted by the change, whether directly through a change to their own systems or indirectly as a recipient of output from or process changes necessitated by the system change. Changes in systems and applications can bring about or require changes in fundamental business processes and even in the underlying mission and charter for the various functions or departments within the organization.

Each team member affected by the system change would define his expectations of others regarding what will be needed in terms of deliverables and timing to enable continued success in performance of his role in the organization. These expectations will typically focus on changes in process and reporting but may also specify changes in a person's role in the organization, and will need to be agreed and monitored to ensure a successful system installation.

In particular organization leaders will need to understand in detail the impacts on their departments and will need to express their expectations regarding how roles and processes may be changing and what will be required of them to adapt.

Expectations for Project Team Creation and Role Definition

Each team member including the project manager and program manager would define his expectations of every other team member including tasks and behaviors; i.e., what work is to be done and what skills are to be demonstrated. Generally we would start with tasks and behaviors of critical importance to the project's success. However, administrative activities less likely to impact project success could be documented as well, giving a more complete "performance contract" for each person and role on the team. Each expectation would include definition of "evidence", a way of measuring how well the expectation is being met. Evidence typically includes deliverables and may include constraints on timing and budget.

Expectations for Requirements Definition

Requirements can be defined using expectation alignment, just as tasks and behaviors are defined. Each specific requirement would include a description of the deliverable element of the design and any constraints on the design element. Timing and budget constraints, if relevant, could also be defined. Most IT development methodologies include extensive tools and techniques for documenting requirements, so use of expectation alignment is not essential here. What's most important is that expectations between customer and architect in terms of tasks and activities are documented, something that would normally occur in the Role Definition phase of the development effort.

Expectations for Acceptance and Production Testing

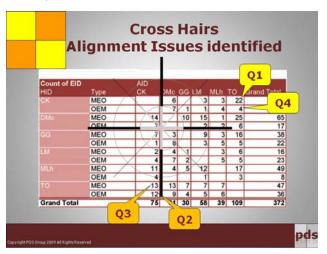
Here, developers, designers, and the appointed customer representatives responsible for acceptance and production testing define their expectations of each other surrounding creation and administration of test plans, accuracy and thoroughness of testing, and documentation and review of test results. Once again these expectations focus on specific tasks to be completed with evidence testing was proceeding, completed, reviewed for consistency with defined requirements, and that results are acted upon.

Expectations for Go-Live or Rollout

Development team members, trainers and documentation specialists create specific and detailed expectations surrounding assurance that appropriate documentation and guidance has been created, reviewed, approved and implemented. These expectations also ensure that application users have been taught how to operate the new application and integrate the outputs into their business process and model sufficiently that their own customers benefit from a successful rollout, and do not suffer the consequences of a failed implementation.

Documenting, discussing, agreeing, and monitoring every one of the expectations so identified produces task lists and tickler files for every team member and actionable information for project management and reporting. It identifies potential problem areas before they affect budgets, and timelines and the ultimate success of the project. Expectation alignment keeps everyone on track and focused on doing the right things right.

How is Expectation Alignment a Leading Indicator of Project Success or Failure?



The process of generating, discussing, agreeing, and monitoring expectations results in many recordable and reportable events. Expectations that are recorded but not yet discussed are not aligned. The number of expectations to be discussed is an early indicator that problems exist with the project and that people may be doing things that are not wanted or expected, or are not doing things that are desirable for successful completion of the project. This information is available early in the project, and well in advance of milestones and phase completion dates.

At this stage there are also many "unmatched" expectations; i.e., expectations of which the other party is completely unaware, leading to high distraction indexes and low alignment indexes, further indications of potential problem areas.

As expectations are discussed and agreed to in alignment meetings it then becomes possible to track progress on each task at a personal level, with resulting early indicators when deadlines and budgets are not being met well in advance of entire project phases getting off track. Further, when tasks are being completed, then achievement levels, the degree to which the expectation was met are being tracked, providing more indicators of individual performance that may be falling short of goals.

The expectation alignment and performance process can be tracked not only between individuals, but also between groups; tracking which can be very useful in highlighting interdepartmental communication issues suggesting problems with organizational acceptance and adoption of the technology changes in advance of the planned rollout.

All of this information can be made available in standardized reporting, and more information can be provided through custom reports.

| Count of EID | | AID | | | | | | |
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| | OEM | | 7 | 1 | 1 | 4 | 14 | 1 1 |
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Results

Application of expectation alignment in:

- Organizational Change Management and Adoption results in broad understanding of the impact on the culture, processes, and functions within the organization, and of the roles of the team members involved in or impacted by the change. With understanding comes greater acceptance by all team members of the impending organizational change.
- Project Team Creation and Role Definition results in clear performance contracts specific to
 the project that go beyond standard position profiles to the actual duties to be performed
 and accountable for on the part of each team member. Assumptions about who is to do what
 are reduced or eliminated. Customer representatives understand the central role they play
 and the true extent of their participation in ensuring a successful project.
- Requirements Definition results in a document with specific guidance for translating user needs into design elements and program code. It reduces the possibility of incomplete or misunderstood requirements. It results in a clear roadmap to the customer's desired solution.
- User Acceptance and Production Testing gives the testers a clear understanding of the plan, process, and their specific responsibilities. It helps to ensure complete and accurate testing of all facets of the application and minimizes the risk of overlooking marginal or unacceptable application behavior prior to its migration to the production environment. It also minimizes the number of post implementation fixes which hamper effective business operation.

• Go-Live or Rollout ensures that all documentation is complete, operating manuals are in place, users are fully trained in application operations, situations requiring rollback are minimized, and business operations continue smoothly with minimal disruption.

A byproduct of all these activities is the capture of extensive detail about each significant task sufficient to support progress reporting, financial reporting, and situation reporting of leading and lagging indicators pointing to potential trouble spots and otherwise smooth functioning of the project team.

Conclusion

Effective communication is essential to strong project management and successful implementation of new or upgraded IT applications and infrastructure. *Use of expectation alignment provides a leading indicator of where things will fail.* It does this by isolating the weak points in communication of a prioritized set of expectations.

Expectation alignment builds a culture of accountability by making everyone's performance visible. It also reduces assumptions and promotes a clear understanding and acceptance of roles, responsibilities and accountability among all team members.

When all team members agree on precisely what they must do and what success will look like they remain focused on those activities relevant to project success; they do not waste time on unnecessary activities, and they do not skip essential activities. IT projects run efficiently and stay on track. The probability of success is greatly improved.

Do you want to eliminate a major underlying cause of IT project failure and gain control of your projects? Focus on improving team communication using expectation alignment. You'll find it is well worth the investment.

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