

TrueTandem – Making It Real (MIR) Process

TrueTandem has developed a multistep process used to help aid the discovery process in order to best deliver a fully functional and usable system. Too often systems are developed from a functional specification that doesn't accurately portray how the users of a system will be using it in their daily work processes. Users are then forced to change the way they want to work to fit a new solution rather than have the solution fit the way they want to do their work. While functional specifications are helpful, they often do not portray the whole story. The TrueTandem MIR process ensures that the full story behind the specifications is captured.

Getting the Story Right

Series of “Day in the Life sessions” – In these sessions our business analyst(s) spend time talking to the business leaders and users about what they do every day and the best way to get things done. These sessions are focused on what needs to get done rather than the technology used. They are focused on the “why” behind actions to supplement the reasons behind what needs to get done. By asking and listening to how people do their jobs, we can capture the “story” behind the functions often providing better ways of using technology in a solution as well as a more user friendly system because we understand the meaning behind the work.

Storyboard Scenarios – After each “Day in the Life” session is complete, we storyboard out basic scenarios of what people need to get done and the reasons behind it. These storyboards create real world scenarios based on what needs to get done from a business perspective rather than just from a feature / function perspective. While not every scenario needs to be created, the main or most complex scenarios are targeted to give the best understanding of what business objectives need to be accomplished. Once these Storyboard Scenarios are completed, they are reviewed with the business leaders and users for accuracy and approval.

WireFrame Solution – Taking the completed Storyboards Scenarios to the technology team, a series of design sessions occur to come up with the best technology solution to be used to implement the scenarios. These technology sessions are constrained by toolsets available, technology environment, resources, timeframes and budget and those constraints are clearly defined beforehand. Working with these constraints, solutions are sketched out for the best possible implementation. While sometimes the technology solution appears obvious, it is easier to make changes to a whiteboard than code base. Once the best technology approach is agreed upon, a wireframe or prototype solution is built out to verify with the business owner and users for approval. Occasionally, more than one prototype will be developed for customer approval and the customer will be presented with pros and cons of each solution and the costs associated with them. At this point we validate and get approval for:

- User Interface design and flow
- User and system workflows/approval processes
- Data validation
- Data retention
- Security model/access

After successfully demonstrating and getting approval for the prototype, the team will prototype system integration aspects of the application. The goal of the integration prototyping will be to ensure that

system to system interactions are modeled and built to verify that data flows are feasible. The most challenging integration points will be tackled first as they represent the largest risk. All prototypes will be approved with the business leaders before any development can be initiated.

Habit of Delivering

The second part of a successful delivery project is creating a culture of delivering results through the project. Our experience in developing applications recommends an Agile-like methodology because of its fundamental themes of reducing risk, promoting frequent inspections/checkpoints on progress and adaptability. Unlike other methodologies which have longer planning phases, Agile focuses on a 'time boxed' cycles. Each cycle includes planning, requirements review, designing, coding, unit testing, and acceptance testing. Cycles/Iterations cover a specific number of weeks ensuring that scope and focus are maintained and migration teams have a culture of delivering – not just developing.

“Agile methodologies generally promote: A project management process that encourages frequent inspection and adaptation; a leadership philosophy that encourages team work, self-organization and accountability; a set of engineering best practices that allow for rapid delivery of high-quality software; and a business approach that aligns development with customer needs and company goals.”¹

The development team(s) will work with the application sponsor to determine a mutually agreeable timeframe for each cycle/iteration. Typically cycles last two to four weeks. However, the more time you give someone to deliver, the further off your project can be before you realize it. So while a cycle/iteration can be up to 4 weeks, the TrueTandem MIR insists that everyone have weekly deliverables. By keeping everyone focused on what they have to get done that week, people stay focused, issues are identified quickly and projects cannot venture far off before it is realized. Weekly deliverables also do not allow people to rely on the “eternal weekend” (which doesn't exist) to get things done.

What Happens When We Are Done?

Too often, development projects are geared towards the “due date” when the application will be rolled into production. While user training and operations are always part of the development team, applications also have to be developed with operations in mind. This includes:

Instrumenting the all code so operations staff can quickly identify problems.

Diagnostic flow charts allowing operational staff to quickly determine root cause

Performance instrumentation for performance reviews

During each cycle acceptance testing will be conducted and will include:

- Functionality Testing
- Security Testing
- Scalability Testing
- Operational Monitoring Testing
- Disaster Recover Testing
- User Acceptance Testing

¹ http://en.wikipedia.org/wiki/Agile_software_development

Some cycles may exclude one or more of these testing areas based on schedule and tests that may have been conducted in the previous cycles. For example, Scalability or Disaster Recovery testing may not be required in each cycle. But that is a business choice rather than an omission that will affect your solution down the road.

The goal of the TrueTandem team is to develop a solution that fits in as seamlessly as possible to what users and operations are already familiar with. By implementing the TrueTandem MIR Process, we can create solutions that fit the way business users want to do their work and fit the operational standards IT groups need to effectively manage any solution.