Agile, DevOps & Continuous Delivery MATURITY ASSESSMENT
Agile, DevOps and Continuous Delivery are areas of best practice that transform how software is created, tested, deployed and maintained. Starting with collaboration of all vested parties, ensuring values and aims are aligned, adhering to the rituals, proper use of the tools available and the introduction of automation, will all speed up software delivery times, while delivering real value in the safest way possible.

Our Maturity Assessment involves Harrington Starr Technology Consulting spending time on site with your delivery teams in order to conduct a thorough review of your end-to-end software delivery processes. We will jointly identify specific and actionable steps that your organisation can take in order to deliver: Faster – Safer – Better.

The aim is for you to raise the quality and robustness of your production software systems, while reducing delivery cycle times and enhancing your ability to iterate and innovate in the market. Other aims include the ability to adopt and maintain an attitude of compliance to regulations and the ability to manage software delivery risks effectively.

We approach our engagements with our “Triangle of Steadiness” mindset, so we are focused on a complete approach starting with people, then culture, followed by processes and then tools. We look into the behaviour and culture along with practices such as development and operations collaboration, infrastructure automation, pragmatic agile processes, and test, release and deployment automation. This is to improve the outcomes of your software delivery efforts.

Problems that Agile, DevOps and Continuous Delivery help to overcome:
- Slow release cycles
- Problems accessing environments
- Poor quality during testing cycles or in production
- Lack of collaboration between development, operations and testing
- Unnecessary complexity
- Slow resolution of problems

Benefits of DevOps and Continuous Delivery:
- Time to market shortened
- Deliver more frequently and with more agility
- Reduce release risk
- Improve efficiency

Cultural benefits of Agile:
- Happier, more productive teams
- Higher employee engagement
- Greater professional development opportunities

Business benefits:
- Faster delivery of features
- More stable operating environments
- Improved communication and collaboration
- More time to innovate (rather than fix/maintain)
What should we assess?

While a typical system will have many parts, some connected, others disconnected, they are the sum of a whole. We strongly believe that the whole should be looked at and examined for a real change to take place. To be truly agile it’s not just a case of looking at development or operations, it’s looking at the planning phase before coding and the post-deployment phase where feedback can be assessed. We examine the whole pipeline, and the entire project delivery approach, providing feedback on what’s going well, and where improvements could be made.

Why should we assess?

Doing what we know because it gives us comfort that we can predict the outcome becomes a dangerous status quo. People, culture, processes and tools change over time. While we don’t want to re-invent the wheel, we all strive to make a better more efficient wheel. Therefore looking from the outside in, utilising our experience, we are able to provide a complicit, objective report highlighting areas for improvement.
The Maturity Assessment features a series of interviews and workshops conducted with key stakeholders and technologists across both technology teams and the broader business. Organisations or departments in question are assessed; spanning people, process and technology considerations.

This engagement is delivered by a team of Harrington Starr Technology Consulting practitioners over a 3-5 day period, depending on the size and complexity of the organisation or department in question.

An example of how we would conduct the assessment is:

- Tour of the offices and development space
- Objective gathering with senior managers
- Interviews with development managers, test managers, product managers, business analysts and other managers responsible for requirements
- Interviews with individual developers, team leaders and architects
- Process and role mapping exercises with a cross section of the development team followed by discussion and questions
- Wrap up and discussion of provisional findings with managers and the sponsor
- Production of the final report with suggestions for areas of improvement.
In a highly mature organisation these qualities should be present:

- Empowered cross-functional teams consisting of a clear product owner, developers, testers, analysts and operations engineers co-located and working together on a particular product or feature.
- An on-hand visible business that feel ownership and experience responsiveness from the team, where both are aligned around the product and customer, iterating quickly to achieve success.

High functional teams would typically feature:

- Frequent, fully automated releases of small features and changes.
- Build fails if quality is not met (code analysis, performance etc.).
- An enterprise agile delivery model with collaboration across multiple teams.

Highly Developed DevOps enterprise adoption would include:

- A microservices api architecture consisting of small services that can be independently designed, developed, deployed and run.
- Highly automated repeatable deployments that are reliable and consistently executed across environments.
AREAS OF MATURITY
We then map these to reports and charts

DETAILED ANALYSIS
We will take a closer look into the following five areas:

Using our tools we can map the results onto charts and graphs

OPPORTUNITIES FOR IMPROVEMENT
Finally we recommend areas for improvement

We then provide a set of recommendations and areas for improvement

We establish why you are where you are, and the contributing factors.
DELIVERABLES

Once the engagement is completed, we will report back on our findings in the areas you are doing well and areas that could be improved.

The report will include

• Key themes, observations and a gap analysis between current and desired maturity.

• Suggestions on improving your current Agile processes or help with the journey towards a more Agile adoption. This is done via mentoring and training or using our consultants alongside your team.

• Defining how different teams compare with each other and highlighting where they are doing well, so others can adopt these practices.

<table>
<thead>
<tr>
<th>S No</th>
<th>Description</th>
<th>Team 1</th>
<th>Team 2</th>
<th>Team 3</th>
<th>Team 4</th>
<th>Average rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>We deliver valuable software early and often (on the order of weeks rather than months) in order to satisfy our customers.</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>2</td>
<td>We welcome changing requirements that represent our improving understanding of customer needs.</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>3</td>
<td>We measure progress in business-valued terms such as time-to-value, cost/benefit ratio and customer satisfaction.</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>4</td>
<td>Stakeholders and team members work in close collaboration (on a daily basis).</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>5</td>
<td>We work in an environment of trust and respect, where individuals organize themselves the best way they know how to accomplish the organization’s goals.</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>6</td>
<td>Our leadership supports, rather than directs, our work (as demonstrated by our immediate supervisors)</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>7</td>
<td>We encourage collaboration rather than competition (focus on what to improve, not whom to blame).</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>8</td>
<td>We use the most effective means of communication available to coordinate our efforts (usually face-to-face).</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>9</td>
<td>We can sustain our development pace for an indefinite period of time without loss of quality.</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>10</td>
<td>We invest in technical excellence and good design to keep the cost of future development low.</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>11</td>
<td>We automate repetitive work (e.g., regression tests) to eliminate human error and speed delivery.</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>12</td>
<td>On a regular basis we reflect on ways to improve, expecting that improvement is always possible as learning increases.</td>
<td>3.0</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Above is an example of part of the assessment report, mapping how teams compare with each other, scored from their own self reviews.

WHAT NEXT?

We also provide direction for immediate and future actions:

• A prioritised set of opportunities for improvement.

• A high-level business case for further project work.

• Support on a pilot project using lessons learnt and best practices that deliver immediate business value.
Harrington Starr Technology Consulting is a technology and services company specialising in Agile, DevOps, Continuous Delivery, and Transformational Programs. The company’s Agile Scrum Rapid Delivery and DevOps Acceleration services help organisations improve time-to-market for high quality new and re-tooled applications.

From strategy and operations to culture and technology, Harrington Starr Technology Consulting helps business and technology leaders identify and address opportunities for growth and profitability.

Harrington Starr Technology Consulting provides training, development, deployment and optimisation services for the full stack of Agile and DevOps technologies including application lifecycle management (ALM), modern development and continuous delivery tools, micro-services architecture, containerisation, automated testing and cloud infrastructure platforms.

Learn more at

http://HarringtonStarrTech.com