Revitalising QA: Embracing Pragmatic Approaches
QA is Alive and Thriving
The speaker

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Director of Infinity Tech Consulting, providing IT leadership and advise on business transformation and Quality Assurance on driving return on investment using efficiency improvements like assessments, innovation initiatives, and continuous improvement efforts.

Outside of the day job:

- Paul has served as the BCS SIGiST Marketing and Communications Secretary since 2020.
- A BCS Chartered Fellow and a Chartered IT Professional Assessor.
- As a TMMi Test Professional, Test Process Improver and past Lead Assessor Paul contributes thought leadership through white papers, ISO/IEC 29119 articles and reviewing the exam syllabi through a TMMi Technical Working Group.
- Is an Ally for the recently launched Women in Test & The Test Engineering Society.
- Paul provides mentoring to disadvantaged young adults through StartingPoint, a Mustard Tree initiative in collaboration with local communities, charities, and statutory organisations.
- Paul also champions sustainability through Giki Zero, Agile Sustainability Manifesto and ISO26000. Recently achieved 75% in the Business Sustainability Management course from the Cambridge Institute for Sustainability Leadership.
Embracing Pragmatic Approaches

1. Demerger - IaaS, SaaS and PaaS
   Cross-commodity price reporting agency across ten business functions define TOM, build capabilities and software and laptop rollout.

2. Multiple Suppliers (8)
   Modern Engineering Standards and different versions of ways of working and good practices

3. Cutover & QA Readiness
   Minimum viable service Lift & Shift, rebuild, rebuild new solutions and BAU workflows Build Digital Platform - SRE

4. Skills in demand
   Technology, Digitalisation, Big Data, Cloud Computing, AI.

The Background

"Quality is not an act, it is a habit." Aristotle
The Ask!

- Establish a consistent, repeatable and sustainable approach to releases within a programme.
- Enhance the current cutover process and clarify QA status for each completed release (138).
- Maintain transparent dialogue for RAIDS and programme status.

“Testing is a skill that you can learn. It's more a mindset than a specific process.”
- Janet Gregory, co-founder of the Agile Testing Fellowship
Pragmatic Approaches:

Quality Engineering Leadership

- **Communicate** your role, vision and what you need from others.
- **Pragmatism** – Implement governance versus delivery methodologies.
- **Disseminate** multiple sources of information and adopt good practices fast.
- Focus on **critical areas**, Infrastructure Digital, Finance and Events, (Risk Management).
- **Integrate the** role, scope and success definition.

Go-Live Readiness

- De-risk programme – Assessment of cutovers.
- **Security privacy by Design, (SpbD)** – Security first.
- Information Security Management System - **ISO 27001**.
- **Regulations** – **Supplier and Trade Sanctions**.
- Deployment Package - Release Process, Deployment Checklist & Entry-Exit Conditions.

“Testing should be exploratory, heuristic, and context-driven, rather than following scripted procedures blindly.”
— James Bach, Founder and CEO of Satisfice, Inc.
**Market View**

**Software Delivery Performance**

<table>
<thead>
<tr>
<th>Performance level</th>
<th>Deployment frequency</th>
<th>Change lead time</th>
<th>Change failure rate</th>
<th>Failed deployment recovery rate</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elite</td>
<td>On-demand</td>
<td>Less than one day</td>
<td>Less than one hour</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>High</td>
<td>Between once per day and once per week</td>
<td>Between one day and one week</td>
<td>Less than one day</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Medium</td>
<td>Between once per week and once per month</td>
<td>Between one week and one month</td>
<td>Less than one day</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Low</td>
<td>Between once per month and once per month</td>
<td>Between one month and one week</td>
<td>Between one day and one week</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

- [Source: Accelerate State of DevOps 2023 v. 2023-12]

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**Six Essential Pillars**

There are six essential pillars in this transformation from quality assurance to quality engineering:

1. Adequate orchestration of quality activities in and across Agile development teams. While QA is increasingly embedded in feature teams, we also see a clear rise of the quality function or quality support teams across DevOps teams.

2. End-to-end automation of quality and test activities across all types and levels of testing, from planning and design to execution and continuous quality monitoring. This end-to-end quality automation must be fully integrated within the IT development process.

3. Leveraging smarter quality technologies to assist quality experts in making the right quality strategic decisions early in the process.

4. More attention to test infrastructure and test data provision.

5. Defining, tracking, and monitoring of the right set of quality indicators to be able to respond immediately to potential quality breaches.

6. Increase the technological and domain skill levels of the quality teams in order to secure value outcomes for business processes and end customers. Quality experts will need to develop their skills further from testing and engineering skills to subject matter business expertise, alongside growing their knowledge of tools and technical platforms.

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**Prioritised Software Development & Delivery Goals**

- End customer satisfaction: 43%
- Time to delivery: 39%
- Competitive advantage: 34%
- Product revenue increase: 27%
- Market expansion goals: 27%
- New customer acquisition: 25%
- Budget: 24%
- Total company revenue increase: 23%
- Product adoption increase: 21%
- Company adoption increase: 11%
- Same other way: 5%
- We do not currently prioritize our development/delivery to strategy/solutions: 8%
- Not at all true: 8%

- [Source: The 17th State of Agile Report]

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**Reimagining Test Strategies**

Figure 16. Current and future technology considerations for organizations

- 68% Agile and DevOps
- 54% Cloud, performance, and resiliency
- 36% IoT, environments, data, and tools

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**Major Testing Challenges**

Figure 2. Major testing challenges

- Limited automation: 45%
- Too many competing priorities/dependencies: 45%
- Time limitations: 45%
- Existing stakeholder risk: 39%
- Maturity of test processes: 37%
- Cost: 32%
- Lack of ownership: 30%
- Other: 2%

- [Source: Deloitte 2023 Quality Engineering Trends Report]

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"Testing is an infinite process of comparing the invisible to the ambiguous in order to avoid the unthinkable happening to the anonymous."  
— James Bach, American software tester, author, trainer, and consultant
Summary: Skills In Demand


- **Growth industries** – Manufacturing, Retail, Wholesale of consumer goods vs. supply-chain, transportation, Media, Entertainment & Sports & Financial Services[3].

- **Fastest growing roles[3]** - Technology, AI/ML, Digitalisation & Sustainability.

- **Future of Work** – Hybrid, new ways of working and adoption of AI & Automation[4].

- **Soft Skills** – Negotiator, Adaptability, Strategic-Thinker, Pragmatism – Deliver the right outcomes[5]. Communication, highly collaborative, emotional intelligence, active listener, patients and conflict resolution.

“The key to building a great product is building a great team first. To me, great teams aren’t bound by roles, but they’re driven by moving forward.”
—Alan Page, software tester and Director of Quality for Services at Unity Technologies

“No amount of sophistication is going to allay the fact all of your knowledge is about the past and all of your decision are about the future”.
—Ian Wilson, Technical and Engineering Risk Manager, GE Vernova[6]
Q and A
ASK AWAY!
References

[3] Dr. Erik van Veenendaal, CEO TMMi Foundation management executive. TMMi Foundation, April 2024. TMMi Benchmark Report Financial Institutions 2024 v1.1
[9] Accelerate State of DevOps v. 2023-12. [06.06.2024]