

Trends in Agile

From Operational to Strategic Agility

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THE AGILE CONFERENCE (www agilealliance.org/agile2017/) is the largest global conference on agile software development, catering particularly to practitioners. Agile 2018 had more than 2,000 participants.

Lessons About Data

Troy Magennis discussed, in his keynote speech "What's the Story About Agile Data?" how agile projects can benefit from better use of data, starting with an understanding that data are a people problem. He stressed that people must take care in collecting, using, and presenting data. People must collect and use data in a way that it does not embarrass people. They must interpret data in context and with care. Data visualizations must be meaningful and lead to action. The data have to tell a story. As an example of dysfunctional measurement, he mentioned the "watermelon status effect," in which the status "traffic light" looks green, but poking deeper reveals that it is actually red. Reasons for this effect include management expectations that everything should be ok and messengers being punished for showing negative data.

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To reap benefits in agile projects, organizations should focus less on reporting status data and more on understanding customer value and priorities. Currently, organizations focus too much on efficiency rather than effectiveness. Rather, they should spend more effort understanding and measuring outcomes rather than outputs. To deal with uncertainty in forecasts, he suggests giving several forecasts or interval forecasts, rather than a singlepoint forecast. The forecast should also be visible when things change. He also suggests using forecasts to detect when estimates are off, rather than using forecasts to prove estimates correct. He also highlighted the importance of creating a safe environment for teams to prosper when working with data.

You can view his keynote address at bit.ly/PD_2019_Jan_1.

Lessons About People

In her keynote speech, Kim Scott presented Radical Candor, a management style she developed after her former Google boss, Sheryl Sandberg, gave her some straightforward unsolicited advice following a presentation. The Radical Candor approach solves "toxic professionalism" by asking managers to follow two principles, simultaneously: 1) care personally (care about her

employees) and 2) challenge directly (challenge them to do the best work possible). Radical Candor is the ability to not fear hurting people when telling them the truth. Radical Candor also requires great listening skills to benefit the leadership.

The Radical Candor framework (www.radicalcandor.com/about-radicalcandor/) recommends that to establish close personal relationships with colleagues, a manager needs to talk and share experiences about many things other than business. However, if an employee is underperforming, the manager must be able to challenge the employee to perform at his or her best, even if this step feels uncomfortable at first. Scott argues that honestly challenging an employee is a sign the manager cares about that employee. The main challenge is balancing constructive criticism with being helpful. In summary, Radical Candor "means saying what you think while also giving a damn about the person you're saying it to."

You can view her keynote speech at bit.ly/PD_2019_Jan_2.

The Practitioner Conference Outreach Initiative

At Agile 2018, IEEE Software had its third practitioner conference



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outreach initiative. In collaboration with the Agile Alliance (www.agilealliance .org), *IEEE Software* chaired the Future of Agile Software Development track. Here, we report on three of the track's eight presentations, which drew more than 600 participants.

Agile Organizations in the Future: How We Are Getting There

Andre Nascimento and Renato Will from McKinsey presented their views on the importance of agile organizations in the future. Their main message was that agile is growing outside IT. They gave several examples, such as the SAAB program with systems updates every six months and 20% cheaper than the previous programs; or Duke Energy with more than 130 agile teams, 3,000 people,

130 product owners, and 200 Scrum masters. Organizations are struggling to survive the current market dynamics, customer expectations, and the VUCA (volatile, uncertain, complex, and ambiguous) world. The results of a McKinsey survey in October 2017 showed few respondent organizations (4%) have completed an agile transformation to date, while 37% have agile transformations in progress. The survey identified seven lessons learned from their experience with agile transformation within a large organization: agility and stability are important, learn and improve from experimentation, leaders are important for modeling organizational culture; adaptation is key, self-organized end-to-end small teams, and this is a continuous improvement process.

For more information, visit bit.ly/PD_2019_Jan_4.

Agile Is Dead, and It Died in Infancy

In his provocative talk, Doug Knesek raised many issues he sees in agile today. He stated the meaning of the term agile has become so overloaded that it is close to meaningless. Companies adopt various combinations of agile practices without really understanding their dependencies, which often leads to poor implementations, delivering much less than expected. To make things worse, many scaling frameworks provide additional practices. Knesek's solution is to abandon the word agile, stop blindly implementing agile practices, and rather focus on the key insight of agile. Namely, the power of agile practices stems from the options they enable and create. Organizations should embrace option-based thinking and actively engage in option seeking. For example, use automated tests to set boundaries for acceptable designs and create architectures that enable system change in predictable ways. As a practical exercise, he introduced the option-boundary kata.

Are We Agile? Fundamental Pattern of Agility

Dan Greening argued that understanding and applying deep fundamentals can help an organization innovate rapidly and succeed with agile. By following these fundamentals, members of an organization can go beyond the "developing software" premise of the Agile Manifesto to drive companies, marketing departments, and careers with agility. Greening presents a pattern language for agility, consisting of six patterns. He argues that by using these patterns, an organization can rapidly diagnose problems that inhibit success, make thoughtful tradeoffs,

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prescribe improvements, and identify lost causes. The patterns are "driving purpose," "limit downside risk (work in progress)," "measure leading indicators," "self-experiment to improve." "share responsibility," and "expand agility."

Takeaways: From Operational to Strategic Agility

At this year's conference, we observed a clear trend: there is an increase in agile experiences at the organizational level. With the mainstreaming of the agile movement, discussions and experiences now include not only managing agile teams but also rethinking the whole organization. As mentioned in the McKinsey presentation, this organization-wide thinking

includes agile strategy, budgeting, and more. Organizations still operating in the 20th century need to adapt to the 21st-century management style, which involves new values, principles, practices, and benefits. These new organizations are a radical alternative to the older command-and-control-style management (including top-down bureaucracies and limited capability to innovate).

At this year's conference, Steve Denning summarized this change as a move from operational to strategic agility. In his view, the agile mind-set and processes increasingly enter the mainstream of management. This change means that while most organizations implementing agile are making existing products faster, better,

and cheaper for existing customers (operational agility), other organizations are starting to look for creating new markets with new products that reach new customers (strategic agility). And while most large organizations are still learning how to improve their operational agility (which is very important), the main financial benefits from agile management will come with the next agile frontier of strategic agility. For more information about strategic agility, visit bit.ly/ PD 2019 Jan 5.

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