Capgemini

TECHNO VISION Change Making 2021
BE LIKE WATER

No Hands on Deck

Self-adapt: from automation to autonomy

Be like Water, anyone? There is nothing more autonomous than a river. It finds its own path to the sea, creates valleys or waterfalls when needed – all with just two drivers: erosion and gravity. Advances in AI and intelligent process automation makes us rethink the human factor in any aspect of business. What if the entire enterprise would be self-driving, achieving its destination without human intervention? And what if, on our way towards it, we look to benefit from autonomous technology even now? AI captain: it's time to sail the rivers and learn about autonomy through not doing.

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WHY?

We have learned from 'hyperscale' cloud provisioning that fully automated, self-optimizing and adapting processes are mandatory to ensure seamless, uninterrupted delivery. And intelligent automation can bring just as many breakthrough benefits to other key areas, such as operations and customer experience. However, it is key to rethink the design of the process. It is not just a matter of automating man / machine interactions, it is also about re-imagining the human role – if any – altogether. Along that journey, many advantages in terms of efficiency, adaptability and responsiveness (all good 'water-like' qualities) can already be achieved, even if the notion of a self-driving enterprise may still be hidden far beyond the horizon.

GO FOR IT!

1. Select the right processes

Automating a process means a radical change, and therefore deserves investment. It needs clear business drivers, such as efficiency, time to market, scalability, quality, adaptability, or compliance. Also, the way automation is applied, needs to keep these drivers in mind.

2. Full automation means full change

When a warehouse is automated – before designing any robots – the warehouse is fully redesigned for robot use. So when a business process is redesigned for automation and even autonomy, the same level of change must be done; covering the full, end-to-end lifecycle, and harnessing the power of intelligent automation throughout.

3. Set up an architecture

Architecture is the key enabler to any substantial change, even more so in the area of automation and autonomous systems. Highly scalable processes need a highly scalable architecture. In terms of technology, the 'native' cloud, microservices and real-time data provide the royal way to go, combined with the 'everythingOps' ('everything' being 'dev', 'sec', 'data', 'ml') means of continuous delivery.

4. Keep it simple

Don't over-architect and over-engineer, just focus on what it takes to make the whole process as frictionless as possible. Every friction or obstacle – also in terms of incumbent human involvement – should be analyzed and addressed as part of the overall design style.

5. Unleash human energies

Full automation – and even autonomy – does not necessarily mean 'no humans' at all. As an example, it could mean augmenting employees that monitor the process, helped by AI and robotic systems. Humans would be tracking the user experience and discover unexpected frictions, in order to constantly improve (automated) delivery. In all cases it is a matter of keeping the balance between the rapidly shifting responsibilities of man and machine.

MEASURE:

- Scalability
- Responsiveness
- Efficiency

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