

## Automation as Enabler for Agile-Lean and Dev-Ops

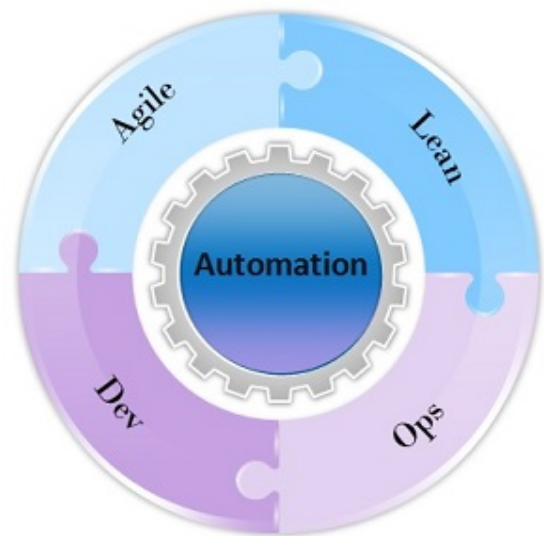
Automation is at the heart of any successful software development.

While automation is fundamentally about bringing efficiencies into any process, it also improves IT/business effectiveness by enabling, driving and integrating agile-lean and dev-ops trends into software development and beyond. This puts automation right in the centre of any new product development, organizational change or process improvement. I call such automation a smart automation.

Agile approaches to software development have become mainstream in IT industry. Automation is at the core of any successful agile development as agile practices like TDD, BDD or CI require automation tools. For an example test automation is critical for any agile testing to be effective within short iterative and incremental cycles. Manual testing would require longer iterations with longer feedback loops and as such be much less effective. Automation enables to maintain the focus on quality throughout the whole software development lifecycle.

Automation is essential and serves as an accelerator when agile transformation programmes are rolled out in organizations. Any agile adoption irrespective of the agile method used is underpinned by using automation at its core.

Automation is a key enabler for any lean software development as it makes possible to implement and use lean principles of eliminating waste throughout the software development lifecycle. What is more, it enables to streamline and deliver added-value processes efficiently while focusing on quality and as such automation is the necessary component in Lean Six Sigma, Lean Kanban and Lean Change methods. The same way as in lean manufacturing of the late 20th century, automation plays the key role in



enabling and driving the popularity of the lean IT concept in the early 21st century.

By automating IT and business processes with the focus on integrating the two, such as in BDD, automation plays an important part in bridging the traditional divide between IT and business.

Automation plays the key role in the latest dev-ops trend in integrating development and operational activities based on automating the deployment processes using build automation and continuous integration practices. Continuous delivery would not be possible without automation. Being able to be fast to market with the right product is the key to any successful delivery. Operational efficiencies are achieved by embedding automation into the business as usual environment in order to run operational and maintenance activities smoothly and better with each cycle as part of continuous improvement.

Because of its role as a key enabler, driver and integrator in agile-lean and dev-ops trends, I foresee a growing demand for smart automation tools, services and expertise in years to come.