Enabling Big Data with CI/CD at One of the Largest Reinsurance Companies in the World

Company Overview
The company is one of the largest reinsurance companies in the world and offers a wide range of primary and health insurance products to businesses and private individuals as well as asset management. This publicly traded company currently has over 40,000 employees around the world and revenue of over $50 billion over its 4 business units.

Business Challenge
This tier-1 reinsurance company has big data computational requirements for actuarial calculations which are performed against a diversity of databases constantly. These databases run on nearly 600 OpenStack VMs, and need to continually be managed, monitored, and upgraded all while enabling continuous integration and development in testing and production environments.

They were looking for a tool that would enable support of their existing tool chain, and customized cloud environment - Chef and VMware powered OpenStack with a custom-built distro, while providing powerful custom workflows to support the diversity of tooling.

Technical Use Case
Cloudify enabled this company to deploy databases on demand, manage them, upgrade them as needed through a simple application blueprint while tying all of the pieces of the infrastructure and application together. The complex architecture contains a management portal to request environment provisioning, an existing IaaS orchestrator that sends JSON requests to Cloudify, a DNS/DHCP that receives the IPs, OpenStack cloud, NetApp storage, Chef for application deployment, alongside 6+ backup and monitoring tools.

The company researched a number of options, looking for application-level orchestration solutions that could support their existing stack, communicate and process data coming from their infrastructure orchestrator, as well as support a diversity of existing applications. They selected Cloudify based on the open and architecture and highly modular plugin architecture that supports any technology, alongside the support for custom, complex workflows, that enables them to innovate and leverage Cloudify for less orthodox scenarios with their environments out of the box.
Why Cloudify
The company researched a number of options, looking for application-level orchestration solutions that could support their existing stack, communicate and process data coming from their infrastructure orchestrator, as well as support a diversity of existing applications. They selected Cloudify based on its open and architecture and highly modular plugin architecture that supports any technology, alongside the support for custom, complex workflows, that enables them to innovate and leverage Cloudify for less orthodox scenarios with their environments out of the box.

Within weeks they were able to write blueprints, build custom plugins and workflows and deploy to production - cutting down the time to hours and days that used to take weeks.

Future Work
Part of the decision to select Cloudify was due to the futureproofing it makes possible - this client is currently exploring add Azure public cloud for on-demand resources, alongside ServiceNow to their stack for IT automation - all supported by Cloudify with out of the box plugins.