Digital World and the Era of Multiplied Innovation

Digital transformation is no longer a priority — it has become a business imperative. IDC sees IoT, AI and blockchain as cornerstone technologies to fuel rapid and scalable innovation. Among these, IoT is one of the more evolved. More than 40% of European companies are already using IoT solutions or developing IoT pilot projects, as IDC’s EMEA IoT Study shows. European IoT spending is estimated to grow at 16% to 2021 from €125 billion in 2017. Many IoT adopters are planning to move beyond an initial proof of concept (PoC) toward broader implementations.

As this happens, companies that develop the skills, create IoT-driven business models, embed security and privacy and identify newer use cases in their businesses will be the ones that can leverage the potential of IoT data monetisation and a connected spaces ecosystem.

Ultimately, what companies are trying to achieve are:

- Digital products and services for newer revenue streams
- More engaging and personalised customer experiences
- Business operations and cost efficiency
- Digital Trust

These digital objectives make it imperative to build an IT foundation that is open, multicloud-connected, API-driven and secure for sustainable transformation.

IDC believes that technology providers that understand this vision from enterprises and have the skills to propel such innovation will be selected as long-term technology partners by businesses.

IT service provider Adfinis SyGroup AG is one such European company that is using Red Hat’s open source technologies, platforms and management solutions to deliver a modern IT foundation for European heritage brands to make them digital natives.
Adfinis SyGroup's Open Source Vision, Red Hat Alliance, and Technology Capabilities

Adfinis SyGroup is an engineering and cloud-native application development company at heart, with open-source and IoT at the core of its solutions portfolio. Its approach to open source is not just to give businesses freedom from proprietary software, but to bring new degrees of efficiency, faster innovation and the development of cloud-native applications, and freedom from silos, and help standardise and automate complex IT environments. This is making its collaboration with Red Hat a natural fit. Adfinis serves approximately 200 to 250 customer projects each year.

Having competed head on with software giants including Microsoft and Oracle early on in public sector projects, Adfinis' leadership team has consistently been at the forefront of new technology adoption, including cloud-native application development, multicloud, containers, Big Data analytics and IoT. This has been fuelled by its partnership with Red Hat, a leading provider of open source solutions for the enterprise that is using a community-powered approach to deliver high-performing Linux, cloud, container and Kubernetes technologies.

Container Platforms Solutions Mark the Next Phase in Adfinis SyGroup's Business

Adfinis SyGroup began investing and experimenting with DevOps, automation tools, Docker containers and open source management platforms such as Red Hat's Ansible early on to build experience and expertise. This comes at a time when multicloud ambitions are unfolding fiercely in Europe, especially to avoid lock-in and to benefit from best-of-breed features across clouds. IDC's research shows that almost 90% of organisations admit they have multicloud environments and that moving from accidental multicloud to intentional multicloud is a key priority for European enterprises.

As vendors, service providers, and large enterprises scrabble to attract relevant skills and experience to execute on their multicloud and container platform journeys, Adfinis has an early-mover advantage.

Adfinis and Red Hat Partnership

Adfinis SyGroup has a significant technology alliance with Red Hat as a Red Hat Premier Business Partner. Leveraging Red Hat's OpenShift platform, Adfinis SyGroup develops IT solutions and cloud-native applications to help its customers modernise workloads using containers, develop an open and interoperable multicloud strategy as a foundation for digital transformation, and execute on their data analytics, IoT and robotics initiatives.

IDC sees OpenShift as the cornerstone of Red Hat's cloud and container-optimised solutions, including Red Hat JBoss Middleware and application services, Red Hat Gluster container storage and Red Hat CloudForms and Ansible for management and integration. Red Hat's primary goal with OpenShift is to accelerate application delivery to support the business. It also incorporates Docker container support along with the Kubernetes orchestration engine.
There is a growing synergy between the two companies around the future of IT, application delivery, and the role of IoT and analytics. Adfinis customises OpenShift with its own code and management tools to help customers innovate without worrying about security, lock-in, future-readiness or a skills gap.

The ongoing collaboration with Red Hat in adding more features to OpenShift and using adjacent technologies such as Ansible, CloudForms, and Terraform is making Adfinis increasingly strategic for Red Hat to go after newer European opportunities and next-generation use cases such as IoT in Europe to promote more peer-to-peer learning.

With a Swiss HQ, Adfinis SyGroup understands the local appetite for digital transformation, regulations, and the nuanced cloud adoption in Europe. Solution providers that understand enterprises’ need for cost-efficient multicloud and can help them achieve those objectives will become trusted technology partners in their multi-year transformation.

One example of Adfinis’ Red Hat OpenShift solution is how it engineered a multicloud-ready and IoT and analytics-friendly container platform for heritage brand Vorwerk. The OpenShift platform is at the heart of Vorwerk’s digital transformation and data- and IoT-driven smart appliances initiative.

Case Study: Vorwerk Digital Transformation

135-year-old German home appliances brand Vorwerk acknowledged early on that it needed to transform its products and deliver a digital customer experience to deepen brand loyalty.

One of its flagship appliances is the Vorwerk Thermomix. The 60-year old appliance was a traditional cooking device that reliably performed functional tasks. As part of its digital transformation, Vorwerk wanted to evolve Thermomix from a static functional product to a smart appliance that was connected, collaborative, and delivered continuous digital value to the user. Kitchens are the central and most integral part of any household, and Vorwerk wanted to make its appliance the centre of the kitchen. It wanted the product development to be closely linked to customer usage patterns and expectations by sending recipes directly from the internet to the device, so that the customer gets ongoing value — the more they use it, the more value they see in it.

To deliver on this vision and to leverage innovation accelerators such as IoT and robotics to transform the Thermomix, Vorwerk first had to undergo IT transformation and, simultaneously, process and operational transformation.

Its backend infrastructure was running on 700 virtual servers, but as they sold a million more Thermomix products in quick succession, the infrastructure was becoming cost- and resource-intensive at the scale Vorwerk was growing and operating.

The IT team wanted a more lightweight and abstracted IT solution to operate the backend. The team also wanted the IT to be highly automated and be able to support IoT data and the analytics projects without compromising data privacy or...
security. It started evaluating Red Hat OpenShift and wanted some additional features and customisation to serve its IT objectives:

- Transform VM workloads to containers. This not only modernised the infrastructure and applications but also helped cut the sprawling VM estate and associated costs.

- Deliver infrastructure as a code to its developers and engineers and rebuild the whole infrastructure code into a new pipeline that deploys to containers to leverage modern app development and deployment techniques such as DevOps and microservices.

- Make the OpenShift platform interoperable across all major public cloud services. This was a key criterion as Vorwerk wanted to avoid heavy dependence on any one hyperscaler. IDC sees the rising popularity of multicloud driven by the need to avoid cloud lock-in and to make workloads and data highly portable, so organisations can respond dynamically to changing cloud prices, features or security risks.

*Adfinis SyGroup’s Red Hat-based Solution as Cornerstone Technology for Vorwerk Transformation*

Adfinis SyGroup built a fully functional PoC for Vorwerk on one public cloud instance. Although deploying to one public cloud was straightforward, making the container platform agnostic and yet operate with the same capabilities was challenging. Adfinis’ engineers built a custom deployment framework using open source management tools such as Ansible and Terraform to make the platform multicloud. Vorwerk is now able to deploy automatically to any cloud it chooses and scale the resource pool or shrink it dynamically.

IDC believes there are key engineering lessons that solution providers can learn from Adfinis’ work on this project. IDC notes that while customising the solution, Adfinis did not alter the official OpenShift installer, which is maintained by Red Hat. This helped reduce the complexity and dependencies in the management platform. Adfinis engineers also emphasised on testing prior to deployment. The team would add testing code to deployment and ensure there was rigorous testing for every phase.

*Transforming Culture and Business Processes to Optimise Modern Technologies*

This culture of test-driven development and deployment has been adopted by Vorwerk’s team for their own development lifecycles. Modern Vorwerk appliances are IoT-enabled smart appliances that are automatically updated with new features. As features touch millions of appliances, the development team needs to ensure there is intensive testing before rolling out features and services as it directly impacts customer experiences.

The DevOps team starts with the test code first and follows with test-driven deployment. Multiple testing layers throughout the deployment and release cycle ensure that the update doesn’t break anything. However, the testing and deployment phase is automated and the software identifies anomalies which the DevOps’ team fixes.
Today, Vorwerk’s appliances themselves are platforms of collaboration, engagement, and functions. The company is exploring adding newer features to make the appliance more central and important to the user’s lifestyle, such as adding audio or radio features or connecting multiple Vorwerk devices for easy management.

It collects a multitude of data points daily from users, analyses them and makes insights-driven product development. This strategy is facilitated by a backend infrastructure that is PaaS based, container-driven, automated, multicloud-friendly and service-oriented.

Vorwerk is taking a platform approach on the front-end with its appliances and at the back-end with a custom OpenShift solution. It is already on the next phase of its digital transformation journey by leveraging analytics and delivering more value to its users. Vorwerk has put customers at the heart of its digital transformation journey and has combined next-gen technologies such as IoT, Big Data analytics, containers, automation, multicloud, and open source without compromising on security, lock-in or costs.

Adfinis’ OpenShift solution is integral to this, and now Adfinis is leveraging its multicloud custom deployment code to help other enterprises with similar strategies. As a result, there are multiple developers and engineers from Adfinis, Red Hat, and Vorwerk, as well as other enterprises, contributing to make the solution even more robust for the benefit of the full community.

Moving forward, IDC sees surging demands for open source, automation, security, and multicloud technologies. This is because of the growing pressure to meet both “Dev” needs and “Ops” needs as companies transform and improve their time to market. These technologies help companies to react to changing market dynamics quickly without huge dependencies on proprietary infrastructures.

Opportunities and Challenges for Adfinis SyGroup

Opportunities:

- Next-gen technologies such as cognitive, AI/ML, IoT, and blockchain are becoming important for competitive differentiation. Adfinis SyGroup should capitalise on new demands by highlighting its Red Hat partnership and its custom work in multicloud and IoT-friendly platforms.

- Another opportunity is not technology-related. Adfinis, with its experience of working with digital transformers such as Vorwerk, can help other companies that want to transform not just legacy infrastructure but the associated legacy operations and processes.

Challenges:

- Overcoming cultural and business process changes at the customer end will remain critical. Many times, inflexible infrastructure and slower time to market are lost opportunities, and Adfinis needs to highlight these while showing the value of its solutions.

- Talent war. There is a growing demand for developers with multicloud management skills, and open technologies, test and ops-driven
development skills, and container experience is soaring. Adfinis will need to invest in a skilled workforce to remain competitive.

- It needs to be mindful that many large SIs and solution providers have similar priorities. It must play up the value of its customer focus, dedicated support, and local knowledge to compete effectively.

Future Outlook

There is a strong focus emerging on IoT in manufacturing, retail, and financial services for improving customer experiences and business processes. Much of the IoT ecosystem is being built on open source, especially Linux environments. Adfinis can use its open PaaS offerings as a springboard to grow its IoT-related business opportunities.

Its expertise, impressive customer list, and open source knowledge and experience in the transition to hybrid cloud and application platforms is attractive for European enterprises.

Conclusion

Enterprises need to start small but start now on IT transformation. They also need to develop a culture and business process to innovate, and to this effect, evaluate new technologies and processes such as containers, multicloud, and DevOps. As they do this, they may want to look at open source solutions such as Red Hat OpenShift from Adfinis SyGroup.
About IDC

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