

CLOUD CONFRONTS IT'ERS WITH MAKE-OR-BUY DECISION

# LEARNING FROM THE EXPERIENCES OF THE MANUFACTURING INDUSTRY

*Nowadays, there is less and less need for businesses and institutions to create IT themselves. In practice, purchasing in often turns out to be more attractive. This applies to cases where it is possible, but certainly also to situations where a suitable and affordable semi-finished product is available. The cloud is an interesting marketplace for these products, offering (virtual) hardware, and primarily lots of software pieces for the IT puzzle.*

Our colleagues in the manufacturing industry led the way here: a supply chain has to be managed continually – and so does the bought-in cloud. And there lies the challenge. Ordering a cloud component is a piece of cake compared to managing a cloud factory within an enterprise, where there is a continual supply of IT applications based on semi-finished products from the cloud.

## **Configuration management**

Just as in the “lean world”, the use of IT requires more control over all the configurations, both initially and during the “run”. Likewise, we can draw a comparison with the manufacturing industry. From the design stage right up to the “in-service” status, all the components must be under control. This entails a far-reaching definition of configuration management. Once that is in order, there is control of the product.

However, if you assemble the product from a lot of buy components, this can be difficult. Each sub-supplier probably has their own definition of configuration and configuration management. In the same

way, the challenge lies in maintaining control. Once you switch to the cloud, challenges will come up. Selecting configurations in a cloud portal on a large scale can easily lead to chaos: “what have I actually bought?” In the last century, the manufacturing industry paid a great deal of attention to configuration management. And now it's our turn, the turn of the IT professionals.

## **IT manager in a squeeze**

The IT manager is in a squeeze. He fulfils the role of supply chain manager, as well as the role of product manager. His customers are seldom clear-cut and their needs vary widely. Some want IaaS and some want PaaS or SaaS. And yet others want mainly solutions. However, they are all very interested in the cloud base, where they can find everything they need. It is hard to convince them that the challenge of that cloud factory is: configuration management, according to the definition of the manufacturing industry. Only then can we give guarantees on matters like availability, security, scalability and costs.

## **"NOW IT'S OUR TURN, THE TURN OF THE IT PROFESSIONALS"**

## **Software at the heart of things**

Whether you call it integration, assembly or configuration, using software is key. Software is the tool that allows everything to communicate with everything else. Software ensures that software communicates with other software, and that hardware communicates with other hardware. Software glues the semi-finished

products of the cloud together. However, the question is whether we are sufficiently aware of this fact.

The cloud goes hand in hand with software and thus with software engineers, who ultimately make the digital solution. This is a challenge for the IT manager, as he does not often deal with the software developers. Moreover, bad software will add unnecessary complexity to your cloud structure. So besides being a product manager and supply chain manager, the IT manager is also a software manager.

## **Cloud control**

It is necessary to gain insight into the use of cloud components with regard to functionality, costs, capacity, availability and security. Also for this, software is available. There are many initiatives by various suppliers, who offer nice user-friendly user interfaces or simple APIs to properly manage the cloud supply chain. The cloud is a fait accompli. We still focus too little on the “cloud factory as a supplier”: according to the steps taken by the manufacturing industry. We need to search for definitions and forms of implementation for product management, configuration management and eventually software management. The emergence of the cloud offers many possibilities to buy, and thus create better IT faster. But before we reach that point, we could focus on installing the IT factory. And in doing so, we can learn from the experiences and concepts of the manufacturing industry.

## **More info**

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