

# **IMPACT OF CLOUD TECHNOLOGY ON ENTREPRENEURSHIP**

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# **Introduction**

The cloud itself is simply a mother term to describe the internet. It can explain many things from the sharing of resources to software through a network of computers. All that's needed to run cloud-based software is the computer itself and the network computers, servers, and data storage systems take care of the rest.

Cloud-based software is becoming more popular among businesses both large and small because you don't need to store multiple pieces of equipment in or near your facility.

Cloud computing is present everywhere and is used by every person in some or the other way unknowingly. The 2 cloud is used by the services which are web-based and provide e-mail or storage. As the technology is moving fast and businesses are growing rapidly the adoption of cloud computing is also increasing. In order to increase it more and more innumerable studies and surveys are being conducted by scientists and researchers to prove the benefits of adoption and creation of higher value.

## **Cloud computing on startups**

From the data collected over the past three years, it is found that there is a significant increase in entrepreneurial activity in Greece, which is confirmed by the outstanding increase in the number of startup companies. At the same time, in 2013 the number of investments in Greek startups was skyrocketed, reaching eighty times more in comparison to the number of investments in 2010. The fact that ten out of thirty-five startups that were funded last year are based in offering SaaS/PaaS in the "cloud" is also remarkable. Concerning the quantitative analysis, there are indications that the majority of startup companies are using or are likely to use cloud technologies in the future. Entrepreneurs are aware of the potential benefits and challenges of the cloud. As general opinion can be considered that cloud computing can somehow affect positively Greek entrepreneurship and startup companies.

Cloud computing can also play an important role in the lean startup method. According to the lean startup method, one of its five principles is the build-measure-learn loop where you "turn ideas into products, measure how customers respond, and then learn whether to pivot or persevere" (Figure 1). The challenge is how to minimize the time of that loop and increase the success rate of innovations. Companies which are using the cloud are able to iterate in this loop quicker, accelerate the experimentation cycle, build quickly a product, measure

and learn by observing what people do with your product. The flexibility that cloud technologies offer, gives to entrepreneurs the ability to update their business plans according to consumers' demands and needs.

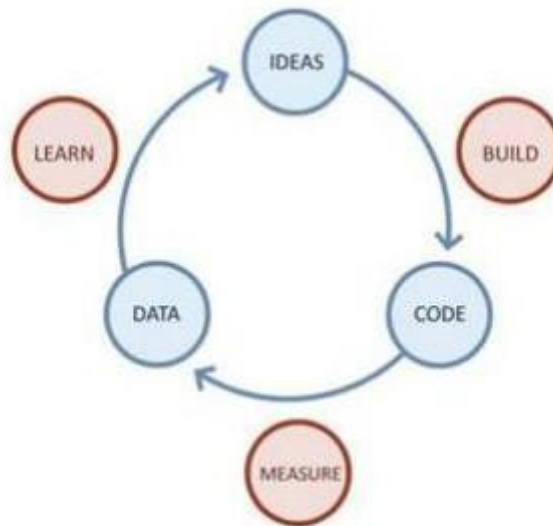


Fig 1.Build-Measure-Learn loop

Cloud computing can offer several benefits to entrepreneurs who want to start up new ventures. To begin with, the financial part, which is one the most problematic factors for doing business in Greece, cloud technologies can definitely lead to costs savings. No upfront expenses are needed since the model of cloud computing is paid as you use. According to Blank (2012), a startup is “a temporary organization in search of a scalable, repeatable, profitable business model”. By finding a scalable business model, entrepreneurs also need to scale their IT resources. However, with cloud technologies, cloud consumers do not have to think about overprovision in case the demand for computing resources increases. Cloud computing gives the ability to manage to scale instantly by adjusting the storage, server, and network needs according to the consumers' demand. It gives the opportunity of accessing economies of scale that only the larger firms were able to take advantage of. To have a better understanding of this issue, we can use the example of “Animoto”, a small startup company that decided to use Amazon Cloud Services. Animoto achieved to attract 750.000 new users within 3 days and successfully handled the enormous load due to Amazon's web services.

However, the benefits of cloud computing are not solely related to cost reduction. The value of cloud computing is more than reducing IT costs. In reality, the flexibility it offers in terms of infrastructure, services, and processes can lead to

significant innovation. Despite cloud computing is often seen as a method for cutting expenses, a larger opportunity is at stake. “We’re entering an era of computing where flexibility in IT drives business agility. Mobility may be considered as a characteristic of an agile company. The cloud allows people to collaborate and contribute to the mission of the company no matter where they are or where they live.

We have serious indications that cloud computing has the potential to affect Greek entrepreneurship and startup companies. The cloud may have a prominent future in Greece. Due to the current economic situation in Greece, startups have embraced and it is likely to continue to embrace this innovative and cost-effective new paradigm. The timing for adopting cloud technologies is more than ideal since many companies seek cost reduction more than ever before. Cloud computing combines the reduction of costs and at the same time it increases IT flexibility, it helps focus on core businesses, it accelerates innovation and it enables the creation of new products and services without reducing their quality and the value they offer. The ground for adopting cloud technologies appears to be fertile since the Greek ICT ecosystem conditions are favorable due to the significant increase of the number of startup companies and the already significant percentage of SMEs.

Cloud computing has inevitably changed many aspects of how technology-based companies are formed and built but also the financing process. The cloud gives the ability to entrepreneurs to create very quickly an infrastructure and then test their new ideas on it. Concerning the technical side of the starting up process, it is easier and cheaper than ever before. Entrepreneurs require less capital to create prototypes, test them, deliver an initial product, acquire their first users and receive valuable feedback. This means that initial customer validation can be underway and entrepreneurs are able to demonstrate to investors faster, easier, and cheaper how their ideas can be applied in the real world. As a result, from the investors' perspective, there is a lower early-stage risk and some of the technology and product risks that may appear in the beginning can be somehow mitigated.

## Conclusion

Cloud computing has tremendous potential to affect Greek entrepreneurship and the creation of new startup companies. Defining and suggesting potential actions for the government, IT industry, individuals and cloud providers is essential in order to accelerate the adoption of cloud technologies and exploit all its potential benefits. Several actions should be taken from government, IT industry, customers, cloud providers and individuals:

- “Stakeholders” must be educated concerning the risks and challenges of

the cloud. Security and privacy issues are among the risks which concern the most cloud consumers.

- “Stakeholders” must be educated about the benefits of cloud computing which are not only financial in nature as described in the previous parts. Those who fail to investigate this term or adopt it, may risk to be left behind by others.