



Business Perspective of Digital Ecosystem

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Digital, Ecosystem, Information Technology, Technology Management.

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ABSTRACT *In the modern era of business, the Digital Ecosystem is one of the first major contributions to understanding digital ecosystems was an innovative 'new communication environments'. Particularly in the context of the Internet was the publication of the ecological cognition framework in 2007. In this article the digital ecosystems described about the digital environment and the media. Also it is focusing on the business perspective of digital ecosystem.*

What is Digital Ecosystem?

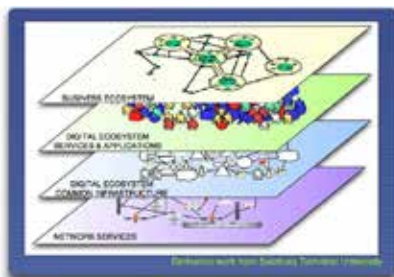
Based on the Merriam-Webster definition of an ecosystem for a digital ecosystem, "the complex of a community of digital devices and their environment functioning as a whole" [1]. A digital ecosystem is a self-organizing digital infrastructure aimed at creating a digital environment for networked organizations that supports the cooperation, the knowledge sharing, the development of open and adaptive technologies and evolutionary business models [2].

A digital ecosystem is a distributed adaptive open socio-technical system with properties of self-organization, scalability and sustainability inspired from natural ecosystems. As an emerging field of study, "digital ecosystems" is informed by knowledge of natural ecosystems and is still being defined. The term is used in the computer industry, the entertainment industry, and the World Economic Forum. [3]

The Digital Ecosystem is forming as the Information Technology, Telecommunications, and Media and Entertainment industries converge, users evolve from mere consumers to active participants, and governments face policy and regulatory challenges. Its stakeholders are questioning the shape and size it will take. They are aware of their inter-dependencies necessary to enable the Digital Ecosystem to evolve into a healthy environment that both creates economic value and adds well being to society.[4]

Future of Digital Ecosystem

The digital ecosystem approach transposes the concepts to the digital world, reproducing the deliverable mechanisms of natural ecosystems. As several interacting natural ecosystems exist, several digital ecosystems exist due to differentiation and the development of endemic product and services tailored to specific local needs. A digital ecosystem means to be the Information and Communication Technology enabling technology for business ecosystems based on the dynamic and amorphous interaction among a multiplicity of small organizations. The free digital ecosystem knowledge and service-oriented infrastructure, as a public common resource. The digital components, services and the formalized knowledge which "populate" such infrastructure [5].



[Image courtesy to Saizburg Technical University, (Accessed on 9th January)]

Specific Aims of the Digital Ecosystem in the business perspective

A network of digital ecosystems, will offer opportunities of participation in the global economy to Small and Medium Enterprises and to less developed or remote areas. These new forms of dynamic business interactions and global co-operation among organizations and business communities, enabled by digital ecosystem technologies, are deemed to foster local economic growth. This will preserve local knowledge, culture and identity and contribute to overcome the digital divide.

The digital ecosystem area aims at developing the ICT-enabling technologies and paradigms that are needed to support the emergence and sustainability of knowledge-based networked business ecosystems: geographic (or virtual) areas where specific policy initiatives will foster growth, improve innovation, productivity and social inclusion, through the optimal use of local assets and the global interaction empowered by ICT. The support to the knowledge sharing, the establishment of worldwide value chains and to transitory business networking will promote global cooperation and alternative ways of developing software and conducting business.

The key enabling technologies developed within the digital ecosystem aim at providing a knowledge and service-oriented infrastructure that supports the spontaneous

- Composition
- Distribution
- Evolution
- Adaptation of ICT-based services.

This platform should allow the SME software industry to independently develop (and disseminate on the network) services and software components which will be composed forming complex, evaluative and adapted solutions. These technologies allow the spontaneous development and the cooperative provision of services and solutions, without the need for any keystone player, central coordination or central point of control/failure [6].

Major Players of Digital Ecosystem

A complete digital ecosystem consists of hardware, software, and services. All play a particular role in the ecosystem in order for it to function as a whole. Based on the design of the hardware, the function of the software, and the services provided, ecosystems can target specific parts of the market or the market as a whole. Microsoft's XBOX is an example of hardware, software, and services solution targeted for a specific part of the market. The point is that all three components are necessary for a holistic ecosystem.



[Image courtesy to <http://www.digital-ecosystems.org/images/dbe-de-be0.jpg> (Accessed on 9th January)]

The important thing about ecosystems is that they create dependencies. These dependencies can lead to consumer loyalty. They, however, can also lead to consumer revolt.

- Microsoft
- Google
- Apple

are out to create ecosystems that drive loyalty. Our conviction is that over the course of the next few years, consumers will consciously begin to make decisions about products based on whose ecosystems they desire to be a part of, or the ones that work better for their life or environment. The hardware, software, and services will be important but more importantly, consumers will commit to and invest in ecosystems [7].

Conclusion

As it relates to personal computing, there are three main companies who enable ecosystems today. They are Microsoft, Google, and Apple. Microsoft and Google are more horizontal, where Apple is more vertical. The history of the technology industry informs us of a fascinating value shift. This shift begins where value is initially in hardware, then as the market matures it moves to software and then eventually to services.

REFERENCE [1] <http://techpinions.com/why-its-all-about-the-ecosystem/4567> (Accessed on 9th January) | [2] <http://www.digital-ecosystems.org/> (Accessed on 9th January) | [3] http://en.wikipedia.org/wiki/Digital_ecosystem (Accessed on 9th January) | [4] <http://www.weforum.org/reports/digital-ecosystem-convergence-between-it-telecoms-media-and-entertainment-scenarios-2015> (Accessed on 9th January) | [5] <http://www.digital-ecosystems.org/> (Accessed on 9th January) | [6] <http://www.digital-ecosystems.org/> (Accessed on 9th January) | [7] <http://techpinions.com/why-its-all-about-the-ecosystem/4567> (Accessed on 9th January) |