Digital Innovation

Abstract

Digital forces reduce transaction costs, value chains disaggregate; third-party products and service can be quickly integrated into the gaps
The Portus product from Ostia consists of two main elements to address these challenges.

The emerging Digital Economy and Digital Innovation, presents a series of challenges to established business across the globe.   These terms Digital Economy and Digital Innovation are presented under a series of guises, but fundamentally with the adoption of new technology, whether this be mobile devices, Cloud based services or adoption of technology such as Facebook in pre-school years; is changing the way people use services. This is an era where:

- Customer Expectation and Competition drives the delivery of Services
- A business Value Chain is exposed with radically new and different entrants, barriers have been removed
- Security and data integrity is critical
- Adaptability is required to address the accelerated response to change
- Costs become sensitive as transparency is increased

With Digital Innovation the Value/Supply Chain moves to a Demand Value Chain driven by the Customer.   This Digital Innovation will not be a gradual adjustment that can be addressed by incremental improvement; this will affect business and theory operations as a Customer Driven step change on current businesses and their operations.

There are three prime industries where the threat from Digital Innovation is greatest

- Financial Services – the Retail Banks predominately, but also Insurance and Financial Markets (Wealth Management)
- Retail
- Transport and Travel

One of the most extreme disruptions from Digital Innovation is seen within Retail Banking.   New Entrants are becoming established within the Value Chain, Google, Amazon, and Facebook are engaging in payment or account management; taking part of the current well established Banking operations. In addition new partnerships and collaborations are being established, Santander recently has established a partnership with a crowd funder - Funding Circle.

As a response a group of UK banks formed a consortium to build a mobile-payment utility (Paym) within the UK. Vodafone Money Transfer, or M-PESA, is well established in Africa with a 35% CAGR in mobile phones; and provides an integrated solution with the mobile technology provider, is now entering the European market[1].

There are a number of trends or pressures underpinning Digital Innovation, as technology becomes increasingly pervasive,

- The way Customers use that technology, trust the providers and expect service response is changing
    - o **Service Response –** If a customer does not get a response from a website or a service within seconds, then they will quickly switch to another service. If Bank Account opening takes longer than a few minutes, and definitely within 12 hours, the customer forgets they even tried.

---

[1] http://uk.reuters.com/article/2014/04/01/uk-vodafone-money-idUKBREA2U0XW20140401

- o **Trust –** In booking a flight on a website, if the ticket details are not sent after purchase within seconds or minutes, the customer begins to worry. There is the nervous wait for a confirmation email, once payment has been processed. What is interesting for a certain set of customers is that there is a degree of trust in current established providers; and there are alternative channels to confirm the flight. This level of trust does not exist with the new providers; and they have to build this from scratch.

- **Use of Technology –** with access to technology, mobile phone, and tablet or through a computer.
  - o **Age of Operator is becoming broader –** There was once the reference to the Facebook Generation and the Digital Denier. This categorisation is too simplistic; there are not two distinct groups but an evolution or natural selection process by which services are used.
  - o **Expectation of Service is greater –** As well as Service Response, the failure of a service is more of a problem – peoples expectation is that once committed to a service it will always be available

How does a company respond when there is?

- Pressure on Operations for Shorter time to deliver business process
- Increasing demand for Automation
- Continual innovation needs to be delivered
- Competitive Obligation, a need to keep service ahead of competition
- The business Value Chain is exposed with radically new and different entrants, barriers have been removed

One area is that the company needs to utilise the current assets, the new innovators do not have the historical information on the Customer at the moment. There is a short window of opportunity. To address the threat of the new innovators, or perhaps to develop new collaborations; these established organisations need to improve their adaptability and flexibility to revive their current competitive advantage from legacy to:

- Develop Plug and Play Componentized Operational Models
- Need to be able to re-orientate components to deliver new services
- Need to develop new technology' channel to legacy environment
- Capitalize on Legacy Data Assets and Customer Insight
- Develop and exploit new channels, and collaborate with new channels
- Exploit legacy services and data with advanced analytics

New Entrant lower costs need to be countered by leveraging legacy services to exploit the legacy services and data

Within the world of Digital Innovation Corporations are expected to be more 'open' than ever before, while this presents new types of security threats. More and more sensitive data are exchanged online (bank information, personal data, payments)

Digital forces reduce transaction costs, value chains disaggregate; third-party products and service can be quickly integrated into the gaps"

How can Ostia help? The Portus product from Ostia consists of two main elements to address the requirements detailed above:

- It provides the capability to discover data within an organization
  - Access a mix of data sources, including the legacy data environments to determine the details of data within, the content;
  - It can determine then what services and applications are using that data and to map out the dependencies between data
  - To analyse the product process and technology layers to understand dependencies
  - Mask the data, obscure elements of the data if required, for example personal information
  - To record the Data within a secure central repository; the meta data

Having completed the Data Discovery and discovered the interrelationship between the product and its technology layer, and recorded the usage of the data within a central repository;

- Portus can then can build services that provide data to a series of analytics applications or directly as required:
  - Combine data from multiple sources, having completed a broader Discovery exercise.
  - Migrate the data to a mix of data repositories
  - Present and report on the data to a series of interfaces including REST/SOAP based protocols
- There is a third element within Portus that provides additional function.
  - Having built the services, Portus provides the capability to Test the "Built Services", prior to deployment within a production environment.

Ostia's Portus environment can be deployed and used by a customer in two ways:

- There is the Development mode, where Portus runs within a Cloud environment; currently IBM's Softlayer environment. This mode is used by customers the develop the base to perform the Discover and Report functions required to understand the legacy data, to test these services using standard data sets stored within the Cloud environment
- The Production mode is where the customer deploys the tested services within their live environment.   Clearly a customer can create the Discover and Report functions on their own Development and Test environment.