AN INDUSTRY FIRST

Ecosystem Business Architecture

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Ecosystem, an eco-logical system.
A term coined in 1930’s by British botanist, Arthur Tansley, is about localized community of living organisms that orchestrate survival through interactions with each other and their environment.

Ecosystem business have become the go-to approach in an era of increasing competition, improvising efficiency through sharing of resources and business growth.
Embracing Growth Opportunities

A New Paradigm of “Business”

• **Forged on a “network”** of Service Providers, Technology company's (IT, CT, OT etc.), Manufactures, Media & Entertainment businesses, Integrators, Customers, Developers and so on, altogether harness value from working and competing together.

• **Mapped out on communities of interrelated stakeholders interacting in value-loops** on a “platform” that locks in their significance of each partaker, and yet enables innovation and business to thrive:
  - Competition (sellers, buyers, producers, curators, partners, etc.)
  - Cooperation systems (joint ventures, communities, marketplace etc.)

• **To iteratively architect the “Business” of existence by thinking beyond own boundary**... for new growth

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**Value-loops**

Network effect that cascades across:
- Sellers: Publishers, Wholesale etc.
- Producers, Curators etc.
- Buyers & Users/Consumers

Amazon handles over 40% of all digital Commerce
- BCG Research, 2018

1994
Cadabra, Inc
Relentless.com

1995
Amazon, Inc
Online Book broker+Bookstore
“Network with publishers, produce, and retail

2009+
Amazon, Inc
Online broker
Network with producers, produce, and retail
By Understanding “Ecosystem” and “Business”

Key Attributes and Success Factors

- Defining Ecosystems (Deloitte Analysis)
- Agreeing on key dimensions for success

Ecosystems are dynamic and co-evolving communities of diverse actors who create and capture new value through both collaboration and competition.

Some key questions...

- Are there different types of business ecosystems to be considered?
- What are the common or unique communities to consider...
- Are there new sectors TMF members can reach into...
- How do we grow or extend the industry’s value proposition(s)...
- How should our ecosystem be engineered for richer value creation, capture and sharing by stakeholders...
- What models of collaboration and competition will sustain the relationships and different interests...

Source: Deloitte analysis.
To Deliberately Architect Common Business Architecture(s)...

Capture common and unique Organization constructs, Business Environment(s), Business Capabilities, Business Processes etc. from a range of top aspirations...

Banking Business
- MTN
- Builds from ground up using Mobile money platform
- MTN wants to be Africa's biggest bank
- Entry into a new vertical
  For Financial services
- acquires and integrates financial products

Content Business
- DIRECTV NOW
- verizon digital media services
- Oath:
- Builds, Acquires & Integrates
- Builds from ground up...
- Entry into media and entertainment vertical

What is common? What is unique? How can this be leveraged within a Group? How do we rope in other Verticals?
Business Architecture

- Business architecture is defined as "a blueprint of the enterprise that provides a common understanding of the organization and is used to align strategic objectives and tactical demands." (Wikipedia)

Why the “need” and now?

- Trends leading to failed business/digital transformation aspirations and projects*
- A framework for ecosystem business requirement translation
- Troubleshoot “what and how” from a business PoV** – e.g. addressing mergers/acquisitions and coming together of industries (capability overlaps, Service provider value chain clarity etc.).
- A “North Star” for ODA systems architecture, implementation and deployment/runtime needs (for 5G Slicing, IoT, AI, Blockchain etc.).
- Address ecosystem ambitions (e.g. Business models, 5G Network Slicing Federation & management, SmartCity XaaS, vertical-specific business models etc.).
- Model driven framework based on re-purposing and existing and new assets together.

“and who will bell the cat...”
The Forum: Efforts for Digital Business & Business Ecosystems

Relying on knowledge, experience and learnings from peers to explore the two “concepts” towards developing that reference for an Industry Ecosystem Business Architecture.

- Almost a mutual and symmetrical interdependence between two systems.

- Everything as a Service cadence influencing changes in capabilities

**Business Ecosystem** (Ecosystem Business): network of organizations — including service providers, verticals, partners, competitors, government agencies, and so on — involved in the delivery of products or service through both competition and cooperation. *(adapted from Investopedia)*

**Digital Business** — the creation of new business designs by blurring the physical and digital “worlds”. *(Adapted from Forbes, Gartner)* to (1) architect resilience, physical-digital continuum, data supply chain, business of Apps, harnessing hyperscale…

**Autopoiesis of ‘Business’** — Ecosystem Business & Digital Business

**IoE Roadmap of Challenges**

- Co-ope
- Callab
- Govern
- Innovate
- Knowledge

**OPEN DIGITAL ARCHITECTURE FRAMEWORK**

- *Requirements*
- *Capabilities*
- *Interactions*

**BUSINESS ASSURANCE**

- Monetization
- Management
- Customer Centricity
- Trust

**Co-corp**

**Build**

**Identify & Define**

**Governance**

**Architecture & Build**

**Identify & Define**

**Co-ope**

**Build**

**Identify & Define**
We need to identify core and unique business capabilities that will be needed in a digital enterprise so that they can become key drivers of a Digital Architecture.

Dr. Haiping Che

TM Forum Board member, Huawei
CTO and Snr. V.P. Standards & Industry Development
Mapping Business Goals, Capabilities & Value Streams

A “north star” for Open Digital Architecture (ODA) Framework

- Knowledge defined business & operations
- Enable Openness
- Use Digital Transformation tech
- Become nimble and experience oriented

Open Digital Architecture

- Ecosystem models
- Organization change maps (SPs, Suppliers, etc.)
- Business capability models and mapping
- Value chains/New value streams/Value maps
- Relationship analysis
- User story analysis
- Process Modelling...

Ecosystem Business Architecture

- Digital Business + Ecosystem Business
  (cross industries, incl. vertical-specific business models – Automotive, Health...)
- Drivers, Goals, Objectives and measures
- Factor in Regional interests (Asia – India etc. Europe, etc.)

Regional/Industry specific:
- Customer
- Business
- Technology

Digital Business + Ecosystem Business

Road Map of Challenges

- Governance
- Monetization
- Management
- Trust
- Enablement

Business Motivations

Drivers, Goals, Objectives and measures

Regional/Industry specific:
- Customer
- Business
- Technology

Governance

Monetization

Management

Trust

Enablement

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Ecosystem Business Architecture & Open Digital Architecture

The Transformation tools for Ecosystem and Digital Business realization

**EBA – ECOSYSTEM BUSINESS ARCHITECTURE**
- Industry first
- More recent TM Forum perspective - ecosystems & connected business
- Overall requirements at organization AND ecosystem level to succeed in ecosystem business (IoT/IoE)
- From governance & KPIs to business assurance, SLAs, responsible data management, etc.
- Business architecture

**ODA – OPEN DIGITAL ARCHITECTURE**
- TM Forum’s core – OSS/BSS telecoms & technology partners
- Operations & Technology transformation
- Leveraging agile requirement and model driven tools, metadata, microservices & TM Forum Open APIs
- System requirements for the digital, connected age
- A digital architecture framework & best practices to achieve it
- Enterprise architecture

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Towards IoE and Everything As A Service

Join Us, Let’s Collaborate and Co-create a ‘living’ Industry Reference Model

Work with the Forums members and stakeholders to define “top” ecosystem interests, and business models...

- Communication Service Providers
- Cloud Services Providers / OTTs / Webscale companies
- Independence Software Vendors
- Consulting & Systems Integrators
- Network Equipment Providers
- etc..

through series of workshops and 1-on-1 engagements to capture aspirations and related requirements...

- Using consistent communication/ language/vocabulary
- Alignment and governance - vertical and cross domain traceability
- Holistic views of business models and their required organization capabilities
- Systemic requirement - user stories / narratives, modelling integration
- Help in identifying transformation processes / methods of integration

To establish reference Ecosystem Business Architecture(s), methods and tools.

- A framework for conversation between Business functions and IT
- Grow stake in value chain for “members” with a target to improve commerce and trade with other verticals and stakeholders
- Clearly distil capabilities (organizational, functional, business-wise, technical...etc.) that will underpin a new growth paradigm and platforms
- Enable Business and Technology functions to align better for Business and Digital transformation aspirations
- Steer the development of ODA as a platform to enable new business with 5G, IoT, AI and newer technologies
Business ecosystems are no aberration; nor are they a surprise... they represent an inevitable, adaptive response to changes in the types of value that “folks” care about, and the interplay of technology innovation, behavioral expectations, regulatory changes and novel business models.

Ralph Welborn
CEO at Imaginatik
End.

Thank You.