

BIL-T CONFERENCE "ARCHITECTURE OF TOMORROW"



**Revitalizing the Enterprise Core
for sustaining
in the Platform Economy**

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An Association for All IT Architects

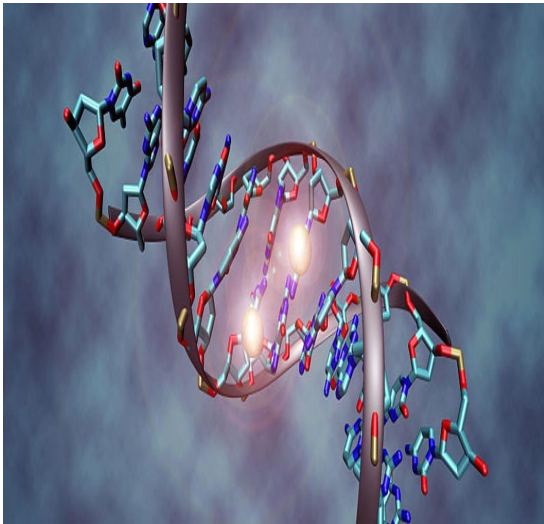
AGENDA

- **Context** of the **PLATFORMs**, their key characteristics (DNA) and **importance**
- **Revitalizing the Core** (in older companies) **to sustain in Platform Economy**
- **Organizational Personas** in the context of **PLATFORMs**
 - ✓ Platform **Creators / Providers**
 - ✓ Platform **Consumers / Subscribers**
 - ✓ Platform **Technology / Service Provider**
- **Role of Architects** in each type of Organization (Persona)
 - ✓ How can architects enable their organizations ace the race in the Platform Economy Game

The context of (Digital) Platforms

PLATFORM is a **Digitally Architected System of Systems** with underlying IT infrastructure and features (applications) that can **facilitate information, goods or services between producers and consumers.**

DNA /Key Characteristics of Platforms:



- **Elastic Scaling** (can connect millions of people, businesses, devices and things without performance degradation)
- **Provide enablement to integrate** business processes with growing number of partners, suppliers and even competitors* **and extend reach into business ecosystems** via **APIs**
- **Omni channel touch points (for humans and things)**
- **Have extensive number of features** (each of which could be an underlying service or application)
- **Leverage Data** and able to **drive insights, actions and outcomes**
- **Ease of use** and immediate appeal for users
- **Trustworthiness and security** (clear terms and conditions are necessary as well as privacy protection and assurances for intellectual property and data ownership)

*<https://www.tcs.com/perspectives/articles/global-leadership-study-balancing-innovation-with-optimization>
Acknowledgement to the posts of Elaina Shekhter CMO at EPAM in Quora for some of the above content

Focus of my conversation in this presentation

specialty business technology platforms (B2B) where there is a big white space where many of us can contribute in our own ways, and which forms part of my day-to-day work responsibilities in recent times

Disclaimer: The presentation is an orchestration of experiences and learnings of the author and not necessarily of the author's employer or any organizations that the author is a member of.

Growing importance of Platform Economy

Over 30% of global economic activity (~ \$60 trillion) – could be mediated by digital platforms by 2025 and yet experts estimate only 3% of established companies have adopted an effective platform strategy.

Source: [2019 McKinsey Report - <https://innovator.news/the-platform-economy-3c09439b56>]

USPs of Platforms

Monetization

- Platform creators monetize their **capabilities; knowledge and experience; data** solely or through additional partners

Value Enhancement

- Helps create new business services, products, innovations and disruptions in an agile manner
- Out of the box tools and technologies to customize / extend the capabilities by tenants
- Pre-certified for many regulatory and compliance requirements reducing the effort, time and cost for such certifications

Organizational Personas in Platforms context



Platform Creator
/ Provider



Platform
Consumer /
Subscriber



Technology
Foundation /
Service Provider

- **Specialty Technology Platform providers**

- B+B SmartWorx by Advantech
- Bosch IoT Suite
- GE Predix

are some examples to name a few.

Even hyper-scalers like Microsoft, AWS, Google are extending to this space.

Governments are also involved in building Public Digital Platforms (Citizen service platforms like Digital Health, Education etc.)

- **In hundreds of thousands**



- **Hyper-scalers like Microsoft (Azure), AWS, Google who provide the foundation platforms and services**

- **100s of other service providers who can potentially help or help other companies to build platforms incl. their own platforms**



Some References and useful reading:

1. <https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/competing-in-a-world-of-sectors-without-borders>
2. <https://web-assets.bcg.com/ba/68/0ae0b21e49d9a0f2118ff9f8c265/auto-business-platforms-are-the-future.pdf>
3. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-strategy-and-corporate-finance-blog/if-youre-not-building-an-ecosystem-chances-are-your-competitors-are>
4. <https://www.insurancethoughtleadership.com/onstar-next-step-for-oem-partnerships/>
5. <https://web-assets.bcg.com/ba/68/0ae0b21e49d9a0f2118ff9f8c265/auto-business-platforms-are-the-future.pdf>
6. <https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/competing-in-a-world-of-sectors-without-borders>



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Revitalizing the Core – How and What

- **Digital Transformation journey – a necessity**, else the power of ***Platforms and consequent Ecosystems cannot be leveraged***
- **Product Centric Agile mindset** is an absolute necessity

Digitally Connected Ecosystems **Mindset of Digital Ecosystems**

- In this era of digitally connected ecosystems, Enterprise Architecture (EA) of organizations extends beyond the conventional boundaries of EA as part of larger business Ecosystems. This understanding is a key element to ace the race in Platform Economy.

Focus on Key Elements **Services, Architecture and Governance***

- The organizations and architecture community supporting them should focus on these three key elements for success in the Platform Economy

Digitalize Legacy First **Leverage Existing Ecosystem to Revitalize before developing new services / applications**

- Identify opportunities to leverage the legacy processes and applications and digitalize them in a way that can contribute to Digital Transformation journey.
- Do not experiment with new applications or services build, till the options of legacy revitalization are exhausted.

* I acknowledge reference of this article for some of the content >>>>>>>>

Marin Jovanovic, David Sjödin, Vinit Parida,
Co-evolution of platform architecture, platform services, and platform governance: Expanding the platform value of industrial digital platforms, Technovation, 2021, 102218, ISSN 0166-4972, <https://doi.org/10.1016/j.technovation.2020.102218>.

Revitalizing the Core – Key Focus Elements for Architects

Architecture

- Data Collection and usage
- Analytics
- Intelligence Enablement

Services

- Monitoring of Service Development
- Optimize Service Development
- Autonomous Services

Governance

- Ecosystem Expansion
- Value System Expansion
- Value Chain Expansion

Architects have a key role to play in any kind of organization personas as discussed earlier, though the job content and capabilities required vary significantly based on type of organization persona. Each type of organization persona need to investigate these focus elements from their respective lens.

Poll - 1

At present, what type of organization are you associated with?

- Platform Creator / Provider
- Platform Subscriber
- Technology Foundation Provider / Service Provider
- Government / Government Body
- Others

Poll - 2

What is your job role / responsibility?

- Architecture / Engineering
- Project or Program Management
- Corporate Strategy (Business and/or IT)
- Function Head (Business / IT)
- Others

Role of Architects in Organization that Design, Build and Operate Platforms

- Understand the business capabilities for target subscribers and organization business model
- Advise if Platformization is the right way for your organization
- Functional or Platform capabilities design and enable continuous evolution of platform
- Enable the Platform build
 - Choose the right technology foundation and features to build your business platform
 - Support in-house teams in development
 - Requirements for partners and Selection of partners who help in build
 - Integrate / Orchestrate technology components, build components from different partners
 - Robust design / architecture to ensure customer (subscriber) delight [ensure aspects like scalability, performance, user experience]
- Platform Governance (incl. NFRs)
 - Compliance, Security, Auditability, Observability considerations
 - Trusted Architecture, Data Privacy & Security

Role of Architects in Organization that subscribe to Platforms

- **Understand** the business requirements and needs of your organization
- **Architect the solution** that optimizes in-house / external platform components as necessary
- **Finalizing specifications and capabilities** required of the platforms their organization wants to leverage
- **Become an advisor** during market scan and identifying the right platform for your business enablement
- **Advise and setup the mechanism** for relevant Monitoring and Governance
- **Architecting extension of the platform capabilities** into your organization business ecosystem and expand it

Role of Architects in Organization that provide services for creating Platforms

- The requests or projects to build platforms may seem like any other application build project.
 - The clients **may explicitly mention sometimes** that the work is part of a larger platform build
- Else
 - A **big picture understanding** of business domain will **provide the right perspective**
 - If the **requirements point to any of the characteristics (DNA) of platforms**, you need to **sense that the project is part of a larger platform** development
- ❑ If you sense that the project is a component of a platform, **designing and building** the project **to confirm to the characteristics of a platform** will **result in better success and stakeholder satisfaction**
- ❑ Scale your organization capabilities via new service offerings, solutions and accelerators, team capability building that enable you become the partner of choice for enterprises looking to build platforms
- ❑ **Become an advisor to your clients** to refine their requirements and extend their platforms to add better value to their subscribers

Thank You

Q & A

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