API Ecosystems:
Scaling Developer UX

digital **API CRAFT**

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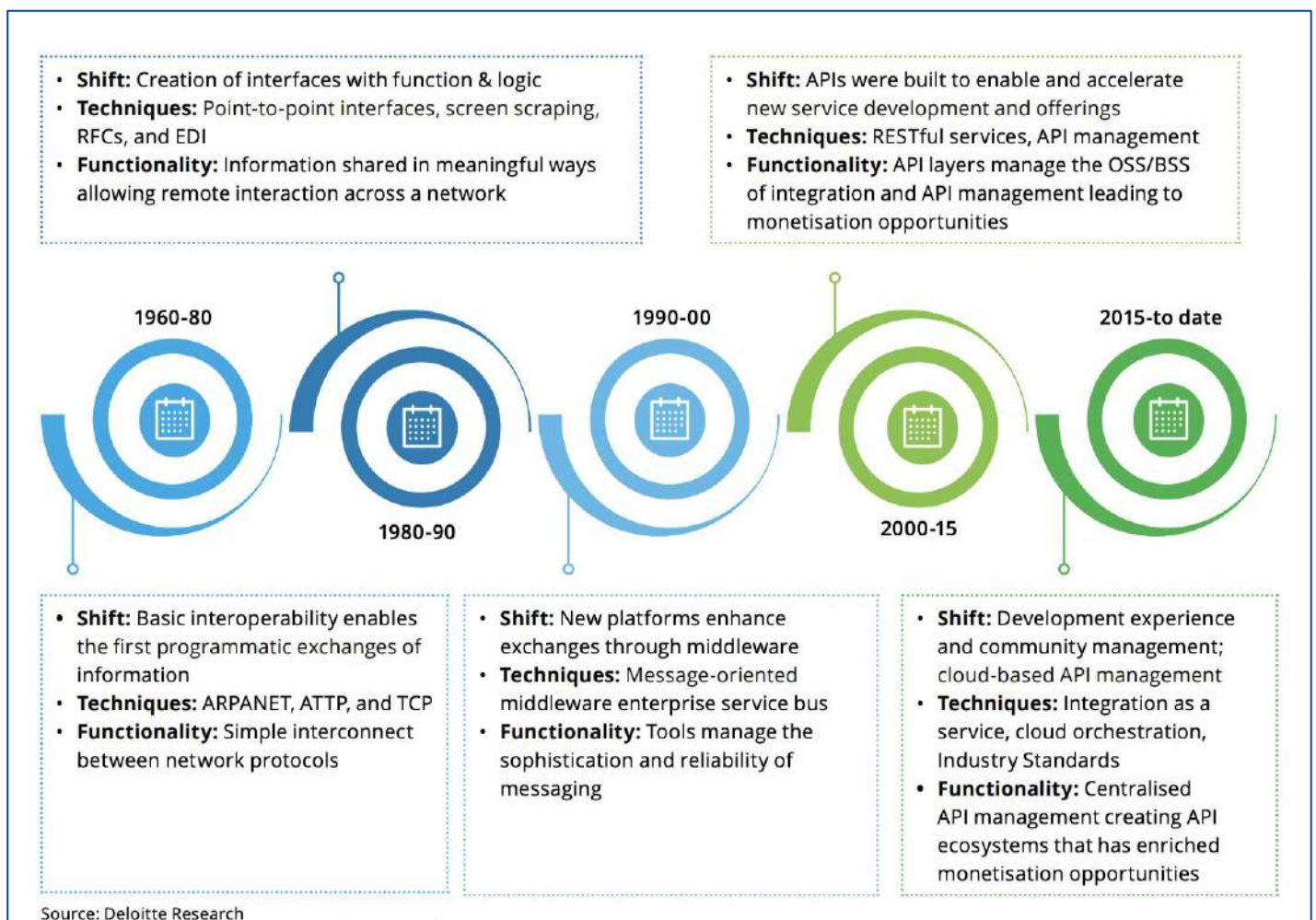
On Jul 27, 2022, DigitalAPICraft's CEO, **Mr. Bharath Kumar** hosted a Fireside chat session at API Days, New York with Mr. Jitin Bhandari, CTO of Cloud and Network services at Nokia, and Mr. Niranjan Ramaswamy, VP of Embedded Fintech, to discuss the Future of API Marketplace and creating connected API Ecosystem. The ensuing conversations threw light on the future of APIs and the value of creating API ecosystems

Introduction: APIs Past and Present

Today, every enterprise understands that APIs   are an indispensable tool for digital transformation and one can go far beyond with a well-crafted API ecosystem. The fundamental role of an Application Programming Interface (API) is to borrow data and functionalities from one application and enable another to benefit from it. While that concept is still valid, the shifting landscape of API technology, from the 1960's to present is detailed below.

- **Shift:** Creation of interfaces with function & logic
- **Techniques:** Point-to-point interfaces, screen scraping, RFCs, and EDI
- **Functionality:** Information shared in meaningful ways allowing remote interaction across a network

- **Shift:** APIs were built to enable and accelerate new service development and offerings
- **Techniques:** RESTful services, API management
- **Functionality:** API layers manage the OSS/BSS of integration and API management leading to monetisation opportunities

1960-80

1990-00

2015-to date

1980-90

2000-15

- **Shift:** Basic interoperability enables the first programmatic exchanges of information
- **Techniques:** ARPANET, ATTP, and TCP
- **Functionality:** Simple interconnect between network protocols

- **Shift:** New platforms enhance exchanges through middleware
- **Techniques:** Message-oriented middleware enterprise service bus
- **Functionality:** Tools manage the sophistication and reliability of messaging

- **Shift:** Development experience and community management; cloud-based API management
- **Techniques:** Integration as a service, cloud orchestration, Industry Standards
- **Functionality:** Centralised API management creating API ecosystems that has enriched monetisation opportunities

Source: Deloitte Research

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Trend: API Management and Marketplaces

Building an enterprise-wide, centralized service catalog and expanding it beyond the APIs has become an extremely important strategy for enterprises. Enterprises now are creating 1000s of APIs, and their API ecosystems need to evolve to manage the complexities of usage and consumption, collaboration, management, documentation, and publishing of 1000s of APIs, and management of 1000s of users and developers. A major trend governing the API ecosystem is to adopt an API-first approach

Here are the top 7 reasons why organizations are investing in API Management Software.

Productivity Gains: Developing applications from the ground up to create new products is time-consuming and expensive. It's not worthwhile when you can find pre-structured, automated API-based integration solutions in the market. This way, you can integrate the APIs into your application in no time

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Economical Advantage: A company can realize substantial cost-savings by leveraging appropriate APIs. Did you know that the development and deployment of an application may cost approximately $270,000 as per research reports? Using ready-made APIs enables developers to capture all the required functionalities in their application, instead of the tedious and time-consuming work of developing them from scratch. Why re-invent software that already exists?

Streamlined Connectivity: The primary role of APIs is to provide seamless connectivity among systems, platforms, and applications. Internal APIs enhance communication within the business resulting in improved and promoting business growth.

Rapid Innovation: APIs enable rapid innovation and creativity, opening new avenues to grow a business with new or enhanced products. Hence, adapting API-based integration and API Marketplaces has become indispensable in keeping up with changing customer demands.

Tailored Customer Experiences: Meeting a customer's expectations is every company's primary goal. Customers want personalized consultation and top-notch user experiences, which is possible by leveraging API technologies. Developers can rapidly create products tuned to the needs of the end customer.

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Effective Marketing: An API Marketplace is the best platform to market your APIs efficiently in front of your customers (developers). Now, tapping into an extensive global customer base is an easy task, whereas it would be an challenge due to a lack of resources and awareness.

API Monetization: API monetization is an effective way to generate revenues and scale the business worldwide. A business can expose the functionalities of products or services through APIs, enabling them to charge the users if they subscribe to their plan. Let's convert digital assets into revenue generating resources with the monetization functionalities offered by the API Marketplace.

API UX: Scaling the Developer Experience

70% of organizations are using API management and mediation to build their digital platforms (Gartner). However, some IT leaders still overlook the business potential of APIs as digital products.

Enterprises of all sizes are increasing their API portfolio as it brings abundant technological advancements, but many organizations are experiencing plenty of challenges such as security breaches, managing APIs complexities, and the time & cost associated with it.

An API marketplace scales the developer experience seamlessly, provides a smart & transactional sandbox, and also renders scalability for monetization. The futuristic enterprises are moving towards building new sets of delightful experiences for third parties.

Growth of APIs in Banking & Telecommunications

Banking APIs

The emergence of APIs in the banking sector has brought revolutionary changes. In the wake of high demand, clients need to get updated with timely information. In addition, banks support customers digitally 24X7 regardless of their timings and   place.

In 2016, the Competition and Markets Authority (CMA) in the UK raised the demand for data access from several banks for third-party applications. These banks decided to share access to their customer's information with them at that time. This decision was a small step toward the open banking API ecosystem. Forbes declared 2017 as "The year of the API economy" and the world has never looked back on APIs, instead moved forward aggressively to embrace the API economy.

Telecommunications APIs

The COVID-19 pandemic has profoundly changed the traditional ways of working and has accelerated innovation and the adoption of new communications business models. Even before the pandemic, telecommunication providers had already been dealing with market disruptions and a new kind of consumer.

Big data, IoT, and artificial intelligence have been here for a while. The real distinction will start when telecommunications providers will start pumping more real-time information at a higher velocity- 5G infrastructure is on the way because tomorrow's telecommunications can't get by without it. Telecoms also have started to see new competitors and competition in the form of SaaS providers and CPaaS services, including OTT providers and technology providers such as network as a code that affect the value chain.

New technologies continue to disrupt the communications industry by offering improved customer experiences in this hyper-connected world. Be it network slicing, low latency mobile networks or gigabit connectivity; 5G promises countless opportunities for telecom companies enabling seamless cross-industry collaboration & accelerating the digital transformation journey

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Futuristic: API Connected Ecosystem

Growing opportunities in the digital world motivate every enterprise to adapt an API-powered digital ecosystem. Now, all businesses are turning digital, including healthcare, financial industries, banking, telecommunications, and more.

APIs allow companies to collaborate and share potential capabilities while acting as a bridge. Apps that do not generally work together can combine capabilities. API management ecosystems work to unite consumers and API providers to present a seamless experience to customers.

Your digital strategy is dependent upon the health of your API ecosystem, and how much value your API provides to developers belonging to your organization and users external to the organization. An optimal API ecosystem strategy is one that welcomes collaboration over competition, innovation over silos.

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Why Digital**API**Craft ?

DigitalAPICraft understands the importance of creating a robust and innovative API ecosystem to maximize ROI and get a competitive edge in a digital world.

DigitalAPICraft, through its products and services, helps global brands establish their API Ecosystem and transform into a truly 'User Experience Enterprise'. As a leading end-to-end digital transformation partner, our API-led approach enables banking, healthcare, telecom, insurance & retail companies to offer delightful customer experience, transform business processes and boosting operational efficiency.

DigitalAPICraft has been awarded "Delivery Partner of the Year for APAC 2017- Google Cloud" and is a premier Google - Apigee partner. Over three consecutive years (2020, 2019 & 2018), DigitalAPICraft is recognized as one of the fastest-growing technology companies by Deloitte in its Technology Fast 50 India and twice (2019 & 2018) in Technology Fast 500 Asia Pacific rankings.

Located in USA, UK, and India, and with customers across the globe, DigitalAPICraft brings extensive product and platform experience to help enterprises with digital strategy and consulting, disruption engineering, end-to-end DevOps, experience engineering, and much more

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DAC Product LIne

One APIMarketplace

Fascilitates the best, API discovery Consumption, collaboration, management, documentation publishing & more

One APIHub

An enterprise-grade internal API portal to aggregate, expose, index & document all the enterprise APIs in an access-controlled mannner

Open APISandbox

Multi-tenant Open APIs Testing environment Rich, Smart & transactional help enteprise create & grow 3rd party ecosystems

One APIDapper

Dapper was created by DAC to improve the quality & usability of API documentation, thus enhancing developer experience by providing a flexible approach to style & structure the documentation pages

DAC Innovation Lab

Brings joint-development opportunities for the businesses that will accelerate their API ecosystem journey through better Developer experience & engagement

DAC APIStudio

Brings together various developers to innovate & design new APIs

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