

# NetFoundry

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App developers and admins use NetFoundry's software, APIs and SDKs to spin up global, app-specific networks (AppWANs) on-demand, with NetFoundry also managing the underlying infrastructure in a Network-Platform-as-a-Service (NPaaS) model. AppWANs are virtual, app-specific Internet overlays, enabling the app's identity, contexts and business policies to control the network. A new art of the possible results as apps can enjoy the economics and reach of the Internet, but with the security and reliability previously only available via custom hardware and dedicated telco circuits. Developers and apps are no longer handcuffed by networks they don't control - they are free to innovate.



## The Context

Business networks such as, MPLS and SD-WAN, are designed for site-dominant, inside the business WAN perimeter apps - private data centres, headquarters, branch offices. The network provides security and reliability. This has limited decentralised innovation because the app developer is restricted by the telco-controlled, expensive (proprietary hardware, dedicated telco circuits, inflexible and expensive network management paradigms). Meanwhile, the traditional business network perimeter is dissolving thanks to multi-cloud, IoT, mobility, XaaS and the transition of apps from monolithic architectures to composites of micro services and APIs. As AI and block chain-based architectures become more prevalent, this transformation picks up speed. This change of the global business app topology, and the desire to enable distributed innovation, requires a resultant reinvention of networking to fit the new app topology and desired decentralised innovation paradigm. This need for reinvention and paradigm shift triggered the NetFoundry Innovation.



## The Innovation

NetFoundry was born in Tata Communications 'Shape the Future' program in January 2016. By May 2016, progress in numerous customer pilots showed enough indications of product-market fit to hire a small team. By December 2016, the small NetFoundry team (8 people by then) was able to sign paid pilot customers, and prepare for a soft launch at Mobile World Congress in February 2017. Now, a year after the soft launch, NetFoundry is booking revenue - \$500k of ACV in the past quarter. NetFoundry enables the app to make the network. Apps "talk to" (via software, APIs and SDKs) NetFoundry's cloud-native, patent-pending orchestration platform to spin up (on demand), purpose-built (by the app) AppWANs to deliver the app over the Internet. Each AppWAN is defined and driven by the identity, contexts and business policies of each individual app. NetFoundry customers and partners quickly and easily spin up app-defined, highly secure, performant, Internet-overlay AppWANs, which are a logical abstraction of underlying network and network control infrastructure in much the same way that IaaS abstracts its users from underlying compute infrastructure.



## Overcoming Challenges

Digital transformation and the Fourth Industrial Revolution is resulting in Internet-accessed and Internet-distributed apps becoming dominant. The challenge is the Internet is inherently insecure and has best-effort reliability. Furthermore, app development has become restricted by networking. Especially now that IaaS took the server handcuffs off business app developers, the only handcuff remaining has been the network - the business apps are increasingly agile and on-demand - the business SD-WAN and MPLS networks are inflexible and pre-built. In summary, the challenge was designing a networking solution to meet the new needs of the Fourth Industrial Revolution - to provide on-demand, secure, reliable networking over the Internet, controlled by the developers and applications.



Agile

Spin up networks in minutes.



Performant

Performance, resiliency, & reliability without private circuits.



Secure

Zero trust, encrypted, application micro-segmentation



Cost Effective

Overlays the Internet, simple API & web-based management

## Impact of the Innovation

market potential in 10 years

**\$200 mn**