# 7 Lessons To Create A Telco Innovation Engine

A LotusFlare POV Paper

## Terry Guo

Chief Product Officer and Co-Founder

# Innovation To Avoid Stagnation

Every industry - from traditional to newer internet-based business models - needs to change and constantly evolve in order to stay viable and avoid business stagnation. The need to continually innovate and grow has been long recognized by communication service providers (CSPs). Having invested significant resources into building 5G networks, their fundamental fear is to watch these advanced networks  become a mere pipe for connectivity. The promise of 5G presents a significant opportunity to develop new types of business that capture the upstream value by leveraging their investment to launch useful new - and perhaps even-game changing - products and services.

In my role of working closely with CSPs over the past 10 years, I have learned that innovation is not just about launching new products and services, hoping that a new business results. It's about launching unique new products and services that help you stand out from the crowd. This is especially important as CSPs expand into adjacent verticals where it's even more challenging for them to differentiate themselves. Innovation takes place when a fundamental new business model is tested, tried and the organization behind it adapts in ways to make it possible. This is what will make them stand out as they enter these different markets.

I often reflect that, once upon a time, Verizon ran many television ads in the US about how they had the best network. Now connectivity has largely become a commodity, not a competitive advantage. Looking at companies like T-Mobile, AT&T or Verizon, the difference in what they offer in terms of connectivity is, arguably, very small. What then can they do to differentiate? They have recognized that it starts within themselves and their perceptions of their customers.  More forward thinking CSPs are going through digital transformation with a focus on user experience.

As our customers tell us virtually everyday and in every meeting, the user experience has become the product. Any CSP can offer fast, reliable connectivity. But if you can offer an improved user experience, one with a digital, personalized, omnichannel approach, that user experience becomes your competitive advantage.

# Caution, Obstacles Ahead

In my experience of rolling out new businesses for CSPs, I have identified three significant (but surmountable) obstacles impeding CSPs' ability to innovate quickly.

First, people and the processes they adopt are often misaligned with innovation in the creation of new business models. To innovate, companies need to build their staff and hire people with different skill sets more aligned with innovation and who are open to try different ways of doing things. I see this most clearly in the approach to corporate R&D and product development. For many CSPs, they have entered an era of a customer-driven process, which is a good trend as far as innovation goes. New products and services should indeed be created to address an existing or anticipated customer need.

Second, the technology enabling systems is a significant impediment to CSP business innovation. In particular, the core technology stacks used by CSPs are built to be stable and reliable enough to support millions of users. They are the opposite of fast and agile. To try to innovate on these stacks is slow and expensive, especially if you're trying to test, iterate, fail and retry different approaches. While you're trying to test business models and services, you're still trying to run the core business on that same stack.

Third, the culture of innovation should be established. The following paragraph from a recent article by Boston Consulting Group article best summarizes this idea[1].

> *"To avoid waste of resources and drive synergy among diverse operations as new products and geographic markets are targeted, telcos need strong and diligent governance procedures, including a large degree of centralized management. Indeed, this is the underlying pillar that enables the other four strategic vectors. To implement these vectors, the corporate culture needs to be more agile than before, adopting rapid product innovation approaches, including fail-fast experimentation and test-and-learn, to encourage creative ideas and continuous product and service improvements. Robust leadership and agile corporate cultures are also essential to ensure being able to recruit creative talent for new initiatives, particularly when there will be unbridled competition from hyperscalers for the most-skilled workers."*

Though significant, these obstacles are surmountable. Next, I'll talk about how I have collaborated with CSPs to work around these conditions to foster business innovation.

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1    "What Five Trends Means for Telcos," by Val Elbert, Franck Luisada, Scott Stemberger, Davids Tjhin, Chi Hung Chong and Olga Smurygina, Boston Consulting Group, December 2, 2022.

# Innovation Engines: Havens for Business Innovation

As a way around these obstacles, LotusFlare has helped CSPs set up what we like to call an "innovation engine". These are essentially cloud commerce and monetization platforms that provide a haven for business model innovation. And this concept of haven is important - innovation engines exist in parallel to core systems (those old stacks I mentioned above) so that they can maintain agility to enable CSPs to test, pilot and rollout new products and services quickly.

An innovation engine has the following high-level attributes:

- Cloud-based and cloud-native
- Microservices based
- Highly configurable by business personnel
- Open and modular
- Built-in Hyperscaling
- End-to-end with all traditional "BSS" capabilities
- Functionally independent from, but easily integrated with, old-stack core systems

I will go into these attributes in a subsequent paper but there are some other attributes that warrant a deeper mention.

### Primacy of Data

Innovation engines are based on the idea that data is treated as if it were flying first class.  The prime position of data must be built into the core of the commerce and monetization service. Why? Innovation engines are system environments that you're conducting experiments within. When you're experimenting with a new product or emergent business, the data the product gives you is the feedback to honestly assess the potential - good or not - of the business model. Without actual data, you don't know where to experiment and the best ways to iterate.

### Cost-Effectiveness

An innovation engine also should also be cost-effective. Experimental products and emerging businesses don't make money right away.  Hence the lower the cost, the easier it is to justify the investment in the innovation engine service.

### The Right Partner

An innovation engine needs to come from a provider that is a proven innovation partner. A large, traditional technology provider of old stack technology is probably not the right partner, as they might come back and say it will cost millions of dollars and many months to realize a new business on their technology. Innovation engines are meant to be agile and cost-efficient. The right partner is one with an innovative mindset, an agile approach with flexibility and a focus on helping you achieve your innovation goals with cloud-native technology.

# Lessons From The Field

In my role as Chief Product Officer of LotusFlare, I have worked with my team to develop our commerce and monetization service, LotusFlare DNO Cloud, to possess all of the attributes needed to implement a successful innovation engine. Even with best-in-class technology as your foundation, it's how one executes that dictates success. Through working with CSPs of all shapes and sizes, I'd like to share seven lessons on how to improve the design, deployment and ongoing support of these innovation engines.

### Lesson 1 - Take An "MRP" Approach

The first lesson is in how we approach product design and deployment. Everyone is familiar with the term minimal viable product, or "MVP", in which a product is launched with a minimum number of features to be ready for testing. We have refined that concept to be one of "Minimal Remarkable Product". While you're still working quickly, the product isn't merely viable: you should strive in that phase to go beyond "minimum viability". You should put the effort in to make it really good so that it's *remarkable*.

### Lesson 2 - Not The Plane, The Pilot

The next lesson is that it's not just about the technology, it's how we use the technology. One example of this is the LotusFlare Rewards and Promotions capability which allows customers to create different reward and loyalty programs. The reward capabilities are powerful but the success of the reward program relies mostly on how the program is designed and implemented, not the underlying technology.

### Lesson 3 - Understand The Regulatory Environment Clearly

We also learned not to let legal requirements or regulations interfere more than absolutely necessary. Telecommunications is highly regulated and that often slows the pace of innovation. If you adhere to a very strict interpretation of every rule, you can spend months making sure a product is compliant. Often, with a little more research to understand what is actually required, you can minimize the amount of work you have to do to be in compliance.

### Lesson 4 - Framework to Prioritize and Validate

Another lesson that goes hand in hand with a MRP approach to business line development is having the right framework for prioritization and validation. When you're working with limited time and resources, it's critical that you properly prioritize what needs to be built. You also need to find simpler ways to validate - such as surveys and research -  than by fully developing the product and deploying it to the market.
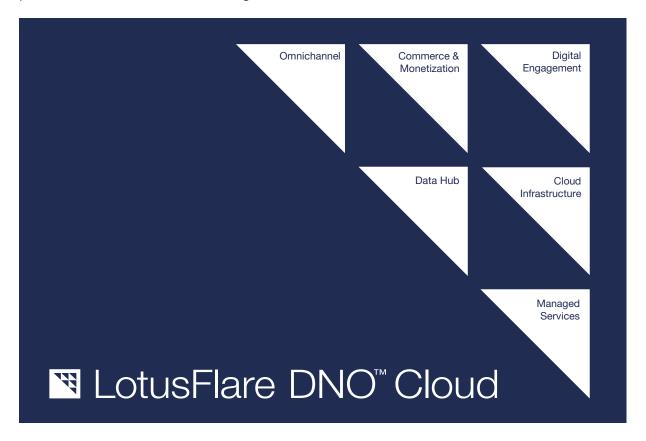
### Lesson 5 - Data Interpreted Correctly

We've learned working with CSP that how the data is used is as important as the data itself. The phrase, "with great power comes great responsibility" comes to mind. Great data also comes with great responsibility. Data about the performance of a business can be presented and interpreted in many ways to achieve specific objectives. We've observed in some instances where data was presented to support individual objectives and not with the goal of assessing the prospects of the new business model. CSPs should employ data experts, the people with the proper skills and intentions, to get you the right information, interpreted in the right way.

### Lesson 6 - User Support: A Very Valuable Resource

An often overlooked source of product insights is user support. When you launch a new product or service, you will inevitably have users contacting support about issues they are experiencing. LotusFlare has found that a lot of companies weren't effectively leveraging this valuable information to help drive product development and innovation.

### Lesson 7 - Ensure Empowered Product Management

In our experience with CSPs, an empowered product management team is critical to the business innovation process. Product management sits between the business and the engineering team, facilitating the process of translating the business requirements of a product into the technical components used to build it. Often the business side will present requirements that are not well-formulated or defined, making it difficult for the engineers to know what to build. Empowered product managers know how and will ask the right (and sometimes tough) questions to identify the actual problems the business team is looking to solve.

Omnichannel

Commerce & Monetization

Digital Engagement

Data Hub

Cloud Infrastructure

Managed Services

LotusFlare DNO™ Cloud

# A Final Word

LotusFlare's ability to help CSPs build innovation engines is due in part to our own approach to doing business. At LotusFlare, we are constantly learning from our customers and we use these lessons to innovate our products and business practices. We focus on fast, agile, development and delivery, to help customers overcome the obstacles impeding innovation. All of these things are consistent with the goal of creating innovation engines.

LotusFlare takes pride in the valuable business outcomes produced by innovation engines that employ LotusFlare DNO Cloud as their foundation technology. LotusFlare CSP customers have been able launch new products and businesses and enter entirely new segments within weeks instead of the years it would take working with old stack providers or with traditional systems integrators. Innovation engines built on LotusFlare DNO Cloud offer our customers an advantage so they can better serve their customers through business innovation.

Thanks for your time and attention in reviewing this POV paper. Please stay tuned for a follow-up paper where I'll drill down into the attributes of successful innovation engines for CSPs.

**Terry Guo**
**Chief Product Officer**
**LotusFlare, Inc.**

Terry Guo is a seasoned entrepreneur and product engineering leader. He is a co-founder of LotusFlare and is responsible for the overall product strategy and execution. Through his tenures at LotusFlare, Microsoft and Meta (Facebook), Terry has accumulated vast experience in developing and productizing new technology, helping companies drive user growth for digital services and building and running profitable businesses. He is currently exploring the opportunities using Blockchain and Metaverse technologies for LotusFlare and the CSPs that LotusFlare serves.

# LOTUSFLARE

Simplify Technology ■ Simplify Experience™

Based in the heart of Silicon Valley, LotusFlare's mission is to design, build and continuously advance a digital commerce and monetization platform that simplifies technology and customer experience to deliver valuable outcomes to enterprises. Developed from "customer experience down", LotusFlare Digital Network Operator® (DNO™) Cloud is a fully-managed cloud-native commerce and monetization service that provides an all-digital BSS to deliver valuable business outcomes to consumer and enterprises customers of CSPs.

Learn more at lotusflare.com



marketing@lotusflare.com