Mitigating Risk

How Network Providers can Effectively Partner with Application and Content Providers

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Abstract

Network providers (NPs) are struggling to identify the appropriate model or combination of models when working with application and content providers (ACPs). This article explores the risks associated with NP/ACP business models (Operator Led, Aggregator, Mass Wholesale, Enterprise Customer and Trusted Partner), along with risk mitigation approaches that are being employed by leading network providers.

Introduction

Network providers considering the various approaches for collaboration with ACPs are confronted with deciding which model or combination of models is appropriate. To help network providers overcome this challenge, Alcatel-Lucent performed a comparative risk analysis across business models. The goal is to provide a solid understanding of the tradeoffs between models and risk mitigation techniques available. Though weighting the risks according to each individual network provider's priorities is required, the risk assessment can help identify an ACP collaboration approach that is aligned with risk tolerance levels.

Business Model Risks

To find the best ACP collaboration approach that considers more than the costs and financial benefits, it is essential for network providers to thoroughly understand the risks for each business model across two categories;

1. *Internal Risks* – include program risks such as the inability to attract developers, inability to differentiate, etc. (see figure below)

2. *External Risks* – include risks that extend beyond the network provider's program such as impact on brand and cannibalization of existing services (see figure below)

The five business models addressed in the comparative risk analysis are thoroughly described in other Alcatel-Lucent materials, but are briefly summarized here,

1. *Operator Led* – Model where a network provider takes full responsibility for the program and establishes direct, standardized relationships with many ACPs

2. *Aggregator* – A partnership approach where responsibility is shared between the network provider and content aggregator

3. *Mass Wholesale* – The network provider grants ACPs access to the network, but has no direct relationship with end users.

4. *Enterprise Customer* – Network provider enables enterprise owned applications, rather than providing application directly

5. *Trusted Partner* – This is one-off approach to establishing a relationship with an ACP to enable a specific application

6. *Internet Model*[1] – Network providers are not involved in the creation of new applications/services choosing instead to provide bit delivery only.

Each model has its own inherent benefits and risks. Network providers need to address each area of the business model to determine which model fits their particular situation and level of risk tolerance. The comparative risk analysis figure below evaluates selected external and internal risks for NP/ACP collaboration business models.[2]

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[1] The Internet model is similar to an approach where applications and services are delivered across the network with zero NP value add and zero additional revenue except, perhaps, data fees. This model does not require direct relationships with ACPs. The Internet model is shown here for completeness but is not discussed further in the article.

[2] Application enablement assessment based on business model risk analysis. Table provides a sample of examined risks.

Figure 1. Comparative risk analysis for select risks

	Category	Risks	Business models				
			Operator-led	Aggregator	Mass wholesale	Enterprise customer	Trusted partner
Internal	Execution	Inability to attract developers to ecosystem	Major	Moderate	Major	Moderate	Minor
Internal	Execution	Failure to reach efficient scale	Major	Moderate	Moderate	Moderate	Minor
Internal	Execution	Deficient core competency in application enablement	Major	Minor	Moderate	Moderate	Minor
Internal	Strategy	Inability to differentiate from the competition	Not applicable	Moderate	Not applicable	Moderate	Moderate
Internal	Strategy	Slow/lag in time to market for new applications	Moderate	Moderate	Moderate	Moderate	Moderate
External	Brand	Averse impact on brand and customer satisfaction	Major	Major	Not applicable	Minor	Moderate
External	Network	Traffic load on network w/o adequate compensation	Moderate	Moderate	Moderate	Moderate	Moderate
External	Cannibalization	Cannibalization of existing services/apps	Major	Major	Moderate	Minor	Minor

● = Major driver   ◗ = Moderate driver   ◖ = Minor driver   ○ = Not applicable

Source: Alcatel-Lucent Business Models

Many network providers are deciding between the Operator Led and the Aggregator models. The Operator Led model is inherently riskier based on a number of internal and external factors. Because the Operator Led model requires high efficiency (i.e., large volumes of applications and developers along with network provider full process ownership), there is a potential *inability to attract developers to ecosystem* and potential for *failure to reach efficient scale*. On the other hand, it is more difficult for network providers, and thus riskier, to *differentiate from the competition* by pursuing an Aggregator model.

Holistically, the Mass Wholesale, Enterprise Customer, and Trusted Partner models have the fewest risks. Those network providers with a lower risk tolerance may be better suited to

implementing one of these models. However, when analyzing these risks, it is critical for network providers to evaluate the relative importance of each risk according to their organizational risk tolerance and priorities. For instance, the Trusted Partner model has the potential to limit a network provider's *ability to differentiation from the competition*. For some network providers, the brand and strategic risks of the Trusted Partner model may outweigh those execution risks associated with implementing an Operator Led model.

Risk Mitigation

In light of the risks and potential rewards, network providers are moving forward with ACP programs but are adopting specific measures for mitigating the risks. The figure below highlights example risk mitigation tactics used by network providers.

Figure 2. Select risk mitigation tactics

Risks		Tactic for risk mitigation
Inability to attract developers to ecosystem	▶	Alignment with cross network provider standards and practices
Failure to reach efficient scale	▶	Process design improvement and technology investment
Deficient core competency in application enablement	▶	Staff augmentation and strategic vendor selection
Slag/lag in time to market for new applications	▶	Process, systems, and business rule design and investment

To mitigate the *inability to attract developers to ecosystem* risk, network providers are aligning with cross network provider standards and practices. In one example, a Tier II network provider in Europe was able to deliver 180 services within seven months by developing standardized ACP interfaces and processes. In other examples, cloud-based API platforms that are rooted in standards are making it easier for network providers to develop an ACP ecosystem because ACPs favor standards-based programs.

Those network providers looking to mitigate the *failure to reach efficient scale* risk are investing in technology and process design that ensures ACP applications are quickly onboarded[3] and efficiently supported. AT&T in the United States and SK Telecom in South Korea are benefiting from industrialized programs that are able to quickly and efficiently onboard ACPs.

Conclusion

Network providers confronted with the various options for ACP collaboration need to consider the inherent risks of each business model. While each organization may weigh risks differently, the relative risks between models are well understood and can be used to analyze the risks against organizational tolerance levels and objectives to support selecting the most appropriate models. Alcatel-Lucent has used its comparative analysis of the factors affecting ACP collaboration to develop a business modeling tool for each of the business models described in this paper. These tools, along with the insight gained through partnerships with customers around the globe, help network providers evaluate and select the best business model for their business objectives, financial situation and risk tolerance. New collaborative business models between network providers and ACPs are part of Alcatel-Lucent's Application Enablement (AE) industry vision. To learn more about the AE vision, visit www.alcatel-lucent.com/application_enablement.

[3] Application and content provider (ACP) onboarding is the process of registering an ACP. Application onboarding includes the process of submitting, selecting, testing, and deploying applications

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