

Detailing the Business Case for Application and Content Provider Collaboration

By Chris Kapuscinski, Ann Marie Vega

Supporting the business case for enablement of 3rd party applications is a significant challenge for network providers (NPs), one that requires careful analysis, planning, and understanding of implicit tradeoffs. This article explores the financial components and drivers for the major business models being pursued by leading network providers today.

Introduction

For the majority of network providers, the difficulty in building a business case is the single largest obstacle to launching new “application developer friendly” initiatives.¹ Many network providers are overwhelmed by the seemingly daunting task of developing an application and content provider (ACP) program business case that simultaneously addresses strategic, financial, and competitive imperatives. This challenge is further amplified by the rapid pace of change in the application and content ecosystem.

To help network providers overcome this challenge, Alcatel-Lucent performed extensive economic modeling. The goal was to provide a solid understanding of the basic business case options, including key revenue and cost components, drivers, and tradeoffs between models and scenarios. Though tailoring to each individual network provider’s implementation and context is required, analysis, based on multiple business models and NPs key decision components, leads quickly to a practical economic and technical solution for ACP collaboration implementation.

Business Models

A significant challenge with building the business case for ACP collaboration is the myriad of potential approaches for engagement. Network providers are challenged with selecting an appropriate approach and building a business case that is aligned with their strategic goals and tailored to their individual situation. Alcatel-Lucent has identified core business models, representing the major approaches employed by network providers for ACP collaboration. These business models 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 Model²*: Network providers are not involved in the creation of new applications/services choosing instead to provide bit delivery only.

¹ Based on Alcatel-Lucent primary research using a broad representation of network providers worldwide

² 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.

Figure 1. Application Enablement business model characteristics

| | Operator-led | Aggregator | Mass wholesale | Enterprise customer | Trusted partner |
|--|--------------|------------|----------------|---------------------|-----------------|
| Network provider builds direct relationship with ACPs | ✓ | | ✓ | ✓ | ✓ |
| Network provider maintains customer-facing responsibilities | ✓ | ✓ | | | Variable |
| Network provider responsible for app selection, screening, testing | ✓ | Variable | | | ✓ |
| Percentage of revenues shared with ACPs | ✓ | ✓ | | | ✓ |
| Standard vs. non-standard relationship with ACPs | Standard | Standard | Standard | Standard | Non-standard |

Business Model Economics

Financial Benefits

There are significant differences in the nature of the financial benefits accruing to network providers from each of the NP/ACP business models. One model may provide direct revenue from the sale of 3rd party applications, while another may help reduce subscriber churn or market share while generating limited revenue from application sales. Naturally, these differences can form the basis for business model selection — depending on a network provider’s financial position and objectives.

The charts below compare the sources of financial benefit from each of three business models, assuming an implementation for a Tier 2 network provider in a developed market. For the Operator Led model, the direct financial benefits represent ~7% of the total. This is due to the large proportion of free applications, the low revenue share that the network provider is taking (30%), and the large number of low-volume, niche applications; however, the indirect financial benefits can be quite large. In contrast, the Enterprise Customer

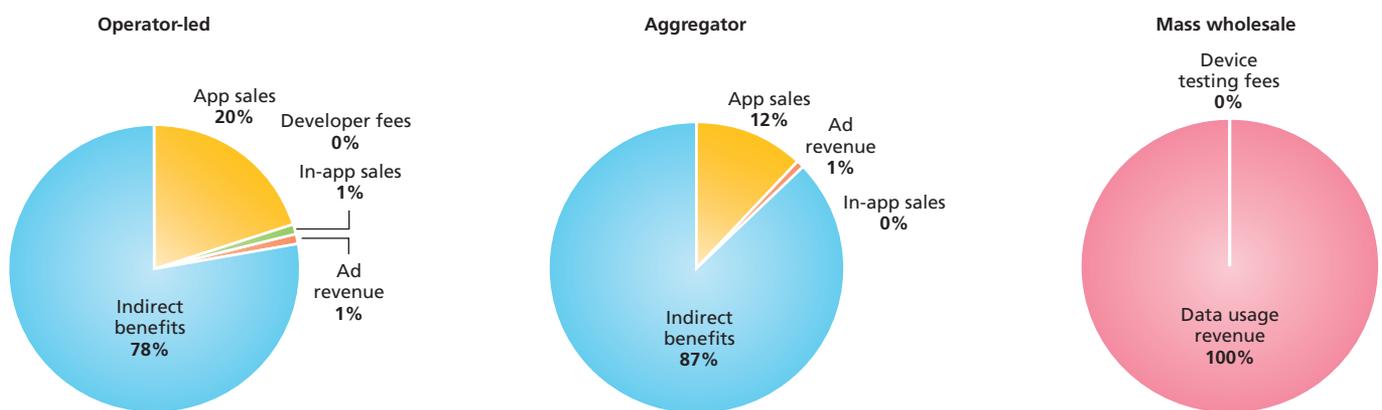
model achieves 100% of total benefits from direct revenue sources including API usage and developer onboarding fees. On the other hand, the Operator Led and Aggregator models derive 93% and 97% of total benefits from indirect sources respectively.

Cost Structure

Network providers considering the various approaches to working with application and content providers should compare the start-up, fixed recurring, and variable (success-based) recurring costs, and brand loyalty effects across Application Enablement models.

In comparing risk profiles of possible financial investments, models with high startup costs and high fixed portion of recurring costs are considered higher risk. As highlighted in the matrix below, the Enterprise Customer model is typically the highest risk due to high startup and fixed recurring costs. From an investment comparison perspective, network providers seeking low startup costs coupled with low fixed recurring costs, may find the Trusted Partner model most appropriate.

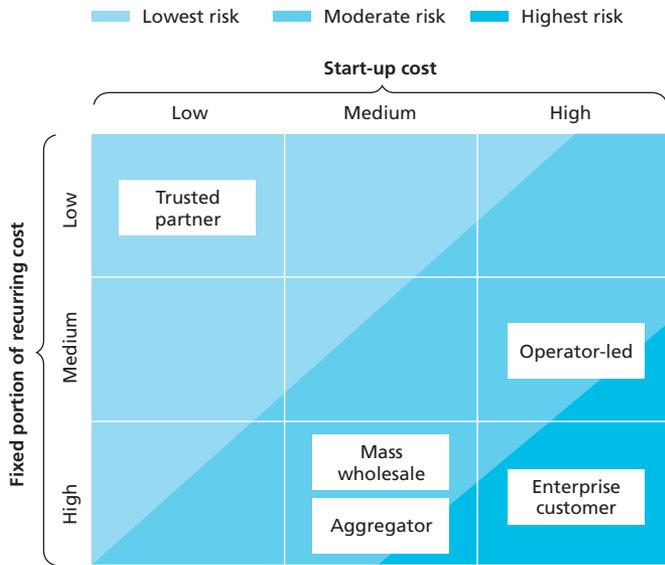
Figure 2. Source of financial benefits by business model



Indirect benefits include incremental subscriber retention, subscriber acquisition, and data plan ad adoption.

Source: Alcatel-Lucent Business Models

Figure 3. Investment comparison across business models



Source: Alcatel-Lucent Business Models

Drivers of Cost

Developing a business model that clearly communicates the required investment and expected returns requires a thorough understanding of cost drivers. These drivers can reflect changes in the scale of a network provider’s ACP program as well as differences in the market context for an implementation. While the costs in each model are driven by a slightly different set of drivers, there are some common components across models. Figure 4 below summarizes the drivers of recurring costs and the degree to which they impact the business models.

Based on Alcatel-Lucent’s experience, the *percentage of subscribers with smartphones*³ is a significant driver in both the Operator Led and Aggregator models. Since smartphone subscribers download more applications than feature phone subscribers, these users drive increased recurring costs. Under one Aggregator model, total recurring costs, excluding revenue shared, increased by 6% when the percentage of subscribers on smartphones was increased by 50%. A network provider considering these models, should plan for demand from smartphone subscribers and analyze how their own subscriber metrics will ultimately impact their specific ACP business case including potentially higher financial benefits.

The number of *APIs Enabled* is another common driver of recurring costs (as well as startup costs) across a number of models. Network providers enabling a large number of high-level⁴ APIs will ultimately see higher recurring costs in all but the Mass Wholesale and Trusted Partner models. In one instance of the Enterprise Customer model, a 2x increase in the number of APIs enabled resulted in a total recurring cost increase of 25%. While recurring costs can increase with API exposure, corresponding data and API revenues can also increase resulting in a net positive business plan.

Conclusion

Through extensive modeling and analysis of network provider economics, Alcatel-Lucent has developed a solid body of experience and modeling capability that helps NPs during the early stages of their ACP business model development. Though the market is still young, the emerging business models and their economics are already understood with sufficient confidence to allow for more in-depth analysis. Alcatel-Lucent understands the risks associated with each model, as well as the expected benefits.

³ Alcatel-Lucent comparative analysis of business models

⁴ Examples of high-level APIs include location and presence

Figure 4. Drivers of recurring costs

| Driver | Operator-led | Aggregator | Mass wholesale | Enterprise customer | Trusted partner |
|--------------------------------------|--------------|------------|----------------|---------------------|-----------------|
| Subscribers or user (#) | ○ | ○ | ○ | ◐ | ○ |
| APIs enabled/network abstraction (#) | ◐ | ● | ● | ● | ● |
| Devices supported (#) | ◐ | ○ | ○ | ○ | ○ |
| System/billing integration time | ◐ | ◐ | ◐ | ● | ◐ |

● = Major driver ◐ = Moderate driver ◑ = Minor driver ○ = Not applicable

Source: Alcatel-Lucent Business Models