

By Lorien Pratt and Mark Zangari

Leading the way to complex business models

App stores represent a quantum change in the way the telecom industry responds to propagating innovation. But measuring success of the two-sided model is tricky

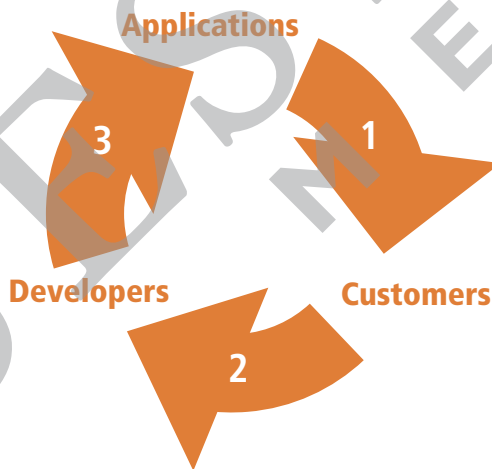
As new business models proliferate, a widespread pattern in telecom is for one operator to imitate another. Handset subsidies, prepaid billing, unlimited usage pricing plans and push-to-talk are but a few examples.

App stores are another case in point. But operators that emulate their superficial characteristics do so at their peril. There are several key strategic decisions that operators must make in establishing what is a complex and subtle business model, and on which the success or failure of an app store initiative depends.

App stores represent a quantum change in the way the telecom industry responds to propagating innovation – in fact, a change in the way operators navigate themselves through what is a more complex and more quickly evolving landscape than faced in the past.

App Stores are usually implemented as two-sided business models. As described by Evans, Hagiu and Schmalensee in “Invisible Engines: How Software Platforms Drive Innovation and Transform Industries” (MIT Press, 2006), these differ from traditional linear supply chains in that a platform company

The ‘virtuous cycle’ feedback loop between apps, customers and developers



1. The availability of more applications makes the platform company's offering more valuable, and results in more customers using the platform.
 2. More customers using the platform attracts more developers to develop for it.
 3. More developers working on the platform creates more applications for that platform...
- ...which takes us back to the first point.

relies on a community of third-party developers to enhance the value of the platform by creating applications for it.

The idea behind the two-sided model is to increase the platform vendor's market penetration, via the “virtuous” cycle (see diagram above).

If all goes well, a savvy platform company can ride this cycle to dramatically grow its customer base, as has been proven in several industries. Note,

however, that the converse is also true. If a vendor fails to attract developers, it will have fewer applications and therefore lose customers to application-rich competitors, making it even harder to attract developers. So this is not a sure-fire strategy.

Two-sided competition

While the concept of earning revenue from two separate customer com-

munities (developers and end customers) and leaving the hard (and risky) work of creating content with mass appeal to others sounds attractive, there is a hidden cost. A two-sided platform company must not only attract customers to its products, it also must compete for attracting the best developers to its platform.

Is competing for developers any different from competing for customers? In some ways, the same dynamics apply. In his new book, “Free”, Chris Anderson (of “Long Tail” fame) describes some subtle nuances in different subsidization approaches.

Mobile operators frequently provide free handsets to customers who sign contracts. Similarly, software platform vendors that run sophisticated two-sided models frequently give away their development tools. Any company seeking to run an app store strategy must be prepared to give away at least its development tools at no cost. It must also support its developers with training, documentation, a call center – in short, all the infrastructure required to support any product. However, no direct revenue is generated by this investment. So this approach only makes sense because of the enormous potential return offered by reaping even a fraction of the revenues produced the “virtuous cycle”.

As noted above, giving away something for free is not alien to telecom’s sales vocabulary. However, it is usually alien to the business model. Of course, “free” handsets are not really free. An operator offering a “free” handset deal knows exactly how and when the cost of the handset will be recouped.

Free development tools are different. Developers never pay anything back to the vendor that provides them. Instead, the payback comes when the applications the developer creates lure new subscribers to the operator’s network (or entice existing subscribers to spend more money with the operator) – a cross-subsidization effect. There is no guarantee that this will happen, nor is there even an obvious single metric that

the operator can monitor to determine whether or not it has happened. How, then, can an operator know whether or not a two-sided business is succeeding or failing?

Monitoring performance

Ultimately, the success of the two-sided model comes down to whether the investment in attracting and maintaining the developer community is paid back by the increase in revenue brought about by an increase in subscriber numbers, and/or revenues per subscriber due to the applications. This is complex to determine, and simply measuring individual business performance metrics is unlikely to provide a definitive answer. More specifically, such metrics alone do not provide any direction regarding what to change if one or more values are not within their desired range.

Instead, to successfully monitor and steer a two-sided business (or any complex business model with indirect effects, feedback loops and similar non-linear structures) a more sophisticated approach is required, based on building a model of the system being monitored.

Under this approach, the behavior of the model can be explored under various conditions and used to develop an understanding of the basic characteristics of the real-world system. Once this has been done, it can be fed with data obtained from ongoing business metrics. This provides visibility into how the system as a whole is operating along with how individual parts are performing.

Copy cats who fail to deploy such management infrastructure run the risk of failing simply because they had no way of knowing whether or not they were succeeding.

Although every operator’s experience is different, there are some common principles relevant to any telecom pursuing this path. A sample:

- Intangibles matter more than ever. Cross-subsidization depends on perception, brand, and marketing.
- The developers’ role is not to be a

substantial source of revenue to the platform company, nor is this the role of applications sales.

- Attracting and retaining a development community is crucial, and significant marketing and support resources are essential.
- The platform company benefits by understanding and supporting its developers’ business model as well as its own.
- Some telecom network platform services (such as location-based services) can be profitable and highly differentiating; others can result in significant wasted effort competing against entrenched players.
- Two-sided systems can produce a “runaway” effect, leading to exponential growth.
- Measurements to track during the early days of building an app store to determine its success include: the number of developers signing up, the number of applications being registered and the number of applications downloaded.

These principles are not just good ideas – copied from existing app stores because they seem to work – but are also supported by economic and case study analysis. We have found that one of the most informative approaches for a team of decision makers to understand two-sided models is to collaboratively draw a picture of the flow of value and information within them. For instance, a picture showing how developers influence end-users, and vice versa, helps to show how revenues that are generated from one side of the model can be used to cross-subsidize the other.

In an app store, understanding these principles can mean the difference between success and failure. With these tools in place, app stores are only the beginning, and telcos with this capability can explore other business models and related decisions that can create significant competitive differentiation. **TA**

Lorien Pratt and Mark Zangari are co-founders of Quantellia – www.effectivedecisionmaking.net