

Grow and Differentiate your Device (Hardware) Business

A Telco and Networking Software Licensing and Monetization Best Practices White Paper



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Executive overview

For many years technology companies sold products where functionality was dependent upon hardware and device capabilities. Acquiring new functionality usually required buying a new device that could do something that was not possible with the previous generation of device. Changes in technology, customer expectations, global competition, commoditization of hardware, tighter CAPEX budgets and customer demand for more value and functions without repurchasing hardware—or persistence of functionality across hardware changes—have forever shifted the market.

This paper explores some of the evolutionary drivers and provides guidance on how to navigate the shift from a device-centric to a more solution-centric, feature-based licensing model approach that enables differentiation. We explore business and implementation considerations, giving you a vision of how to take advantage of immense opportunities inherent in a business focused on providing extensible and flexible solutions rather than selling just hardware and devices.

Most importantly, movement to a solution-centric, feature-based licensing model approach allows you to increase recurring revenues and add great flexibility to your product lines, all while making your company easier to do business with.

An industry in transition

Generically, two primary disruptors have forever changed the world of telecommunications and device manufacturers. First was the 'Internet Bubble', which drove hardware commoditization—from servers to networking equipment incorporating high-reliability attributes that had been solely the domain of proprietary, non-open-standard devices. Telco service providers could now procure standardized hardware at significant cost savings-giving them leverage for lower prices and increased competition by eliminating the need to upgrade just to gain additional capability. Margins started to erode. And today, with the advent of

multiple cores, standardized interfaces, virtualization and cloud offerings, the market demands and measures more in terms of capability (*features and capacity*), and less on brand.

Second was the 'Smart Phone' which was ushered in by Apple and the iPhone. Today's sophisticated customers expect device capabilities as table stakes where a device family's success is driven largely by the application (*software*) ecosystem. For example, when your car wants a data stream to schedule a service call or provide internet radio, you care less about phone brand than about capability. As a manufacturer, your device will have to support the rapidly increasing pace of new functionality without continual hardware uplifts.

Thus, hardware, and more pointedly, device manufacturers have had their entire business model turned on its head and must evolve in the new domain of the software-centric world in order to survive.

Business considerations

Taking the steps to move your business from hardware-centric to solution-centric opens a world of additional revenue possibilities. In particular, you can realize greater flexibility in product offerings while making your company easier to do business with. Both of these improvements require little marginal overhead. While the path to get there requires careful thought, you can transform your business incrementally with wins along the way.

When making the transition, businesses should focus on three areas to drive business decisions:

- What are you selling?
- How will you monetize it?
- Who will sell and fulfill it?

Clearly there are a lot of details but the vast majority fall into one of these categories so let's explore them.

Definitions

Any discussion of technology and licensing has many terms that are often used in different ways. Here are definitions of terms used in this paper:

- **Device/Hardware:** An element usually sold as an independent functional unit. Generally, the term device refers to a commodity such as a mobile phone, tablet, or other end-user item. Any physical unit or element that delivers a set of functionality. Includes both devices and larger elements such as servers and other network equipment.
- **Software:** Applications and other malleable, replaceable code installed on hardware. In a software-and/or feature-based solution-centric approach, your applications and software become the driving line items in your portfolio.
- **License:** A mechanism, usually involving a key, token, or some other registration, that authorizes use of software functionality. Licenses enable you to tailor solutions and expand your product line with less reliance on physical hardware changes or delivery.
- **Feature:** A capability or capacity that is embodied in one or more hardware and software elements and usually is a sellable line item.
- **Solution:** A combination of software, hardware, features and services sold as a collection to solve one or more specific business needs. Whereas a company might once have sold 50 cash registers to a customer, that same company now sells a solution that supports 50 transaction points, along with inventory monitoring capabilities, and can add value with a new application or license key.

What are you selling?

In a traditional hardware or device model, the primary line item is an assembly of some sort: frame(s), card(s), box(es) or a commodity standalone unit such as a phone. Capabilities, usually in the form of features, typically form subtending components in the Bill of Materials (BOM) or line items that add value to the hardware. Thus, you sell a chassis with some number of features added on. Extensions to the original sale may include new features, but usually center on new cards or other tangible additions, if not replacements. This was often true in commodity devices that were considered expendable with a limited lifetime.

In the new world, we come in from a different dimension. We sell capability (*features and capacity*). Rather than quoting a WhizMaster 5000 with 85 processor cards and, oh by the way, it will service up to 300 customers; you now quote a 300 Customer Support System that just happens to include the hardware to make that happen. Rather than selling a purpose-built word processor, phone or other end user device, you sell a unit that can be expanded by a software change.

Think very carefully about this. We have just broken and replaced every product management and quote configuration rule and asked our entire carefully trained sales force to STOP focusing on selling hardware. Every company that's made the shift has had to overcome this mind-numbing change in thought process. Be careful to avoid minimizing its importance or difficulty.

How will you monetize it?

So, if what we sell is different, then how it gets monetized will also change. In fact, there are many more creative

opportunities for driving revenue with a solution-centric, feature-based licensing model approach.

Again, in the traditional hardware world, the revenue stream boils down to two components:

1. **Units of hardware with an associated capability as one-time sale, usually with a high margin**
2. **Annuitized revenue stream with support contracts, usually for both hardware and software, with or without an ability to upgrade software along the way**

In reality, many hardware companies deeply discount support contracts in order to make the initial sale; ultimately this undervalues a critical revenue source. Focus on devices and larger hardware tends to drive a very bumpy revenue cycle, especially for large contracts with long sales intervals.

The other challenge with a hardware, device-centric marketing approach is that customers have a natural tendency to want to drive down incremental cost of each unit which puts your sales in a defensive posture. In fact, the software capabilities or features often times takes a back seat to physical device and it is solely the device that drives pricing.

Fast forward to today's solution-centric, feature-based licensing model approach and we see that changing product focus to one of software, feature, services and solution value moves your marketing conversation away from customers' perceived cost associated with manufacturing hardware (*and the drive to lower it*) and the traditional perceived near-zero distribution cost of software.

A shift toward one of overall value enables you to balance all aspects of product delivery, optimizing overall margin rather than in a piecemeal fashion.

This layer of abstraction of solving business problems now puts the marketing and sales conversation on a level of what brings most value to your customers and eliminates concern over how you provide it; thus giving you the flexibility to manage your business' moving parts as you need to, while keeping a consistent external brand.

In particular, using a solution-centric, feature-based licensing model approach to sell the value of your product provides tremendous flexibility in both satisfying your customers as well as increasing the revenue stream.

Software and Licensing Facilitates Monetization

With licensing, products have several possible revenue streams. The license represents a right to use a well-defined set of capabilities (*features*) or capacity. Within this model there are several paths to improving revenue with licensing.

Perpetual Licenses: Perpetual licenses provide customers with an ongoing right to use the product and features within the current operating environment. It may have constraints on number of processing units, users or other attributes without any promise of maintenance or support (*although most software vendors offer separate maintenance plans which are often times a percentage of the license*) or usability in the future. It provides you with a one-time immediate revenue increment. Some customers prefer this model as it offers some future-proofing of their investment even in the absence of a maintenance plan. In most cases, customers choose to capitalize such purchases so sales are subject to constraints of CAPEX budgets.

Subscription Licenses: Subscription licenses provide customers with a right to use within a given time constraint. Subscription licenses often benefit customers by providing a justifiable transition from CAPEX to OPEX budget. As a vendor you will often benefit by converting what was a one-time sale into an annuity with minimal recurring sales investment. Subscription licenses also provide you with additional license and deployment options:

- **Rental:** You open up new markets by allowing a customer to use your product or feature set for a short period of time. This works to everyone's benefit by providing exposure to your product and giving the customer the flexibility they need.
- **SaaS or On-Demand Use:** A Software as a Service (SaaS) or an on-demand delivery model approach allows customers to adjust their usage as needed. Often there is a threshold baseline limit but usage beyond that is as-needed. An example would be the number of users or ports that correspond to fixed or recurring events such as contests, sales, holidays, etc. Revenue is achieved by periodic audit or by issuing

keys valid for a specific period. This model has annuity properties and minimal sales overhead. It provides many customers with a predictable and flexible expense model and little or no additional cost to you as a vendor.

- **Usage Pattern:** A variant of the on-demand case, customers are able to shift use of the product, capabilities (*features*) and capacity where needed. This might be to accommodate a follow-the-sun use pattern, cyclic uses and shifting among machine capacity in a production or shift cycle. For example, a customer uses this model to enable their customers to change the functionality of high-CAPEX hardware based on production cycles, thus offering the equivalent of swapping out an entire factory section of equipment as needed.
- **Trial-to-Sale:** Another powerful technique for sales with the solution-centric and feature-based licensing model approach is to allow customers to use the product for a free or reduced cost for a period of time. At the end of the trial, the product either deactivates or receives a new license attached to revenue. This approach goes beyond the initial sale in that you can enable your customers to try various capabilities with a well-defined expiry thus gaining interest without having to take an overt action to minimize unpaid use.

Maintenance: Maintenance and support is sold separately, though it can be bundled, and has several aspects including both updates and upgrades. This is an important distinction. Updates are bug fixes and related changes to the product that leave basic functionality unchanged. Upgrades are new features or new capabilities. Both updates and upgrades can result in new versions however, and as a result they are typically sold as separate line items and result in two distinct revenue streams.

Hardware: Finally, we return to hardware. Hardware may be sold as a separate item or bundled as part of the feature set with its price included in the features, although cost may be managed separately for some accounting purposes. While hardware/devices are still an important part of the equation, notice that we change their emphasis from being the primary line item to an entity that enables the sale or realization of features. This is the primary thought shift.

Who will sell and fulfill it?

While the traditional options of direct and indirect sales still apply, transitioning to a solution-centric, feature-based licensing model approach—where licensing plays a key role in defining your business and revenue models—opens new doors for fulfillment and support. It is critical that you have complete visibility into customer transactions and that you have solutions and processes defined to manage the fulfillment of licenses and all related electronic deliveries. In addition, you need to provide rigorous configuration

management capabilities that both complement and reinforce your sales configuration rules. Herein is a summary of sales and fulfillment considerations and what these options mean to you, your intermediate vendors and your end customers:

- **Direct Sales:** Your sales force continues to sell as it always has, but to make the transition to a solution-centric, feature-based licensing model approach easier for your sales organization, it is important to have an electronic software fulfillment system that is robust and highly scalable that interfaces with your supply chain systems.
- **Indirect/Channel Sales:** As with traditional inventory, licenses may be sold through resellers and channels in multiple ways. You can transfer licenses to your vendors and they can sell them as desired or you can continue to manage the “inventory” for them. With an electronic software fulfillment system, you can retain full back-end activation for all licenses, giving you near real-time metrics and visibility to your installed base while retaining transparency for your channels, if desired.
- **Storefront/Self-Service:** In some cases you will wish to allow your customers to purchase products on their own through an electronic storefront. It is critical to ensure your customers have a seamless transaction through the same electronic fulfillment back-end, providing you with near real-time fulfillment information. For those customers who need to change their usage periodically, such as with the usage pattern approach described earlier, fulfillment systems can provide your ERP systems with triggers and full transaction information to keep your data current.
- **Usage Metering:** A new opportunity that arises when moving to a solution-centric, feature-based licensing model approach is the ability to use the product as needed and to be charged for usage. This is similar to any utility post-paid approach. When moving to a model like this, it is critical to allow customers to adjust their use as needed while enabling automated collection of usage data (*which may be billed to the customer, if agreed*). These tools also facilitate software license compliance audits.

Hardware costs for this model, can be managed in several ways. Assuming you, as the vendor, provide the hardware, your pricing model may contain an initial installation cost threshold to offset some significant portion of the necessary capital. You may also choose to capitalize the system, or some portion, as you still retain ownership and then use an appropriate depreciation schedule. Balancing these costs will depend on your particular business model. You may also choose to move completely to commodity hardware which the customer will procure while still charging for usage of the system’s capabilities.

- **Inside Sales:** Movement to a solution-centric, feature-based licensing model approach also offers great opportunities for your inside sales force. Using back-end license fulfillment, software fulfillment and distribution systems provides up-to-the-minute data for all of your licensed products and customers. This enables you to establish triggers and metrics to increase inside sales efficiency for leads, cross and up-sell opportunities and follow-up. Analysis of trends and use patterns can quickly identify new leads for your sales funnel and help build stronger, fact-based customer relationships.

Implementation considerations

As with any major business model change, there are a myriad of details to consider. New opportunities, along with fundamental changes to processes and mindset, require careful change management and leadership. The high points below will help you avoid some of the land mines. To provide guidance along the way, Flexera Software’s strategy consultants and engineers bring decades of experience across multiple industries to help you navigate these challenges.

- **Fulfillment Models Are Often Turned Upside Down:** We touched upon this at the beginning. Placing tangible items such as devices and other hardware at the top of the food chain is appealing to the senses, especially when this is the approach that got many companies through so much of the technology evolution and drove their growth for so long. As a result, it is challenging to wrap the corporate consciousness around selling features and solutions. Changing the value proposition is the single most important change to manage.
- **Quote-to-Cash:** Moving to a solution-centric, feature-based licensing model approach brings you and your customers incredible flexibility. When working with quote-to-fulfillment-to-invoice processes, pay careful attention to how configuration models and Bills of Materials relate. When used in a device or hardware model, the tangible nature of deliverables drives the data structures and dependencies. A solution-centric, feature-based licensing model approach removes those hard boundaries, often making it difficult for product management staff to initially grasp a new and effective set of structures. Ensure that decisions made at all stages, from sales to quote-to-fulfillment-to-invoice, are examined against the big picture. It is far too easy to optimize processes at one portion of the chain causing dramatic overheads downstream. There are no silver bullets since each business is different, but keeping perspective across the entire enterprise is crucial. In my own personal experience I found that Flexera Software experts can guide you in designing your approach.
- **Revenue Recognition**—Revenue recognition shines a bright light on moving to a solution-centric, feature-

based licensing model approach since we can greatly speed up the recognition process. Fortunately, there are direct analogues from physical to software and feature-based revenue recognition. However, almost instantaneous electronic delivery of software and enabling keys permits rapid acceleration of revenue recognition. In addition, generally accepted rules for software and feature delivery are extremely favorable with respect to when you can recognize revenue relative to a traditional hardware-as-prime sales model.

- **Fulfillment Ecosystem**—Just as with a hardware and device-centric model, you have multiple fulfillment options as discussed above. Moving to a solution-centric model offers new opportunities but, as with other parts of the business, there are new subtleties that you must carefully consider to achieve business efficiencies. By way of example, most device companies will quote specific hardware and ultimately invoice with a series of unique serial numbers that satisfy a number of process wickets including incoming inspection and SOX traceability auditing. In the intangible world of software, you may deliver an authorization to retrieve a certain number of keys but they will not necessarily be generated until activation. In some cases, there are no visible keys at all when devices register without explicit customer activity. All of these affect your business including appropriate recognition of revenue. Ensure that your fulfillment ecosystem understands all of the constraints and dependencies associated with your product and your business demands as you implement new processes.

Partner with a proven provider with market leading solution and expertise

Flexera Software's licensing, entitlement management, software delivery and update solutions are designed to handle the capabilities and intricacies mentioned throughout this paper. They also provide expert guidance on setting policies and building operational models to ensure your move to a solution-centric, feature-based licensing model approach is successful. Regardless of the size or phase of your business, Flexera Software's expertise and solutions are there to help you in your journey.

Conclusions

Transitioning any hardware or device business to a solution-centric, feature-based licensing model approach opens up a world of opportunity and flexibility that adds value to both customers and vendors alike. Global competition and commoditization of hardware has driven us in this direction and most customers now demand it. Only niche players will be able to sustain the traditional hardware/device centric model into the future.

While adopting a solution-centric, feature-based licensing model approach is the way to go, it brings with it challenges—many emotional and psychological—for those companies which come from a different legacy. To succeed you must keep the big picture in mind, have a deep understanding of the impact across the organization and fully articulate the value a solution-centric, feature-based licensing model approach brings to driving revenue and the entire supply chain. Look to others who have made the leap and ask them to share the good and bad. Strategy consultants who have guided companies through the process can be your best friends and are well worth the investment.

Authored by:

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About Flexera Software

Flexera Software is the leading provider of strategic solutions for Application Usage Management; solutions delivering continuous license compliance, optimized usage and maximized value to application producers and enterprises. Flexera Software is trusted by more than 80,000 customers that depend on our comprehensive solutions - from installation and licensing, entitlement and compliance management to application readiness and software license optimization - to strategically manage application usage and achieve breakthrough results realized only through the systems-level approach we provide. For more information, please go to:

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