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Responding to Virtualization: How Software and Services Can Save Your Hardware Business

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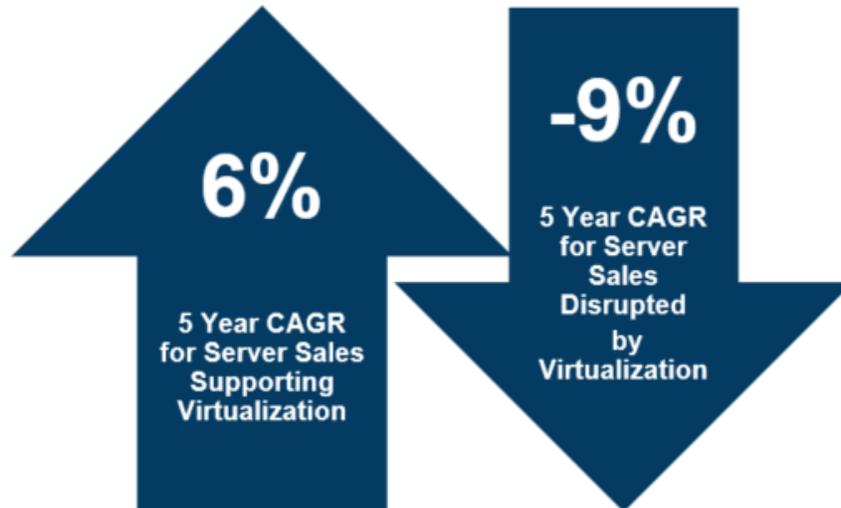
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Responding to Virtualization: How Software and Services Can Save Your Hardware Business

Hardware vendors are under attack. A number of factors are threatening hardware vendor revenue streams: aggressive pricing, competitors with lower cost labor and/or materials, innovative features or capabilities, and potentially the scariest... virtualization. As more and more hardware businesses are being attacked by new entrants and software-defined solutions, vendors are increasingly looking to software and services to fight back against the virtualization wave.

There is no doubt that virtualization is increasingly disrupting hardware businesses. In the server market alone, IDC predicts server platforms that support virtualization technologies (e.g., x86) will be the only server hardware type to grow between now and 2020, as noted in the figure below.



IDC Market Forecast: Worldwide Server Forecast Update, 2016–2020

Sales Supporting Virtualization is 2015-2020 forecast for x86 Servers

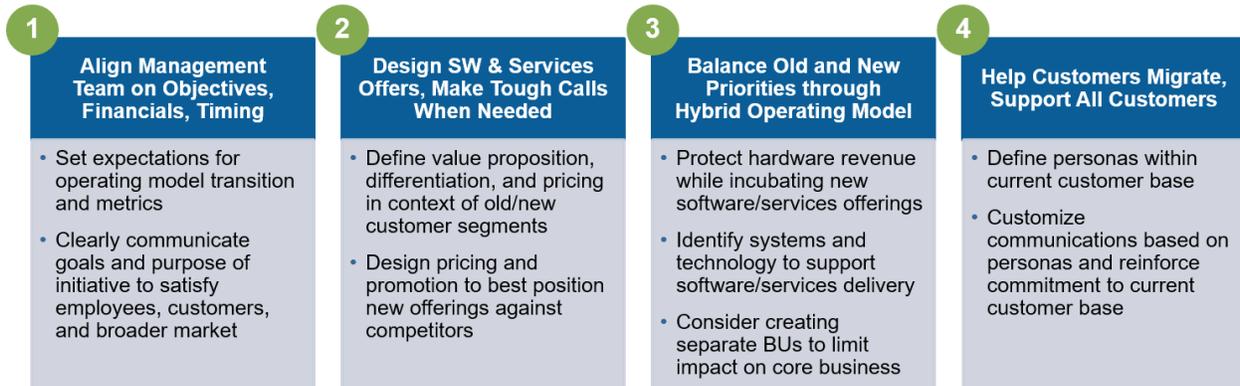
Sales Disrupted by Virtualization is summed total CAGR of CISC, RISC, EPIC, and ARM sales projections from 2015-2020

The good news is that hardware companies are fighting back. While the key steps in transforming a hardware-centric business to a solutions-centric business are well understood, there are emerging guideposts on how those steps apply to the specific case of virtualization. Important lessons can be learned from the many businesses that have been threatened by virtualized technology—both those that responded and survived and those that did not respond and perished.

Transitioning from Hardware to a Software and Services Business: A Four-Step Playbook and Lessons Learned

To successfully transform a hardware company to a hardware, software, and services business, the following four-step playbook should be followed:

Four-Step Playbook for Shifting to Hardware + Software + Services



Hardware companies can take different approaches to executing this playbook as they add software and services solutions to their portfolios. IBM, a company undergoing its own long-term transition away from hardware, leveraged acquisitions and divestitures to change its revenue profile from 18 percent coming from hardware sales in 2010 to 7 percent in 2016.¹ Alternatively, Agilent Technologies, Cisco Systems, Brocade, and many more hardware-centric companies have organically shifted their business models to leverage software and services, either through large internal initiatives and investments or by partnering with forward-looking customers to develop solutions.

For hardware companies embarking on this transformation due to threats from virtualization, the four-step playbook can be further refined to help them compete and win. In the following section, we identify key lessons for hardware-centric companies undergoing this four-step transition, then provide a real-world example from the communication service provider (CSP) industry. The CSP market is one of the largest markets we see being influenced by virtualization, specifically through software-defined solutions that increasingly replace legacy network hardware systems.

¹ 2010 percent of revenue calculated by dividing “Systems and Technology External Revenue” from Total Consolidated Revenue. 2016 percent of revenue calculated by dividing “Systems Hardware” revenue by Total Consolidated Revenue as reported in 2010 and 2016 IBM Annual Reports.

Step 1: Align Management Team on Objectives, Financials, and Timing

Virtualization Lesson: Embrace how fast your business is going to get cannibalized.

When a company's hardware components are virtualized, the market it operates in changes rapidly. Instead of ignoring or downplaying the changing market, management teams must embrace it by taking a candid view of how quickly the legacy hardware business will get cannibalized. Building management-level consensus around the degree and pace of adoption, and the resulting impact on company financials, sets the stage for appropriate action.

CSP Industry Example:

Cable and telecom companies are embracing virtualization technologies for cost savings, flexibility, and scalability. These traditionally hardware-centric companies have aggressively built out network function virtualization (NFV) software and services, requiring quick alignment of management to enable market execution. According to IHS, the NFV market will grow at 42 percent CAGR from 2015–2020, with software representing 80 percent of market spend in 2020.

Step 2: Design Software & Services Offers, Make Tough Calls When Needed

Virtualization Lesson: Get ready to compete against yourself.

The release of virtualization software with bundled services puts pressure on hardware business units to accelerate refresh cycles, build flexible capabilities into hardware, and make supply chains more lean and responsive. When offering a range of solutions, it is important to clearly define the value proposition of each service, as well as price, in the context of old and new customer segments. Companies that can best leverage their hardware positioning to launch and grow their software and services units will have a head start in the race to capture virtualization customers.

CSP Industry Example:

A mix of hardware and virtualization software and services solutions are still required to meet customer needs. Although NFV ecosystems represent a significant, high value opportunity for some customers due to improved functionality and a reduction in ongoing costs, it's not the right fit for all customers. We've seen the industry target customers within their install base that are likely to have successful deployments, while keeping legacy customer relationships intact.

Step 3: Create a Hybrid Operating Model that Balances Old and New

Virtualization Lesson: Developing, selling, and servicing software is different from hardware.

Companies that transition from hardware to hardware, software, and services need to build out new capabilities associated with their new software-oriented operating model, including:

- **Sales:** Identify software-savvy customers that expect ease of install and consistent updates; adjust Sales compensation models for subscription/recurring revenue licensing
- **Services:** Stand up implementation, support teams for configuring and delivering software; develop migration offerings to support customers at various stages in product lifecycle
- **Product:** Identify new pricing models (subscription, consumption, etc.)
- **General & Administrative:** Update KPIs to track cannibalization, churn, cross-sell

CSP Industry Example:

Individual CSP providers have already taken clear steps to shift to virtualized software solutions. In order to build out these solutions, CSP providers have deployed proofs-of-concept efforts with strategic customers, made key infrastructure investments, and signaled to the market that hybrid hardware / virtualized software solutions are being prepared for go-live.

Step 4: Go Above and Beyond to Help Customers Migrate; Support Customers Who Aren't Ready

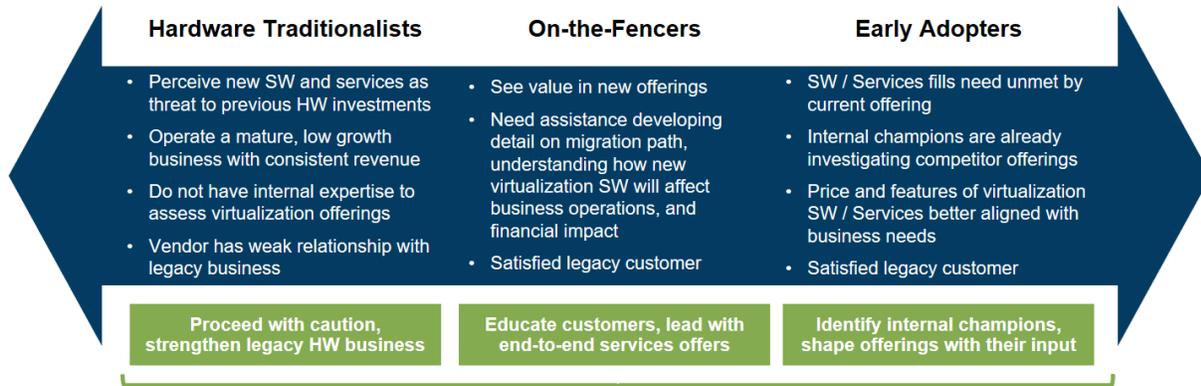
Virtualization Lesson: As much as virtualization scares you, it scares your customers just as much.

Among customers of virtualization software and services providers, some may be reluctant to adopt new technologies and/or, new software pricing models (e.g., perpetual license, subscription) or establish new operational processes to support new technologies. Other customers may be craving the opportunity to leverage new technology-enabled services. Customers can be grouped by their transition personas, as captured in the image below, and then be targeted or supported depending on their comfort with new solution packages.

CSP Industry Example:

CSP providers have initially targeted large, strategic customers with virtualization offerings. Customers that have been identified as early adopters can help build out the value proposition and positioning for new, bundled services that can be used to move down market. By incrementally developing the market and targeting early adopters, virtualization providers gain experience and expertise that they can use for the remainder of their customer base.

Hardware Customer Personas Considering Transition to Virtualization Software and Services Solution



Recommended Vendor Approach by Customer Persona

Key Takeaways

Virtualization isn't going away, and hardware companies need to move fast, make tough decisions about where they invest their money, and be clear-headed about which customers they target. Making the transition from hardware to virtualization software and services requires a firm-wide business model and organizational shift that takes time to get right. By following the playbook discussed above and establishing a firm-wide commitment to the success of this transition, hardware companies will have a leg up on their competitors.

Waterstone Management Group helps technology companies and investors create measurable value by identifying and capitalizing on disruptive growth opportunities and driving excellence in Services, Cloud, and Customer Success performance. Should you have any questions on this topic or wish to discuss virtualization opportunities in general, please contact:

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