Supply Chain Management

Viewpoint

Save \$1 billion in three years

A master plan for transforming the telecommunications supply chain



High performance. Delivered.

By Ramon Colomina, Terry Steger and Jason Cook, Accenture When it comes to achieving high performance, communications carriers have it doubly tough. For decades, their operations were defined by a non-competitive market with predictable, stable volumes. The mission now is to present a high-level look at supply chain improvements that, for communications companies, are both feasible and essential.

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William Shakespeare noted that "Some are born to greatness, while others have greatness thrust upon them." In the business world, however, greatness is neither inherited nor bestowed. It is achieved almost solely by a deft combination of effort, innovation and adaptability. It is the product of what Accenture calls High Performance Business—the behaviors and characteristics that the best companies leverage to consistently outperform their peers.

When it comes to achieving high performance, communications carriers have it doubly tough. Virtually all are the product of a regulated environment whose requirements were entirely different from how successful telecom companies must now perform. For decades, their operations were defined by a non-competitive market with predictable, stable volumes. The mantra was high levels of availability across all services. Minimizing downtime was a higher priority than maximizing cost-effectiveness. Maintaining large material inventories, excess network capacity and redundant assets were common characteristics of the service strategy. There was minimal risk to this approach since costs could be passed on to customers.

Telecom deregulation was initiated quite some time ago and has taken a while to set in. But even in today's environment, vestiges of the old model remain. In most carriers' organizations, for example, the technology infrastructure has been upgraded slowly and consistently, but not dramatically. Telecom companies are also seemingly behind the curve when it comes to the use of outsourcing: In-house is still in-style. But perhaps the hardest tradition to shake has been "regionalism." Old-line telecoms grew up with a "California service area," a "Mid-Atlantic service area" and so forth. To this day, most of their operating approaches are similarly regional, redundant and (thus) misaligned with a national or global, post-regulation, hyper-competitive market for communications services.

Time is running out

Fast forward from Shakespeare to Gerald Ford, who once observed that "Things are more like they are now than they have ever been." The message is simultaneously muddy and clear. On the one hand, things actually are less like they used to be than they have ever been. That is the muddy part. The clear part is that, for telecom companies, dramatic, transformational change is imminent and essential. The time clock on slow, evolutionary change is running down.

The biggest incentive for dramatic, transformational change is competition. Wireline, wireless, cable and Voice over Internet Protocol (VOIP) are all competing in the same marketplace. In fact, many consumers have dispensed with wireline altogether. Cable, wireless and new telco fiber for neighborhood/home offerings will soon be the primary combatants for Internet service. DSL is holding its own as a consumer-access technology, but dial-up Internet is out of the race.

Not surprisingly, all those extra players have helped turn communications into a commodity. Choices are up. Prices

Why the supply chain and why now?

Communications companies have been working to improve supply chain performance for decades. Many have succeeded to one degree or another. However, the time for a new push and a new direction has arrived. Never before, in fact, have conditions been better or the potential greater. Here's why:

- Most of the key players have yet to take full advantage of the newly created scale they have acquired through mergers and acquisitions.
 By and large, the regional, fragmented approaches they used to use are still in place.
- In most markets, regulatory relief is finally making cross-business-unit and cross-geography integration possible.
- The lines between traditional product lines are blurring. As a result, coordinating operations across business units is more important than ever.
- Capturing all the value that transformational change has to offer requires cross-functional, strategic programs across sales channels, operations, engineering, finance and supply chain processes; rather than traditional initiatives within traditional organizational silos. In other words, it is all about the supply chain.
- Savings that can be generated in supply chain are substantial enough to impact enterprise value and share price.

are down. Churn is up. Loyalty is down. Plus the end user now "consumes" communications services in much the same way that he or she does with any retail consumer electronics product. Buying behaviors, customer experience expectations and brand-management challenges are basically similar whether you are marketing a PDA or an IPTV service. This is still a relatively new concept for traditional wireline carriers.

Enter the opportunity

When it comes to transformational change, the telecom supply chain is clearly the right place to start. After all, most carriers' supply chains were built to support traditional, regionalized voice networks. That business is flat or shrinking; yet the percentage of operating costs still tied up in the old model is huge. Hundreds of millions of dollars in resources, facilities, networks, assets and real estate are being

commandeered unnecessarily. That is a supply chain problem, as well as a huge opportunity.

What's more, all those extra supply chain dollars are not even doing a good job. Telecom companies' supply chains simply were not designed to support the customer-centric, crosschannel distribution of multiple products and services. They are unintegrated, ill-suited and misaligned. Imagine a modern-day technician asked to install TV, high-speed data and voice service coming through a single fiber-optic connection. Chances are he will do it, and do it well. However, the backstage machinations—divergent supply chains, disparate storage locations, multiple financial systems, uncoordinated supply relationships and inconsistent SKUmanagement systems—are certain to make the effort way more timeconsuming and expensive than it could be.

The bottom line is that most carriers despite having conquered the "bundled," all-in-one world from a marketing and sales standpoint—are still working with poorly performing, antiquated supply chains and back-end infrastructures that cost way too much. Those supply chains were not meant to handle today's variety of products and services. They are supporting yesterday's priorities instead of working to help build tomorrow's market- and competitive advantages. Clearly, the time for supply chain transformation has come. The potential savings could reach a billion dollars for an integrated telco with \$50 billion in annual revenue. The customer-attraction and -retention potential could make the effort even more rewarding than that.

The next generation telecom supply chain

Regulatory shifts, industry consolidation, market changes and technology advances have converged to make this a unique time for communications companies. But it is not just a unique time; it is a unique opportunity for forward-thinking carriers to extract huge savings from their supply chains. The remainder of this point of view presents a "master plan" for designing the next generation telecom supply chain. It is not a step-by-step instructional that would span hundreds of pages and thousands of variables, but rather a high-level view that emphasizes the structure and the potential.

As shown in Figure 1, the next generation supply chain is actually three cross-business-unit-focused supply chains: a network supply chain, a device supply chain, and an indirect materials and services supply chain. These entities are the consolidated product of what, in many organizations, may have been scores of distinct, business-unit-focused processes, organizations and assets. Now, however, they are a trio of high performing operations that are wholly committed to leverage and synergy. Each has worked to jettison nonessential assets and squeeze maximum value out of those assets that are indispensable. Each seeks scale opportunities whenever and wherever they exist, particularly through acquisitions, global partnerships and shared services operations.

The network-, device- and indirect materials supply chains also excel at blending skills from inside and outside the company. On the inside, employee talent is optimized through extensive and formalized supply chain training programs. Paths for advancement are clearly marked. Out-of-the-box thinking is encouraged. At the same time, outsourced supply chain services-from materials procurement to service management-are widely embraced. In some cases, even the coordination of third parties is outsourced to a "managed supply chain services provider."

Within three years of their formation, these three supply chains—separate but collaborative—have the potential to help carriers increase cash flow by more than \$1 billion. Figure 2 depicts the origins of these potential savings.

Figure 1. High level industry segments in the next generation telecom supply chain

High level industry segments Traditional Cable / Wireless wireline Broadband Material flow path Engineered purchases Engineered purchases Engineered purchases Communications equipment Network (e.g., head ends. (e.g., mobile switches) (e.g., LEC and IXC manufacturers supply chain uplink) BHS (towers, switches) BHS (poles, vaults) BHS (vaults, pedestals) enclosures) Network electronics Network electronics Network electronics Intermediaries Cable and hardware Cable and hardware Fiber and hardware Technician or Customer connect Customer connect Carriers Contractor CPF IPTV STBs Device Handsets Device manufacturers supply chain Accessories Accessories Remote controls Returns Prepaid cards Modems Home gateways Consumers Office furniture Office supplies Indirect Vendors materials Information technology Corrugated materials and packaging supply chain Facilities management Janitorial supplies Carriers Advertising and marketing services Temporary labor Printing Utilities

Supply chain assessment areas of opportunity evaluation

Inventory reduction program Integrated fleet management Procurement transformation Distribution network rationalization Reverse logistics Network supply chain systems

Product lifecycle management Inventory reduction program Distribution network rationalization Returns/repair network Device supply chain systems

Indirect sourcing and procurement Procurement outsourcing

Travel

Figure 2. Potential cash flow improvements associated with supply chain transformation in the communications arena

				Recurring versus	
Impact area	Potential impact	Estimated base	\$ Impact	one time	Drivers
Quick hits (funding for rest of transformation). Potential savings: up to \$400 million					
Reusable idle assets	20% reuse of idle assets	\$250–500 million in idle assets	\$50-100 million	One time	Less direct-procurement spend by reusing existing assets
Indirect materials	5% reduction in material costs	\$1-2 billion indirect spend	\$200-300 million (over three years)	Recurring	Reduction in indirect procurement spend
Distribution network consolidation. Potential savings: up to \$130 million					
Distribution facilities	10% reduction in logistics costs	\$30-50 million annual operating expenditures	\$10-15 million (over three years)	Recurring	Fewer facilities (regional and intermediate locations)
Inventory	10% reduction in inventory (spares and CIP)	\$500 million- 1 billion inventory spares	\$50-100 million	One time	Less inventory needed for fewer stock locations
Transportation	10% reduction in transportation costs	\$30-50 million annual operating expenditures	\$10-15 million	Recurring	Less materials movement due to consolidated distribution network
Supply/demand planning/management. Potential savings: up to \$150 million					
Inventory	20% reduction in inventory (spares and CIP)	\$500 million- 1 billion inventory spares	\$100-150 million	One time	Less inventory attained by improved forecasting, planning and stock management
Procurement. Potential savings: up to \$375 million					
Direct and indirect materials	2% reduction in material costs	\$3-4 billion addressable spend	\$200-250 million (over three years)	Recurring	Lower material costs through better sourcing- supplier rationalization and contract renegotiation
Materials standardization	1% reduction in material costs	\$3-4 billion addressable spend	\$100-125 million (over three years)	Recurring	Less assets performing same function, lower procurement spend through increased leverage and inventory pooling
Fleet management. Potential savings: up to \$300 million					
Fleet operations	20% reduction in fleet operating cost	\$150-300 million annual operating cost	\$100-200 million (over three years)	Recurring	Fewer vehicles, better and less-expensive maintenance facilities, potential fleet outsourcing
Fleet procurement	10% reduction in fleet procurement cost	\$300-500 million annual fleet spend	\$50-100 million (over three years)	Recurring	Standardized fleet specifications, better "go to market" approaches, optimized bidding and contracting

Total potential savings: Up to \$870 million to \$1.3 billion over three years for a telco with \$50 billion annual revenue

Making it happen

The next generation telecom supply chain will not happen overnight, or even over a year. It is a long-term, high-value proposition that thrives on vision, commitment and patience. Following is a potential "master plan" for guiding companies where they need to go.

The starting point will be a supply chain strategy that aligns with the telecom industry's new business environment. That means migrating from a model in which organizations, processes, facilities and services are segmented by business unit or material category, and toward an operating model that segments operations by customer or demand type. The goal is to rebalance customer and cost focuses. eliminate redundancy and hone the ability to deliver current/future products and services to any channel in any combination. Traditional supply chains simply cannot handle these requirements. They are too asset intensive, too inflexible and too committed to a functionally and geographically oriented view of the world. As noted earlier (and shown in Figure 1), the key segments will be:

- Network equipment (core network, construction materials, etc.)
- End-user devices (handsets, set-tops, modems, routers, media centers, etc.)
- Indirect materials and services (MRO, office supplies, temp services, etc.)

An equally core mission of the new strategy is to find and inculcate synergies—leveraging supply chain capabilities across business units and material categories. In the new model, for example, procurement of temporary staffing services would be coordinated and controlled by a single organization across wireline, enterprise and wireless business units.

During the strategy phase, companies will also seek to evaluate and prioritize the cost savings and service improvements made possible by the new cross-business-unit supply chain approach. A key part of this will be identifying divestiture opportunities for any asset whose elimination might improve incremental cash flow and/or raise flexibility. Assets with particular relevance include distribution centers and transportation; technician fleet vehicles; fleet management and maintenance services; and equipment testing, repair and refurbishment operations.

Once the strategy is formulated, it will be important to implement "quick hit" programs that provide funding for the ongoing transformation process. Highpotential programs (potential savings of up to \$400 million) include:

- Asset-optimization: As usage of the network continues to decline, and as technology changes free up assets, it is important to automate and mechanize the re-use of existing assets. Rather than purchasing new equipment, carriers should ensure that any equipment removed from the network is quickly refurbished and made available for construction or maintenance activities.
- Enhancing supply chain-wide visibility: The industry's new reality—more procurement venues, longer sourcing distances and newer (less proven) relationships-dramatically increase the need to "see" the entire supply chain.

Further down the road, more in-depth initiatives will unfold, based on opportunities identified during the program's strategy phase. As shown in Figure 2, nearly \$1 billion in cash flow improvements are possible by focusing on four critical areas:

- Consolidate the distribution network and potentially outsource some or all parts of it. Redundant facilities greatly increase facility, labor, inventory and transportation costs. Outsourcing distribution repositions (formerly fixed-cost) facilities and personnel into variable costs that can be flexed up or down as the business changes. Potential savings: up to \$130 million.
- Build new capabilities in crossenterprise demand/supply planning to drive down supplies of non-revenue generating assets—particularly inventory, construction-in-progress and field spares. A typical telco will hold an average 180 days supply of spares inventory and more than 60 days of construction in process. Small improvements in demand forecasting and supply planning thus can have a big impact on typically large inventory positions. Potential savings: up to \$150 million.
- Restructure procurement with initiatives such as strategic sourcing and supplier relationship management. Strategic sourcing is a formal methodology for obtaining products, components, materials and services by rationalizing and often consolidating the supply base (e.g., vendor consolidation and material standardization). Supplier relationship management focuses on postcontract activities that are mutually enacted and executed, such as monitoring, measuring, managing and reporting on supply chain management performance; or designing and implementing joint quality-assurance programs. Potential savings: up to \$375 million.
- Transform fleet management to provide standardized vehicles and support services across organizations with minimized total cost of ownership. Carriers should evaluate

outsourcing of vehicle administration and maintenance, as well as the establishment of pooling programs for specialty vehicles. Standardizing and rationalizing fleet specifications has the potential to deliver major savings for carriers with large annual fleet buys. Potential savings: up to \$300 million.

High performance and the telecommunications supply chain

The above guidelines are not "action items." Their mission, like that of this Accenture point of view, is to present a high-level look at supply chain improvements that, for communications companies, are both feasible and essential. On the one hand, more than

\$1 billion in cash flow improvements are feasible simply because the industry has so much catching up to do. Its progress since deregulation has been steady, but the gap between the present and the possible is still immense. At the same time, transformation is essential because the nature of competition in the telecom business has changed radically. Companies are competing with newer companies that are largely unburdened by regulationera supply chains. Nor are the expectations of today's customers in synch with most carriers' supply chain capabilities.

The bottom line is that high performance—the ability to consistently outpace competitors—is only possible if dramatic changes are made to carriers' supply chains.

Across all industries, in fact, most high performances businesses are supply chain masters. They routinely incorporate supply chains into their business strategies, and insist that their supply chains contribute to growth and competitive advantage. They also know that sage investments in supply chain technology nearly always bring solid returns, particularly those that improve data visibility and align supplies with demand. And perhaps most important, they know that today's customers cannot be served fully and economically without a modern supply chain infrastructure. Most telecom companies know this also. All that is left is to make it happen.

About the authors

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About Accenture Supply Chain Management

The Accenture Supply Chain Management service line works with clients across a broad range of industries to develop and execute operational strategies that enable profitable growth in new and existing markets. Committed to helping clients achieve high performance through supply chain mastery, we combine global industry expertise and skills in supply chain strategy, sourcing and procurement, supply chain planning, manufacturing and design, fulfillment, and service management to help organizations transform their supply chain capabilities.

We collaborate with clients to implement innovative consulting and outsourcing solutions that align operating models to support business strategies, optimize global operations, enable profitable product launches, and enhance the skills and capabilities of the supply chain workforce. For more information, visit www.accenture.com/supplychain.

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