



UPS Supply Chain Solutions<sup>SM</sup>

## Digital Lessons for the Consumer Goods Supply Chain

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## Introduction

In fashion and design, history has shown that timeless elegance and functionality are born in the dictum that less is more. But is it? How can subtraction ever produce an increase? This equation seems to defy logic, and indeed, simple arithmetic. It is counterintuitive.

And yet proof abounds, particularly in the arena of consumer goods. One of the hottest selling consumer products of recent years provides a compelling example that less can, in fact, be much, much more. It also provides powerful lessons for enhancing the supply chain. All we have to do is listen.

Literally.

## Delivering Digital Music

It has been some time since the record was the medium of choice for conveying music into our lives, but it remains perhaps the most correctly named. It literally was a record; a record of a performance, captured for posterity, and packaged for permanence.

But the record was not permanent. The medium of vinyl proved too transitory due to its inherent limitations, and susceptibility to wear and tear, heat and abrasion. It gave way to a smaller, more resilient disk; the Compact Disc. The Compact Disc Audio (CDA) format is both a truer and more permanent record of the performance, with digital clarity, and a functional lifespan that may actually exceed that of its consumer.

It is also much more portable than vinyl, but with one key caveat. While prerecorded CDs themselves are relatively small, the digital files encoded upon them are not. They are much too large to transmit from device to device, even with increasing telecommunications bandwidth. An alternative digital format was needed that was even more portable. The answer, when it arrived, was elegant.

The latest digital audio formats, enabling tiny handheld ‘jukeboxes’ capable of storing every song in an audiophile’s collection, derive their functionality directly from application of the *less is more* dictum. They dramatically reduce their file size by discarding two things that most listeners will never miss; the range of sound above the limits of human hearing, and the range of sound below it.

In this instance, less **is** more. Less data means smaller file size, greater versatility, and enhanced functionality. What is extracted does not contribute to the listening experience, and its elimination created enough value to create several booming new classes of consumer electronic products.

## Delivering Digital Music Players

This same ‘enhancement by subtraction’ can also have powerful benefits for the supply chain that brings these devices to market, or indeed, any consumer good, be it electronics, apparel, footwear, toys, sporting goods, or next year’s must-have sales triumph. Less is made more in the supply chain when you are able to remove distribution redundancies, extraneous links, multiple hand-offs, operational barriers, and unnecessary expense.

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## Distribution Redundancies

The archetypal consumer goods supply chain is an extended global enterprise, reaching throughout the world to meet variable product demand. As such, it affords a plethora of opportunities for optimization and efficiency enhancement. Some of the most profound and beneficial transformations begin with an amazingly simple question: why are we doing something twice, when it doesn't really even have to be done *once*?

As evidenced by its very name, the global supply chain has traditionally been regarded as a linear progression, with a clear, immutable sequence. Product typically moves from factory to consolidation facility, to cross-border carrier, to distribution center (or centers), to store, to consumer. Frequently, the distribution centers grew up with the business, and their location may bear only passing resemblance to the geographic realities the more mature business now faces.

It is not uncommon for these facilities to be located significantly inland, requiring arriving product to be drayed substantial distances from the port of discharge. All too often these goods are then unpackaged, prepared for placement in a retail environment, repackaged for distribution to individual stores, and then sent back out.

The redundancy lies in the location of the stores and customer populations served. In many cases they lie between the port of discharge and the consumer goods distribution center. The goods pass their ultimate consignee en route; an expensive *déjà vu*, both in dollar cost and transit time.

Instead of covering the same ground twice, there are numerous avenues for improvement that may be traversed. It is possible to trade direct, by leveraging international solutions which integrate pre-labeling and multi-modal transportation to effect expedited, efficient distribution directly from off-shore production facilities. Other solutions may include cross-docking and strategic positioning.

All of these methods, individually or in conjunction, pare down the overall supply chain, and in doing so, greatly enhance both its capacity and its business return. Less becomes quantifiably more.

## Extraneous Links

To continue the metaphor of a supply *chain*, all distribution networks comprise component links, which must adhere to a seemingly simple rule in order to maximize business utility. Each activity that must occur to distribute consumer goods should be effected within the supply chain element or component that adds the greatest possible value, while incurring the smallest possible opportunity cost.

This becomes challenging in that many activities, ranging from product preparation and labeling to quality management and reverse logistics, can actually be conducted in one of several different ways. In fact, many organizations do conduct them in several different ways, simultaneously.

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It is not uncommon for distribution centers to be located significantly inland, requiring arriving products to be drayed substantial distances from the port of discharge.

This situation is prevalent in corporations with multiple brands, divisions, or subsidiaries, who often evolve distinct and separate processes over time. While there are cases where it is necessary to maintain duplicate incompatible operations, these are the exception, and not the rule. More often than not, the rewards realized through increased economies of scale from enhanced operational efficiencies are considerable.

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This opportunity to derive more from less is not unique to the large corporation by any means. Small and medium size businesses are not immune to extraneous supply chain links, which frequently arise when disparate supply chain functions are managed in isolation, without understanding of their larger holistic ramifications. Here, too, consolidation and centralization can be powerful tools to cull extraneous process, and, in doing so, enhance business efficacy.

### Multiple Hand-Offs

We have all heard the adage that too many cooks spoil the broth. Can the same be said for too many logisticians? It can, easily, when they are not integrated. This is a key area for profitable supply chain improvement.

The consumer goods supply chain is typically an amalgamation of service providers and carriers, each contributing in some small way to the overall success (or lack thereof) of the total business. In effect, they become the distribution network. When they operate independently, with little coordinating direction and oversight, they quickly create a spiral of decreasing returns, which may preclude growth, impede customer service, and decrease cost effectiveness.

This prevalent situation also has more immediate tactical ramifications for the consumer goods business. As in any network, transition nodes are the weakest points of a supply chain. Goods, information, and funds can all be greatly reduced, or lost entirely, at hand-off points between service providers. The potential for damage and delay increases exponentially.

Here again, there are numerous avenues to resolve this difficulty of inefficiency. A truly integrated global service provider with comprehensive scope and breadth can become the operating system upon which a consumer goods business runs and grows. This type of solution is not only more integrated, efficient, and effective, but also inherently scalable and upgradeable in the face of a dynamic consumer goods market.

Another beneficial alternative is found in the capabilities of sophisticated lead logistics providers, who have the ability, tools, and expertise to tie diverse multi-faceted supply chains into a cohesive whole. With either strategy, removing unnecessary elements from the equation greatly decreases the potential for misunderstandings and missed connections.

### Operational Barriers

The modern consumer goods supply chain literally spans the world, and it is not uncommon for products to transit multiple national borders before reaching the hands of the customer. The industry's inherent global nature can easily result in an interconnected web of complex trade logistics requirements. Failure to meet them can expose a corporation to substantial regulatory penalty. Many organizations inadvertently create counterproductive barriers for themselves in their efforts to address both these requirements and their own internal business realities.

This need not be the case. In fact, with proper understanding, infrastructure, and adherence to disciplined process, cross-border trade management can actually be converted from an operational barrier to a business accelerator and a competitive advantage.

There are numerous options for not only removing operational impediments from the global supply chain, but for structuring them in ways which enhance business value and speed consumer goods to market. Examples include, but are by no means limited to, intelligent positioning, shared utility logistics resources, Foreign Trade Zone facilities, and application of international trade logistics tools.

The ability to remove operational constraints from the extended global supply chain is directly proportional to expertise and the ability to leverage greater economies of scale.

### **More Profit Through Less Expenditure**

While many iterations of the ‘less is more’ dictum are counterintuitive, one is exceedingly clear and obvious; less expense translates directly into more value for the international consumer goods business. Every expenditure, be it paid in cash, inventory, time, or utility, is drawn against total supply chain resources. Every expenditure that can be contained and minimized directly improves bottom line position and enhances economic profit.

Each of the above strategies of reduction can return the efficiencies and economies critical to growing the modern consumer goods business. This refinement is the work of a scalpel, not of a hatchet, however, and requires fundamental logistics and transportation expertise and holistic capabilities to effect.

With a strategy of efficiency, less can be made to do more, to deliver more, to achieve more, and to create more consumer goods business value.

**Other published white papers:**

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*Cornerstones of Post-sales Service Excellence*

UPS Supply Chain Solutions develops and implements solutions that optimally manage goods, information and funds to create enhanced business performance.

This white paper has been developed by UPS Supply Chain Solutions to offer insight to global business leaders.

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