

RESULTFOCUSED

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BEING AUTHENTIC...

By Anton Nieuwoudt

“Of undisrupted origin and not a copy; genuine...”. This is the definition of authentic according to the Oxford dictionary.

We live in a photoshopped world where authenticity has made way for imitation and compliance.

Unfortunately, in many cases, imitation and compliance aligns more towards mediocrity rather than excellence. Purely because it follows the path of least resistance.

So let's pull the concept of authenticity towards the supply chain. In my opinion, it is our responsibility as supply chain and logistics professionals to make decisions to improve efficiency and effectiveness on the flow of goods and information based on an understanding of the past, present, and future business environment. This might be a simplistic opinion, but it covers all the basic principles. Organisations are not the same. They operate in similar business

environments, but they are quite different...even within specific industries. Why are we then so fixated on standardisation and compliance if they are all different? Don't get me wrong. There are arguments for standardised processes within organisations to ensure proper governance. What I'm trying to say is that there is a need to make supply chains authentic. In other words, referencing best practice but aligning these to consider the organisations' own unique culture and operational challenges.

How do we do this? In my opinion we start with understanding the needs and values of your end customer, and then building an authentic network of material and information flows that best address those needs which are aligned to their values. What needs and values have you been ignoring in your organisation?

Our challenge today is to be authentic leaders with the necessary courage to strive for excellence rather than mediocrity through imitation and compliance.

In this edition of RESULTFOCUSED we judge supply chain improvements at Campbell's Soup, we look at the new demands that the new iPhone 6 are putting onto the supply chain, we gain insights from Unilever's perfect logistics network exercise, we look at warehouse automation as a strategic catalyst, and how to take control of global transportation costs.

“Character cannot be developed in ease and quiet. Only through experience of trial and suffering can the soul be strengthened, ambition inspired, and success achieved.”
Helen Keller



JUDGING SUPPLY CHAIN IMPROVEMENT AT CAMPBELL'S SOUP

By Lora Cecere
(eff.com, August 2013)

Over the course of the last two years, we at Supply Chain Insights have worked on a methodology to gauge supply chain improvement. We named it the Supply Chain Index. We have found that supply chain metrics are gnarly and complicated. During the last two months, we have been interviewing supply chain leaders to get their views on the methodology.

We believe that a supply chain leader is defined by both the level of performance on the Effective Frontier (balance of growth, Return on Invested Capital, Profitability and Inventory Turns) and driving supply chain improvement. We think that it requires a focus on both total performance and measured supply chain improvement. We also believe that it needs to be based upon their peer group. Supply Chain Excellence as defined by a methodology where all companies are put into a spreadsheet and compared across industries is meaningless.

In this blog, we share an interview with Dave Biegger, SVP of Campbell Soup.

Background on the Supply Chain Index

During the period of 2006-2012, Campbell Soup Company outperformed its peer group on the Supply Chain Index. The Index is a methodology developed by Supply Chain Insights LLC, in cooperation with the Operations Research Team at Arizona State University (ASU), to gauge supply chain improvement. In the Index, corporate progress is calculated on balance, strength and resiliency improvements. The balance factor tracks progress on both year-

over-year growth and Return on Invested Capital (ROIC), and the strength factor is based upon improvement in both operating margin and inventory turns. Resiliency is the tightness of the pattern, or the reliability of operating margin and inventory turns results. Together, the three factors form the Supply Chain Index.

The Supply Chain Index methodology is based on three principles. The first is that the supply chain is a complex system that has increasing complexity. It needs to be managed holistically as a system. The second principle is that the supply chain needs to be managed cross-functionally, end-to-end, from the customer's customer to the supplier's supplier; and as such, it cannot be viewed as just another function. The third principle is that the supply chain is a significant contributor to corporate performance, and that supply chain improvement can be tracked and measured based upon public financial statements.

On July 24th, I interviewed the Campbell team –under the leadership of Dave Biegger, SVP of Global Supply Chain, to gain insights on the Index, and their journey. Dave joined Campbell Soup Company in 2005 after a 24-year career in product supply at Procter & Gamble. Dave asked his team to join him for the discussion. Here are the notes from that discussion.

What has Campbell done to demonstrate such strong performance over the last 6-year measured period?

Eight years ago, we started with a focus on Total Delivered Cost (TDC) and elevating our cost savings program performance, as well as eliminating sub-optimised cost efforts that might have helped in one specific area, but hurt our overall performance. We took a holistic approach to accomplish this goal by developing training programs and tools to ensure that all employees had an accurate picture of total cost and how to drive improvements. We built these into continuous improvement programs such as Lean Six Sigma, while also setting goals to drive breakthrough cost savings to supplement continuous improvement savings.

I strongly believe diversity of experience and thought leads to improved performance. This is why our next step was focused on building an effective supply chain team by developing people and leveraging their talent. We wanted to create the best mix of people with the right skills and experiences and put them into the right positions. The key was to build upon the tremendous experience that already existed within Campbell, as well as attract great talent from other world-class companies and

supply chain organisations. That blend has been key in helping us to make significant improvements.

Any time you make a significant change or improvement, it's essential to understand the culture of your organisation when developing an approach. At the beginning of this journey, we tended to behave more in silos in parts of the company, both across the plant network and across functions. This obviously made it more challenging to implement new concepts in a standardised way and to reapply great solutions. It became clear at the time that starting small with pilots to prove concepts was an important way to build support and alignment at Campbell. We began with a focus on operational reliability; making products right the first time with no waste in a reliable manner. We needed to ensure that we had a strong and predictable base capability to build upon. This work was organised under an Operations Excellence program, a pillared approach supported with clear leadership and matrix teams. Our next focus was to introduce produce-to-demand as an operating strategy, or the implementation of demand-driven concepts. We've made great progress, and I am proud of how well the organisation now works together through improved communication and shared resources. We simplified our SC strategy and communicated in a straightforward, one-page document that laid out primary goal areas. Our intention was to maintain constancy of purpose and continuity. These strategy areas remain important today, while our priorities and tactics evolve as we make progress.

Any time you make a significant change or improvement, it's essential to understand the culture of your organisation when developing an approach.

How did you approach your cost savings program?

As with all supply chain organisations, when we focus on big cost opportunities, we normally deliver savings in those areas. But we created a model to ensure that we were systemic and structured in how we approached cost savings. To drive the sustainable savings program at a best-in-class level, and to ensure that we could reduce costs faster than the cost of inflation, we implemented specific standards. In our program, cost avoidance, while desirable, does not count towards the metric. In addition, a one-time cost savings does not count either. As a team, we agreed to count only recurring savings that offset inflation. Our aim was to maintain a 3 to 3.5 percent savings as a percent of year-over-year total deliver costs. We set a goal that 50% of our target would come from continuous improvement and the other half would come from breakthrough innovation and thinking. We've developed a clear model with specific accountabilities to ensure success in delivering strong cost savings performance year after year. Our approach simply breaks accountabilities and goals across the areas of Manufacturing, Logistics/Network Optimisation and Ingredients/Packaging.

What have you learned?

It's important to recognise the interdependencies of capabilities and programs. Each focus area alone is important and can bring great value; but, if key focus areas and programs are managed together holistically versus independently, the opportunity becomes much greater. Campbell's programs included Operations Excellence to build a strong base, Network Optimisation, Product and Process Simplification, Visibility/Orchestration of the SC network (including S&OP), and implementing an Operating Strategy consistent with Demand-Driven Supply Network capabilities. As we improve in each of these areas, we also open up opportunities in the remaining areas.

As we became more efficient with our assets and began building more flexibility into our plants, we improved cost and service results, along with creating an opportunity to streamline operations, which fell under our Network Optimisation program. This has led to almost a 50% reduction in the number of plants across Campbell's global footprint, and although each decision has been difficult, the cost impact has been significant and important.

Through our common platform/postponement initiative, we simplified product designs by eliminating non-value-added flavors or ingredient dice sizes. This also improved the consistency of our product quality, reduced costs and inventory,

and enabled improved reliability through the resulting simplified process. This is challenging work because it is highly dependent on cross-functional collaboration. We would not have succeeded without a team effort across R&D, the business leaders, and SC disciplines of engineering, procurement, and manufacturing. This dedicated team of 20, a majority being R&D resources, was self-funded due to its ability to quickly drive savings. Most important about this effort was that we were clear on our principles that quality was more important to us than cost. This meant that every change we made had to result in equal or better quality at equal or lower cost.

To drive the sustainable savings program at a best-in-class level, and to ensure that we could reduce costs faster than the cost of inflation, we implemented specific standards.

In addition to quality, we've created capabilities that will support improved customer solutions and enable growth for the business. Flexibility is not just about asset rationalisation, but also about unleashing growth in different product formats, packaging sizes, etc. It's not just flexibility within the line, but across the entire production system. After five years, we've nearly completed implementation of our simplification effort, Soup Common Platform, which consisted of three phases:

- Start with formula (recipe) simplification.
- Focus on process simplification (We were able to eliminate unnecessary processes, which not only made it easier and more cost effective to make the product, but also improved quality by minimising the impact on ingredients through the process).
- Equipment and plant design (Our focus was on the plant of the future. We reduced 40 percent of assets and still make the same amount of product with greater flexibility. Our final implementation of this program is happening next year).

We started these improvement efforts in the center of the supply chain with an emphasis on building manufacturing capability, reliability and flexibility. We now have the ability to focus more on materials management and suppliers upstream, and distribution and customer solutions downstream, to drive optimisation. While we are nearing the end of our work on the Soup Common Platform, we continue to focus on strengthening relationships and ensuring greater cooperation with our suppliers and customers.

Were there any improvement efforts that did not go well?

One of our opportunity areas was to improve our planning processes and make the proper investment in Advanced Planning Systems. We needed to make the investment because our system was aging and we wanted to invest in a way that supported our demand-driven agenda. However, we simply attempted to do too much too fast, expecting we could quickly move ahead with integrated planning. S&OP also presented challenges, but we have since changed to a more structured approach to drive greater business ownership. While the implementation was a challenge overall, we've moved beyond it.

Over the last year, we focused on ensuring that our systems and tools were delivering as expected. On the S&OP side, we haven't done anything that's drastically different from all the textbooks. Where we've put particular emphasis and made a step change was in adapting the culture to have a shared understanding of how we run the business. S&OP success depends on a strong culture that supports a cross-functional process. We have a good cooperative effort and understanding from marketing, sales and supply chain on how to make decisions that ensure the success of S&OP. We continually reinforce this within our culture, as well as maintain ongoing process improvement.

Why do you think Campbell will fall on Index ratings in the future?

We had about seven consecutive years of constant improvement in our supply chain at Campbell, across virtually every result area. While I was surprised to see us at the top of the list for that period knowing there are so many strong supply chain organisations in our industry, it also matched what we had been experiencing with all of the results improvements we had delivered. Assuming the measure is generally effective at recognising improvement, I have to assume we will fall on the list over the next few years. Some of the decline in ranking will be due to the issues I mentioned above with the planning system implementation and the

impact that had on results. The bigger impact will come from a conscious choice we made. As part of our Network Optimisation program, we consolidated our supply chain network in the U.S last year. While the driver for this move was excess capacity, as well as a compelling cost savings benefit, we also knew there would be a two-year hit on our inventory performance until the flexibility was created at other sites to allow the inventory levels to fall and resume the improvement trend we had been following. Finally, we all understand that margin is not fully controlled within supply chain. We have two things that have challenged margins recently at Campbell:

- Mix due to the addition of recently added high-growth business acquisitions that come with a lower margin rate
- Trade investments that will return to more historic levels in the future.

As we move past some of the challenges we had over the past year or two, and return to the inventory improvement path we had been delivering, I expect that we will see solid improvement in Index ratings.

It takes many years to build a culture to improve supply chain excellence, and many well-intended technology or plant design projects can quickly take a supply chain team off guard.

If you had to do it all over again, what would you do differently?

We have enjoyed excellent results over most of the last several years, but there are a few things I would change if we could go back. We tried to do too much too fast. As a team, we committed to implementing demand planning and supply network planning all within the same year, followed by inventory optimisation and demand sensing. We also underestimated the organisational investment it would take to achieve our desired results. In the end, we experienced important learnings, built critical capabilities, and will now be able to generate more results improvements in the future because of that effort. More broadly, we could have been more balanced in our approach to integrating an already aggressive supply chain agenda with a rapidly increasing product innovation agenda.

Despite some of our recent challenges, we feel very good about the contributions that the supply chain team has made at Campbell for a meaningful stretch of time. Without a longer-term vision, and a willingness to take risks by embracing big opportunities and committing to big results improvements, we would have only made incremental progress. If I had to simplify what has been most important for us, I would say the two keys have been people (leadership) and an integrated approach. It's no surprise that strong leadership and great people make the difference, especially when the organisation is engaged and collaborating both within the supply chain and across all other functions. The power of an integrated approach, connecting multiple complex improvement efforts, has clearly driven much stronger results progress than we would have seen from independently driven initiatives, even if all had been successful individually.

Conclusion

The lessons of the team in the trials and tribulation of building supply chain excellence apply to all. It takes many years to build a culture to improve supply chain excellence, and many well-intended technology or plant design projects can quickly take a supply chain team off guard. Luckily for Campbell, this supply chain team had the right stuff to self-correct and put the supply chain back on course. - **RF**



APPLE IPHONE 6 LEAVES SUPPLY CHAIN SCRAMBLING

By Reuters (fin24.com, August 2014)

Tokyo - Suppliers to Apple are scrambling to get enough screens ready for the new iPhone 6 smartphone as the need to redesign a key component disrupted panel production ahead of next month's expected launch, supply chain sources said.

It's unclear whether the hiccup could delay the launch or limit the number of phones initially available to consumers, the sources said, as Apple readies larger-screen iPhones for the year-end shopping season

amid market share loss to cheaper rivals.

But the issue highlights the risks and challenges that suppliers face to meet Apple's tough specifications, and comes on the heels of a separate screen technology problem, since resolved, in making thinner screens for the larger iPhone 6 model.

Cupertino, California-based Apple has scheduled a media event for September 9, and many expect it to unveil the new iPhone 6 with both 11.94 cm and 13.97 screens - bigger than the 4-inch screen on the iPhone 5s and 5c.

Two supply chain sources said display panel production suffered a setback after the backlight that helps illuminate the screen had to be revised, putting screen assembly on hold for part of June and July.

One said Apple, aiming for the thinnest phone possible, initially wanted to cut back to a single layer of backlight film, instead of the standard two layers, for the 4.7-inch screen, which went into mass production ahead of the 5.5-inch version.

But the new configuration was not bright enough and the backlight was sent back to the drawing board to fit in the extra layer, costing precious time and temporarily idling some screen assembly operations, the source said.

Output is now back on track and suppliers are working flat-out to make up for lost time, the supply chain sources added.

Japan Display, Sharp and South Korea's LG Display have been selected to make the iPhone 6 screens, the sources said.

Representatives for those three suppliers, and for Apple, declined to comment.

Wider impact

Apple is known to make tough demands on its parts suppliers for new iPhones and iPads as it competes to create designs, shapes, sizes and features to set it apart and command a premium price in a fiercely competitive gadget market.

This can cause glitches and delays, including screen problems that crimped supplies at last year's launch of a high-resolution version of Apple's iPad Mini.

It also highlights the danger for suppliers of depending too heavily on Apple for revenues, creating earnings volatility.

Earlier this month, Japan Display, said to be the lead supplier for the new iPhone panel, said orders for "a large customer" - which analysts said was Apple - arrived as expected, but shipments may be delayed in the July-September quarter.

Japan Display's reliance on Apple's cyclical business has spooked some investors. UBS Securities has forecast that Apple will contribute more than a third of the Japanese firm's total revenue in the year to March 2015.

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Japan Display's share price dropped to a 12-week low of ¥501 after first-quarter earnings on August 7 lagged market expectations.

In Taiwan, home to several Apple suppliers and assemblers, export orders grew less than expected in July, even as factories rushed output ahead of new smartphone launches, reflecting the erratic nature of the business.

"Currently, there's a small shortage in supply of a specialised component for our communication devices," said a spokesperson for Pegatron, which assembles iPhones. "This kind of problem regularly occurs and the impact on production is negligible."

Supply chain sources had previously said challenges with the new iPhone's screen in-cell technology, which eliminates one of the layers in the LCD screen to make it thinner, caused a delay in the production of the larger 5.5-inch version. One display industry source said the in-cell issues had now been resolved.

The pressure on Apple for stand-out products has increased as Samsung and, more recently, a clutch of aggressive, lower-cost Chinese producers such as Xiaomi and Lenovo Group have eroded the US company's market dominance.

The iPhone 6 unveiling has been widely anticipated to bolster momentum for Apple shares, which have risen by a third, to above \$100 each, since the company posted strong first-quarter earnings in late-April. - **RF**



INSIGHTS FROM UNILEVER'S PERFECT LOGISTICS NETWORK EXERCISE

By Dan Gilmore
(scdigest.com, July 2014)

You may have seen somewhere along the way - I certainly have many times - a statement along the following lines: 80% of a supply chain's total cost structure is locked in based on its physical design.

The import of that statement - to the extent it is true - is that it means all the other work companies do to reduce supply costs (improved productivity, better transportation planning, etc.) can only impact the mere 20% of those costs that are not locked in by the design, indicating you should be spending a lot more time on the latter area than most companies do.

It is not clear where that 80% factoid came from, though I know (I read it myself at the time) it may have emanated from an article written by a PRTM consultant many years ago (I can't find the reference today). It has been repeated many times since, including by me, whether or not that was the original source.

Is it true? I don't think anyone really knows. I have asked several of the best minds in supply chain network design (Mike Watson of Northwestern, David Simchi-Levi of MIT, Tony Brzoznowski of LLamasoft, Jeff Karrenbauer of Insight, etc.) whether they believe this statement to be true, and all have said they aren't really sure. Several of them have said they would be interested in looking at this question more closely.

All that as a preamble to one of the more interesting conference presentations I have seen lately, from Matt Algar of Unilever, at the recent LLamasoft user conference in Ann Arbor, MI.

I believe it sheds some bright light on this very question.

I attended the session based on its title of "Defining the Perfect Logistics Network," interesting on its own right, but especially relevant for me based on some thinking I have shared on the coming era of what I call perfect logistics. The

presentation turned out different than I expected - but was compelling nevertheless. Algar made the initial point that as in virtually every company, each year the Unilever logistics organisation was given targets from the top relative to cost reductions for the coming year. But he said, did anyone really have the context or understanding to know whether those targets made sense? And while Unilever generally found a way to hit those targets, did it sometimes do so at the expense of other areas less closely measured, or achieve the short term goals while doing some damage to the mid- or long-term strategies?

These I think are very interesting, important and near universal questions. How to address them?

These issues somehow led Unilever to ask deeper questions about what comprised and drove its total logistics costs. And the starting point was this: what would its logistics costs be if it in fact had a "perfect" US network? And if it could determine that, how then could it explain the delta between what those perfect network costs would be and what it actually spent?

I have certainly heard of many companies doing "unconstrained" supply chain network designs at the start of a project, but never quite in the way Unilever went at it here.

So using the LLamasoft network design tool, Unilever proceeded to answer those questions. It started by calculating what its logistics costs would be in a perfect logistics network, where all plants could make all products, everything went out in a full truckload from manufacturing sites, there were never any expediting costs, etc. It also involved benchmarking what the best market rates for transportation would be in such a network.

That ideal network, it turned out, would operate at logistics costs equal to just 55.8% of the current spend.

So, how to explain the other 44.2% of costs? Unilever then nicely segmented those out by category:

- Costs of from its actual physical network of DCs and third party co-packers (logistics costs only): 25.7% of the total
- Operational inefficiencies, include transportation mix deviation from the perfect model: 8.78%
- Customer "Cost to Service" (accessorial charges from customer deliveries, orders that caused extra logistics costs, etc.): 7.98%
- Volume phasing (production/shipping volumes fluctuate, causing overtime, end of period inefficiency, etc.): 1.66%

I hope the merit of all this is clear. Unilever was able to attain a much deeper understanding of what drove its logistics

costs, and pinpoint the true impact of inefficiencies. It allowed a much more informed and intelligent approach to setting cost reduction targets. It provided great insight to help with the effort to reconfigure its existing network towards a more optimal one. And it would provide much greater clarity in making trade-off decisions, such as between manufacturing and logistics costs.

In its case, the network costs locked in are a combination of the ideal costs (55.8%) plus the costs of the network it really operates (25.7%) - for a total of 81.5%. The only costs that could be attacked from operational improvements, if you will, are in the other three categories, equaling just 18.5% of the total. Conversely, it has a 25.7% opportunity from improved network design. That is very interesting indeed.

It also in the end changed the mindset within Unilever.

"We saw that logistics savings would need to shift from tactical operating efficiencies to strategic changes in customer terms of sale, manufacturing profiles, and distribution," Algar said.

Brzoznowski recently told me that "This approach helps show supply chain and corporate leaders how far their current operations are from optimal." I think that would be eye opening for many companies.

The aforementioned Mike Watson, who writes our "Supply Chain by Design" column, noted that generally, the first step in a network design project is to build a model that can explain/predict current logistics costs. Next, he says, you build an "optimised baseline," where you apply all the rules that should have been followed but often aren't, to see what costs should have been.

"The Unilever team took this idea a step further - they came up with a nice extension to the idea of the optimised baseline,"

Watson recently wrote for us. "They asked questions like what if every product could be made everywhere, what if every part was transported as if it were on a full truck, and what if everything traveled on the ground vs air."

So, I think the Unilever approach was very innovative, not dissimilar to an unconstrained network analysis but with a different goal and thus result. I think many if not all would benefit from doing this kind of analysis.

By the way, Unilever has started to do this same program in other geographies, and found the cost breakdown - from the ideal network costs as a percent of current spend to the percents in each of the "inefficiencies" buckets, varies significantly.

So, with that last thought, I circle back to the issue of how much of a supply chain's cost is "locked in" by the network design. Does this Unilever exercise provide any insight into that question?

Indeed it does. In its case, the network costs locked in are a combination of the ideal costs (55.8%) plus the costs of the network it really operates (25.7%) - for a total of 81.5%. The only costs that could be attacked from operational improvements, if you will, are in the other three categories, equaling just 18.5% of the total. Conversely, it has a 25.7% opportunity from improved network design. That is very interesting indeed.

Those numbers will be different for all, of course, but it looks like the PRTM guy or whoever it was may just have been right.

- RF



WAREHOUSE AUTOMATION AS A STRATEGIC CATALYST

By David Welch, Rune Jacobsen, Pierre Mercier, and Robert Souza (supplychain247.com, August 2014)

In today's fast-changing retail-industry environment, warehouse automation can be a surprisingly powerful tool for meeting new supply-chain challenges head on and using the supply chain to create competitive advantage.

Retailers today face many threats to their traditional ways of doing business.

New competitors, overcapacity in the industry, demanding customers in a sluggish economy, multichannel growth—such forces are combining to create pressure both to achieve greater operational efficiency and cost savings and to innovate and grow. In this climate, retailers are increasingly using the supply chain to drive competitive advantage.

Among the many options for improving supply chain performance, warehouse automation is one whose benefits, though potentially great, are in many cases only partly understood.

Thanks to recent and ongoing technological innovations, the benefits of [warehouse automation](#) are more accessible than in the past, and they can be used to drive value throughout the supply chain and to open up strategic options.

Achieving Warehouse Savings
Most retailers are well aware of the warehouse operations ("four-wall") savings enabled by automating processes such as putaway, retrieval picking, sorting, and palletising. The automation of these processes can improve labor efficiency and quality control and save on other equipment, materials, and expenses. The four-wall economics are a function of scale and labor costs, which is why retail operations with high throughput and labor costs, such as case-pick grocery facilities, have been most likely to automate. Automation also has been easiest to justify in a growing retail space in which additional distribution-center space is needed, and the cost of new construction can be amortised over this growth.

Although achieving four-wall savings from warehouse automation might seem relatively straightforward, evaluating the potential savings is more complicated than many people realise. One reason for this is the dramatic differences in investment costs for automation, depending on the complexity and scale of a warehouse operation and the particular solution chosen. Choosing which processes and items to automate can also have immense implications for fixed costs and project risk.

To properly evaluate the benefits of such investments, executives must consider an extensive set of factors. In our experience, holistic investment-decision models for warehouse automation include several dozen inputs, which incorporate a variety of financial and operational considerations.

Beyond Four-Wall Savings

Potential four-wall savings are often top-of-mind considerations for retail executive teams, but teams should not be trapped into thinking that these savings are the only source of value from automation. Warehouse automation can also enable

improvements to the broader supply-chain network and, even more dramatically, enable a range of previously unimagined strategic options.

The potential benefits of warehouse automation exist throughout the supply-chain network. Consider these examples of benefits at three key points in the network:

- **Warehouse.** Dramatically improved utilisation of storage space reduces the need for new construction as greater warehouse capacity becomes needed, and facilitates centralisation of warehouse operations and closing of buildings.
- **Transportation.** The ability to assemble denser pallet cubes through automation means more tightly packed trucks and lower average shipping costs per item, reducing transportation costs by up to 10 percent.
- **Store Backroom.** Store-specific pallets (assembled to reflect the layout of a particular store) can reduce shelf replenishment labor, with store operations savings estimated at up to \$0.02 per case.

Beyond such network improvements, warehouse automation can be used to open up new strategic options and initiatives for retailers. For example, automation can enable growth by allowing a distribution center to service more stores and increase product offerings. Sobeys, a Canadian grocery chain, for example, cut case-handling costs in half while adding capacity by constructing a state-of-the-art automated distribution center. The new facility positions Sobeys to invest in low-cost growth in the future.

Reducing cycle time through warehouse automation is another strategic benefit. By speeding up the queuing and batch-planning, order-picking and packing, and transportation processes, automation can dramatically reduce order-to-delivery cycle times. This improved cycle time in turn reduces inventory, improves fill rates, minimises lost sales that can reduce customer satisfaction and loyalty, and can even eliminate the need to maintain distribution center stock altogether.

Finally, automation can be a key lever for strategic growth and is particularly well suited to help unlock the value of retail e-commerce. Traditionally, e-commerce has presented daunting problems associated with complexity, cost per order, and customer responsiveness, and automation can mitigate some of these challenges. For instance, automation solutions can reduce the costs and complexity of SKU growth through the use of dynamic or virtual pick slots.

Reasons to Act Now

Now is a good time to reconsider preconceived ideas about automation, as a number of factors are combining to make

the value of automation, including its potential strategic value, more accessible than ever before. Competition among solutions providers and lower space requirements for automation technology are resulting in lower costs. Higher throughput and other automation-related performance improvements, coupled with lower costs, are increasing potential return on investment (ROI).

In today's fast-changing retail-industry environment, warehouse automation can be a surprisingly powerful tool for meeting new supply-chain challenges head on and using the supply chain to create competitive advantage

More processes can now be automated than in the past, and individual machines can handle a greater variety of tasks. In many instances, installation flexibility allows for brownfield warehouses to be retrofitted, reducing real estate costs. And the scalability of today's systems means that investment in additional capacity can be deferred until needed. In still other situations, investment in automation can help mitigate the risks of labor supply constraints, shocks, and regulation.

Underlying all of these developments is the automation industry's increasingly successful effort to address the variability of warehouse process needs. The evolution of automation solutions is being driven, in particular, by the most variable and expensive warehouse process—picking and sequencing. While case-pick solutions have been the focus of the most recent wave of innovation, there is an opportunity for further innovation with each-pick solutions.

With the value from warehouse automation becoming more accessible, there are other compelling reasons for retailers to act now. As with any other new technology, the experience curve in automation rewards early movers. Additionally, several of today's automation providers are hungry for business, which can result in creative pricing opportunities.

The pressures on today's retailers to reduce costs, improve service, and find ways

to innovate and grow are a call for action on supply chain performance and even on operations strategy itself. A shift in strategy, in turn, presents an ideal opportunity for considering how well a company's infrastructure serves its business needs. Conversely, an infrastructure improvement such as automation can also begin conversations throughout the supply chain that can lead to transformational change.

Evaluating Possible Solutions

A company that is evaluating ways of improving warehouse efficiency and decides to automate has essentially three options to consider: semiautomated process improvements, established fully automated storage-and-retrieval systems, and second-generation solutions reflecting the latest innovations in the industry. Along with various differentiating factors that are more or less obvious, a key distinction among these options is that the first two involve well-defined constraints that the newer automation systems have significantly eased:

- **Semi-automated Process Improvements.** These require less investment than full automation, but they provide fewer benefits. Although such solutions can increase picking productivity, track order progress, and reduce errors, they keep labor-intensive processes in place. Semi-automation is typically an appropriate option for smaller-scale operations.
- **Fully Automated Storage-and-Retrieval Systems.** Established systems offer proven, lower-risk ways of improving labor efficiency and quality control and have been used effectively by early movers in automation such as Kroger, Zara, and Nike. Incremental improvements in performance and design over the years have added value. Yet these systems also entail constraints. For one thing, the large up-front costs typically require scale to generate positive ROI. For another, traditional systems, though configurable, are costly to change once installed, and retrofitting brownfield, nonautomated warehouse space requires construction of new buildings. Traditional automation systems also have large space requirements for the installation of conveyor networks and cranes to automate case handling.
- **Second-Generation Solutions.** The constraints involved in semiautomated and traditional fully automated systems greatly enhance the attraction of newer solutions that, although less established at this point, can enable companies to create significant value by breaking these constraints. - **RF**



TAKE CONTROL OF GLOBAL TRANSPORTATION COSTS

By MercuryGate
(supplychain247.com, August 2014)

Regardless of what and where you are shipping, the goal is to achieve total control over your global logistics process and the associated costs. Successful logistics organisations are supercharged by the MercuryGate TMS to achieve maximum velocity.

How have retailers, manufacturers and distributors who successfully control their global transportation costs made themselves Smarter, Stronger, Faster, Better?

They have supercharged their global logistics departments to quickly adapt to change through using an affordable, easy-to-use, cloud-based transportation management system – MercuryGate TMS.

Critical to the success of any logistics team is the ability to:

Negotiate and Procure the Optimal Rate

Transportation costs savings begin with procuring the best available rate for every load, no matter the lane and mode. Negotiate long term contracts with volume commitments with your carriers while maintaining the flexibility to find spot rates when the circumstances call for them. Public and private bid boards are both available so you're sure to be always using the best available carrier at the best available rate.

Of course, the "best rate" isn't always the lowest rate. There are other factors to be considered. Information is readily available about your carrier's on-time, safety and environmental records from outside sources as well as your own historical records held within the TMS. The TMS will constantly collect carrier performance data and offer it back to you in a form that helps you always select the "best" available carrier.

Simultaneously Optimise Inbound and Outbound Transportation

Consolidating shipments into loads,

making use of pooling scenarios, finding backhauls, and configuring efficient multi-stop route plans reduces driver miles and squeezes maximum savings from the transportation spend. Regardless of whether the focus is on inbound or outbound freight, or both, the MercuryGate TMS with Mojo delivers optimal results.

Select the Optimal Mode, Carrier and Rate

When planning loads, keeping your options available will help you find savings where you never expected. Using a true omni-modal TMS opens opportunities to take advantage of multiple service levels and mode shifts that reduce costs. Carrier information can be stored locally or accessed remotely using web services. To the user, all those rates and schedules are available from a single, easy-to-use interface. Planning multimodal, multi-leg loads is easy because the MercuryGate TMS does the heavy lifting.

Regardless of what and where you are shipping, the goal is to achieve total control over your global logistics process and the associated costs.

Achieve Control Tower Visibility & Decision Support

"Where's my stuff?" That question can come from a customer or internally. Either way, the answer has to be quick and complete. The MercuryGate TMS offers an easy-to-use interface and the ability to use the reference number that's available to locate items down to the SKU level. If the item is packed in a carton, on a pallet, in a container, on a vessel in transit, you can quickly report accurate information about the current status and expected arrival time.

Better yet, what if you could be alerted to an issue before someone has a chance to notice and ask? Because the TMS is monitoring the movement of your freight day and night, notifications can be sent via email or text when issues arise. When someone asks about it, you can reply, "Relax. It's already taken care of."

When simply spotting an issue isn't enough, adjustments can be made to the delivery plan to meet the new objectives. The MercuryGate TMS offers the ability to explore available options based on current carrier and schedule data. Collaborate with your partners in real time to find an acceptable alternative and to put the new plan into action.

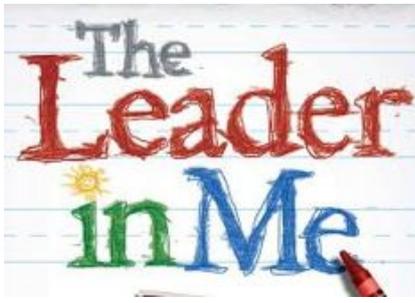
Conduct Effective Freight Audits and Manage Payments

Your savings will continue even after loads are delivered. Unexpected charges, at the line item level, are automatically identified by the MercuryGate TMS. Invoices that fall within your range of tolerance are automatically passed to Accounts Payable for payment. The others are reviewed and disputed until they are also approved for payment.

Centralise & Standardise to Reduce Costs

Centralised carrier contract procurement, load consolidation, event management and other transportation management functions return huge rewards for many companies. Distributed transportation teams maintain direct control and visibility of their shipments but also leverage the efficiencies that come from centralisation and standardisation.

Standardising transportation processes across the company streamlines operations and minimises rogue spending. The MercuryGate TMS offers a configurable workflow tool to define processes for all users to follow. The resulting process minimises keystrokes and opportunities for human error. It also insures everyone is following the same process and using the same data to support decisions that minimise transportation costs. - **RF**



SHOULD LEADERS BE HEROES OR RELATIONSHIP BUILDERS

By Eric J. McNulty
(strategy-business.com, July 2014)

As I walked through the airport recently, a quick scan of the magazine rack showed a preponderance of glossy covers featuring photographs of single individuals: a CEO, a celebrity, a politician. This focus on the individual is an extension of a narrative tradition that goes back at least as far as Homer. We like stories about heroes, villains, and victims, and those stories are brought to life through compelling characters.

This tradition is also reflected in how we think about leaders. We relate the rise and fall of organisations through the stories of their executives, the successes and failures of armies through the exploits of their generals, and the triumph or defeat of social movements through the journeys of their most visible advocates. Jobs. Patton. Bezos. Mandela. Schultz.

But the reality is not that simple. Leaders never act alone—rarely, if ever, do breakthrough ideas have a single parent.

Successful strategies, tactics, negotiations, and operations are usually not the product of sitting alone in one's room. Researchers use the term “agency” to describe the actions of individuals. The leaders described above are portrayed as individual agents—think “my idea,” “my vision,” or the title of a regular feature on CEOs in Harvard Business Review, “How I Did It.”

In my experience and research, however, leaders are more often co-creators or joint agents. I may have an idea, but you and several others add to it before it becomes the next big thing. Jeff Bezos has contributed mightily to Amazon's success, but he certainly didn't do it alone. Alan Mulally didn't turn Ford around all by himself. Even the legendary Welch, Gerstner, and Iacocca were not the solo acts they are so often portrayed to be. Employees, investors, suppliers, customers, and even competitors played important roles in making the

companies these leaders ran successful.

Research on nonlinear systems at the Santa Fe Institute and elsewhere, which I first encountered through the work of Margaret Wheatley, holds that change in a system comes not from the actions of one agent but rather from the interactions of two or more agents. If you view global organisations as complex systems, as I do, then evaluating and developing leaders as individual agents is foolhardy at best. These efforts are much better directed at improving how leaders foster communication and build relationships.

Most giants of the leadership canon—from James McGregor Burns to Jim Collins—focus on the efforts of the individual rather than the individual as part of a group. But some, like Warren Bennis, write that triumph in creation requires more of a group effort. Bennis wrote about “great groups” at Apple and other innovative companies as the successors to the “great man” tradition of leadership. He wrote about “the myth of the triumphant individual” that underlies much leadership thinking. Individuals have value, but that value is best viewed in the larger context of the system, not separate from it.

Creation is wonderful, but co-creation opens up far greater possibilities, unlocks more resources, and more effectively hedges the risk of overlooking either opportunities or pitfalls. Co-creation gives you the freedom to say, “I'm not sure. What do you think?” It allows you to more deeply engage followers, peers, and even potential naysayers. It doesn't diminish what you do; it amplifies it.

As you think about your own leadership journey, I encourage you to keep agency in mind. Yes, you must think about what you will do, but try placing it in the context of what you will enable others to contribute, how you will remove obstacles to others' success, how you catalyse collaboration, and how you can ensure that credit is shared as widely as is deserved.

Heroic narratives may be easy—perhaps even essential—in storytelling, but do not confuse them with what is actually essential to your success as a leader.

Truly great leaders are masters of co-creation. So, what can you do?

- **Watch the credits.** The next time that you see a film, stay through the credits. You will see that while the stars' names may be in larger type, there are dozens, perhaps hundreds, of others who were essential to creating the film. Eliminate any of them and you would have a lesser experience or perhaps no movie at all.

Creation is wonderful, but co-creation opens up far greater possibilities, unlocks more resources, and more effectively hedges the risk of overlooking either opportunities or pitfalls. Co-creation gives you the freedom to say, “I'm not sure. What do you think?” It allows you to more deeply engage followers, peers, and even potential naysayers. It doesn't diminish what you do; it amplifies it.

- **Create a genealogy chart for a great idea.** Look at the last (or next) successful initiative in your organisation and trace its lineage. From where did the seed emerge? Who was at the meeting where it was first surfaced? Who was it bounced off as it matured? How did you or another leader nurture the idea? Try to include everyone who contributed in some way to its development—and then post it on the wall for everyone to see.
- As you keep your **leadership journal** (and I encourage everyone to do so), periodically note the times when your actions have either encouraged or discouraged co-creation. Think about what worked and what you might have done differently. - **RF**

Note - All credit goes to the particular author and/or publication of the articles shared in this publication.

Result focused logistics and supply chain advisory services

By Anton Nieuwoudt / Niels Rudolph

dasRESULTAT is a results focused logistics and supply chain management advisory company with greater than 30 years combined experience in various functional areas of logistics and supply chain management across diverse industries.

Our primary objective is to support our clients to reduce operational costs and increase their service offering to their clients through optimising their supply chain, by offering a wide range of services based on our own practical experience.

dasRESULTAT stands under joint leadership of Anton Nieuwoudt and Niels Rudolph.

Leadership

Anton has close to 15 years experience in logistics- and supply chain management across various industries.

Prior to co-founding dasRESULTAT as a boutique logistics and supply chain advisory company, Anton was at Accenture where he was involved in various projects in the Retail, Mining, FMCG and Energy sectors. Here he was able to expand and apply his fulfillment, supply chain management, supplier management, project management and business consulting expertise.

At DB Schenker, Anton gained experience in integrated logistics management, spare parts logistics as well as inbound- and outbound logistics solution implementation.

Anton holds a Bachelors degree in Marketing from the Rand Afrikaans University and a Masters degree in Logistics Management from the University of Johannesburg.

Niels has more than 20 years experience in logistics- and supply chain management mainly within the 3PL industry.

Prior to co-founding dasRESULTAT as a boutique logistics and supply chain advisory company Niels founded ORAscm as a specialised logistics consultancy company. He also worked at DB Schenker and PriceWaterhouseCoopers in Germany as a project consultant.

Niels spent the largest part of his career at DB Schenker in various roles in Germany, Singapore, Malaysia and South Africa. During his last role at DB Schenker in South

Africa, Niels was responsible for logistics development, reporting directly to the CEO. Here he applied and expanded his knowledge to develop logistics solutions across the local automotive, high-tech and retail industries.

Niels holds a Diplom Betriebswirt (BA) from Staatliche Berufsakademie, Mannheim (Germany).

Functional experience

Our functional experience include among others warehouse design & management, transportation management, inventory management, demand planning, supply planning, supply chain planning, supplier relationship management and project management.

Industry exposure

We have had exposure to industries such as retail, automotive, consumer goods and services, petrochemical, mining and defense aerospace.

Core offerings

Through our core offerings we can support our clients to achieve strategic, tactical and operational results. These offerings cover areas such as Strategic Supply Chain Planning, Fulfillment, Sourcing & Procurement, and Project Execution.

Credentials

Since founding the company in the fourth quarter of 2012 we've been involved in various engagements.

Our primary engagement in 2013 has been with a leading global third party logistics company. Here we've been tasked to support them in their turn-around of their contract logistics department, transportation management strategy and operating model design, Africa business development strategy, and procurement strategy development.

Secondary engagements during our first year of operations included a warehouse performance assessment at the Cape Town operations of a global apparel company, supporting a logistics service transition at a German automotive manufacturer, and providing warehouse implementation support for an agricultural equipment manufacturer.

We are currently supporting a transportation consulting company with project management and subject matter advisory at a South African FMCG company, and with a supply chain assessment at a Durban based manufacturer of engineered wood products. - **RF**

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dasRESULTAT is a results focused logistics and supply chain management advisory company.

We partner with our clients to identify and unlock practical and sustainable supply chain solutions.



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