

Agility in warehouse management

*Editor's Note: This article was inspired by **Embracing Agile**, an article published in the May 2016 Harvard Business Review. Authors D. K. Rigby, J. Sutherland, and H. Takeuchi are primarily concerned with software development, but many of their ideas are readily applied to warehousing. KBA*

Agility is a widely used term in contemporary management, and yet it is also generally misunderstood. Some managers think agility means “doing it faster” and others associate agile with anarchy. In fact it is neither. In its best implementation, agility is based upon four principles:

- People take precedence over processes and tools
- Management responds to change rather than just following a plan
- Working prototypes should replace documents
- Collaboration is worth more than rigid contracts

Let's explore how these four principles might be applied in managing a warehouse.

It's the people!

A successful political campaign in the last century used the slogan “it's the economy, stupid.” By addressing this issue better than his opponent, Bill Clinton won the election. In looking at warehousing, we frequently find evidence that people assets are not well controlled. For example, if your company does not maintain a metric to measure retention, you may not realize whether there is a problem in selecting and keeping effective workers. When employee turnover is concentrated in one department, this is a signal that something is wrong. If you are not using staffing services to handle the peak seasonal requirements, employee turnover will be a perennial challenge. If coaching and exit interviews are not part of your HR procedures, you may not recognize smoldering problems with people until they become a bonfire.

CH Robinson is one of the largest logistics service providers, and this company emphasizes agile methodology in HR management. They appeal to students to join as an intern. “Look for more than a job! We give our interns an important opportunity a chance to earn professional respect with our customers in our industry.” The website section about culture includes videos and lively music to illustrate “great people, great causes.” It is clear that CH Robinson recognizes that effective human resource management starts with a program that attracts talent.

Flexible schedules can be a tool to attract and retain

great people. Eight hour days and 40 hour weeks are common but not always necessary. 4/10 work weeks will attract those who appreciate a long weekend or suffer with a lengthy commute. Short schedules will attract people who combine work with childcare.

If your HR manager is more concerned with keeping people out rather than drawing talent in, you are not exercising agility in controlling your most important asset.

Responding to change

One recent survey revealed that logistics service providers are lacking in innovation. One way to combat this is to demonstrate your ability to quickly respond to new opportunities. For example, one of today's challenges is a shortage of talent, not just truck drivers but many other jobs associated with warehousing. To the extent that you attract and retain a winning team is one way to demonstrate that your management knows how to creatively respond to external change.

3-D printing, also known as additive manufacturing, is no longer a new technology, but still one that is not widely implemented. Some companies have spent more money studying it than it would cost to buy a small machine and start using it. A few of the major multinational logistics service providers have installed 3-D printers in selected warehouses. You need not be a multinational giant to play this game, and the agile warehouse manager will install a 3-D printer and then offer this service to customers.

Crowdsourcing is another change that is available to small warehouses as well as large ones. Last year Amazon announced that it would handle local deliveries with driver owners in a program similar to Uber. Is there any reason why this could not work in your warehouse?

Employ working prototypes

The agile manager will substitute experimentation for detailed analysis. There are robotic systems today with a payback of less than two years. Furthermore, they don't cost very much. Rather than continue to study robotics, the agile manager will make a small installation. If the experiment is not successful, the loss will be tolerable. If it is successful, the agile manager will have an advantage over the competitors.

The same could be said for the changing technologies described earlier. Smaller 3-D printers are no longer expensive. Crowdsourcing of delivery services can be accomplished with minimal capital investment.

Agility with customers

Agile management will develop increased collaboration rather than airtight service agreements. There is no contract that will guarantee good service, and the emphasis on collaborative agreements is a relatively new and constructive phenomenon. A working agreement that is based upon collaboration rather than adherence to rules is one of the newer trends in managing the relationship between shipper and service provider.

How much new business would be attracted to your warehouse if you offered a 24/7 response system? This does not mean that the warehouse is in full operation around the clock, but it does mean that there is one person designated to accept emergency calls at all times. Furthermore, there is a crew available to open the warehouse and handle a shipment at any hour or any day to fulfill a customer requirement. Relatively few warehouses do this, which is why agile customer service is an innovation that could result in new customers or more loyalty from the ones you have now.

How would you react if a customer asked you to open a new warehouse in another city? Some warehouse operators have a "quick response" team with experience in handling a startup. These people are able to move to another community and stay there until the startup is well underway and local talent has been hired. Again, relatively few warehouse operations have this capability. Those who do should be well-positioned to gain new business.

Supplier agility

The two most important suppliers for most warehousing organizations are transportation firms and real estate providers. Within transportation, the largest share is trucking companies. Agility with trucking means fast turnaround. It is a sad fact that warehouses have a bad reputation. Warehouses are where drivers are forced to wait, where time is wasted because the product is not ready or dock facilities are inadequate.

Agile warehouse managers have the ability to change this image. What if you are able to promise that no vehicle will be detained on your property for more than two hours? Each trucker will be timed from entry until the driver is released. Whenever this time exceeds two hours, management will investigate to discover who is at fault and how delays can be prevented in the future. Trucking should enjoy agility which rivals that of the airlines. The most successful air carriers are those who have the fastest turnaround at the passenger gate or the cargo ramp. The warehouse manager who turns trucks around faster than competitors will be recognized for superior agility. Those operators who do not control turn-around time will lose business to those who do.

Agility is seldom mentioned in rail transportation, but there are cases where it can be important. If the warehouse is handling leased railcars, the ability to rapidly load or unload that equipment and keep it moving represents a savings for the client. Just as in trucking, keeping track of elapsed time is the first step. The elapsed time starts with placement of the rail equipment, and it ends when the railcar is released to the carrier.

Real estate is seldom associated with agility, but it can

be. If your company has grown through construction of buildings, how fast can you build a new warehouse? Speed can be greatly influenced by the ability to get quick approval of financing. Building design has great influence on elapsed time, since a pre-engineered metal building can usually be completed faster than a conventional roofing system with masonry walls. Rehabilitation of existing real estate is sometimes a faster and better alternative than construction of a new building. Maintaining a track record of your ability to quickly expand your storage capacity can be a significant marketing initiative.

Agile information technology

In today's digital marketplace, the website replaces the old catalog or brochure.

The best warehouse operators use the website as a communications center, with messages intended for their own people as well as existing clients and prospect of customers. Some even connect the website with an order management system, allowing customers to place orders or inquire about inventory levels. Digital security is important, so your information system must be designed to prevent unauthorized entry or fraud. At the same time we have seen overly robust security systems that make communication needlessly slow and difficult.

Information technology within the warehouse is equally important. Are you using voice systems or Internet of Things to expedite the process of order picking? Agility in IT means systems that are not only efficient, but also user-friendly and fast.

Agile marketing

Like any intangible service, the marketing of warehousing is far from simple. Can you answer these four questions?

- Who are your top five competitors?
- What is the growth strategy for each?
- What are they particularly good at?
- In what areas can you beat them?

Superior agility is certainly the best answer to the fourth question. However you can't be sure of this until you get the answers to the first three.

It is equally important to understand what your existing customers think of you, and what needs they have that are not now fulfilled. Marketing is about more than finding new customers, it should be about improving the relationships with the clients you already have.

Agility and corporate strategy

Strategic planning should start with improved understanding of your own capabilities. Try this SWOT analysis of your own organization:

- What are your greatest strengths
- In what areas are you relatively weak
- What are the most important opportunities, *particularly missed opportunities*
- What are your most immediate threats

Answering these questions should involve a management team exercise, not a solo effort. As you find the answers, the next step is to develop plans to deal with each. As these plans are outlined, consider how the exercise of increased agility will make the strategy more effective.

KEN'S COMMENTS

The cost of promoting the wrong people



Leo Rosten, author and humorist, said “first rate people hire first-rate people; second rate people hire third rate people.” Hiring right may be the most difficult job in the warehousing business. The decision is frequently emotional. We tend to hire people that we like and avoid people who seem unattractive. Because mistakes are unavoidable, it becomes necessary to take corrective action. Yet some employers compound the error of hiring the wrong people by promoting those same individuals.

How do you separate right from wrong? Interviews and tests administered by an industrial psychologist or a similar recruiting professional is one way to accomplish this. Unfortunately, once a person is in the organization, it is difficult to remain objective about her or his capabilities. The outside resource provides that objectivity.

Are college degrees necessary?

Prof. Roger Blackwell made a list of jobs that can achieve a six-figure salary, all of which can be attained by people without college degrees. These include the following occupations: real estate broker, air traffic control-

WAREHOUSING TIPS

The critical importance of customer retention

Retention is a neglected KPI. According to Direct Marketing Association, the average company loses between 10% and 30% of its clients each year. It costs 6 to 7 times more to acquire the new customer than it does to keep an existing one. The building of loyalty is critical but not easy. However, it is far easier in warehousing than in trucking. Changing warehouse providers is inherently dangerous. There is always the chance that the new provider will be worse than the existing one, and your customers will wonder why you replaced a good provider with a poor one. Changing truckers may involve nothing more than calling a different telephone or sending a new email to a new service provider. In warehousing, the inventory is usually moved from one building to another, and the new provider will face a learning curve.

The best warehouse providers work hard to keep a finger on the pulse of each major client. When problems occur, they are discovered in their infancy, before they have become significant issues. There are a variety of ways to keep a finger on the pulse. Some warehousing companies

ler, professional pilot, construction manager, plumber, executive chef, court reporter, and radiation therapist.

Will scarcity change the logistics service business?

For the last few decades, the conventional wisdom suggested that service providers who are asset light or even asset free are the best of the best. But what happens when assets become scarce?

Particularly in motor freight, asset-based carriers might be preferred by shippers who suffer from a shortage of capacity. Those most likely to succeed will have a mixture of asset and non-asset services. In warehousing, they are the companies that own some of their real estate, but not all of it.

MOOCs come to supply chain education

Some experts predict that “massive open online courses” (a.k.a. MOOCs) are a mortal threat to the future of universities. With this in mind, we were impressed by the amount of publicity offered by Penn State Online for its courses in supply chain management. This university has long been a leader in logistics and supply chain education, and now it seems to also be out front in the offering of MOOCs. Will the majority of advanced degrees in our field be obtained on the computer rather than in the classroom? Will those schools that neglect MOOCs still be in business in ten years?

use questionnaires. Others will provide a frequent progress report to key clients, describing in detail the progress they have made since the last report. This is based on the theory that if a service provider does not tell his client what he is doing right, he will be constantly defending the occurrence of failures.

Is convergence the new buzzword?

Convergence is the merging of technologies and services into a unified whole. It is the opposite of specialization. Some observers say that a prime mover in the logistics service industries is convergence. A few providers are merging with others in order to acquire skills that are needed for a more complete service offering. Specialists are in decline, and the generalist is in the spotlight. All of these observations might end with a question mark.

Strategists are in a perennial debate about the value of convergence versus specialization. Some buyers are wary of too many eggs in one basket, so they reject the vendor who offers one stop shopping. At the same time, service providers question whether specialization or convergence is the better approach. The pendulum on this issue swings in both directions, and it is not easy to tell which way the service industries are going.

Necessity is the mother of invention

By B. Trebilcock, *Modern Materials Handling*, May 2016, pg. 16.

This article is about Quiet Logistics, a company described in the feature story of our April issue (write to us if you need a copy). It describes the reasons why the company developed its own source of robots. CEO Bruce Welty describes the robotic solution this way: "I think of what we're doing as a solution that happens to include a robot. Our view is that we should let people do what they do well and let robots do what they do well."

Managing the high intensity workplace

By E. Reid and L. Ramarajan, *Harvard Business Review*, June 2016 page 85.

In today's digital economy, many companies expect some of their people to be available to respond to communications at all hours. Often the reaction to this is not healthy. A halfpage chart designed to answer this question: how do you respond to texts and emails from colleagues in the evenings? The authors suggest that those who respond with rapid engagement may burn out. At the other extreme, those who follow up on the next day may damage their career, but they should emphasize results, not effort, when discussing work. Superhuman dedication may not always be necessary to organizational success.

Leading the team you inherit

By MD Watkins, *Harvard Business Review*, June 2016 pg. 61.

Much of the literature about corporate management ignores the challenges facing an executive who is asked to take over a team that was assembled by someone else. Most team building frameworks assume that you get to set the direction and tone from day one. A leader who is taking over an existing team must learn how to navigate the transition. The author describes a three-step process. Step one is to assess the people you've got. The second phase is to reshape the team's direction and sense of purpose. Finally, scoring some early wins will accelerate the development of the team and enhance your position as its new leader.

Funding flexibility

By J. Bond, *Logistics Management*, May 2016, pg. 38

This article explores the ways in which equipment leasing can help fleet managers analyze asset costs, operator productivity and telematics data. New approaches allow users to measure not just cost per hour, but cost per unit moved. The article is based on interviews with several executives with materials handling manufacturers.

A peek into the distribution center software of the future

By Chris Elliott, *Parcel*, April 2016, pg. 23.

Two factors are driving the change. In the last three years, labor rates rose faster than inflation, and companies are having a harder time filling distribution positions. Robotics and 3-D printers are among the major drivers of change. In Japan there is a pharmaceutical warehouse that performs 70% of the picks with autonomous robots. The demand for faster service is also driving change. New systems must be designed to reduce lead times.

Using data and analytics

By V. Thompson, *Logistics & Transport Focus*, May 2016 pg. 48.

The distinctive feature of this short article about data is that it asks why. Recognizing that many companies mindlessly collect figures that are never really used, she asks us to start by seeking the answers to these questions:

- What are the primary reasons for collecting the data?
- What are you trying to improve?
- Do you want to address strategic issues?
- Do you want to improve your financial performance?
- Do you want to benchmark yourself against your peers?
- Do you want to develop new products or services?

Note that the last four questions may be the answers to the first two. A notable quote in this article is taken from the writing of Ronald Coase, a British economist: "if you torture the data long enough, it will confess."

Just my (re-) imagination

By R. Sherman and V. Chauhan, *Supply Chain Management Review*, April 2016, pg. 29.

The authors trace the digital disruption of current supply chain systems. They observe that e-commerce now involves everything from consumer goods to specialty chemicals. Companies are simultaneously customers, partners, suppliers and competitors with one another. The four digital technologies that drive this transformation are:

- Internet of Things (IoT) together with mobile devices like GPS.
- The cloud
- Big Data
- Social media