

Let's start with some words from a previous episode to refresh our foundation for our talk today. Here we go! The words *supply chain* used to be used on a pretty limited basis by folks such as factory managers and parts suppliers. But recently, in the midst of worldwide crisis, supply chain is suddenly in the vocabulary of middle school students, TV reporters, and shoppers. That's why we're talking about supply chain. In this episode, we'll specifically look at perpetual reconfiguration of infrastructure,

But let's start with a definition: a supply chain is a network of people and organizations, and their activities involved in providing a product or service to a consumer. That's it! But, beyond that definition—supply chain is a pervasive reality that's enjoyed every day by every person in every consumer-saturated society.

So, just how is it that a shopper in the 21st century came to expect to easily pick up a whole host of unrelated goods, say, a bicycle, hair gel, a jar of pickles, adhesive tape, batteries, cinnamon, and fresh table cream, and all that in one stop? And think of this extravagance—that shopper expects to do that pretty much anytime, 24/7, in any major superstore in America! Then he easily fills a completely different wish-list tomorrow at a different store! And then he fills yet a different wish-list the next day from a website with millions of items available! And remember, consumers casually expect the immediate fulfillment in the store or the customized delivery to a particular doorstep in a couple of days!

Hey, that casual, routine fulfillment of billions of transactions worldwide each day requires a foundational accumulation of supply chain infrastructure that is then relentlessly utilized. That's important, and when we go to research the actual definition of supply-chain infrastructure, we quickly find a pretty confusing, often-inconsistent blizzard of different words and lists. The problem is that the lists created by actual supply-chain professionals vary from one another in important ways. But our challenge is still this: we need to really understand infrastructure in an era when many supply chains are stumbling...even failing.

So, let's back up and say what's probably the most general go-to everyday usage by many people, something like this: infrastructure is the physical structures and facilities like roads and electrical power plants that are needed for the successful livelihood of people, enterprises, and societies. And that's a good start. We all know by common-sense observation about the huge benefits from physical infrastructure and the equipment they facilitate. Roads and bridges accommodate trucks. Railroad tracks let the trains roll. Deep ports and bays harbor ocean-going ships. Airports enable airplane traffic. Then we go to power plants and dams and their role in the distribution of electricity. Then there are oil refineries and re-fueling gas stations in every city and most every town in America.

Now, I know that this is the kind of stuff we tend to take for granted...but that's exactly the point! We take the transportation side of supply chain, for granted...*until we can't take it for granted anymore*, like in the COVID era when ships full of goods were immobile for days and weeks just off the coast of the U.S. That's why this podcast is focused on the astute, *perpetual reconfiguration and refinement of your supply chain*. That's right—supply chains need to be reconfigured and refined on an ongoing basis. And we're not talking about something that supposedly just "gets handled" routinely by others in some mystical way. Indeed, a highly effective supply chain that operates without apparent disruption or hiccups is one of the most challenging aspects of managing any organization for the long-term—across the *entire* supply chain!

So now we go to supply-chain *facilities*. Gigantic warehouses. Distribution centers. Huge retail stores. Containers, crammed full and stacked, perched on long trains and big trucks on the move to these types of staging facilities, many of which have millions of square feet. And think of the equipment. Giant cranes at the ports. Forklifts, conveyors, and robots at the facilities. And don't forget the shopping carts, shopping baskets, canvas bags, and grocery sacks at the end of the supply chain by self-serve customers themselves. Going to a local store without those carts or sacks? Hardly. Even that is part of supply-chain infrastructure.

Now with this key nod of the head to consumers serving themselves so often being “the last 100 feet” of the delivery process, we’re moving rapidly toward the nitty-gritty of a strong process. Sure, that process takes advantage of the ships, the trucks, the forklifts, the conveyors, the robots, and every square foot of the supporting facilities. But remember, that process does so by adding all the people that it takes to actually make the goods, to expertly operate equipment, to stock shelves, to directly serve customers, and to manage workers. And these workers aren’t just in the business of getting physical goods from point “A” to point “B,” many are key links in the supply chain of just *services*, too, like waiters at restaurants and housekeepers at hotels—also making sure that customers served at that endpoint “B” are served well.

Wait, you say, *what* workers? We can’t find enough workers! Crazy, for the first time in modern memory in the U.S., most every significant supply chain is now desperately thirsty for more qualified workers, or even unqualified workers willing to be trained! It kinda doesn’t matter whether it’s about making and delivering goods or it’s about providing services. People that business folks assumed were pretty much routinely available turned pretty scarce. Factory workers, drivers, hospitality workers, you name it!

Again, that’s why we’re focused on the astute, *perpetual reconfiguration of your supply chain*. It’s pretty clear now that the labor world in the U.S. has changed for good, at least in some aspects, with many workers demanding schedule flexibility or remote work or multiple gigs...or even a mix of these. “Hey, boss, take it or leave it!” So, old-fashioned worker scheduling and worker management, you know, with the gruff boss saying, “My way or the highway” ...? Well, workers are often taking that highway, essentially saying in the words of that popular old country song, *Take this job and shove it!* Truly, the game has changed for countless enterprises. And the bad news is that many of your vital supply-chain partners face exactly the same problem and are less reliable than they’ve ever been before...unavoidably so!

And they don’t call it a supply “chain” for no reason. The supply chain—like all chains—is only as strong as its weakest link! So, your wonderful strategy that worked consistently for years is only as good *today* as, say, an idle factory in Germany, the fully-loaded ship languishing offshore in Long Beach, California, or the availability of truck drivers and other key workers in Utah. OK, then, what about outsourcing? Like those companies don’t have the same problems, the same obstacles? You gotta work it all with them, too!

Yes, that’s why we’re focused on the *perpetual reconfiguration and refinement of your supply chain*. And that brings us to a key component of the supply-chain equation: the internet and software and technology and data—all those undergirding enablers of the very best digital strategies. That’s software and processes that work to seamlessly manage a blend of people and technology—what’s often called out as the internet of things (IoT). All of that’s about databases that capture countless bits of information that are ineffective and even misleading without the savvy and expertise to continuously extract the data and properly interpret it for the reconfiguration and refinement of your customized, refreshed supply chain.

So, just what *is* supply-chain infrastructure? Amazingly, we’ve only defined some key parts of it with our list of physical infrastructure like roads, facilities, and equipment...and then with people like workers and customers themselves and outsourcing operating in a whole new world...and then with the internet and software and processes and technology and data. Decades ago, we took it in stride when something was going to take a few weeks to receive. But the last couple of decades of extreme supply chain performance, we got spoiled. That is, until COVID and the response of many layers of government bureaucrats negatively affecting so many supply chains. Indeed, nowadays, government employees everywhere feel righteously empowered to alter the way business and supply chains have been freely and efficiently done.

And we haven’t even addressed competitors yet, like Amazon rewriting how retail can succeed! You see, supply chain is so complex because there are so many links in the chain not in our control. So, the only response? Simple: a relentless, perpetual reconfiguration and refinement of your supply chain! Yes, the times they are *always* a’changin’. Hey. You expectin’ to win at ongoing supply chain infrastructure change?

A&A: Application & Action

1. Candidly, are you and your enterprise fully vigilant...continually on the forefront of successfully addressing ongoing supply chain change? Give examples.
2. In your supply-chain reality, what are the most difficult dimensions to stay on top of? People? Technology? Aggressive competitors? Discuss how you do or can address these dimensions.
3. How effective is your local church at the supply chain of the gospel being preached to every creature and the making of disciples of Jesus Christ? Has the “infrastructure” of that supply chain changed in recent years, revealing the need to reconfiguration? Be specific.