IlLUminate Blog Transcript: **Zach Zacharia and Steve Scala – What Every CFO Needs to Know about Supply Chains**

Recorded March 29, 2021. Listen to it here.

ANNOUNCER: 00:01	[music] This podcast is brought to you by ilLUminate, the Lehigh Business blog. To learn more, please visit us at business.lehigh.edu/news.
JACK CROFT: 00:12	Welcome. I'm Jack Croft. Host of the ilLUminate podcast for Lehigh University's College of Business. Today is March 29th, 2021. And we're talking with Zach Zacharia, Director of the Center for Supply Chain Research at Lehigh, and Steve Scala, Executive Vice President of Corporate Development at DiCentral. The topic, What Every CFO Needs to Know About Supply Chains. Dr. Zacharia is an Associate Professor of Supply Chain Management in the College of Business, where he teaches graduate and undergraduate courses in supply chain operations management and logistics and transportation. Steve Scala is responsible for identifying strategic priorities, building partnerships, executing mergers, acquisitions, and divestitures, as well as integrating new business and partnerships into DiCentral's organizational structure. DiCentral is a leading global provider of business-to-business integration and application and system integration solutions with over two decades of experience solving complex electronic data interchange, or EDI, and Application Programming Interface, or API, challenges. DiCentral collaborated with Dr. Zacharia on a year-long study focused on uncovering the impact that supply chain digitization has on a company's bottom line. Good to have you both with us. Let's start at the beginning. How did this partnership between DiCentral and Lehigh University Center for Supply Chain Research come about?
STEVE SCALA: 01:44	It basically started when Zach was actually starting the Center for Supply Chain Research at Lehigh. At the same time, DiCentral was looking for a partner to do some research. Obviously, I think we all today use the internet as our primary research tool for major purchases. Our clients, we think, go out to the internet and research a lot of available solutions for supply chain problems before they even invite a vendor in. So as a vendor for supply chain solutions, we were looking at trying to get content out on the internet that actually was backed by leading research institutes because obviously, if we just put it out there as marketing material, it's highly discounted in terms of the way people look at it, think about it, believe it, etc. And whether you're buying a car or a dishwasher or going on a vacation, I think people today just go to the internet to research a lot of their material. So I approached Zach when he was starting the center and asked him kind of what his vision was for the Center for Supply Chain Research. Then, I talked to him about the fact that I wanted to do research and fund that research, and that really fostered this partnership between the two of us.
CROFT: 03:07	Before we get into the specifics of what every CFO needs to know about supply chains, let's talk about what the questions you were primarily interested in getting answers to before you started and how you went about collecting the data for the report.
SCALA: 03:23	Yeah. So today, a lot of jobs become very specialized. And really kind of what we were finding is we were going out and talking to people that were in charge of supply chains. And often the meeting would sort of get stopped because they had to kind of bring in their finance people. And we were thinking, "Geez. Shouldn't the supply chain

person know this sort of thing?" And vice versa. Sometimes we'd be talking to somebody in the finance organization about supply chains and it was evident that there was sort of a disconnect in the knowledge. Where supply chain people couldn't go into the finance area. The finance area couldn't really go into the supply chain area. And we saw this intersection where, really, there were activities that were taking place in both organizations that really needed more education on how sort of an activity on the left was sort of impacting an item on the right. And so I said to Zach, I said, "Zach, there's this sort of cross-section of information that's sort of I think we could get a paper done on because I think there's a lack of just knowledge that's sort of out there."

SCALA: 04:29

And so we took it really from the CFOs point of view because we said, "Look, obviously we're the Center for Supply Chain Research. Everybody's going to be reading those papers. But I think there are some value in taking this concept of supply chain and writing about it in such a way that a CFO could understand it." So we started really asking ourselves, "Well, what are those typical questions where the CFO sort of says, 'I'm not knowledgeable enough about this area, that I need to take somebody from supply chain and pull them in"? And we thought we would write about that. But areas that obviously the CFO cares. So things about cash, things about inventory, things about revenue recognition, things about collecting cash, things about invoicing clients. These are all events, for the most part, that really you can't honestly do until an event has sort of happened inside the supply chain. And that's really where sort of the impetus for the research started and then sort of our questions unfolded around that.

CROFT: 05:30

One of the things you mentioned is revenue recognition. I'd like to ask Zach, what is revenue recognition? A definition for our listeners. And talk a little about the role that revenue recognition plays in the supply chain and why it matters.

ZACH ZACHARIA: 05:44

Great. Thank you, Jack. So one of the things that we need to look at in terms of revenue recognition simply means when do you recognize revenue. And there was a disconnect between the International Financial Reporting Standards and what we in the U.S. use, which is the GAAP accounting rules — generally accepted accounting principles. And this difference because you could imagine-- let me give you a real example. I was talking to one of the executives that we had interviewed for this research study, and he talks about developing a machine that costs about $1 million, is what they sell it for. They have it running in their plant. The company will send a representative and will ensure that everything is running and they take it apart, they box it together, they put it onto a truck. It goes to the port, it gets shipped. In this case, it was going to Europe. And eventually, it ends up with the customer. So the question then comes on, do you recognize revenue when the system leaves your plant, when it arrives at the port, when it arrives at the port across Europe, or when the customer actually turns it on?

ZACHARIA: 07:00

And because every company would prefer to recognize revenue as early as possible, because it goes directly to their books, and in that case, their balance sheet looks so much better. Here's the problem. Sometimes the product doesn't arrive to the particular customer without some sort of damage. And then the customer withholds payment. And so you have to restate these financial kind of statements. So that's why they came up with this rule, to say that you can only recognize revenue when the customer actually acknowledges receipt of the product. When they certify that it has actually arrived. But the basic thing is, is that there is now this sort of tension between finance people who would like to recognize revenue as soon as we can and then the supply chain people who need to actually deliver the product. So this has sort of led to this place, this gray area, where sometimes there's a push to recognize revenue early. And companies use a number of different ways to recognize revenue. The right way is to wait, to when the customer actually receives it. Another method is when the transportation company says, "Hey, we delivered it." The third method that we found companies used is that they just estimate how long it takes, add an extra day, and then say, "Okay. The product has arrived." And so it's that kind of intersection between the financial and finance supply chain and the physical supply chain that was very interesting for us to research.

CROFT: 08:35

Steve, one of the key findings from the report is that 85% of C-level executives expect digitization efforts to enhance cash flow and reduce day sales outstanding, DSO, or the average number of days it takes a company to collect payment from its customers. Which raises the question, why is DSO so important to CFOs?

SCALA: 08:58

Obviously, you mentioned DSO, which really measures sort of the time from the invoice to the time that you collect the cash, right? And what DSO is really measuring is it's measuring sort of the amount of credit you're giving to customers. But more important, what it recognizes is, is do you have the cash or do you not have the cash, right? And obviously, there's a way to benchmark, obviously, what your DSO is relative to sort of the industry or to your peers in a given vertical. And pretty much I think every DSO-- or every CFO on the planet typically knows what their DSO is because they're always trying to improve it. Now, with that said, one thing I will say is there's a lot of data that suggests that DSO days have gotten worse over the last sort of 10 years, not better. And you would think with all the digitization or the focus on it, that actually DSO would be going down. So if we say that 45 days, on average, is a good cross-vertical DSO number, and obviously that'll depend on what vertical you're in, we've seen that number go from, let's say, 45 to 46 to 47 to 48.

SCALA: 10:09

And when we did the research basically, I mean, I don't want to oversimplify things, but I'd say that people fell largely into one of two camps. A, we had large companies that were very flush in cash. Had a lot of cash on their balance sheet. And remember, this study was not designed to, but it went out sort of at the peak of sort of COVID. Where we had many industries, obviously, that were either doing great, like maybe a grocery store because everybody was taking the toilet paper and the paper towels, or B, we had maybe some companies, and I don't want to say specifically, but you can imagine there were other companies that were largely hurt, like the cruise industry where nobody wanted to be on a boat. And obviously, if you've got no cash as a business, that's a problem. And we know many profitable companies do go bankrupt. Not because they're not profitable, but because they haven't timed their receipt of money coming in with obviously money going out. So DSO is a big deal to companies that are financially strapped or even a start-up because obviously, maybe you're not flushed with a lot of cash sitting on your balance sheet.

SCALA: 11:21

So in some industries, and we interviewed many people that took our survey, but those that really were cash-strapped, they couldn't have been more focused than on that item of cash and getting it in the door. And we had many CFOs sorts of explaining to us that during COVID they were getting phone calls from their customers that sort of explained, "Hey, look. We're not renegotiating our contract, but we are going to start paying you with deferred payment terms." So even though the contract might have given maybe 30 days of credit or 60 days of credit, those customers were just plain calling up and saying, "We're hurting. We're going to basically notify you, but we're going to take an extra 30 days to start paying you." And for some companies, that was very, very, very painful. And some of those CFOs immediately went into a mode of looking for ways to offset that.

SCALA: 12:17

And one of the ways that we had found that some CFOs had done was, for the most part, they weren't really exact of when to send an invoice. So obviously a sale might have been made. They might have had the opportunity to send an invoice, but really, were quite relaxed about it. And then one of the things they were looking at was, "Well, look, if they're going to pay me even later, I'm going to move that date from when I could have invoiced you to the date that I absolutely can invoice you." And that might have been after they'd booked the revenue, or typically where it's defined is typically in an agreement between a customer and a supplier that'll say, "This is when I can invoice you." And what we found was that CFOs, especially those that were financially strapped, they were more apt to go through these agreements and find the exact date that they could invoice the client.

SCALA: 13:07

And then more often than not, they were not looking to just invoice, but digitally invoice. They didn't want to just get the stamp out and lick the envelope and mail it. They wanted to push a button and have that invoice leave their ERP [enterprise resource planning] and transcend sort of the network and end up at the customer's ERP so that it could be processed. And that's really one of the ways that we saw that customers were responding, or people in the survey were responding, to increasing sort of their DSO. Which was, one, getting the invoice out faster, quicker. Because even if it's mailed and it's done quickly, and it's done Federal Express, somebody on the other end still has to open up that envelope and enter it. There are manual entry errors associated with re-entering that information. And then more often than not, we saw that those companies then wanted to be paid electronically. Because the same thing happens sort of when data comes through the U.S. mail in the other direction, or a FedEx, or a UPS. There's a transit time. It's not electronic. It's not sort of instantaneous.

SCALA: 14:14

And then the last thing that people wanted was they wanted the remittance information. Because business-to-business transaction meant often there's many items sort of on the invoice. There might be 20 things we ordered. Maybe 18 of those got shipped. Maybe 18 of those are satisfactory. And the two items sort of that are on now the invoice never got shipped, a lot of companies don't want to pay for those items they didn't even take delivery of. So they're willing to maybe partially pay an invoice. So if the invoice came in at, let's say $100, maybe they're paying only $80. But if you're not explaining sort of, when you write the check that you're short paying it and the reason why, and putting the details on there, then when the company who receives that check sees that there's only $80 on it, even though they've sent out an invoice for $100, they can't logically go back into their system and close that process out. Because they don't know why the $20 isn't being paid. They don't know if it's because, A, they short shipped maybe something incorrectly. Maybe there was the item that never got shipped. Maybe there was something damaged. Maybe it was a marketing discount. They just do not know. And so one of the things we found was that companies were putting a lot of emphasis on getting the invoice out electronically, getting the payment to be electronic, and then last, getting that rich

	remittance detail that sort of explained if you weren't paying the full invoice, what were the details behind that short payment? And this is what we saw with customers that were so, so, so focused on DSO.
CROFT: 15:48	The report that resulted from the study is called What Every CFO Needs to Know About Supply Chains and it was recently released. And one of the things that it looked at is how supply chain digitization affects both the physical and financial supply chains. I was wondering, Zach, if you could talk a bit about the role that each of those supply chains plays and how they interact?
ZACHARIA: 16:13	Absolutely. And it's really important to understand that they are distinct, but they're nevertheless very interrelated. And each of them are important in its own way. Steve gave you a great example. For example, you have a product that gets delivered and then you have someone that actually sends a check, but you don't have the right remittance information. That is, the information that tells you which particular invoice you're paying and what percentage of the invoice you're actually paying. Then, you have this disconnect between whether the product is there and whether the revenue has been recognized. Whether it's gone into the right bucket, so to speak. So it's important to understand that you have to spend efforts not only in ensuring that the physical transport of those products-- you spend a lot of effort tracking those products in real-time. Making sure that the transportation system you use is reliable. But you also have to make sure that the financial information that goes along with that product, that tells you what that product is and how it needs to be paid for, also needs to go along with it.
ZACHARIA: 17:24	And one of the things that we got out of our interviews that-- and these are CFOs. One particular person told me that the industry norm is about 50 days. But a very, very large customer of theirs said that, "We're just going to go at 90-day payment terms." And immediately, this particular company said that, "Now, we're scrambling because we've got to do the same thing to our suppliers." And how can we help our suppliers? Because some of the suppliers are not going to be able to survive a 90-day time for payment. Remember, you've already given them the product. You've paid for the product to your supplier, perhaps, and you're waiting for that income to come back. That revenue to come back. So this is why there is an extra focus on days of sales outstanding, how quickly can you get paid, and the timing of when you actually send the invoice, and these are all interrelated. So the physical supply chain and the financial supply chain in many ways are just as important for each other and they do interact, especially when you get the product to the customer and the customer actually pays you for that product.
CROFT: 18:38	And one of the other things the report found was that 95% of manufacturing companies who responded have already started the process of digitizing purchase order engagement activity with customers and the same percentage had begun moving to digitize invoices sent to customers. That's a lot who have started. But to me, that kind of indicates that there's probably a lot of data entry still occurring the old-fashioned way, by hand, on paper. So what is that costing manufacturers, Steve?
SCALA: 19:11	Jack, you're absolutely right. While a lot of people have started it, we saw that very few people have gotten to the end line. Just to give you a sense, only 6% of the people that responded in our survey actually get 100% of their remittance information when an invoice kind of comes in. Only 6% get it 100% of the time. Which kind of means that a lot of the other folks, obviously, the majority are not. There is a

lot of manual activity going on. And what we try to do in the survey is to try to calculate-- we asked them how much money they were spending sort of with regard to these different processes? And we would kind of look at getting invoices out/getting invoices in depending on what side of the fence you were living on. If you were having to take data and re-enter it, whether that be purchase order information, etc. And we kind of broke it apart. But the net of it is, is companies on average in our survey were spending over $1 million a year in manual costs with regard to just the data entry side of things. Now, that's all of those things combined. It would be information, maybe you're getting from your bank, might be information you're getting from your suppliers, might be information that's coming back from a customer, etc., but it's all the data that, in essence, somebody has to manually enter, number one.

SCALA: 20:35

The other thing I would say is that the companies obviously didn't even take into account-- we didn't measure how much of that data entry is accurate versus a manual key check of somebody entering the wrong information. And I speculate that if you kind of count up not only the $1 million, but maybe the cost of the errors that are introduced as part of that process, you'd find out that the numbers would be far larger. That actually impacts sort of the customer or these companies of the cost associated with this manual entry. So obviously, the labor cost is one aspect of it. But the reason that a lot of the companies were obviously doing this is they were obviously wanting to get some sort of improvement out of that.

SCALA: 21:23

And in an average client, kind of we asked them, K, well, if you've started your process, and only a small number of you have sort of finished this digitization, we asked them to sort of project, which is if really the whole process was 100% digitized, what would that mean as a benefit? And one of the things we asked them was, "Well, what would the benefit look like in terms of DSO If everything was 100% digitized?" So if you didn't have any manual activity in there. And the people in the survey were basically saying that somewhere between three to seven days of DSO could be improved if all of these cycle activities that are manual today or partially manual today were 100% digitized. So not only is there a huge savings with just, one, the reduction of sort of the labor cost. Second, the elimination of errors. But just really the pure performance if the company gets improved if you got a three to seven-day improvement in terms of collecting cash.

ZACHARIA: 22:28

And if I could add to that, Steve brings up a great point. When we looked at the actual data from the respondents, we divided up the respondents into three groups and we looked at days of sales outstanding. And the top performers averaged about 30 days, the median was 36 days, and the bottom performance was about 48 days. And as Steve mentioned, in our research, we found out that 85% of the people felt that you could get an improvement of at least three to four days all the way up to seven or eight days. When you get to seven days, you will clearly be in the top performers, which is a huge benefit. Again, getting paid for that, for the products that you actually provide, and having that cash available. One of the CFOs that I interviewed said that when their customers said that they were going to go to a longer payment term, they said, "No problem." They said, "All right. If you're going to use me as a bank, I'm going to charge you accordingly." And they had some incentives so that if they paid earlier, they'd get it. But otherwise, they're paying some interest on it. So it goes around with both this sense that the suppliers, the people actually providing the product to the customers, also have to take a look at the costs associated with providing that extra credit. And therefore, any time that we can digitize it, we not only save costs, as Steve mentioned about the manual process, but it directly goes to our bottom line.

CROFT: 24:09 OK. Let me ask Steve, then. Clearly, digitization has benefits for the manufacturers. Are there ways that it complicates relationships with customers or ways that enhance relationships with customers or both?

SCALA: 24:29 Well, I think this one's very complex. And I would say at the end of the day, in most cases, it's a win-win. But one of the things I've always said is bringing about change inside of organizations is very hard. And bringing about organizational change, even harder. I say to people a lot of times, "Oh, you want to digitize your procurement? Great. Just figure out internally how many people would have to be at that meeting." And you start looking at all these people that show up to the meeting. And now I say, "Well, great. Now, think about transcending that from your organization now out to the maybe hundreds of suppliers that you deal with and figure out how many people need to be in that meeting." And bringing about organizational change is hard primarily because it requires obviously two parties that maybe have some alignment, but maybe not in terms of timing.

SCALA: 25:24 Which is, a lot of our customers or people that participated in this survey have obviously initiatives that they've got they've got to get done for their company. Whether that be putting in a new WMS [warehouse management] system, a new TMS [transportation management] system, a new ERP, dealing with some problems within the company, putting in a new factory or a warehouse. So they've got their initiatives. And then here people show up on their doorstep, a manufacturer or a supplier, and say, "Hey. One of these things we'd like to do this year with you is fit in this digitization effort." And the guy's thinking, "Well, where am I going to get the time, energy, investment, etc., to take all the other initiatives I signed up for and add this to the list?" And so when you think about sort of the communications and the alignment of the benefits, timing is a big element of this. And so obviously the manufacturer is obviously looking to get the benefits of expanding their channel of relationships. They want new customers. In many industries, a customer might no longer be using B2B. We have a lot of customers that were part of this survey that were manufacturers mainly to a traditional retailer.

SCALA: 26:40 And when you think about what's happening is there's always change in sort of these landscapes. So if we take sort of a consumer product goods company today and back up and look at what their supply chain looked like maybe 5 or 10 years ago-- and I'm just going to pick a product. Let's just say I sell shoes. And maybe let's just say my average sale is I sell 1,000 pairs of shoes a year. Probably five or six years ago, probably my traditional way of selling that would have been to go through a retailer. The retailer probably would have submitted an order. The order probably would have been a bulk order, such that I would have shipped those shoes in a truck. And that truck might've been a truckload that would have went to their distribution center. And then the retailer, for the most part, were to break my 1,000 shoes into individual shipments that would have then ended up in the store.

SCALA: 27:30 Now, here we are in 2021 and we have COVID and nobody wants to go to the store, one, because we don't feel safe, or second because they were physically closed because the government said, "Hey. We can't have people out without masks." And so everybody's going home and shopping online. Now, how does the shoe manufacturer deal with that? The shoe manufacturer can't rely now on the retailer because the malls are closed. Nobody's in there. He can't make a sale that way. So what does he do? He puts maybe his shoes up on Target.com, Amazon.com, Walmart.com, maybe somebody else's dot.com. Well, that's not going to result in a 1,000-shoe order. That's going to be an individual order that now comes in. And a lot of times, the retailer or the marketplace, wherever that order originated, is going to ask that shoe manufacturer to ship those shoes directly to the consumer's home.

SCALA: 28:23

So think about that supply chain digitization. In the past, it might've been possible for the shoe manufacturer to survive without digitization. Me taking one order from a retailer that represents 1,000 shoes being sold. I can handle one piece of paper. I can handle one truck. I can handle one shipment. But now, if I'm still selling 1,000 shoes and they're all individual orders because some of them came from Amazon, some of them came from Walmart, some of them came from Target, and each one of those now fires at me as an individual order and I've got to fulfill all of those as an individual shipment, I now have to deal with the invoicing as an individual invoice — my landscape fundamentally changed. And you can say, "Well, look, the manufacturer had to do that because they had to survive. And obviously, that was a benefit to them." Now, he obviously can no longer do that by hand. He's got to digitize that. So it's obviously a win for the manufacturer. For the retailers that moved online, you could argue, they have the same problem. When they were ordering one order of 1,000 shoes, was no big deal. Maybe could have faxed that, or emailed it, or written on a piece of paper. But there's no way that those people clicking on those keyboards at Amazon and Walmart.com and Target.com can result in somebody in the back office writing out slips of paper and then sort of faxing those out. That's not going to evolve either.

SCALA: 29:55

So really it is a win-win. I mean, the marketplaces that moved from brick-and-mortar retail stores to the online format had to digitize. The manufacturer on the back-end, literally, he couldn't handle it either. He had to digitize. So in many cases, it just fundamentally requires a digitization to just fundamentally happen. And I'll give you an example where I don't think either the online marketplace would have happened if it wasn't digitized and I don't think the back-end could have reasonably fulfilled those obligations, ship those out, invoice them on time, have the parcel post carriers pick up. Because remember a lot of these shoe manufacturers maybe only had one bay. Now, he's got to worry about maybe UPS, FedEx, and the United States Postal Service coming in to pick up these different shipments that happened multiple times. In the past, you only had to have one truck show up one day. Now, he's got to coordinate all of that. So this digitization really has a plentitude, if you will, of business changes that kind of go on with it. And then obviously there's the whole aspect of just obviously having to adhere to these new business processes that are forcing this digitization. And both parties benefit. At the end of the day, I believe both parties benefit from that digitization.

CROFT: 31:15

And Zach, same question, but with the suppliers. Are those same factors that Steve's just been talking about in play when you're talking about a manufacturer digitizing and how that affects the relationship with the suppliers?

ZACHARIA: 31:30

I completely agree with what Steve laid out with the manufacturers. One of the other things that we have to think about is, is that it is tricky to get people across an organization and with another organization to agree to particularly changes. Steve gave a great example of thinking about all the people you've got to get into the room.

Well, now what if you're dealing with suppliers and customers? One of the things that we found in our research was that it is much, much easier to start the digitization process with your own suppliers. And again, the benefit of digitization is there because now everyone has a better understanding of the costs of when the revenue is coming in and there will be a significant reduction in the manual entry process. Not only those costs will be reduced, but also, there'll be a reduction in error. So one of the things that we need to even look at when you think about implementing something like this is to start with, perhaps, your suppliers and develop digitization with your suppliers and see how that works out. And then, perhaps, focus on with your customers.

ZACHARIA: 32:47

The other thing that you really have to emphasize is that the actual number that we found, the cost of manual data entry out of the-- we had more than 125 respondents. And remember these are CFOs and CEOs. We wanted the people who really would understand this whole process. We found that, on average, companies were spending about $1 million a year on manual data entry. And the reason that companies don't really look at this in great detail is because the costs are never taken up by one particular department or one particular function, but rather it goes across the company. And some of the people that we talked to, they said that this was just a small little thing that they might do on Tuesdays or Friday at the month-end and things like that so the costs were absorbed. But when we actually got them to look at it first on a monthly basis what they actually were spending, this is the number we found. On average over $1 million a year associated with manual data entry transactions that goes into an ERP. So here's the other benefit of digitization is it can take those costs out, reduce those errors. So clearly it is a benefit whether you are a manufacturer or a supplier or a retailer to be able to digitize because these benefits sort of go across all members of the supply chain.

CROFT: 34:24

Now, one of the things that I'll admit surprised me somewhat was that your research found that 42% of business-to-business payments today are still being made by check. And granted, that's down from 51% just 5 years ago, but what are some of the remaining obstacles companies face moving to electronic payments, and what would be the main benefits of doing that? And I'll direct this one to Steve.

SCALA: 34:52

Well, first of all, let me just say, I think COVID certainly accelerated these things. I think it's safe to say that one of the things that came out of it was the fact that nobody wanted to be in the office, being the person that was asked to go into the office to write the check anymore. They were safer working from their house. So we actually did have clients that called us and said, "One of the challenges we have is our bank will physically write a check for us and we don't have to send somebody in the office to do that anymore, but the bank is not being very flexible. The bank has a format that they want us to put it in. But as long as we can get it in that format, they're happy to take over the writing of the check, that distribution of the check, etc. But we're having a problem, just creating the format that the bank wants it in." And some of the information was in the ERP and some of the data was sort of in an Excel file. And there was data all over the place and they needed somebody to help them consolidate it. But the point being is the one thing I did find out, or I think the study sort of surfaced is, look, I think for something to be digitized is it requires both ends of sort of the spectrum to want to make it happen. Because a lot of people will accept an electronic payment, but the owner party doesn't want to send electronically. They'll kind of say, "Yeah, I receive," but the sender doesn't want to send. And when you look at it, you're kind of saying, "Look, what is the motivation or the incentive to paying somebody faster?" And there's not a lot of incentive. If I'm moving off of paper and it's nice and slow, why would I suddenly start figuring out that I want to send it to you electronically? There's just not a lot of incentive associated with that.

SCALA: 36:39 Now, you could argue COVID was an incentive. "I didn't want to go in any office. I wanted to be safe. I didn't want to go in any office to write a check." But I think if you want this mass adoption of people that move away from the slow check process, which is it just benefits them. "The slower the money comes out, the better for me." To be quite honest with you, I don't think it's a digitization thing. I think people are going to have to look at, "How do you incent somebody to want to be able to be the sender of it?" Because I think most parties that are on the receiving end, it's quite clear why obviously you would want it to come in electronically. That's just abundantly clear. But for the sender, I think some of the signals as to why to digitize it aren't maybe fully understood. They're not quantified as much. Which obviously there's a fraud aspect of it. One of the biggest ways that companies lose money is if somebody steals that check and then whitewashes it and turns it from a $1,000 check into a $10,000 check.

SCALA: 37:41 So there is some incentive, if you would, for a move to the digital format. But I do think that some of the things that other people have done, and we know about it, obviously, in the industry, is early payment, which is the 2/10 net 30. You pay it, obviously, in the 10 days, you can get a 2% discount or something like that. But it's that kind of a thing, I think, that we're going to have to have more emphasis put on in the industries. If you are going to get both the sender to move from a paper-based process to an electronic-based process, there's going to have to be more either incentives or rewards or benefits to the sender of the money, as opposed to the receiver. Because the receivers have largely adopted the ability to receive it. It's more the people that are sending it that are still holding onto it.

CROFT: 38:35 One final question then, and that's kind of the money question here, what every CFO needs to know about supply chains? What would you say are the key things to take away from all of the things that we've talked about today?

ZACHARIA: 38:52 So if I could perhaps jump in and answer and then Steve can finish. When we did this study, we identified a number of benefits of being able to digitize. And here are some of these benefits. Number one, and this is a really good thing for CFOs to learn, is that, first of all, it reduces days of sales outstanding. Remember that cash-to-cash cycle. Getting that cash available and active, that part of the cash flow of your system, is a huge benefit. Second, you increase the cash flow. The available cash that a company actually has. Third, you can actually improve the accuracy and the frequency of your cash forecasting. Now, some of our CFOs did say that the price of cash is so low that to borrow money the interest rates are so low. But that's not always going to be the case. So it always makes sense to figure out how to keep available cash. You digitizing will obviously improve gap compliance. You'd also reduce any need to reconcile or restate your results and thereby reduce the errors that are associated with it. And finally, it reduces manual data entry. All of these are the benefits of digitizing both on the customer side and the supplier side.

SCALA: 40:22 For me, what I think I took away from this was, at the end of the day, the financial performance of the company is not going to improve without collaboration between the people that are running sort of the supply chain and the people that are running finance. There's a vocabulary difference between the two. If the CFO calls down to the supply chain guy and says, "Hey. Did we ship that product??" Maybe not implied in there specifically, but maybe he is asking a revenue recognition question. Which is, he wants to know whether he can book that revenue or he doesn't. And yet, neither party really understands maybe what the right way to ask that question would have been, or not. Maybe the guy down the supply chain only sees that the product shipped and maybe he says, "Yes." But maybe it's got a 10-day journey associated with it and maybe the revenue gets booked maybe incorrectly as a result of that. So I think there's a vocabulary. There's sort of a set of objectives, obviously, the supply chain people have. And there's a set of objectives, obviously, the finance people have. But at the end of the day, obviously, everybody's motivated to try to improve the financials of the business.

SCALA: 41:31 The paper obviously highlights many of the intersection points, I think, between supply chain and the finance group. We've touched on many of those. One was revenue recognition. The second is day sales outstanding. The third is cash. Collecting it, getting it in, getting it sort of booked back on sort of the ERP, and then just digitizing things because there's a lot of manual costs sort of in the process. And I think that really for me, it just sort of reaffirmed that there is a disconnect between sort of organizations, many times, within businesses. And we're trying to maybe kind of highlight areas where two of these at least organizations can get together and talk about it in a common way, such that the objectives are sort of better understood as may be really where the question is sort of leaning to. And just to give you a view of how bad that revenue recognition issue is, I mean, two-thirds - two-thirds! - of the people in our survey basically said that they had to make manual revenue adjustments in their financial statements based on confirmations of when the customer actually took possession of the product. So if these things were working well, there's just no way there'd be two-thirds of our companies having to go in and readjust, if you would, entries that were already made to a financial statement. And that just kind of goes to show how either manual or how much misinformation sort of exists within the business that we would have that level of sort of activity still taking place.

ZACHARIA: 43:09 If I could add one more aspect of what Steve said, he reminded me of the idea of collaboration. If you remember the example I gave earlier, where the very large customer went to a 90-day payment term, the CFO that I talked to said that, "We realized that our suppliers were going to be in trouble, so we arranged to get a line of credit for them at a lower rate than what they could get so that we could make sure they're going to survive in time to get paid properly because you do have to look out for your suppliers." And the key underlying messages there that I want to say is, is that collaboration, talking to your customers, talking to your suppliers, sharing this information, is a huge and very critical part of being successful in the long-term and it needs to be reemphasized when you're really looking at running a successful company.

S1: 44:04 On that note, Zach Zacharia, Steve Scala, thank you so much for being with us today on ilLUminate.

ZACHARIA: 44:10 Thank you.

SCALA: 44:12 Thank you for having me.

CROFT: 44:13

As director of the Director of the Center for Supply Chain Research at Lehigh, Dr. Zacharia and the faculty and students at Lehigh Business are generating new ideas for education and future knowledge in the field of supply chain management, as exemplified by the study conducted in collaboration with DiCentral. Once again, Steve Scala is DiCentral's Executive Vice President of Corporate Development. This podcast is brought to you by ilLUminate, the Lehigh Business blog. To hear more podcasts featuring Lehigh Business thought leaders, please visit us at business.lehigh.edu/news. And be sure to follow us on Twitter @LehighBusiness. This is Jack Croft, host of the ilLUminate podcast. Thanks for listening. [music]