Hi, this is Jonathan Kwoh with Radio Tuck and I’m here with the Vice President of Information Technology at Stora-Enso North America, which is a company that focuses on the forest products industry.

When most people think of forest products, they think of the 30-year old mills and a rather dowdy kind of industry. So what kind of impact has IT had on the forest products industry, to start off with?

Well, I think the single biggest impact is in the area of customer relationships. If you take a look at society at large and the types of customers that we sell our products to and you look at the names, for example, our single biggest customer is a firm that maybe your students have heard of called AOL-Time Warner and obviously the AOL part is very, very sophisticated in the use of information technology and, therefore, expects its suppliers to enter into those types of sophisticated relationships with it.

From what I had seen, after becoming part of the company it was, well recognized in InformationWeek, the role that IT was taking in making the forest products company much stronger. In some experiences, IT seems like a cost center and overhead and it seems like you managed to change that perception and perhaps change the culture a little bit. Can you tell me a little bit about how you did that?

Well, first of all, if any staff function is viewed as a cost center, it usually means one thing has happened in the past. They have some view of the world, it is concentric around their definition, and so that tends to be a very internally focused definition. Whether it be engineers doing engineering, and therefore they have an engineers type of view and think, well, the rest of the world is this way, or human resources or, in this case, information technology. So the first primary secret that we did was we said we’re no longer here to do information technology work. We’re here to serve customers. In working with our customers obviously we’re going to bring a set of tools, we’re going to bring some knowledge to the customer, but let’s work with the customer in a collaborative way and figure out what is it that the customer is trying to accomplish. As soon as you start to do that, though, what you very quickly discover is that if you were operating underneath your own pyridine, within your own discipline, the types of problems you were solving may be interesting within that pyridine, but had no meaning, it really didn’t generate any value. So, if the external person who’s paying the bill sees no value out of what you’re doing, guess what they’re going to do over time? They’re going to try to cut your cost, cut your budget as much as possible. So by shifting the focus back around to customers and teaming with customers and understanding what are the customer problems and what are the things that you can then do within your discipline, then you can apply the tools of your pyridine to that customer’s set of problems. You can then articulate benefits to what you’re doing that far
exceed the paltry budget that you get, and then it becomes a productivity engine or a financial
engine. A lot of different people have written about this in different ways. But, the concept then
is you no longer get measured on how much you cost, you get measured on what you’re
producing. Then, as soon as you start getting measured on what you produce, and as you start to
discuss the wonderful world of the future, what can be done in the future with your tools, it then
starts to drive people to ask questions, not so much as how much will this cost, but they will start
to ask questions like how quickly can you give this to me? And it totally changes the dynamics
of the discussion. Let’s say, for example, that I sat with you and got some sense that if I could
help you create a new computer program to do XYZ and we both very carefully analyzed the
benefits, let’s say the benefits are going to be ten million dollars and I tell you it’s going to take
six months to do the project and it’s going to cost a thousand dollars, well, on the cost side of the
world, you’d say ‘oh, well, great ten million dollars, a thousand dollars, here is your thousand
dollars, see you in six months’. But, think about how big ten million is from a thousand. It’s a
ten thousand-fold increase. Think about a six-month time period. If they look at you and say if
you could get it done in a month, how much would it cost, you’d say it would cost a hundred
thousand dollars, is that a good deal? Absolutely it’s a good deal. Well what happened? Your
budget just for that project just went up a hundred fold, right? But on the other hand, the
economic value of pulling the savings in, pulling the benefits in by 5 full months more that
outweighs that 100 fold increase. So now the discussion has nothing to do with what is your
budget, per se. Yes, you need to understand your costs so that you can do a cost benefit analysis.
But now the discussion is more on time and those types of things.

So that’s where I had seen this comment from you where you said time compression drives
savings. Is that the basic underlying idea?
Absolutely. That is the basic underlying idea. If you’re trying to do something, if you’re
customer focused and you’re meeting with your customers and you can find ways to do
something better, the longer you take to get that completed, the longer you take to get it
implemented, and all the savings thereby are lost. I’ll give you a real practical example. Every
compound sends out an invoice for their product. Many companies use third parties to help sell
their product. The commission that those third parties get could be all over the map. And it
varies industry by industry. Within one of the industries that we have, one of the products we
sell is fine paper that is sold through merchants to a local print shop. Now, it is typical within
that type of a distribution system to pay a commission of five percent to the local merchant. In
addition, it is also typical to give the cash discount to the local merchant, if they pay on time, by
two percent. Now these numbers may sound small, but when you apply these numbers to one
million tons of paper, the numbers can become very large very quickly. Now going back to this
example of time compression driving savings, we used to calculate, and lets say a typical
invoiced started at a thousand dollars and we would say ‘ok, the invoice is going to be for a
thousand dollars but you’re going to get your five percent commission so now its 950 dollars and
then you’re going to get a two percent cash discount and so you take another two percent off of
950 dollars and that’s what you’re going to get paid. Well it sounds fairly straight forward,
except that the way that everyone else in the industry did it is that they took the thousand dollar
invoice, they took the two percent cash discount off, which brought it down to 980 dollars, and
then they paid commission only on the 980 dollars. Very easy change to make in an invoicing
routine. In fact, it should take management longer to discuss the implications of the calculations and how they communicate it to their customers, than the programming side. When you talk about one million tons of product and changing a simple calculation like that, it can translate out to be six hundred thousand dollars a year. So, I’m sitting with one of my peers and they are extremely frustrated because they want to have this calculation changed and they’re talking about 600 hundred thousand dollars a year of savings and it’s buried in an IT queue. And I looked at my peer and said no, no, no, no, you don’t understand. This is not six hundred thousand dollars a year in savings. He said well, what do you mean? I said, no, the real savings of this is approximately three thousand dollars a day for every single business day that we haven’t made this change. Now how long has this item been sitting in the queue? And the answer was six weeks. Well, six weeks have five business days, that was thirty days, times three thousand dollars or 90 thousand dollars. I said don’t you think maybe, if we talk about the savings on a daily basis, we could change the priority of this item, and that result was we had the change done in two days. But we had discussed it or, more important, the decision to be made by management would have been sitting in a queue for thirty days.

So a lot of it’s trying to make not only a connection with a customer but make sure that there’s that strong connection between your IT group and your internal customer. Whether internal or external, another key thing that we do that is a little bit different than how most other information technology departments are organized in North America is that we’ve taken approximately 200 IT people all across North America and we’ve put them into what are called customer focus, customer centric teams of six people, which is a typical team size. And those six people now physically sit with, and are part of, the customer organization. And not only is the customer deciding what needs to be done, but now that these six-person teams are sitting with the customer, the customer can dynamically change the priority day by day if an item like this shows up. But you’ve got to switch your pyridine, you’ve got to switch your thought process of the value of time. We’ve all heard in our account classes about the time value of money. Well this is a real practical example of the time value of money.

Let me change the topic just a little bit, but I’m sure it’s related. One other thing that came out of the case I read was about this strategic low and I thought it would be interesting if you could kind of explain the implications of that kind of framework. Let’s also bring that back into the context of talking about the traditional cost focus organization, or we could reword that to be a technology focus organization just as much as cost focus. Since we want to move off of a focus on technology and focus on the customers, we said we need to have a way to view customers or a way to segment customers. And so we said, well, there are really three types of large groups of customers within our business. One is the external world, now the external world means the external world outside the four walls of our particular enterprise. Who are the sub-customer groups? Well, number one is our external customer who actually buys our product is part of that. A second group from an IT perspective would be our suppliers. Because, in essence, there are relationships that we can do out there in that external world that can have an impact on our supplier, weather positively or negatively, but I guarantee you if we have a positive impact on our suppliers, that lowers our cost. If we have a negative impact on our suppliers, it increases our cost. Ultimately, we’re going to pay, one way or the
other for the cost of our things. A third group is the investment community at large. The people who are making those decisions, and then there’s our shareholders specifically. We happened to pick a globe because it has three distinct pieces that kind of works this way. So if you look at the Earth, the first thing that you notice is that there’s water and trees and continents. And that’s the external part of the globe and we talk about that. As we dig deeper into the globe as a model though, then we find the continental plates. The things that the exterior world that we see kind of rest upon. And there’s a very popular activity going on in industry today, particularly within software called enterprise requirements planning pieces of software. Some of the typical names you’ll hear are SAP or Oracle, we used to talk about Bond several years ago but they’re pretty much no longer a player, and a company called J.D. Edwards, but there are probably 20 or 30 people that compete in this space. The concept there is that as you’re looking at your business processes and as you’re looking at the different areas of the business, as you can have transactions take place in one part of the business, have it immediately available to all parts of the business, that can drive overall cost savings. So, the plates, if you will, the pieces of software we use to handle that part is in the RP package and the types of customer groups that we’re supporting there is human resources, finance (a lot of financial people, a lot of accountants running around keeping track of all sorts of things, senior management falls within that group) and purchasing really more belongs up in the external group. Then there’s a third area though, if we go back to our analogy of the globe, if you will, and that’s the molten core. Actually, we talk about life and everything grows here based on sunlight hitting, and sunlight hits the Earth and it causes things to grow and then animals eat that, and then we eat the animals. We also eat the vegetables as well. However, if the molten core wasn’t still hot, life couldn’t exist on the Earth, and most people don’t understand that. 99.9% of all the energy that sustains life on the Earth is from that initial molten core that’s still hot and at some point, it will cool. Now, it’s still going to take another 6 or 7 billion years, so we’re still going to be around for a while, but we can’t just live on sunlight. And within our industry, that molten core is our manufacturing facilities. And our business, you alluded to the fact that at the moment the title or the name of the company on my business card is called Stora-Enso Oy, which is actually a European, Pan-European/now North American company, and I’m responsible for the North American division of that. But as you look at our industry as an industry, the entity called Stora-Enso has only existed for about three years. If you were to go back five years or six years, there’s no one piece that is larger that ten percent of what the total entity is today. And to give you a feel, we are the second largest forest products company in the world. We have 12 billion in sales if denominated in dollars. A majority of our sales are in other currencies and as currencies fluctuate, actually 12 billion historically sounds like a low number compared to if you look at our output. So, going back to these manufacturing facilities all over the world, each of them have grown up over a hundred year period. And each have information technology of different vintages over that hundred years. Part of our strategy is saying that we also need to have IT groups focused in on each of those manufacturing facilities. But then the real power of the overall globe concept is how do you get information that is important to the external world to the mills and from the mills back to the external world, and we tend to use the ERP type software in between to do that. But this is really very much a different view of how an IT organization is structured. In general, IT groups are structured around technologies as opposed to around customer groups. And to give you a feel, you could pick just about any technology that IT touches today and other than maybe paper and
steel and petrochemical, we have some of it all, which most other companies only have little pieces of it. So if your only focus is around cost, and your only organized around technology as opposed to customers, there are winners and losers and you don’t service the entire enterprise. So that is the concept of the globe, and actually this customer-centered view is being accepted, being adopted quite well right now out in the external world, and is one of the things that drove our overall rating this year, with InformationWeek, as the 29th best IT organization in North America.

I was wondering how it’s all tied together, because I do see that there tends to be, if you look at a lot of these big companies like Oracle, where they’re taking their ERP databases and trying to create them as a CRM type of engine. So do you think this is the kind of way things are going in terms of getting integration of, I guess you’d call it, the outer sphere with at least the middle sphere?
That’s exactly right. Now whether it will be a single vendor or not, I would make the flip back argument that I think that you’re going to see consolidation taking place more and more over time. And so, the real role of those types of vendors and what they’re trying to accomplish, you won’t get it from a single vendor, because you can’t afford to replace existing technologies as you acquire other businesses. So, it’s more the mindset and the tools that you’re going to bring the bear, so that when you have an Oracle and you have an SAP and you have an old Bond system and have a new J.D. Edwards system, how are you going to latch all those together and still talk. So that’s part of the globe concept. And there’s not doubt that we lose the outer part of the globe, we’re using the latest types of technologies and latest languages you would find in any internet start up company. In fact, we have our own internet start up group right within my organization and it acts and behaves just like an internet start up within that exterior part of the world.

I was also going to ask a little bit about XML and standardization because it seems that the company in your group has been kind of trying to take a lead position in trying to create that standardization across the forest products. Can you tell us how important XML standardization is and how you went about trying to take a leading position in it?
Let me rephrase your question a little bit this way first though. I’m not sure all your listeners know exactly what XML is and I tend not to try to throw around a bunch of acronyms or buzz words without explaining. So lets first deal with the business concept that you have two members in a business relationship, one of which wants to send a purchase order information to their supplier, and then their supplier wants to send back OK I got your purchase order and, by the way, here’s what I’m going to charge you. And then at some point, the supplier creates the product and is about to ship it back to the customer and says, oh, by the way, I’m ready to ship your product and here’s when its going to come. We tend to call that an advanced shipment notice. And then the product is actually shipped and the paperwork is sent and then an invoice is sent and then ultimately a payment back. Now, in the industries that I serve, it’s a fairly mature use of technology on the magazine side. So, we use a technology called EDI, electronic data interchanging. We’ve used that extensively in the past with all of our customers to pass that type of information back and forth. XML has the ability to do that type of work as well as other types of value added sharing of information across to separate enterprises. It so happens that XML just
doing this work that EDI did in the past can do it much more efficiently at a much lower cost than what EDI used. And so if you have an industry that has already adopted EDI, moving to XML cuts everyone’s costs already that participate. But just like in the EDI world and the XML world, there’s very, very detailed work that needs to be done, definitions need to be done on both sides to say do you call a purchase order purchase-space-order, do you call it P.O., do you call it P space O space, and then what’s the structure of the information in between them. You have to do that literally for thousands of date elements. Now we had to do that in the EDI world in the past as well, but within the XML world, once you decide on it, there’s a lot more tools. So the standard setting that we’re involved with and we are taking a leadership role with one of our key customers, in this case AOL-Time Warner, is to set a standard that the whole industry can easily adopt and, in fact, the standards setting and the standards activity we’ve been involved with has ultimately been accepted as a Pan-European/North American standard and it’s called the Poppy Net, within the XML world. But there’s other reasons besides just replacing EDI that we want to use XML. What XML is, is a technique where by different partners within a supply chain can share not just information back and forth, kind of in static, pre-thought out way, but if all that information has been coded, if you will, to XML, it allows that business partner kind of on the fly to do some of their own calculations without taking it deep into the heart of their own systems. And so over time it’s going to drive a lot more productivity and a lot more creative use of information across different enterprises.

And of course the standardization aspect is the key so you can do it with any vendor or any customer.
Correct. And if you think about it, any one customer of ours probably deals with four or five manufacturers, doesn’t sound like that much work on their side, but still its four or five times the work versus if they can adopt a standard one time. But we as a manufacturer, we literally deal with hundreds of customers and have to get into negotiations with each of those customers. It’s very time consuming and hence the driving for standards.

Ok, I think we’ve talked about two key ones, namely some of this consolidation XML, but what other important IT trends do you see in the future?
Oh boy, that is such a wide open question. First of all, let’s talk about something so fundamental that most people probably don’t think about its implications, and that’s the internet, and more importantly, some call internet protocol, which is the underlying technology used to shift information. The size of the internet is very large, extremely large, and when I’m talking about the size now, I’m not talking about how many end points or the types of information you can find, but the amount of information you can actually push through the internet as any one employer is very large versus anything in the past. And so when you think about what life is going to be like two years from now, five years from now, ten years from now, the ability to drive cost out among different players in the enterprise and are using now this big ability to push information, you’re going to find that literally pretty much anything that you have of importance would be of interest to one of your external partners. The cost is going to be so inconsequential to share that information, that all sorts of information, all sorts of knowledge, and all sorts of collaboration is going to take place. So the latest thoughts within people in my type of position, what we struggle with, is how can we use this thing called the internet to better collaborate with
our partners, whether they be suppliers, whether they be customers, whether they be the
customer of our customer. And so we can call that collaborative processing is the new big thing
that’s kind of out there on the horizon. There are some companies – there’s a little bit of tools
out there – but that’s going to dramatically change the way business is done in the future.

**Can you give an example of how collaborative processing would work?**
Sure. The most mature example is something called Covisint, which is an exchange that was
created by the big three auto makers here in North America. And the real collaborative part of
Covisint isn’t that it allows the door handle manufacturers to place their delivery information to
the automakers. I was having lunch with a gentleman yesterday, who was doing a start up in his
business, that he was getting into doing specialized coloring of plastic. Now, let’s relate this to
collaborative processing and to Covisint. Logically, he wants to provide a service to extruders
who create a door handle on a car where the color of the plastic of the door handle has to match
the side panel and other panels within the car. But let’s say the person who has the contract just
to do the door handle is a different player than the person who has the contract to do some plastic
on the dashboard or a different material on the dashboard. In the past when, someone wanted the
car manufacturer up above, a design team wanted to change the color of blue from sapphire blue
to midnight blue, and who knows what sapphire versus midnight means, obviously there’d be
some very specific specs the color people understand, but think about the amount of time it
would take underneath a non-collaborative world. First, that person would have to get with
artists and have to decide what the exact shade of blue they want. Then they’d have to turn
around and have to communicate to someone who was in their purchasing department that was
responsible for dealing with overall plastic makers. Maybe there’s 20 different suppliers each
making different pieces, so they now need to communicate to them the new shade of blue. And
then those people who need to do the new shade of blue maybe a shade of blue they’ve never
done before. And remember this is all different sorts of materials we are ultimately going to get
to this guy who’s doing the plastic coloring for the injection molder. They have to turn around
then on their design teams and figure out OK, how are we going to respond to this new customer
requirement. Then ultimately, once they figure out technically how they’re going to do it, then
they need to go to their purchasing departments and say, ok, now you get in touch with our
suppliers and tell them we want them to make this part in this different shade, different materials,
different specification. It’s no wonder that the US auto manufacturers only really change their
cars once every three years in the past. When you think of that Herculean effort. Underneath
Covisint and underneath the collaborative processing, is that person is consciously making a
decision in the design team to move from sapphire blue to midnight blue. As he’s making that
change within his requirement, it instantaneously flows to everyone else who is on this
collaborative tool and now they all can start to work in parallel rather than serially on that
activity. So that’s a practical example of collaborative processing. Who knows, maybe General
Motors of Ford will get it to the point where they can dramatically change a car every year,
versus changing some minor details and calling it a new model year.

**One final question. In the past year, has there been anything unexpected or surprising that
you have seen that you’ve thought to yourself wow, I wish I had known that a year ago?**
There are surprises like that every day, every week, every month. There’s a rapid pace of innovation going on in society right now and just that overall innovation – there are things that I encounter on a regular basis. Just this thing I was talking about collaborative processing. If you had asked me about collaborative processing 15 months ago, I would have looked at you kind of funny and said, well, what’s that? And I guarantee in the next 6 months there’ll be an idea even bigger and more powerful than that. This idea of time – time is getting shorter. If you understand Einstein’s theory of relativity, somehow on the Earth all of a sudden, we’ve moved closer to the speed of light because we’re getting tremendous time compression everywhere in everything. And that is measured by the rate of innovation. And just think about what types of products that you have today that you didn’t’ have two years ago. How many people two years ago really ran around with something like a PDA and really used it. It wasn’t the norm that it is today. And I’ll tell you, that within three years, the PDA type device will be your main transport mechanism for watching your favorite movie while you’re waiting at the airline terminal. If it isn’t three years, it will be five. I think it will be within three years you’ll have some wireless device and you’ll be watching a personalized video of something that’s important to you.

All right, it’s been good talking to you and thanks for talking to Radio Tuck.