



## **Interview of Bertil (Bert) Nordin**

Interviewed by:  
James Pelkey

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**James Pelkey:** When did you join DCA?

**Bert Nordin:** February 1st, 1981.

**Pelkey:** What was the status of the company when you joined it?

**Nordin:** It was really kind of a cottage industry type company; sales of about 3, \$400,000 a month, living hand to mouth, almost bankrupt.

**Pelkey:** So the company was just struggling along when you got involved.

**Nordin:** Right.

**Pelkey:** How long had the company been in existence when you got involved?

**Nordin:** Since 1972.

**Pelkey:** It was kind of a contract engineering shop?

**Nordin:** Well, it started out, essentially, to finish a contract, I guess it was, for a front-end communications processor for DEC Series 10 hardware -- the old DEC 10 -- and from there, the company started to develop some products, finally. They developed a -- well, they sold this product to some other people, and then they developed the first statistical multiplexer, and finally a networking multiplexer, but they never really had any marketing expertise or any money to do these kind of things, nor the management to build a larger company. So essentially, they were floundering along with a lot of neat product ideas, no money for extensive R&D and product quality control, marketing and sales and so forth, so they were really kind of at a very dangerous hovering point.

**Pelkey:** At that point in time, had the company prospered earlier?

**Nordin:** No, they had never really made any moneys. I mean, they had some years when they showed a little profit, but it was really a small company, mirrors kind of things.

**Pelkey:** Do you recall when they introduced their statmux?

**Nordin:** I can only guess, but I would guess it was somewhere around '76.

**Pelkey:** So it probably preceded Micom.

**Nordin:** Oh, they definitely had a statmux before Micom, but Micom had the marketing savvy to capitalize on it. And Micom's, when they introduced it, was also an easier product to install and to use. It was more user oriented.

**Pelkey:** So the statmux that DCA did probably was between the Micom and the Codex offering, which was roughly around the same time -- their 600 or 6000 series.

**Nordin:** What do you mean 'it was between?'

**Pelkey:** Well, in terms of functionality, complexity, price point, because the Codex product was at a \$40,000 price point. It was big and expensive and --

**Nordin:** No, the DCA mux probably had more functionality than either one of them. Certainly the networking multiplexer did.

**Pelkey:** How about that. What caused you to get interested in the company?

**Nordin:** The way I got in contact with the company was sort of strange. I was at Quantel at the time, and I got a phone call in, oh, somewhere around March or April of 1980 from the lawyer for DCA, asking me if -- or, he told me he saw Quantel's name -- and he was a friend of mine at the time -- he saw Quantel's name as one of the companies a venture fund that they were talking to had an investment. It was NEA, and so he asked me what kind of people they were, and so forth, and I told him they were great people and Dick Kramlich was a friend of mine, and so forth, and that was really the end of the conversation. Then, about a month later, he called me back and said: "Hey, look, this deal's getting kind of complicated, and we haven't had venture deals in Georgia very much," and so forth, "Would you mind if I sent it to you and take a look at it and tell me what you think?" which he did. I read the thing about twice and didn't really understand it, because they had all kinds of upside-down convertible preferred and all this stuff, so I put it in my drawer and forgot about it, and about a month later, I was going out of town, I was looking for something, and I came across this thing. "Oh, gee, I didn't call him back." So I took the thing with me on the plane and had time to read it carefully, and I called him back and I told him it was really too complicated; what they ought to try to do is get a common stock deal. At that point, he said that it didn't really matter, because NEA had pulled out, everybody had pulled out, so they had to get more money from the bank. I said: "Fine, thank you. I'm sorry I couldn't be of any help." Then a couple months later, he called back again. He said: "Would you mind -- " he says: "You're a good friend of Dick Kramlich, right?" and I said: "Yeah." He says: "Would you mind calling him and ask him if -- what the real reason was they pulled out?" I said: "No, I would be happy to, but obviously I'm going to have to tell him I'm going to tell you," because I was thinking at the time a lawyer is liable to sue. And he said that was fine. So I called Dick, and Dick said: "Well, it was pretty simple. We think the products are great," and so forth, "but that the company would never go anywhere because the company didn't have any management." So I called this guy back, this lawyer, and I told him that, and he said: "Well, that's what we suspected," and that was the end of the conversation. Meanwhile, I still didn't know anything about DCA. Then, a couple of months later -- this is about October, November -- it was in the paper that we were selling, or had sold, Quantel to Mohawk Data Sciences, and he called and asked me what I was going to do, and I said: "Well, I really didn't know, other than the fact that I was going to move back to Atlanta." So he said: "Well, would you be interested in DCA?" and I said: "I don't know, I'd have to look at it and talk to the people and so forth." So he arranged that, and I came back here and talked to everybody in the company plus their industrial psychologist, because the company was having internal squabbles at the time and they hired an industrial psychologist. The people here asked me to come with the company, and so I talked to Dick Kramlich and asked him, if I did, would they put in money, and he said: "Yeah,

who else do you want?" So he put together a group of five venture capital people, and that's essentially how it happened.

**Pelkey:** How much money did you raise at that point?

**Nordin:** \$3.5 million.

**Pelkey:** And the product line that you were trying to commercialize at that time was what?

**Nordin:** It was a network processor, network communications processor.

**Pelkey:** And that was a front-end device?

**Nordin:** Yeah, it was a front-end, switching, protocol, control processor, basically for asynchronous devices: asynchronous terminals, asynchronous computers; DEC and Data General primarily.

**Pelkey:** So kind of a data PBX with a protocol conversion in it?

**Nordin:** Well and also statmuxing.

**Pelkey:** Oh, ok, statmuxing as well.

**Nordin:** All combined into one box.

**Pelkey:** Now, what happened next?

**Nordin:** Well, essentially, we got the money. We stopped shipping the product, because they had shipped it in order to be able to finance the sales and receivable financing. Our problem was the things didn't work, so we stopped and figured out how to make them work, and fixed the ones that were in the field, and then started shipping again. In addition to that, we started to revamp the sales and marketing within a period of, oh, six months or a year; had totally new people. The only person left was a gal who had come to the company a few months before I did, had just come out of the University of Michigan. So we brought in really competent systems sales type people, and a key guy for marketing, and built up the sales, built up -- improved service, drastically improved quality. They used to have about 20% of their products either dead on arrival or infant mortality, and we got that down to way less than 1%. Essentially, what we did is we patterned the company after Hewlett-Packard, in terms of emphasis on quality; emphasis on engineering; emphasis on the way we deal with the associates in the company.

**Pelkey:** How much did this product sell for at this point?

**Nordin:** These network products? They'd sell for -- depending on what's in it, because it's really a very modular product -- anywhere from 15 or \$20,000 up to \$60,000, probably averaging 30 to 40.

**Pelkey:** And who did you compete with?

**Nordin:** At that time our major competitors were Infotron and Codex, and sometimes with Micom where a customer would use statmuxes combined with switches.

**Pelkey:** Now, they would compete with you, really, with statmuxes, as opposed to having a product as sophisticated as yours.

**Nordin:** None of them were as sophisticated, although Infotron had a pretty good product at the time.

**Pelkey:** So you started building the company with this product, so that you were shipping it reliably with quality. What was your next step in terms of building DCA?

**Nordin:** Well, basically that got our sales up to the point where, for the year ended June 30, '82, they were -- I don't remember what they were, probably eight or ten million, and then for the year ending June 30, '83, they were \$14 million; that's pre-merger. Meanwhile, we went out and the public market got real hot in early '83, so we did a public offering, and just kept emphasizing the fundamentals: product improvement, good service, good quality, hard hitting sales -- you know, working real hard on sales -- and from there we went, did the public offering, then we merged with a company that had the IRMA product, Technical Analysis Corporation, and did the same thing for that.

**Pelkey:** How did you find -- what was the name of the company?

**Nordin:** Technical Analysis Corporation. Well, they were here in Atlanta, and what happened was one of our directors, Frank Bonsal, suggested I get ahold of the guy who was head of it, Wave Graham, which I never did because I was real busy, but I happened to be walking by their booth at the Comdex show when it was in Atlanta in the spring, and Wave recognized me and grabbed me and pulled me in the booth, so that's how I got ahold of them.

**Pelkey:** Now, that was a very different kind of a product than the product you were selling. You had a direct selling organization, sophisticated --

**Nordin:** No, at that time we sold through distributors.

**Pelkey:** Oh, you sold through distributors. Even in '81, '82?

**Nordin:** Yeah.

**Pelkey:** That's a pretty big-ticket item to sell through distributors at that point, wasn't it?

**Nordin:** Yeah, and in effect, there were only probably three or four that were effective. That's why, ultimately, we went to a direct sales organization.

**Pelkey:** You didn't even use manufacturer's reps? You used distributors?

**Nordin:** They were manufacturer's reps. They weren't really distributors.

**Pelkey:** So when you saw the IRMA product, still, that was a board level product, versus a systems level product that you had. That's a different kettle of fish.

**Nordin:** Well, except we didn't understand that. What we understood was that it was a protocol conversion product, which we were already in.

**Pelkey:** Because now, by this time, you wanted to have synchronous.

**Nordin:** Exactly. They had IBM expertise. We didn't, so we thought that those elements would meld together and make a stronger overall. So that was the basis for it.

**Pelkey:** Then lady fortune shined on you.

**Nordin:** Yeah, well, we did the same things there that we did with the network product. We put a sales force behind it, a lot of advertising dollars, good production quality, good service quality, all of those things together; in other words, the fundamentals, and the upshot was we ended up, by being first in the market, we had market recognition as such, and became a standard. Secondly, is we became known as a very good company to do business with.

**Pelkey:** But the process of combining, you still continued to sell the stand-alone boards, as well as trying to take that technology and incorporate it into your higher value added systems.

**Nordin:** Right.

**Pelkey:** And it was really the stand-alone products that started to consume more and more, I presume, of your attention, because they started to sell.

**Nordin:** The sales went so fast, yeah.

**Pelkey:** And all of a sudden -- and it was because this PC base was being installed at an astronomical rate.

**Nordin:** Right, exactly.

**Pelkey:** People just a few years before would never to have expected that to have happened.

**Nordin:** Right.

**Pelkey:** I presume when you bought it you didn't think: "Synchronous terminals and 3270s are going to stay out there. What we need to be able to do is provide this kind of networking processor -- "

**Nordin:** Well, that was kind of a fun thing. I didn't really envision how the whole thing would go, but -- I won't take that much credit -- but one of the things that did happen in that same Comdex show, I walked around the whole thing very carefully, spent a day or two, and there was one thing that was very apparent to me that I still remember, and that's that three fourths of the booths seem to feature enhancements to IBM PCs, and what that told -- see, I had come out of the small business computer industry, and the key in that kind of an industry is how many software applications are there. So I saw that, and I thought to myself: "The IBM PC is going to barely apply. It's going to be history," and it almost was, as you may recall. The reason I thought that was going to happen had nothing to do with IBM. It was because there were so many people doing software and other enhancements to the product that I just felt that this thing is really going to go.

**Pelkey:** That was Comdex in '83?

**Nordin:** Yeah, spring of '83.

**Pelkey:** That's right, having come from that background -- that's an excellent point -- you were receptive, having had this prior experience and having seen this, to recognize that, at a higher, abstract level of the details of it, that if that many people are putting that much energy into this, this PC is going to take off. So when it came time for you to look at a tack, in terms of that product, you said: "Wait a minute, let's continue to invest in getting that product out there, because the PC is going to be an important product."

**Nordin:** Exactly.

**Pelkey:** That process of acquisition, because that was one of the first -- that acquisition by far -- I can't think of another acquisition in the data communications industry that proved to be as successful -- was a very important step for DCA.

**Nordin:** Oh, sure.

**Pelkey:** And it gave you the market presence and the scale and the ability to be able to then go off and start to court other companies, and acquisition has been an important part of your strategy of building a bigger company. Then you bought a local area networking company in Fox and Cohesive --

**Nordin:** And Forte, and Crosstalk.

**Pelkey:** So this process of trying to play in all these different markets -- during this period of time, what was it that was driving this recognition on your part to buy these other companies?

**Nordin:** Well, the primary reason is, in looking back in history, if you take any industry that starts out as a cottage industry, you always have a lot of competitors; automobiles, for example. Back in the teens and twenties, there were a lot of car companies in the United States; dozens of them besides the obvious ones that are gone, like Packard and Nash and so forth. As the industry grew, it took more and more marketing, more and more R&D in order to remain competitive,

and the upshot was that it's like a pyramid. It starts out with a lot of competitors -- actually, more like an hourglass. It starts out with somebody with the original product, and then a lot of companies -- small companies -- are in it, and then it narrows down again to be very few of them, and only the strongest survive. So, our feeling was at the time that if you're going to be one of the longer term players, you better put together a pretty broad spectrum of data communications products and become pretty large or you're not going to be one of the survivors. So that's essentially what we did.

**Pelkey:** Which is a very different strategy than most of the other data communication companies, who tended to stay much more narrowly focused. The traditional datacom guys have all stayed, for the most part, very focused.

**Nordin:** Yeah, and they're all in trouble today, with the exception of Codex and Racal-Milgo. In fact, those are the only two that I can think of who aren't having very serious problems from an earnings perspective.

**Pelkey:** Now, from the advantage of where you were selling, when the LANs started to come on the scene, were you -- how soon did you become aware of them and how soon did they impact the business so that you realized that they were competing for the same dollars that traditional datacom guys were?

**Nordin:** Fairly early. We just really weren't in a good position to do anything about it, because we didn't have the right guy as our VP of engineering, and we also had some internal conflict within the company at the time in engineering. So the upshot of it was we didn't really shoot into it as aggressively as we should have, which is unfortunate. We're in it now, but we should have had the LAN products that we have today -- I'm not talking about 10 Net, I'm talking about the networking processor products -- we should have had what we have today three or four years ago.

**Pelkey:** And you were aware of that and would have done it, you just, organizationally, couldn't execute what you saw as the opportunity.

**Nordin:** Right.

**Pelkey:** Was your customer base telling you that they wanted that, or was it just your recognition that this new technology was coming along?

**Nordin:** A combination of all of those things.

**Pelkey:** Because this issue of where ideas come from, the vision of a few people saying: "This is the way the world is going to be," or is it the marketplace telling you --

**Nordin:** Well, it's a combination of both. It's a combination of both. I mean, obviously, your customers, when you invented something like the statmux or the IRMA products, don't tell you anything, because they don't think of it. They just don't know that there's a need for a product



like that, because the product doesn't exist, but once it does exist, then they tell you: "Ok, these are things that we need in that product." So it has to be a combination.

**Pelkey:** Now, over this period of time, while you competed with Infotron and Codex in the beginning, you've gotten to the point now where you kind of compete with everybody, yet there's no one who is really a head-on competitor, other than, potentially, Codex.

**Nordin:** Well, it depends on the products. Codex, to a degree they are. IBM is a very big head-on competitor.

**Pelkey:** IBM is probably your number one competitor, with the breadth of your product line and your position in the marketplace. You've positioned, through the process of having all these different kinds of products, you've now positioned yourself very differently than all of the other datacom companies.

**Nordin:** Right.

**Pelkey:** Which was a conscious act on your part, because it was necessary for scale --

**Nordin:** Well, a lot of it was unconscious. I mean, we never intended to compete with IBM. I try to avoid that like the plague. For example in the IRMA product, we had the IRMA product line before IBM had anything similar, but they saw the market picking up, so they went into the business. So they became a competitor there. In the T1 product area, they became a competitor there by license -- or making an OEM agreement -- with Network Equipment Technologies, NET.

**Pelkey:** Why did you not participate in the T1 business much earlier, given that you had statmux capability?

**Nordin:** Well, we did. We had a product called the Netlink, which was a point-to-point product, a very good product. We still sell some of them.

**Pelkey:** When did you introduce that?

**Nordin:** About 1984, but, frankly, we didn't have the engineering resources and perhaps, to an extent the vision, to develop the kind of T1 equipment that we have today.

**Pelkey:** Were you aware, at that point in time, that these T1 tariff changes could have a significant impact on what was going to happen?

**Nordin:** Not really. I mean, we were a year or so before we bought Cohesive, but not three years before.

**Pelkey:** In terms of the traditional datacom guys, the only one who really made a business of it was Timeplex. I mean, Infotron and GDC all had them, but --

**Nordin:** No, GDC did, they just failed technologically.

**Pelkey:** They were the first one there; they just failed.

**Nordin:** Right, and Timeplex really saw the thing coming and designed the right product for the right time. Now they haven't done much since then, but they were certainly there first.

**Pelkey:** It was interesting how the companies that were in the business tended not to become the leaders in these new business categories as they evolved. The modem guys weren't in the statmux business.

**Nordin:** Codex was.

**Pelkey:** Yes, excuse me, other than Codex.

**Nordin:** And Racal-Milgo had a statmux.

**Pelkey:** But they came later.

**Nordin:** That's true.

**Pelkey:** Codex --

**Nordin:** Well, Codex got into it by OEMing Micom products at first.

**Pelkey:** No, actually, they had their own.

**Nordin:** Oh, did they?

**Pelkey:** They had the Vander Mey product at the high end. Then they ended up OEMing the Micom products. But this issue of innovation, the traditional datacom people clearly didn't do LANs, and the T1, other than Timeplex, while they were in it, they didn't successfully compete in the business.

**Nordin:** That's correct.

**Pelkey:** Do you find that to be strange?

**Nordin:** No, not really. The reason for it is that once you are in a business, you've got to support that business by improving the product, solving customers' requirements in that area, and so you tend to be burdened with your history. The upshot of it is that you're not out doing clean things, whereas if you aren't doing anything, you can start with a clean piece of paper. See, a really big company like IBM can decide 'ok, let's be in such and such a business,' and take a number of engineers and put them on a project, and they don't have to worry about anything else, whereas these smaller companies can't really do that, because they've got to support their present business.

**Pelkey:** You were fortunate because you were a very well managed company and you got to the market early enough so that capital wasn't an issue for you, which was not true of some of your competitors. The fact that some of your competitors were owned by much larger companies, was that, to you, an advantage or a disadvantage or --

**Nordin:** It makes you nervous at times, but as it turns out, it was a moot point.

**Pelkey:** That was not something that ever crossed your mind, in terms of where you need to be -- that another solution would have been to become part of a bigger company?

**Nordin:** It crossed our mind, but we never did it.

**Pelkey:** Do you think the process of venture capital, in terms of the creation of so many companies, has been healthy for this process, the industry development?

**Nordin:** That's a tough question. It's kind of interesting; you hear the people from Intel talk about it. They themselves got started by leaving another company with venture capital, yet when a group of people leave them with venture capital and start a competing company, then they say that's bad for the industry. I think the answer is probably both. In a more mature industry -- I don't know. It's just hard to say. The truth is it's easier for somebody with a new idea to develop it independently, so I think to a degree it's healthy. The other side of it, however, is in carrying out a market development and so forth, clearly the bigger company has the advantage, and that's why the Japanese are killing us, for example, because a company like NEC can develop chips for their internal purposes and have a ready market for it and have zero marketing costs for part of their industry, and effectively sell to the outside world incrementally, whereas Intel, for example, has to -- their whole business is selling to the outside world, so it's not incremental to them, so their cost of sales is higher.

**Pelkey:** Has international sales ever been important to DCA?

**Nordin:** We sell about 25% international, so yeah.

**Pelkey:** That's pretty significant. Do you find that you're able to compete effectively internationally?

**Nordin:** We have been in certain markets. We have not been in the Far East, but that's because we didn't have products. We're working on that now.

**Pelkey:** I have no other questions. Thank you very much for your time.

END OF THE INTERVIEW