Oral History of Harper Thorpe

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Harper Thorpe

Conducted by Software History Center—Oral History Project

Abstract: Harper Thorpe has had an impact on the development of innovative marketing channels. During his 22 year career with Hewlett Packard from 1977 to 1999, he spearheaded the use of independent software vendors (ISVs) and Value-Added Resellers (VARs). He helped to move HP from a predominantly instrument-focused company with a direct sales force to becoming a major competitor in the minicomputer and desktop computer businesses by offering customers solutions to business problems instead of just hardware. Harper's model of sales distribution has been copied by many of HP's original competitors. At the time of this interview, Harper was President and CEO of Sonic Eagle, Inc., a real estate technology company, which was later sold to First American Title Company.

Michael Mahoney: I am Mike Mahoney and I am interviewing Harper Thorpe, formerly of HP, as part of the Software Industry Special Interest Group's oral history project. This interview is taking place on June 4, 2008 at the Computer History Museum in Mountain View, California and is in connection with a pioneer meeting of software vendors and value-added resellers who supported HP minicomputers. Harper, let's begin by talking about your background. Where did you grow up, where were you educated, and what did you study?

Harper Thorpe: I grew up in Redding, California, and actually started college as a music major on scholarship and gravitated to mathematics and then electronics. I left school at UC Davis in 1972 with degrees in mathematics and electrical engineering. I joined the Naval Weapons Center in China Lake, CA as an electronics engineer, designing, among other things, inertial navigation systems that guided missiles to their destination. Frankly, that wasn't extremely fulfilling because the better I did my job, the more damage was done. I worked for the Navy for about five years, and then went to work for Hewlett Packard in 1977.

Starting at Hewlett Packard

Mahoney: What drew you to Hewlett Packard?

Thorpe: I joined Hewlett Packard as a systems engineer. HP had a thriving desktop computer product line, and so with my technical background, I was one of those who was hired to help salespeople explain the benefits of using HP desktop computers.

Mahoney: Had you been using them at China Lake?

Thorpe: Just very briefly, but essentially I had to learn the product line. However, I was well equipped from the standpoint of the two degrees which both were computer science oriented. I'd done programming, I'd done hardware design, and I knew what the customers for these desktop computers were likely to want to use these computers for.

Mahoney: So you brought domain knowledge to HP with you?

Thorpe: Right. I started out as an SE [Systems Engineer], as we called it then, which was actually an applications engineer. I was aligned with the sales organization to help in a pre-sales mode. We weren't selling services [but provided guidance] based on what I knew and what I could do.

Mahoney: So you were teaming up with the sales force to go out and talk to potential customers, and then you would listen to the customer's problem and talk about ways in which a solution could be designed. Who would design the solution?

Thorpe: Most often the customer would design the solution although we did have some, what we called "application packs," typically technical-- these were technical applications, so they might be statistical applications, graphical applications-- some things that HP actually had developed. But for the most part the problem to be solved, the technical problem, was going to be solved by the customer using these desktop computers. The most interesting thing about this, which is, I think, part of HP's history, is the desktop computer product line was a very leading edge product line, bringing toolsets to engineers that they'd never had before. Prior to then, a technical person who needed computing power probably had to use a mainframe or a minicomputer. And we could bring to them, for less than $20,000, that kind of power sitting on their desk as a personal workstation.

Mahoney: Was this product to be used as a computer in the sense that one sits at and presents the problem to it, or was this the kind of system that allowed hookups with their instrumentation so that they could automate measurements and that sort of thing?

Thorpe: It could be both, and there were some desktop computers that were better applied in the controller sense, where that computer would control instrumentation and take

measurements and then, of course, have the computing power to analyze those measurements, produce a graphical result, that kind of thing. One of the keys to these desktop computers was that they were essentially programmable by the user. HP had its own language, HPL, which ran on some of those computers and then HP moved to BASIC.

Mahoney: Which product line was this? Is this the 21 series?

Thorpe: It was called the 9800 series product line, and the manufacturing was done in Colorado.

Mahoney: Was this the one that they started calling a desktop calculator because they weren't in the computer business?

Thorpe: Originally they were called desktop calculators, yes. You might position them between hand-held calculators that were introduced in the early 1970s, which were products that had a level of power in the user's palm, versus a minicomputer, which was being created elsewhere in HP.

Mahoney: But these were fully programmable in the sense that they ran an operating system and had programming with a universal computation programming language available to them?

Thorpe: Yes. There was an HP proprietary operating system. The HPL language was an HP product. When we moved to BASIC, the products became even more universally accepted because there were many people who could program in BASIC.

Mahoney: Was this your own version of BASIC or somebody else's?

Thorpe: I would say it was a fairly standard version of BASIC. There were some extensions that included the instrument control capabilities. HP was also the inventor of something called the HPIB, HP Interface Bus, which was one of the most popular ways of controlling instrumentation. So the instruments were built with the HPIB interface, the computer supported the HPIB interface, and the language that was offered allowed [was extended to include] that [capability].

Mahoney: And BASIC had been extended.

Thorpe: Yes. So that's how I cut my teeth at HP in a pre-sales mode, working with some of what I considered to be the best sales people that I'd known, including those that had called on me when I was the consumer instead of the seller, so to speak. And within two years of joining HP, I was encouraged to become a salesperson. It turns out I not only knew a lot about the computers, but I enjoyed immensely being in front of customers; that had been noted by management and they sought to put me on the front line as a salesperson.

Mahoney: Back up for a second. Maybe you answered this and I missed it, but what drew you to HP? I mean, when you were at China Lake, were you looking around at various places or did someone suggest that you might like to join HP?

Thorpe: Two or three things came together. First of all, I interviewed with HP coming out of school in 1972, and HP was essentially not hiring at that time. It had been a target early on as I got close to graduation. I [chose to work at] the Naval Weapons Center because I was one of those engineers who wasn't quite sure what I wanted to do with my degrees, and they offered programs that allowed me to essentially survey different kinds of endeavors as an engineer or mathematician. However, I was somewhat disenchanted with the kind of work I was doing. It was not the kind of work I could even take home and talk about it. It was top security work. I was also living in the High Desert of Southern California, and my wife was not too keen on that as a place to raise our family. And I had a friend from the Naval Weapons Center who had joined HP about six months earlier. He came back out to the Naval Weapons Center to call on us. He was in this pre-sales role, by the way. We went to lunch together just as a couple of old friends, and he was telling me about the problem that he was expected to solve that afternoon, and frankly, he wasn't real clear on how he was going to solve the problem. While we sat over lunch, I solved his problem and he said, "You would love it here." So he was promoting HP to me at that time. He also knew that there was an opportunity in the Bay Area. I was Northern California raised and educated, and I wanted to get back to Northern California so it felt like the stars were aligning. I actually interviewed in North Hollywood, California, with the target opportunity being in the Bay Area; I was hired there in a quick day-long interview process, and essentially was shipped to Northern California and started my HP career, and was extremely pleased with that change.

Sales at HP

Mahoney: Okay, we'll go back now to HP. So you spent two years before you moved from technical support of sales to sales itself?

Thorpe: Right. I moved into sales on April Fool's Day of 1979, which I always thought was a perfect day.

Mahoney: As long as no one gets the joke.

Thorpe: <laughs> Yes, exactly. And I moved from a job where I was called a hero or a genius four or five times a day routinely to a sales job, which I often likened to being an umpire where if you call a perfect game, that's what's expected, but don't ever expect credit, and certainly don't misrepresent your company or in any other way foul up. So that was an interesting transition. But in one sense, since I was in a pre-sales mode as a system engineer moving just to the front line, I was very much doing the same thing only I was now the quota responsible salesperson.

Mahoney: Did that assignment come with a customer base, or did you have to develop one?

Thorpe: We were still developing customers for that computer product line. Again, it was a leading edge offering in the technical space. We were very much alone, at least from my perspective and maybe it was just that I thought nobody had anything that measured up and I went into the marketplace self-confident that I had the best that there was to offer. But it was still a lot of cold calling and creating opportunities. There was marketing air cover for the product, so to speak, so I didn't literally have to dial for dollars. There were customers who were responding to our marketing efforts. My geography of responsibility was the city of Santa Clara, and I also had responsibility for Lockheed. So I had a relatively small geography, but you're now talking late 1970s and all of the activity in Silicon Valley and all the technical pursuits of the various companies around us, so I certainly was not unhappy with the opportunity that I had available to me; I considered myself pretty good at what I did, and so the sales results followed.

Mahoney: How did you identify your targets?

Thorpe: Well, I had a technical offering to sell, so I did what any salesperson would do. I surveyed my marketplace and looked for the active companies who seemed to be prospering, growing. And then I looked for the engineering organizations, the R&D organizations. I also had counterparts in HP's instrument business who were calling on people in the same geography. The instrumentation product line and this desktop computer product line went very well together into these engineering organizations. So there were times when I found opportunities for my instrument counterparts and vice versa. The job was to use the marketing air cover, and then to do the sheer work of getting out there in your geography and understanding what customers might be part of your available market. And, of course, Lockheed was also a great place to be selling. The bigger difficulty at Lockheed was there was about a 13-step approval process for any expenditure, and so you could convince an engineer

at the first step that this was the instrumentation or the computer that they wanted to use, and there were still many steps between the demonstration and essentially the close of the technical sale and finally getting somebody to write you an order. But it was a great proving ground to be not reliant on other resources at HP from a technical standpoint; to be able to get out there in the trenches and work directly with people who were in these R&D roles that I had been in for five years.

Mahoney: So you didn't take a technical person along with you?

Thorpe: I didn't need to.

Mahoney: You didn't need to?

Thorpe: Yes. That was obviously a great boon to me, as well as in any form of sales, your credibility, the credibility of the company you represent, the quality of the products and so forth. So, if I'm in front of an engineer talking about a product on which I'm an expert and talking about the kinds of problems that I, too, solved when I spent five years in an R&D environment, you can imagine that all of a sudden we're a collaborating pair of engineers.

Mahoney: You have a certain amount of street credibility here.

SELLING THE HP 1000

Thorpe: Yes. Yes. So that went very well. I sold in that geography out of the Santa Clara sales office; I then moved to the Palo Alto sales office and my geography of responsibility changed, but I was still selling the technical product line. I took on the HP1000 [minicomputer product line] at that point. There was a merging of sales force activities. There was essentially a technical minicomputer sales force selling the HP1000 alongside the technical desktop computer sales force, and there was a point in time where it was deemed more rational that we have one sales person in a focused territory selling both.

Mahoney: Now was this because the market had converged or because the products were converging?

Thorpe: I would say it was primarily because there was the possibility that you'd have two HP salespersons competing for the same order calling on the same engineering organization to sell a technical computer solution.

Mahoney: Because either system would do the job?

Thorpe: Well, one system was likely to do the job better depending on what the application was, and obviously, once I had both to sell, I would guide the customer to the most appropriate solution. But imagine if there was the possibility that, if I only had one of those solutions to sell, I could end up competing against my counterpart, and that was going to be ineffective.

Mahoney: You're just stepping on one another's toes at that point.

Thorpe: And confusing the customer. It's always been important for HP, to the extent that we could accomplish it, that there's one HP presence, one HP story, one HP strategy, one HP recommendation. And from the standpoint of the effectiveness of the sales force, the cost-effectiveness of deploying a sales force, you would want to have one person out there who was capable of representing the breadth of solutions that might include the best possible solution for that customer.

Mahoney: What kind of guidance were you getting from management above you in this process? I mean, were you receiving training as a salesperson? Were you attending continuing education courses? Was there a support network to make you better at your job?

Thorpe: Yes to all. HP was a great company in which to launch a career. And again, this was sort of my second career, having moved from R&D into sales. But both from the standpoint of selling skills as well as technical skills, product knowledge, I would venture to say that HP knew that it made no sense to send the army to battle without ammunition, and so we were well schooled. I felt we were always well prepared. There were salespeople beside me who didn't have the technical background I had, so they might have approached their job differently. They might have used technical resources that were available as pre-sales application or system engineers, but I might not need that. So that's the difference in what members of that army are that are going to market. But HP was exceptional, I would say, at putting a team in the field calling on customers, who were going to represent the company and the products well.

Mahoney: Among the things that interest me-- it dates back to having done a series of interviews on the creation of UNIX—is what I referred to as the Bell Labs ethos and then how that ethos was conveyed to people when they came to Bell Labs. There's very clearly an HP ethos. How was it conveyed to you? How were you acculturated, as it were, in the company?

Thorpe: Early on, I would say I was not sensitive to how and what was being done to me or the organization necessarily [relative to being acculturated], except that everybody for the

most part-- always there are some exceptions-- but the role modeling of what I came to know as the HP way was so strong that it wasn't like we were indoctrinated as much as we were led, and had role models to look to at the highest levels of the company. When I joined the company, it was a $700 million annual revenue concern. When I left the company in 1999, it was a $46 billion company and the last CEO that I directly dealt with was Lou Platt. I would venture to say that from when I arrived in 1977 to when I left 22 years later, that feeling of the HP culture, the HP way, the responsibility that all of us in leadership positions as well as on the front line representing HP to customers - that feeling was so strong about who we were, who we represented. Taking care of the legacy of Bill [Hewlett] and Dave [Packard], as we used to say, (at least I personally felt that) was important, but there weren't indoctrination sessions per se. There wasn't necessarily any training on the HP way. Many of the books that have been written about it I would say followed Dave and Bill's passing to a great extent, although of course they wrote some themselves. But it was just part of who we were and how we operated. And I think it made us very attractive as vendors who became partners with our customers, and partners with our partnering organizations, of the channels that we embraced: our ISV partners, our software partners, and our reseller partners.

Mahoney: You said it was a $700 million business. How big was it as far as people were concerned?

Thorpe: I don't really remember specifically, but HP was obviously huge in the Bay Area, and there was a point in time when I think the number was 40,000 people. And we were international at that point, and we were certainly national and international, so I'm not sure if we were 60,000 worldwide or what we might have been at that point. I do remember that when I would meet people and say I worked for HP, first of all, many people had an appreciation of HP and you sort of, which gave you personal credibility when somebody might just simply say "Gee that's fantastic, I've heard great things about that company." But the other thing they would say is, "Well, I know somebody else from HP. Do you know them?" And I would say, "Well, there are 40,000 of us in the Bay Area, but give it a shot." And every once in a while, we knew the same person, but you can imagine with 40,000 people, most of whom were in the manufacturing divisions and I was in the field organization, so it was hit or miss on that.

Mahoney: How flat an organization was it or how hierarchical was it? I mean, did you feel you had access to levels above you? Did you have thoughts about the way things were going?

Thorpe: I would say early on, first of all, it didn't occur to me to exercise that. I certainly had access-- I'll flip it around and say I was never denied access. Early on in my career, again, I considered myself fairly self-sufficient. I knew what my role was. I didn't have the kind of account opportunities where you would bring in the HP brass, so to speak, to close the mega deal. But at every annual event, let's say, where we were celebrating our successes of that

year, we would have the top management in HP present, talking to us about our roles, the vision for the company, how proud they were of our accomplishments, and they were there not only there to present but to dine with us. And so they were available and visible.

Mahoney: So, you were a sales representative for those products for about four years?

SELLING THE HP 3000

Thorpe: Yes. I sold the technical products, again, for about half that time, and then I got this idea that [my family] would have a better quality of life if I moved to Sacramento as opposed to staying in the Bay Area, and that was close to my alma mater, UC Davis. So I requested a sales opportunity out there, and the one that was available was in the HP 3000 product line, which was our commercial product line [it addressed business needs as opposed to technical needs]. So I was willing, and management, based on the success I'd had up until that point, was willing to take a chance on me doing that. And the only reason I put it that way was that I was going now from calling on engineers to calling on the presidents and CEOs of companies or division managers selling a very different product in the HP 3000.

Mahoney: And for very different purposes.

Thorpe: Right. The other major distinction was probably that the average unit sale for me as a technical person was about $20,000. The average unit sale as a commercial salesperson selling the HP 3000 at that point was a quarter of a million dollars.

Mahoney: Wow!

Thorpe: One of the things that this value difference causes is to make you re-think how many prospects you can deal with at any point in time and deliver a quality engagement leading, hopefully, to a sale. So if I needed 100 prospects for that $20,000 product to eventually have it net out to quota or better, I really needed to adjust that in the commercial space because I couldn't service 100 prospects who were going to make the decision to buy the system that was going to run the division or run the company. In fact, I would say that was a much bigger transitional issue for me to work through than just understanding what the HP 3000 was and how it could help a company. I just needed to change my way of approaching these customers. But that went well.

Mahoney: There must have been a transition in terms of who you talked to and what you talked about; up until now you've been talking to fellow engineers about problems you solved in

common. Now I gather you're talking to MIS people about accounting systems and management systems and so on. What did you do to gain the requisite fluency in those areas?

Thorpe: The common thread in both is solving a problem; so if you're talking to engineers, you're solving a technical problem. If you're talking to a president or a CEO or CFO or division manager, you're solving a business problem. And if I do say so myself solving problems is one of my fortes. Knowing what we understand, what we know, what we don't know, how to sort out the difference, how to get from Point A to Point B in a pragmatic way, how to do that such that the benefits are achieved and the risks are minimized, that was the common thread. So my approach to solving business problems, even though I had not yet been in those roles, was essentially to investigate [with business leaders] in the same manner or a similar manner, as investigating problems with technical people. What was keeping that person up at night; what they perceived automation could do to make their lives and their companies better. Now in this case, by the way, all of a sudden I did need that backup technical support.

Mahoney: That's what I was asking.

Thorpe: Yes. So I would bring in that HP 3000 system engineer to potentially help me. And what became even more important in selling the HP 3000 was the application software that was going to solve that business problem, and HP was not in the commercial application software business. So, whereas we had some packages that we could offer to the technical person, for the most part, in this [the commercial] case, we had a computer with an operating system and a database. Most small customers are going to say, "Well, I'm not interested in buying a computer for the sake of buying a computer. I'd sort of like to solve that business problem we were talking about. Do you have a solution?"

Mahoney: Yes. They're not going to want to program their own solution.

Thorpe: Not typically. There were some customers I sold to who had internal IT departments who would create their solution on our computer. But starting from scratch, obviously, is the slowest way to get to the benefit, so more often the customer wanted us not only to bring in the HP 3000 but to also bring in the software solution, and in this case, what I needed to do was find that stable of software partners who had solved problems in state and local government or education or manufacturing or distribution or whatever business that my new prospect was in, and make the marriage between their application and our computer system. So that [the hardware plus the software] became the solution that, if I got the sale, the customer was buying into.

WORKING WITH ISVs

Mahoney: So you would identify a prospect, find out what their problem was, and then look around for an ISV (Independent Software Vendor) that had solved similar problems, and then you made contact with the ISV?

Thorpe: Yes. It could have happened in that sequence. The way I approached it was actually to figure out what solutions I had first. So I actually looked for those ISVs who had solved problems that I imagined the customer I was about to call on had. Rather than going into a customer cold and saying, "Would you mind spending an hour or two with me educating me about your business, and maybe I'll come back and talk to you about a solution," my entry was to come in and say, "Hewlett-Packard, in conjunction with this software company, has solved problems in the industry of which you're a part, and it's very likely we can help you."

Mahoney: Did the ISVs help you find prospects? I mean was it sort of you would sometimes come up with a prospect or did an ISV come to you and say, "There's a possibility here we could make a sale?"

Thorpe: Well, in 1980, when I took over the HP 3000 product line, I essentially had a territory that was Sacramento north to the Oregon border, which was not like selling technical products in Silicon Valley because there's a lot of space [geography] between prospects. Plus the HP 3000 wasn't that old [mature] at that point. So, there weren't many software providers for the HP 3000, and those that existed were primarily technical companies who [hadn't developed commercial applications] -- they could solve technical problems, (and I've used technical a couple of different ways, so we're not solving technical problems for engineers), meaning they knew how to program on the HP 3000.

Mahoney: I was going to say they were solving system software problems.

Thorpe: Well, they could have been solving application-level problems. They could have had that distribution solution or that manufacturing solution, but they were developers. Let me say it that way. They were developers of solutions on the HP 3000. They typically weren't robust companies with marketing and sales functions in addition to their software development capability. I would say that not very often did they bring a prospect to us and say, "We've been approached about our manufacturing solution. Would you like to go with us and sell an HP 3000?" More typically it was that we knew that they existed. Our fledgling software programs (initiatives) at least included catalogs of those people we knew who had ever developed on an HP 3000, let's say. So I might go to that catalog and figure out who could be helpful to me in the territory I had, based on the opportunity as I perceived it. I might contact them in advance

and tell them who I was and what I was trying to accomplish, and were they interested in supporting Northern California? Did they have the wherewithal? How big were they? And sort of qualify them as a partner to team with me to go after business in Northern California.

Some of these people lived and worked in Northern California, so in the early days of our software program I would say that many of these people-- and this is probably true of many industries as they're beginning to be served by companies with computer systems and business solutions-- you've got regional players who are close to the action that might be created by, in this case Hewlett Packard, who become our sort of "at large" or de facto partners to pursue business together. Very often they would be developing a custom solution for this customer, so many of my customers-- bringing a capability to a small business -- which at least is what my geography (territory) looked like. I didn't have a lot of huge businesses (in my territory). Again, I'm no longer in Silicon Valley. I'm in Northern California, and typically above Sacramento, so I'm talking to companies where part of my message is you can do today what only the bigger companies have been able to do heretofore. We can now bring to you an affordable solution that fits the size company that you are, and a solution that can scale as you become a bigger company. And I'm going to bring in my partner, who would provide software. Or if they had an IT department-- and most typically, for me, that was state and local government, as opposed to the small business in Yuba City, California-- so, again, I might find the prospect first and then go get the solution. This was not nearly as efficient as identifying my solution partner first, sort of creating that portfolio of solutions, and making sure that they were willing to go with me and were capable of supporting the customer in Northern California. Anyway, I would go in and qualify the opportunity, and as soon as I knew I had a reasonably good fit, I would bring my partner in and together we would get it done.

Mahoney: Now was this in any way a new way for HP to be doing things?

Thorpe: In terms of how I described my going to market?

Mahoney: Yes. Was this a new set of relationships as far as your ISVs were concerned?

Thorpe: I would say it was a new way of HP doing things. Whether other salespeople across the nation or around the world operated the same way I was operating, I'm assuming they did. But when I say it's a new way of HP doing things, HP had always been and still was a hardware company.

Mahoney: It sounds like basically for the HP 3000 line, HP's getting into a business it really hadn't been in before.

Thorpe: That's correct. The HP 3000 was not the first time we put our toe in the water in the commercial space, because of the HP1000, which was a predecessor, and there were other lines that had been offered into the market as timesharing systems. So while there were others serving commercial applications on our computers, our heritage was technical. Our original foray into computing was to support our instrument lines as controllers or technical computing devices, but we were building general purpose computers that could be applied many places. What made the HP 3000 so successful as a commercial offering was the marriage of not only a computer with an operating system -- MPE as an operating system became an operating system of some renown, I would say, for its multiprocessing capability-- but also the Image database, which now made this a better commercial machine. And we weren't in the application space at all, so whereas we had, again, sort of the foundation piece (the systems software) for the customer to consider, we didn't have the business solution. So what was new was going out to find these folks (partners) who were willing to team with us in creating solutions for customers, and doing that both in the sense of building custom solutions and then, ultimately, having products that they would sell alongside us.

Mahoney: Right. I'm not sure when to bring this in, but this seems to touch on something that kept coming up yesterday afternoon, which was the sense that HP was not in the computer business, except that they built computers. And in particular, they were not in the commercial market, but they have a commercial computer. Were you sensing that? I mean, was there any kind of tension for you? Did you sense this strange schizophrenia?

Thorpe: Well, my perception of HP at that time-- and I don't know that it has changed-- is that there was the factory and the field. The factory built products and the field sold those offerings. It could probably also be said about HP, at that time, that the factory built solutions to problems that we didn't understand yet, and we were about to understand it when the customer told us how they saw applying the product that we brought to them. That might be slightly overstated, but I'll give you an example. A new product introduction of an HP 3000 might not have included any discussion of software applications per se, or at least didn't include our portfolio of software applications because we weren't in the application business. It was just that we had a very capable computer product, and the closest guidance that we got, I guess, as to where this computer might be applied were all the industries that might be able to use it. And I never saw one of those presentations where any industry was left out. It was like, okay, so I have a general purpose computer system that can be applied anywhere. I just need to figure out, as a salesperson, where it's going to be applied, which meant that now I had to bridge that gap between a capable computer system that was general purpose, and the business problem ultimately to be solved. So the other point that I think you're touching on is that there were top-level managers in HP that resisted going into the computer business for awhile.

Mahoney: Part of the question I have is why the HP 3000 existed at all?

Thorpe: Now that I can't answer for you. My sense of it is that, first of all, HP's always been an entrepreneurial organization, and we were very used to enhancing products and leaping forward based on breakthroughs we've already made. And in the encouragement of that entrepreneurial spirit, we get a lot of products that were built because we could, not because we were trying to solve a specific problem. And then once we had built the solution to the problem, again, yet to be identified, we're saying, "Wow!"

Mahoney: Oh, my God, we've got a computer.

Thorpe: Not only do we have a computer, but we've got something really cool and something at a price point that potentially nobody else can match. And so you sort of back into the market. Where does it apply? How are we going to market it? How are we going to prepare our sales force to develop the opportunity? And there might be others in the factory whom I didn't talk to at that time who would say we had more foresight and vision than that, but from the field standpoint, often it was here's the product, go find the problem that you're going to solve with this product. The other thing is, especially as we got into the commercial space, it was not necessarily a sure thing for a company with only a technical reputation to be successful in the commercial space. We had precious few people representing the product early on. I don't know if it would be called an experiment, but we weren't hanging our hat on it. I doubt, but don't remember, whether or when the HP 3000 ended up in an annual report, let's say, as a stake in the ground, stating that we are here pursuing the commercial space with our HP 3000 product line.

So I'm not sure, again, when the HP 3000 first showed up in Hewlett Packard's annual report. Backing up only slightly, when I joined the company, we were essentially an instrument company, still. In this time frame I'm thinking about, the early 1980s, we were at least 80 percent instrument results, from an annual report standpoint, and less than 20 percent computers. And that 20 percent of computers were the desktop computers, the HP 1000 and these other products.

Mahoney: Still your technical solutions line.

Thorpe: And the senior management of the company, as you might expect, came out of the instrument business. We're building a computer business, and they are the people now that we would look back and say were the leaders of that business who may have eventually become the leaders of the entire company. But, again, we were an instrument company. As we went into the commercial space, we didn't want to take IBM on directly. First of all, we didn't have the credibility to do so. We didn't have the wealth of applications software. We didn't have the money behind the product. We didn't have the presence in the marketplace relative to

sales and marketing. We were not going to survive IBM choosing to target us and make sure we never got there. So we actually talked out loud about going where IBM wasn't, a flanking strategy as opposed to taking them on directly, but not necessarily staying invisible. I mean, we had marketing, but not to the extent that would have raised any eyebrows at IBM. If anything, I suspect they would have scoffed at the thought.

Mahoney: No blip on their radar.

Thorpe: Right. Conversely, IBM probably knew us as a provider of solutions to help them get better at building their computers. In fact, I've heard stories where we went in with our instrumentation to help IBM measure processes inside the computer, inside the chip, to build a better product. And how many companies who are now essentially in the computer space and, potentially and eventually, became a competitor of IBM, are going to help IBM get better at what they do at the same time? That, by the way, is an important aspect of the way HP thought and acted, I would say. If we were going to win, we were going to win on the merits of what we brought to the marketplace. We weren't going to win by disadvantaging anybody else, certainly not by disparaging the competition.

Mahoney: Well, in one sense, IBM was part of your marketplace on the instrumentation side.

Selling the Solution not just the Hardware

Thorpe: Yes, in that time frame, imagine what's going on in the computer industry generally, whether it's at the chip level, storage, computing, whatever it would be. Yes, that was the world that our instrument counterparts in sales called on, and very effectively so. And we had solutions, again, that nobody else had and the strength of the HP name and everything else. So now we are, in the computer organization, sort of the upstarts, during the move out with computing products and calling on the same customers ultimately that IBM was calling on. But in the early 1980s, again, when I was selling the HP 3000, and even when I became a district manager in 1983 and was managing a group of sales people in the East Bay area of the San Francisco Bay area selling the HP 3000, most of the customers that we called on either didn't think they could afford IBM, hadn't been called on by IBM or for whatever reason, certainly were willing to entertain Hewlett Packard being the provider. And maybe our story was enhanced by the reputation HP had in the Bay area, but this was new. This was definitely new, and we didn't have solutions to all of the business problems that we were encountering. But we had, I think, a method, a style, a credibility, a solid company, and quality products.

We had many things that when the intangible or sort of the soft sale is happening, as opposed to getting right down deep in the benchmark, whatever that is, whether it's the functions that you're providing or the speed or whatever that might be, we had a lot of credibility. And I think our approach was appreciated. We were there to solve business problems, and if we couldn't solve the problem -- which was part of qualifying the prospect opportunity-- if we couldn't solve the business problem, we never tried to convince anybody we could and deliver a solution that wasn't going to work. Most of us thought this is our career, and this is still going to be my customer next year when-- if they're unhappy -- they're now my problem. And in addition there was the fact that every sale had to become a reference for the next sale. When you're breaking new ground like that and we didn't have references, to a great degree, every sale had to become a reference for the next sale. And if that sale was within an industry, that was our reference within the industry, so it was a very exciting and sort of heady time.

Mahoney: But this, if I hear you correctly, sort of gave you a stake not only in the effectiveness of your product but in the effectiveness of your ISVs product.

Thorpe: Yes.

Mahoney: The total solution had to be what satisfied you.

Thorpe: Right.

Mahoney: So that would suggest developing fairly close relationships with your ISV partners.

Thorpe: Of course. There are stories about the very early HP 3000 delivery issues that some of our ISV partners had to help us solve, to have the product live up to how it was being positioned. So if you move past some of the early stumbling, frankly-- and the stumbling, by the way, was ugly enough at one point that, I think, Dave Packard is renowned for having almost pulled the plug on the HP 3000. It was like, "Get it right and don't embarrass me," would be my interpretation, "and don't embarrass the company." So you get past that time to where it became a capable product.

Mahoney: What were the problems? When were you encountering them?

Thorpe: This preceded me since I was selling the HP 3000 in 1980. The product came out in the middle 1970s, perhaps earlier. And so I didn't personally experience that, and I never personally had to apologize for it. So by the time I'm selling the HP 3000 it was a product I was proud of and the company was proud of, but there was still a need to embrace a partner who

was going to help provide the business solution. And I'm sure that by then I wouldn't have been able to entice partners to team with me if they thought their reputations would be damaged in the process, or worse, that they committed to deliver a solution that ultimately wasn't going to work. And they had to be concerned about how costly that's going to be, because no matter how you've proposed the solution and what you think the customer is going to pay-- and even if you bid it on a time and materials basis -- there's a threshold to what the customer will pay and then, in my experience, we're both gone.

Mahoney: And it's not just that sale, as you point out; it's the reference that's gone too.

Thorpe: Yes, that's right. So the ISV partners were very willing. Again, they were, generally speaking, relatively small companies at that point in time, without sales, without marketing. So we were [HP was] the sales and marketing. To an extent, we were probably more-- we were delivering more leads to them than they were delivering to us, I would say almost for sure. In fact, the good software providers who were developing solutions for customers were probably consumed by one or two customers at any point in time, because these were 4-10 person organizations, and again, primarily development and support staff, no sales and marketing. The CEO or president was probably the original technical person in the company.

Mahoney: Did you feel any need or wish to develop that resource in any way?

Thorpe: In what sense? Are you talking about HP development?

Mahoney: I should think you would be looking around for software resources, or were you?

Thorpe: Outside the company?

Mahoney: Yes. Were you looking around for new ISV prospects at the same time?

Thorpe: No. I wasn't personally trying to figure out where the technical folks were. There was a point in my HP career when, in a sense, I was, but we could talk about that a little bit later. No, I was looking for who was established, who had some experience, and who was willing to go into Northern California with me. I had counterparts who had developed relationships, and we used to even talk about our hip pocket software developer. Again, there was a time where we were selling the HP 3000, and unless we had somebody to develop software, who was also going to make the sales call with us and convince the customer that they should spend money and risk some time on new development, it wasn't going to happen. But again, time to market suggests that you figure out what you have, and you go sell that. And

if you don't have it, you don't spend a lot of time selling it or trying to develop it, in the sense that a sales person is paid monthly or at least quarterly. The horizon of your [sales] career is about that; as in, you can't miss making quota very long while you're developing things. There were probably factory-based people who certainly had thought about and had programs for encouraging those technical people to raise their hand and be willing to be developers on the HP 3000. That was a blind spot for me at that point in my career. This partner either existed or they didn't exist, and my job at that time was to convince someone that they would prosper if they teamed with me.

Sales Quotas

Mahoney: How did your quota get set? Who set it?

Thorpe: Well, it was always a top down process not well understood by anybody on the front line. Again, HP was very much driven by the factory; Sales was just an expense. So the sales organization in HP was not a profit center. I don't know if it is now, but it wasn't then, and I doubt that it is now. So Sales was an expense, and the factory would build a product and determine, as part of the business pro forma, how much we could afford to spend on sales. And obviously, you would project revenues. You would project costs. You would figure out how many people you could deploy. And of course, the revenue that you projected became the quota that eventually had to be spread across however many sales people you had. So there were some sales people that actually thought they negotiated quotas, but the reality was, at least one level up, that the district manager had his or her quota already.

Mahoney: It's one number divided by another number.

Thorpe: And you're getting your portion. The other, just as a quick aside, most of us believed that HP was our career forever, and not just because it was a great place to work, but because we knew HP was going places. And with that kind of vision we also knew that our jobs were to develop territories that we knew were going to be split. In fact, when I was interviewed and hired at HP, I was convinced even then, as one of the interviewers said, "Everyone we hire today will probably be a manager in less than five years," and I didn't doubt that for a moment. So I was there to build a career with a company I knew was growing. I knew I had a responsibility to be part of that growth and that I was not going to occupy a sales territory for year in and year out. If I did my job, pretty soon my manager was going to come to me and say, "There's more opportunity in your territory than we think you can effectively cover. I want to put two people there. Which part of it do you want?" In fact, one of the mechanisms that we used was to have the incumbent sales person divide the territory and assign what he or she thought the quota should be to each part of that division. And then the manager would tell you which

part you got, which is sort of the check and balance: "I hope you do a good job of splitting this, because you don't know what part you're getting."

Mahoney: This is like you make the split, and I'll make the choice.

Thorpe: Yes. But it's true; anybody who aspired to go in that direction and was deemed capable, of course ultimately by management, was going to have an opportunity to be considered to lead others in the roles that they had previously executed.

District Manager

Mahoney: Well, let's move on in your career then. What was the next step?

Thorpe: Well, before I was promoted to district manager, I sold technical products for one more year. I was asked to take over a territory that was in disarray, and not only had products not been sold, but there were many unhappy customers. And I left a very lucrative territory to somebody I'd mentored the prior year to take on that assignment. I would say that for me personally that was huge from a career standpoint. I didn't know how big at the time. The reason it was huge is that, first of all, I was willing, and I took some personal risk to do it. And then when I was successful in turning that territory around, about a year later, I was promoted to district sales manager. I was brought back from the Sacramento region, to the Bay Area, to run an HP 3000 district in the East Bay. My reputation at HP, I would say, became one as, first of all, willing to take on those kind of challenges and particularly good at building from where there had not been anything or fixing what was broken.

Over the course of my 22 years with HP I was asked frequently, "So was this your career plan? Have you ended up where you always thought you would and where you were aimed?" And at least at HP, I would say that more often than not, I was tapped on the shoulder for the next opportunity or assignment before I was thinking about going there. Very often, it was something that needed to be fixed or where something needed to be created, and it turns out that's a perfect fit for me. What I didn't want to people to know was, if you just say, "Harper, not even you could solve this problem," that's really all I needed to know, and you wouldn't have to pay me to go there.

So I became a district manager. In fact, the district had not made quota for the prior two years in the East Bay, so there was a little bit of reorganization to do within the district, and some motivating, and some other things to be done. But probably the most significant thing that I did with my first district assignment was to realign my sales people vertically. I took what had been what we literally called a "horizontal commercial district" - meaning your territory was defined by

zip code. So my district had the zip codes we roamed, and the adjacent district managers had the zip codes they roamed. Based on my experience in Northern California, and knowing the value of aligning with software providers who have solutions in specific industries, I basically took this district and said, "All right, you're going to be my manufacturing specialist. You're going to be my distribution specialist, you're going to be my state and local government and education specialist," and so forth. I took another person and made him my ISV specialist. So now I had a person in my district whose job it was to assemble a portfolio of solutions that we were going to bring into the East Bay, and his customers were his peer sales people who needed those solutions to be effective in the verticals, for which they were responsible.

Mahoney: So his job now was to foster or build a stable of ISVs and encourage new ISVs?

Thorpe: Yes. And the East Bay geography was not Silicon Valley. We were not really the hot bed of growth that was happening in Silicon Valley. I guess I would describe it as almost more heavy industry than the kind of industry Silicon Valley is known for. When I gave my team vertical assignments, I then gave them the entire district to roam, whereas, prior to that, the district would have so many zip codes, and I would have assigned the subset of zip codes to each of those sales people. Instead, you're no longer zip code bound, except to the degree the district is, and you need to go get all the manufacturing companies, go get all the distribution opportunities, go get all the state and local government, and so forth. That district, that had not made quota for a couple of years, made quota that year. And the following year, I think we made 150 percent of quota. This clearly was a successful way for us to go, and I would probably say [I think] it became a model for how other districts organized going forward.

Mahoney: And how important was it that you had separated out an ISV staff position?

Thorpe: It was important for efficiency. First of all, in a sense, you could say that once I verticalized, we were all a little bit concerned in the district, me and my sales people, that the opportunity was thin. So when I divided the territory I think I had seven sales people, but I didn't have seven verticals. I'm thinking back to how I thought through this. It's like I looked at the verticals that I thought were an opportunity for us and conceivably, I had one extra person there, because I ran out of verticals. But I'm pretty sure that wasn't my only thinking. It was back to this efficiency issue where you asked, "Did I try to develop ISVs when I was in Northern California?" Well, if I'm [a salesrep] developing ISVs even before I get to market to call on prospects, and I've got a quota to deliver on a monthly basis, I can't get there from here. So now I have a person who's 100 percent focused on that, and not just looking for the regional software provider who's going to go in as a development organization hand-in-hand with us, but scanning nationally for who the players are who've built solutions that run on the HP 3000 and solve problems in the distribution, manufacturing, and state and local government, and so forth.

And I gave that person an override on the success of the district, since I still had my district-level quota to achieve.

So, I still had to divide my quota across the remaining people. I still had to figure out, again, how I was going to make the assignments. But I would also say it just became so much more meaningful to the sales people to not just be generalists in the marketplace. And imagine, when you are a generalist, and you call on a manufacturer one day and a distributor the next day and state and local government the next, you're never an expert. You're sort of, maybe, okay in everything but not good enough in anything, as your customer might perceive you. What I wanted also was that expertise to happen as a result of that focus. So now, it was the same as when I was the expert R&D guy who is now selling products to other engineers doing R&D. Now I had sales people who could speak knowledgeably about the issues that our manufacturer was struggling with, or a distributor and so forth and so on. So the district turned around, I would claim, on that basis. And not only did that become sort of a model for other district managers to consider; but I think the light went on for management as well to actually focus somebody in the third party arena and have them similarly become expert in who these [ISV] companies were, what motivated them, why would they team with us. Remember, there was lots of selling to do in getting a software provider to engage effectively with you and begin to spend their resources where your customers are.

Mahoney: So this is a point at which ISVs become part of your business, in a sense?

Building a Third Party District

Thorpe: Yes. They certainly were part of ours. So my next district assignment was still in Northern California, but now I was asked to develop the third party district for Northern California. I gave up my geographic responsibilities, and again, if you're successful, be prepared to have it divided, and move forward. I was asked to develop a third party district in support of the entire area. In the HP vernacular, the district is the lowest technical unit (sales team) closest to the customer. Then the area is a group of districts, and the region is a group of areas. So I became the third party district manager in support of the entire area's goals. So now my team was responsible to bring solutions to the breadth of those selling. Oh, and this was the other thing that changed. Based on my background and the opportunity we perceived we had in the Bay Area, which was made up of commercial and technical sales people, my charter became third party, be they ISV or reseller and both technical and commercial. So I had people who were recruiting technical ISVs and VARs, people who were recruiting commercial ISVs and VARs, people who were responsible for equipment OEMs [Original Equipment Manufacturers], and we were responsible for consultant relationships. We were essentially assigned to build a portfolio of partners that were going to help the rest of the districts be successful in selling solutions and solving business or technical problems.

And that was the huge turning point in my career at HP, because the rest of my time at HP, after 1985 or 1986, from then on, most of what I did at HP was around building out our portfolio of partners, be they ISVs, VARs, consultants, distributors, and so forth. And I loved it; it was great. But I actually went from the systems organization at one point to what was called the Computer Products Organization. I spent awhile learning the reseller business, as well those products that ultimately, as we've all seen, have become commodities (personal computers and printers). But HP was still a leader, certainly in the printing business. We were sort of there with our PC offerings, not nearly as strong a player. But I learned about the retail space at that time.

Mahoney: So this, for you, was a transition from selling HP's product line directly -- and because of your new association or new responsibility for third parties – to selling through the third parties. You then began to get a sense of what a more commoditized product line would look like.

Thorpe: And we weren't using the commodity word as much at that time, but these were products that were going to move more through retailers rather than resellers, as we traditionally define them in the systems business. So, as I commented the other day that when I left HP in 1999, we had 900 resellers (in the U.S.) of our systems offerings, and we called them VARs (Value Added Resellers). We had at least 30,000 resellers who were primarily retailers of PCs and LaserJets [printers], and that group was also called VARs, and my translation was "'Virtually Any Reseller." But the strategy was very different. With personal computing products, you want your product to be available when the customer decides they want one. And you really take on a much greater responsibility to create demand that is fulfilled through a retail channel; whereas, in the systems business, our value added resellers were building solutions that solved technical and business problems, and that solution had to be present and available when they resold our hardware.

Mahoney: Well, up until this point, we have been talking about ISVs, and now VARs have come in. Had you had been involved with VARs before this?

Resellers are the Key to Revenue Growth

Thorpe: There were a few resellers, and I'm going to use the reseller term for this reason. We didn't know if we liked resellers, and hadn't really figured out what the value was that they could provide, especially in the systems business. We had OEMs, which were primarily defined as companies who used an HP technology or a component. It might be a computer, but let's for the sake of discussion, call it computer in a rack; it's not a full system. And they would embed our technology or product in their solution and go to market. The HP logo may or may not be present when the customer makes a buy decision. With a VAR, typically

the HP logo was present, and even if they sold it independently of us, they were supported by us. In the computer products arena, PCs and LaserJets, these were primarily retailers, and there's no judgment made at all about whether or not there's value add in the traditional sense. Their value to us is that they offer product availability close to the customer and to a great extent, HP creates the demand. And if the customer decides they want an HP LaserJet, where can I get it most quickly? So, I went over to the Computer Products Organization, and for a while I managed a geographic area of retailers. Then I managed ComputerLand, which was at that point, the largest reseller of HP products, albeit, again, these were PC and LaserJet kind of products. That was the strategy (HP's preferred channel) to get to market with those kinds of products. That was the predominant strategy, to go through retailers, even though the systems sales people still had customers who might want to use HP PCs as terminals to the HP 3000 or HP 1000.

Mahoney: They were selling the client server systems?

Thorpe: Right. But reselling or retailing was the predominant strategy for these other types of products. Obviously, when you're selling products that cost less than $5,000, or less than $1,000, you can't use a high-touch selling mechanism. But that was a great education for me to understand not only the small retailer, the large franchise, or a ComputerLand, which eventually evolved into sort of a similar type organization to a distributor. Ingram Micro, Micro Age, Intelligent Electronics are some of the other big names at the time. So I learned that part of the business, and again, one of the great opportunities for me personally at HP was that every assignment I got, no matter how capable I might have thought I was going in, there was this vast area of knowledge to capture in the execution of each new assignment. I had that opportunity [with ComputerLand], and I did that for a couple of years, when my area manager from the systems side of the business (who had become the U.S. marketing manager) came to get me and asked me to develop, at a national level, the kind of channels activity that I'd developed for him at the area level.

So I became the U.S. value-added channels manager or whatever we called ourselves: the Value-Added Channel Marketing Center, I think. It was the first time in a long time I wasn't carrying a quota. I had more of a program job, a headquarters job, and that was fine, because there was a lot of organization to do to begin to serve not only the manufacturing divisions, who were now starting to think about partners more fully as sales channels through which they could deliver products. But there was a lot of work to be done in convincing partners that we were serious about embracing them, and that we'd be consistent in the way that we addressed them. And we wrestled with decisions like, "Did we like resellers?" and "What was the role of the reseller?", and, "How was the reseller going to participate with or independently of our direct sales force?" All of those kinds of things were the fertile ground that needed attention when I got there in the early 1990s.

Mahoney: Yes, and now the article you gave me suggested there was some learning experiences there at the beginning. Learning experience is just two nice words for problem solving.

Thorpe: That article speaks to trying to distribute complex systems in the classic sense, where you deliver a product to a distributor who, in turn, provides the product to a reseller downstream from that distributor who may, as HP did, drop ship systems directly to the customer on that reseller's behalf. HP knew how to do that in the computer products arena of PCs and LaserJets. In the systems business, at that point in time, HP did not know how to do that. And frankly, I would say they weren't concerned about how to do that at the time. It just wasn't perceived to be the path to market, to include this intermediary. But let me back up slightly to the challenges of what we called the VMC.

Mahoney: Resolve that, just the letters, VMC.

Thorpe: Yes, it's on some old slides. I think it was called a Value-Added Channel Marketing Center.

Mahoney: Okay, Value-Added Channel Marketing, okay, fine.

Thorpe: So channel suggests a path to market from the time that you've manufactured it to the time the consumer receives it. And from a selling standpoint, is it a selling (demand creating) channel? Is it a fulfilling channel? In the case, again, of the computer products, the retailers were fulfillment primarily, which is not to say that when a consumer comes into Office Max a sales person won't guide them as to which product is going to be the best fit. But I also used to say that it's an environment where the manufacturer should expect zero un-sell. And what I mean by that is, if a consumer comes through the door at a retailer and says, "I know what I want. Where is it?" That sales person is not going to spend very much time saying, "Well, what problem are you trying to solve? Maybe there's a better product for you."

Mahoney: I've been in those stores.

Thorpe: So I used to call that "zero un-sell", because there were a lot of people confused about whether or not certain channels create demand or just fulfill demand. And part of my role in this channel marketing environment was to help the factories, so to speak, and I don't mean to depersonalize it-- but to help them understand what actually happens between the time that they create a product and a consumer finally consumes that product or buys that product. And this education, I would say, had to be provided by somebody who had been on the front line selling and who had the experience-- this may sound self serving but-- who had the experience

not only of selling technical and commercial, but had been in the systems-selling environments, in the environments of selling or retailing PCs and LaserJets. You saw that full spectrum of players, whether they operated as partners hand-in-hand with you in front of the customer, or whether it was the retailer you would never meet because the application to become a retailer was electronically approved, as opposed to a face-to-face interview. So anyway, those differences had to be understood.

And then it's like anything else that demands consistency; and relationships require some level of consistency. You may not like it, but if it's consistent, you know how to deal with it. Better yet, you're trustful. Even better yet, you're willing to forgive mistakes which will be made. So, in considering all of that and looking at our channels programs at the time, and again we had been schizophrenic with what was the resellers' role. Do we like resellers? Are we giving the resellers a discount that could be part of the margin we'd retain if we didn't include them? You go through all of those kinds of decisions. And I'd say one of the things that I felt was my job at that time was to deliver a consistent program to all partners, be they considered ISVs, consultants, resellers, distributors, whatever role they might play, and whatever business they thought they were in, and how they were in business with us. So the beginnings of my activities as the Channel Marketing Manager for the U.S. and then the Americas, North America in particular, was to deliver programs to partners that they could believe in, trust, and count on. And I'll leave out the details for the moment in terms of what each of those partners might have required of us or asked of us. But also then being able to look at a sales leadership that was primarily direct-sales oriented, since HP had, for the most part, gone to market in the systems business with a direct sales force.

Then back at the factory, which still looked at sales as an expense, and they said, "Well, am I getting what I need from this sales force?" And the challenge, in the 1990s for us, became capacity. So our movement in the direction of resellers was good, and the fact that distributors also had a valid role in the systems business was largely based on the fact that the quotas that were coming to the field organization were in excess of what we could capture based on the number of sales people we deployed. At that point in time, and I'm talking about early 1990s, we didn't even have one sales person per Fortune 1000 account. So the middle market then is uncovered. Small business is not even considered, and in our largest of the Fortune 1000 or 500 or 200, or whatever you want to say, we had teams. So the math doesn't work; we can't be face-to-face selling complex solutions to business and technical accounts, because we don't have the capacity. The only way we're going to develop that capacity is to develop a robust reseller and, ultimately, distributor capability. And IDC (International Data Corporation), at the time, said it's a high risk, low return foray for HP to imagine they're going to develop value-added resellers who can deliver complex business systems to the marketplace. That's not what resellers do, and the prevailing wisdom was, at the time, that the best you've got is a few technical people out there. They're not good business people. They don't have staying power.

They can't afford the long sales cycle that these system sales require. They're not loyal. This was all the stuff that they were not. And well, as I've already told you, if a challenge is given to me and I'm told that it can't be solved, then I'd say, "Well, let's take a look."

Mahoney: Let's go back to developing the resellers sector.

Thorpe: So, yes, the challenge, again, was that we didn't have the capacity to capture the amount of business that the revenue challenge we'd been given suggested we needed to capture. So we were going to have to build a capable value-added reselling force. And I loved the challenge because IDC, in particular, said it couldn't happen. And IDC didn't necessarily rule the world, but they were a respected consultant, and nobody else had done this before. IBM hadn't done it; DEC hadn't done it nor did Data General; whomever you want to talk about that we might have been competing with at the time and some had tried and failed, hence IDC had an opinion.

Mahoney: It's a hint.

TAMO ("Then A Miracle Occurs")

Thorpe: Yes. So just backing up slightly, I remember being at a meeting with senior management where a bar chart, whose author was unnamed, was presented, and it was a bar chart with dollars on the Y axis and time on the X axis, and each bar represented not only the number to be achieved, so to speak, in total revenue in a fiscal period, but it also had a breakdown by channel. And many of the channels that were suggested by this unnamed author (who I suspect was an MBA who didn't know the company yet) didn't exist, including the VAR channel. Distributors were mentioned, OEMs. And somebody at least had recognized, but maybe analytically, not practically, that you're going to have to develop these channels to capture these revenues. And in the role that I was in, there was nobody else to give the assignment to, so I was drafted; but I was happily drafted into that and began to build out this channel. One of the slides, by the way, that I walked around with at the time was my TAMO slide, T-A-M-O. At one end of the chart was the hot technology that HP was bringing to market, at the other end of the chart was all the revenue we were going to capture by delivering this hot technology into the market, and in between was a cloud labeled TAMO, which stood for "then a miracle occurs."

Mahoney: Okay. I've seen a variation.

Thorpe: So I was responsible, I used to say, "I'm responsible for the miracle." Good. I liked that. So we first had to convince a lot of people that resellers were good, who'd lived

through the schizophrenia of are they good, are they not good? And those (sales people) who had partner responsibilities, by the way, would on an every six month or annual basis go back to their partner and say, "Well, we'd sort of like you to be an ISV again because we want to keep all the hardware revenue," or however that story might have been more tactfully told. So we had, I wouldn't call it damage to repair, but one more time we're going out to some number of partners to say, "Resellers are now good." And they would look at us and say, "For how long?" And so we said, "No, we're serious." And we began to bring the programs to them, and the consistency of execution that allowed them to believe if they made investments alongside their good partner HP that those investments would yield results. At the same time while we didn't have capacity to touch all of the end-user customers that might want to buy HP product, we didn't even have the capacity to develop all the reseller relationships that we wanted. And we knew some of the resellers that we did want were the customers of some distributors and that the distributors could be part of our reseller cultivation activity as well as play a role in terms of support of a reselling channel that would offset some real work and expense by HP.

So this is all good, and theoretically, people are starting to believe that I'm on the right track, but the systems organization isn't yet putting barcodes on boxes. So I mention that because in the PC and LaserJet business, when your strategy is to go through retailers and you're shipping lots of product-- I mean, millions of boxes-- there has to be an effective way to receive them at an Ingram Micro, at a MicroAge, at an office wherever these kinds of technologies are available and being used. When we would ship a system to a customer in our old direct sales process, we would say to that customer, "At this date, you will start to receive HP boxes, and about two weeks later we'll send the customer service rep out to take an inventory of those boxes and if you've got them all, we'll let you know that we are ready to install and then we will install your computer system." So imagine that that's the process through distribution, first of all, and you have multiple systems going through a distributor who, when they receive a box, they know it's HP because it has an HP logo on it, but there's no other information virtually on the box, and certainly nothing that can be scanned to (automatically) receive that product into inventory. One of the roles of distributors, ultimately, was to stage that system prior to it being shipped to an end user. That was a value-add they provided to their reseller customers, and it was of value to us.

The other thing that was going on in HP at the time was that HP was very divisionalized: a system comes together from many different divisions. And there's no magic in that; well, of course, there's the terminal division, the storage division, memory division, computer division, whatever, and that was why we used to tell our customers that over a two-week timeframe, all these boxes would be arriving from various different places, all with HP logos. That's how you identify an HP system. So a distributor now is going to order computers, and the system hasn't been ordered by their reseller yet, let's assume, but they're inventorying the computers, the memory, the terminals, the PCs, the printers, whatever, so they in fact are ordering the pieces

and parts from which they will assemble a system on behalf of their reseller customer. Again, significant value-add to us. They're closer to the reseller, who is, again, closer to the customer. And the ultimate goal of a reselling tactic is that they're going to capture business where you are not. We needed the cooperation of the HP sales force, and we did take care of that through a commission mechanism that said, if you participate with your good reseller partner, you will be rewarded as well, so don't compete with him. That happened a little bit later because we did live through the competing era.

So we put distributors in place and our resellers and cultivated that. You mentioned a problem that we had along the way. It was a problem related to the factory's perception that, if product is ordered, somebody has made a buy decision. Well, at the distributor level, not necessarily. The distributor's inventorying product so that when the consumer downstream from the reseller, who's between the distributor and the consumer, makes the buy decision, we are ready to deliver quickly and assemble, stage, and deliver. So ignoring the barcode problem, which we did solve, we shipped a lot of product to one of our newer distributors of the HP 9000; we shipped them a lot of product-- I think about $1.6 million worth-- and the division, of course, chalked that up as a sale. And the terms in our distribution agreement basically said, if you haven't sold the product, you can return the product. So what happened was, the demand wasn't there, the product didn't flow through distribution to reseller to end user, and Arrow, the particular distributor, took advantage of the right to ship it back, which they did. And that created quite a stir because a $1.6 million order from the division's standpoint-- keep in mind this distribution is happening over here; my primary historic delivery is through a direct sales force where an order's an order-- and when an order that big came back-- and probably the average system sale at that time, I'm going to say, at HP was $150,000, maybe less for a UNIX system-- that was a big hit. And so I ended up in front of a general manager explaining this -- and it's not the first time we had had this discussion, but the first time that it was meaningful to him -- I would say. Because HP is responsible to create the demand in many cases, and the resellers, albeit loyal, many of them sell other manufacturer's products. And if the manufacturer brings the deal, the unwritten rule is, well, I'm going to go home with the person that brought me to the dance. So if that reseller sold Sun and DEC and HP, and DEC brings the customer, the reseller is going to attempt to close that business for DEC. And HP was not very good at the demand creation, the pull through, of that product, and certainly not on behalf of resellers. All marketing efforts, all build and ship processes, were all geared to a direct sale.

This reselling thing was not only the cultivation of a capable set of resellers who could compete on our behalf, who could stay in there for the long-term sales cycle, who had the financial wherewithal and the business acumen and the technical prowess and the solution and all of the stuff that we didn't - cultivating those relationships with resellers who would help. But now back at the factory we had to change a lot of people's expectations as to what we needed to do to properly support such a channel. And you can go all the way back to this chart, this bar chart

that showed how revenue was going to flow. Honestly I'd still like to know who created that chart because it was mostly theory. Let's put it this way: the field organization (leadership) believed that you wanted us to perform to that and develop these channels, and we started that activity. But nobody at the factory changed the way that they did business. It was still the assumption that virtually 100 percent of the product was going to be delivered through a direct motion, and we still didn't have any barcodes on boxes.

So I had to call on the VP of manufacturing at HP and present to his entire staff one day, what our selling strategy and channel development strategy was, and it was like I was an alien in that room. And I had actually thought these conversations were happening above me because, as significant a responsibility as I felt I had, that job was still not considered a senior management role. So I wasn't in all of the staff meetings of senior managers where senior field management talked to senior management in the factory or manufacturing, whatever. But it turned out, as things evolved, that I was the best person to go talk about what our reselling channel needed. And so a lot of my work at HP in that time period was actually done internally to HP in convincing people that the direct sale cannot be our whole future. It has been our history and it will continue to be part of our future, but we've got to get really good at moving product through resellers.

Communicating to the Corporate Management

Mahoney: So this experience essentially learned in the field was that this view had to be brought back and made part of the corporate culture, if that's the way the corporation wants to go into the market?

Thorpe: Well, it is an example of bringing the experience in the trenches back into an organization that didn't realize to a degree that those changes were occurring. There are lots of ways that you gather intelligence on what the market wants, what your channels need, and so forth. And I don't know if this was just lack of experience or complacency but it might be asked: "Did we take our eye off the ball, or did we just not understand how the ball had moved?" There was a disconnect between the way that you developed capacity, both direct and indirect, to get product to market and the traditional way of doing business. There were people who were pulled kicking and screaming in the direction of this reseller thing, who still wanted to question whether or not IDC wasn't right and why are we going to build all these processes and change the way that we're doing business when this channel is under development and we haven't yet seen the promised land. And so there is risk involved. There were business cases to build and there were other things to be done there because HP is, again, very pragmatic in the way it goes about things and not very often does it take a flyer without some analysis. But in this case, and very specifically in this example of Arrow returning $1.6 million, the lesson registered when

the pain arrived. The discussion had been theoretical prior to then, but now it was, "Oh, yes. Yes, we get it. Yes, thanks. We understand."

Mahoney: It wasn't academic anymore.

Thorpe: It was not academic. It was absolutely real and impactful on quarterly results.

Mahoney: It sounds almost as if it's a question of discovering what business you're in. Now sometimes you go to people and you say, "What business are you in?" and they say they're in the business of producing something; but no, that's not the business you're in. You're in the business of selling something.

Thorpe: Yes. I think that's true. And it's clear in the evolution of the computer industry, not just at HP. Take Dell Computer. Dell Computer gave us fits for many years as a PC provider and PCs have been more capable as they moved upstream, but that's not the part of the story I'm telling. Early on, Dell, for all practical purposes, were a distributor who was assembling Dell product based on the R&D and components built by other suppliers. They were an assembler and distributor, and they were better at getting product to the end-user customer directly (with no intermediaries called distributors, franchisors and retailers) than we were. And they had a major account program aimed directly at the same customers we were serving with our systems business and with our other businesses. So were they a PC company, or were they the most effective distributor of PCs with a Dell label on it? That was real competition to us, IBM and everybody else. So we were a very strong technology company at HP and we built tremendous products that were as reliable as refrigerators, whether they were complex systems or instruments, using leading edge technologies that were solutions to problems not yet understood. But the historic direction to the marketplace with any HP product had always been a direct sales force that the factory funded, touched, trained, guided, and assigned the quota. And now we're talking about losing some control of, at least, the historic mechanisms as you go (sell) through people who are not your employees. And if they're not your employees, can you really count on them? I've seen many organizations try to go through indirect channels; they know they need the capacity, but have no concept of what it takes to cultivate that channel to compete on their behalf, to be motivated to compete on their behalf, to sell their product over any other product that they have on their line card. And they attempt to forecast that business as this bar chart effectively was a forecast. But there are no loyalty programs, there's nothing that cements the relationship between the manufacturer and that intermediary who is closer to the customer than you are with certain kinds of products. And the 1990s were a learning time for the HP systems business, and I would say that we did really well, but it was not without stress and it was not without learning and it was not without investment in places that people had not imagined investing in. We were still investing in R&D and manufacturing, but we weren't necessarily investing in a manner that assumed these products

were going to flow through selling organizations and distribution organizations that were happy to do business with us as long as it served their business goals. But now you had to have that conversation.

Managing and Measuring the Distribution Channel

Mahoney: Was there a quality control issue with the VARs?

Thorpe: In terms of who they were and how they acted? Not really.

Mahoney: Yes, I mean, the system they deliver is going to have an HP label on it, on the machinery, and the customer's buying a system so it seems to me HP would have a stake in whether the reseller could deliver a product that worked, lest you get some of the mud spattered on you when it doesn't.

Thorpe: Right. Yes, and we took that very seriously. And that was part of IDC's caution, can you really count on these people to represent you well and not only carry the mantle, but to deliver quality to the consumer who's going to be looking at your logo? So back to when I said we had 900 resellers in the U.S. compared to the 30,000 selling PCs and LaserJets. We authorized every one of those with humans interacting with the management in the organizations who were our reseller partners. That's one thing.

Mahoney: And they were reporting back on their sense of this company's reliability?

Thorpe: Right.

Mahoney: You get sort of fitness reports coming back to the company?

Thorpe: Well, we had people in the field who were responsible for these relationships, who were being measured on how effective these resellers were, and checking everything from: was our reputation enhanced by our association with this reseller, or was it damaged and, of course, were these people selling the product? We had reviews, but we didn't necessarily have a checklist or a quality report. But my point is that we authorized them one at a time. We deployed them as you would deploy a direct sales force, in the sense of a coverage model. I mentioned zip codes, verticals, and various ways that you decide where your opportunity is and how you're going to cover that. We actually kept a bit of a governor on how many resellers we had, not just from a quality standpoint, but what I was trying to do -- having been a sales manager prior to this assignment-- was to create an effective coverage model. And a coverage model suggests not only that you adequately cover the market, but you also attend to making

sure there's enough opportunity for these resellers not to be bumping into each other every day, and the only way one can win over the other is to cut their price on the HP gear. So value-add was a very big deal, and if a reseller didn't have significant value-add that would justify them representing us and reselling the product, they couldn't even get in the program. And then from the standpoint of how many were in what geography, representing what kind of solution, we also sort of measured things that way. And then we moved to a point where, within the reseller program, not unlike ranking your salespeople, we ranked the resellers. And we created best in class programs, and we published the criteria to become one. And we had conferences of our resellers, and we cultivated them and their share of mind and heart, just as you would a direct sales force.

Mahoney: Did you develop these programs or did you have a hand in developing these?

Thorpe: Yes, this was my baby. And I've had a chance to counsel other organizations in how to do this, and what I tell them is the first thing you have to understand is direct selling because there's nothing about preparing your sales force to go to market, about establishing your coverage model, about attending to quality or giving ammunition to the army to effectively compete and all that. It's all the same. And then you say, "But these are not my employees, and some of them carry competing products," and so there's even more that you have to do. If I have an employee who's got an HP quota, I know he or she can't make money doing anything else. If I have a reseller who carries competing products, then I've got another job to figure out how I'm going to have them be recommending me over my competitor. I always used to say that my worst fear is that I've authorized a reseller to sell HP product who in front of the customer says, "If HP was the best thing for you, I would recommend that. But I'm recommending Manufacturer B." I said, "We cannot be in the position where that's taking place." So the people who were closest to that reseller and had responsibility for that relationship, were responsible not only to achieve a quota through that reseller's effectiveness, but to know we had share of mind and heart and that we were getting the recommendation over our competitors. And that we'd also prepared that reseller, again, to compete on our behalf, which in part is to say, "This is why you want to recommend HP over anything else on your line card."

So, again, you sort of need to hear: "Well, if I'm a sales manager, or if I'm a factory trying to work through a sales force, and everything that I have to think about from training, support, product availability, ease of ordering, all of that stuff to make my sales force happy, competitive and productive, those are all the same things that need to happen through a reselling organization." And then it gets a little bit more complicated in some areas in the coverage model. So we literally had the model program in the U.S. in the middle 1990s, and I'm very proud of that. And IBM hadn't figured it out and DEC hadn't figured it out and other competitors hadn't figured it out.

Competitive Products and Companies

Mahoney: I was about to ask what contact, if any, did you have with the opposition?

Thorpe: Not very often did I meet with my competition. Now, if you say, my personal competition might have been the channel manager at DEC or the channel manager at IBM or whatever, we used to get together at industry conclaves. *VARBusiness* was a publication of some renown at that time, and they used to give awards to vendors who were recognized as having the best channel programs, and HP was recognized at the top most years. So I didn't meet with them to trade war stories and that kind of thing. I met them, but I didn't have personal relationships.

Mahoney: You knew who they were.

Thorpe: I knew who they were by reputation.

Mahoney: Did you try to keep tabs on what those organizations were doing or did you think you were so far ahead that you didn't need to?

Thorpe: Oh, absolutely. My competition in the role I was in was what my competitors' channel programs looked like and whether or not, at the end of the day, the reseller was more inclined to align with them than align with us. So it was just another way of measuring your capability, the same as a manufacturing division producing a competing product might produce a benchmark result that says we're faster than, or whatever. My results had to be that my programs are viewed by our reseller partners as the best and that they, the distributors and resellers, were prospering as a result. And by the way, one of the things that I didn't worry about was the product, the actual product, because when you look at how a reseller or an ISV partner is measured, besides the fact they don't want their reputation damaged because they've aligned with somebody delivering a poor quality product or a product that just can't be delivered or whatever, their measurement of the value of this relationship is by making money and is my reputation being enhanced based on my affiliation, in this case with HP. So I assumed somebody else in the organization was taking care of that product stuff, and I knew how to effectively present that to my partners, but the best product doesn't necessarily win through a channel. If there is not a good margin opportunity, if your own sales force, your direct sales force, is competing with your resellers, if you're not providing training, if you're not providing communications, all of the other things that make that reseller feel that they're embraced, valued and that they will prosper, it's not going to happen. So yes I'm very proud of how that went and the success HP had delivering systems to resellers.

Mahoney: And this program was what carried you through to 1999?

After Leaving Hewlett Packard

Thorpe: Yes. I essentially ran that program until I left HP. I had one other assignment between leaving that program in about 1998 and 1999 and when I departed. And HP at that point was trying to integrate the computer products organization and computer systems organization and the channels; there was a lot of machination about how they're going to participate together. And in 1999, I got an opportunity to join a startup in the DSL space, commonly called Rhythms NetConnections. That was one of the early national providers of DSL, and it's the first time after many opportunities I succumbed to an external offer to go do for them what I had done for HP, so I took that job. And is that where you say, the rest is history? I don't know.

Mahoney: Well, did you leave a legacy? What happened after you left? Did they follow the path you were going down?

Thorpe: The program went into some disarray, is what I heard. New management came in, new management who didn't value the distributors to the extent we had valued them. For instance, instead of a distributor buying at a discount and having some control over the margins that they could make, the distributors were compensated on a fee basis as if they performed a specific function that we put a specific value on and we would pay a fee. At the reseller level, I'm not exactly sure how that propagated because, by that point in time, most of our resellers were downstream from our distributors. When you ask a question like, "Did you leave a legacy?" I guess in trying to figure out if I did, I don't know how many people would say, "Those were the best of times, Harper led that charge," and associate me with those successes. I know that in the period of time that immediately followed my departure, there was enough unrest in the channel that I was getting calls from people saying, "What's happened?" and "Can't you go back and fix this?"

Mahoney: Let me flip that, then. You now went into new opportunities. How did your HP experience help you there? Were you building on that experience? Or were you actually going off into new areas and trying new things?

Thorpe: I was still in a technology field, and I was hired originally to develop indirect channels. The HP experience helped in both tangible and intangible ways. First of all, the HP way was ingrained in me, so people who did business with me, who enjoyed doing business with HP, and the HP way, and anybody who espoused that philosophy, and acted accordingly, I think enjoyed the interaction. My background, again, from school forward, includes a lot of

technical and analytical activity, and I'm very pragmatic in the way that I do things. And so I'd say the combination of 22 years with HP pretty much made me an HP person. I was going to act and treat others that way. I knew how channels worked. I knew how salespeople worked. I knew those motivations. I knew what kinds of programs we had to put in place, and so forth.

But that DSL market was a very difficult market for most companies, including Rhythms. It didn't survive very long. But the work was interesting and mind expanding with again more challenges. In this case, the predominant channel that we were trying to speak to was called an ISP (Internet Service Provider), and I can't claim to have known much about ISPs when I took that job, but I learned a whole lot about them very quickly. And so I did that for about 27 months, flying out of Sacramento to Denver every week on Monday, and flying back on Friday. And when I'd had enough of that, and actually Rhythms was effectively going to be acquired by MCI at the time, then I departed, and consulted for awhile, and then most recently joined a company that my son started with two partners. They needed customers and I had the right skill set and I was free, which made that a very attractive union. And I was trusted. So then I ended up joining that company in 2004. We sold that company in 2006, and we all still work for the acquirer now.

Mahoney: Did we forget anything?

Thorpe: If we did, I'll only know it when we see the tape. <laughs>

Mahoney: Okay. Harper, thanks very much.