

NCWIT Interview with Elizabeth Charnock

BIO: Elizabeth Charnock founded Cataphora and has led it from concept to profitability, funded entirely by revenues from clients and without any outside investment. The company's genesis was a fundamental insight that Elizabeth had about a revolutionary approach to information retrieval. Starting from that idea, and a kitchen table group of four employees, she has guided the growth of Cataphora to over 100 employees. The company has seen three consecutive years of at least 100% growth in revenue, customers, and employee head count. In 2006, the company moved into a dedicated new headquarters building in Redwood City, California, and opened an office in Washington, DC, two blocks from the White House. 2006 also saw the granting of all claims in Cataphora's fundamental technology patent, which Elizabeth co-authored. In leading Cataphora's success, Elizabeth has drawn on her prior experience as an entrepreneur and CEO, and on her extensive knowledge of information retrieval technology and business. Prior to starting Cataphora, Elizabeth was CEO and founder of Troba, an industry leading Customer Relationship Management software company which she sold in 2001. Her previous experience includes management and senior engineering positions at international high tech companies such as Hewlett-Packard and Sun Microsystems. She started her career at Unisys in Plymouth, Michigan, where she ran a human factors laboratory. Elizabeth has lived in both France and Germany and speaks both of those languages. She has been a dedicated jazz dance performer. She enjoys travel, as well as spending time at home with her whippet, Ragnar, and African Gray parrot, Howard. Elizabeth holds a BS in Theoretical Mathematics from the University of Michigan Honors Program, which she entered at the age of sixteen.

Lucy Sanders: Hi. This is Lucy Sanders, and I'm the CEO of the National Center for Woman and Information Technology, or NCWIT. With me today, is Larry Nelson, from w3w3.com. Hi, Larry. Welcome.

Larry Nelson: Hello. I'm so happy to be here.

Lucy: And Lee Kennedy, who's a co-founder of Tricalyx, a new company here in Boulder.

Lee Kennedy: Hi.

Lucy: Lee is also an NCWIT director.

So, today, we're interviewing Elizabeth Charnock, the CEO and founder of Cataphora. Elizabeth, welcome.

Elizabeth Charnock: Thank you.

Larry: Boy, I tell you, I'm so excited to be a part of this. It's a great program, and sorely needed out there, which is what really makes it extra special.

Lucy: Well, Elizabeth's company is just extremely interesting to me. Elizabeth, I see, from looking online, that you're a patent holder?

Elizabeth: That's correct.

Lucy: And your company works on email. You must have some pretty sassy algorithms there, trying to figure out the content [laughs] of email. Why don't you give us a bit of information about your company?

Elizabeth: Sure, I'd love to. First of all, it's not just about email. In fact, the idea that the company is founded on is that search is really no longer just about content.

The search algorithms that are out there now, with the exception of Google's, on the Internet, all have very much to do with classifying documents according to content. And most documents used to have quite a bit of content, making this fairly easy to do. So you can see how many times, for example, the word "chicken" appears in a document or the word "hammer" appears in a document, or how many times

the words "hammer" and "chicken" co-occur in the same sentence or paragraph or so on.

But now, in the world we live in, people are so wired--we all have Blackberries; we've got Treos and the equivalent devices; we use IM--with the result that email, and even informal memos, are a whole lot less formal and less long than they used to be.

So, what our technology is all about is weaving together these different, smaller items into a searchable object that's meaningful. So, what we've done is changed the boundary of search. So search, for us, is no longer about an email or an IM or a phone-rep message; it's about the dialog that can be put back together with our algorithms.

To give a concrete example of this, while it's become a bit hackneyed at this point; let's say you have a message, of whatever form, whose entire content is just, "Yes, let's do it." Well, what does that mean?

Larry: [laughs]

Elizabeth: Does it mean, "Let's go commit securities fraud"? "Let's go embezzle that 300,000 bucks"? Or maybe it just means, "Let's go fishing." Right? How are you going to know? It used to be that the answer was in the same document. Now the answer may be two or three documents or items away. And that's what our company's all about.

Lucy: Well, it is really interesting. And I think the algorithms must really be pretty fascinating.

Larry: Boy, I'll say. One thing I can't help but wonder, just as kind of an opening question, is how did you get into technology? And then maybe a second part of that question is what do you think is really cool today, in addition to what you're doing?

Elizabeth: How I got into technology, originally, as a child? My father is an electrical engineer and very, very much, I think, pushed me that direction, initially--especially since I was an only child, so I was his one opportunity.

But when I was in college at the University of Michigan, they had a program in mathematics that was trying to subvert what everybody at the time thought was almost just a law of nature, which was the fact that no significantly original, or significant period, mathematics had ever been done by anybody over the age of 27.

Lucy: I remember that.

Elizabeth: So somebody endowed the University of Michigan with a program to try to push promising mathematicians through their PhDs, with a little bit more time before their brain turned to mush at the age of 27. And the program was so much better than anything else that was out there that, even though I had no intentions of being a math major when I entered college, within a few months it was pretty clear that that's what I was going to do. And that's what I did.

Larry: Wow.

Lucy: Theoretical mathematics degree. That's amazing.

Lee: It is.

Elizabeth: People don't believe me now. They assume I must be a lawyer because of the field that my company is currently operating in.

[laughter]

Lucy: And just as a follow-up with that, as you look out into the technology spaces today, what, in addition to some of the things that you're working on at Cataphora, are you thinking personally are just really cool?

Elizabeth: This is going to sound a little silly, perhaps, but I think there's going to be a lot more things out there like this. I don't know if any of you guys have a Roomba--you know the robotic little cleaning vacuum...

Larry: [laughs]

Lucy: In fact, Helen Greiner has been one of our interviews as well, from iRobot.

Elizabeth: It's a wonderful thing. And I think that they could have done more, in terms of making it more, I don't want to say cutesy, but something that would maybe appeal to a broader set of people. I actually bought it for my husband for his birthday just because I thought he'd think it was cool.

Larry: [laughs]

Elizabeth: And I think that home robotics that actually do something useful, that are engaging and are not ridiculously expensive, I think, are a big area.

I think there's still a lot to be done, obviously, in the area of search, apart from what Cataphora is doing. It's not uncommon, in the work that we do--which is, at this point, mostly investigation and litigation--to get literally 10 million items or more for a case. And these are not Enron-like cases; these are more run-of-the-mill sorts of cases.

Lucy: Wow.

Elizabeth: And so, while we're right now focused on the enterprise aspects of it and the legal aspects of it, there are obviously the personal information management of it all that I think is a really interesting problem.

And some of the social networking stuff, I think, while a lot of it is somewhat trivial, some of it's really quite interesting. If you can build special-interest groups for different types of research, or for people who are really expert or compassionate about a certain, very specific kind of thing, I think that's technology very well used.

Lucy: I agree. It's huge. And it's changing so many things: the way people market, the way people find out what their interested in. It's amazing.

Larry: Hmm.

Lucy: Well, Elizabeth, you mentioned your dad as an EE, and he had influenced you into technology. What made you become an entrepreneur, and what about being an entrepreneur makes you tick?

Elizabeth: In my case, those who have watched me progress, especially since I've come out to Silicon Valley--because I'm from Michigan originally--I think would say that it had to do with the fact that I was, again and again, in situations in much larger companies where I could see that the company was in decline, and there really was nothing much that I could do about it.

And I wanted to have a center of excellence around me. I wanted to do work that I was proud of. I wanted to be working someplace where it was good to get up in the morning and go to work. And that sort of drove me to wanting to roll my own.

For example, I joined Hewlett-Packard at the point that it was starting to decline, and saw what that looked like, and it was just a very frustrating place to be. And it was interesting for me to see the "Wall

Street Journal" extensive coverage of the firing of Carly Fiorina, and they were noting that many of these problems really pre-dated her, even if she exacerbated some of them. And I was just so happy to see that, after 10 years, that now it was out in the open.

But yeah, I spent a good several years there, and similarly joined Sun at the point it was arguably starting to decline. And I felt that I could do a better job, and I wanted to do a better job, even if at a smaller scale.

Lucy: So, in terms of entrepreneurship, many people have mentors or people who influence them along the way. And we were just curious who your role models are. Who influenced you, and how did they influence you?

Elizabeth: As an entrepreneur in different ways, John Nesheim--the guy who writes the books on startups, he's best well-known for writing the book, "High-Tech Start Up" which here in the Valley is considered the Bible for starting a startup--is an adviser of the company and is a really great mentor. At this point, he really spends his life teaching high-tech entrepreneurial ship at Cornell, and writing books about it and advising a few companies. So he's seen many, many, many variations of the movie. He's very wise, and he's always willing to help.

Julie Wainwright, who was the much-maligned CEO of Pets.com during the bubble, I think is a really good person, and has a lot to offer in terms of, well, when you take a fall, you get back up on the horse--has a great deal of personal grace and elegance.

And Philippe Courteaux, who hired me into their elite, who I believe is the only four-time successful CEO in Silicon Valley history. Obviously, there's a huge amount to learn from.

Larry: Wow. I was not aware of that fact. I'm going to have to look more up on that.

Lucy: You've got another book to read.

Larry: Yeah, I do. Two other books...

Lucy: [laughs] Two other books.

Lee: That's an impressive list of mentors.

Larry: Boy, I'll say. Elizabeth, I do have to point out that I was born in Michigan, so I understand. But I chose Colorado. I wanted to be surrounded a bunch of really neat people in a wonderful climate.

Lucy: [laughs] Little plug there for Colorado.

Larry: Little plug. Elizabeth, if you were to look back at the different things that you've been through--and I'm sure you've had a couple of the tough moments--what's maybe the toughest thing that you had to live through during your career?

Elizabeth: Unfortunately, there's more than one...

Lucy: Like or us all.

Elizabeth: This is my second company. My first company was during the bubble, and we ended up having to sell it after the individual VC left the VC firm after the bubble burst--at the point that many venture capitalists were no longer getting along with one another.

And that was very, very difficult, not just because it was failure in some sense, even though we ultimately were able to sell it and at least get everybody a job, but because it was so unfair, in the sense that we had met all of our goals, we had exceeded some of our goals, and there was an exogenous failure event, as one person put it. And that's very difficult to explain to people who have really put their heart and soul

into something.

Obviously, it was a very difficult time, yet one of the things I am most proud of was that many of those same, original people joined this company, Cataphora, and made it possible for us to get to the point we are now--which is to say we're a 100-employee company in the Valley that has never taken a dime of investment from anybody, not even ourselves.

Lucy: And I noticed that in some of the information on the web about your company. And I can really empathize with some of these unfair events in the world of startups. I was on the board of a company where a venture capitalist, in a Series B round, backed away at the very last minute, when, if that company had chosen to just bring more partners to the table originally, the company could have kept going. And as a result, gone.

Larry: Yep.

Lucy: That can be very, very hard.

Elizabeth: I think that, as a practical matter, one of the things that very few people understand about the startup world is that there is very, very, very little--and in fact, arguably no--accountability on the part of the investors.

Lucy: So it's clear you've been through a lot of challenges.

Elizabeth: Yes.

Lucy: If you were sitting with a young person and giving them advice about entrepreneurship, what kind of advice would you give them?

Elizabeth: Something, actually, that is very much stressed on John Nesheim's site, at least when last I looked, which is that if failure will completely destroy you, you should not go down this path.

Lucy: Hmm.

Larry: Good point.

Elizabeth: Kind of an odd thing to say, perhaps, on a website of that nature. But it's a very important one, I think, because, statistically, depending on whose numbers you believe exactly, 99 percent of all startups fail. It depends at what point you start measuring. At what point does the startup become significant enough that it exists? Does it have to incorporate? Does it have to have people spending significant amounts of time on it? Where does conception occur? If you want to look at it that way.

No matter how you measure it, the vast, vast, vast majority fail--some for avoidable reasons, some for unavoidable reasons. Some were perhaps ill-conceived. But for whatever the reason, statistically, you're very, very likely to fail. And if you can't accept that initially, then it's perhaps better to stay in that larger company, then to go out there and follow somebody else who's taking the load on their shoulders more than you are on yours.

Lucy: And so I'm sure you have a network of friends who are in various stages of startup companies. And if they fail, what do you tell them to console them?

Elizabeth: The main thing I say is, hopefully, you learn something from it, whether it's something to do with things to do again, things to avoid doing. If at all possible, what you learn about yourself, what you learn about other people that you are in the endeavor with. And you, at this point, have to make a real decision, not a knee-jerk one, as to what you now want to do.

Lucy: Well, and I think that that's very wise advice. I'm sure that that wisdom is part of what has given you your success as an entrepreneur. What other characteristics do you have that you think have given you advantage?

Elizabeth: I would certainly say that one of them is persistence and discipline. So that's two, but obviously they're interrelated. Levelheadedness is something that I always tell people at Cataphora is a huge, huge, huge component to startup success because, without it, it's almost impossible to take the long view of anything. If you can't take the long view, then you're not going to last very long.

The former VP of marketing here at my last company said, "Well, the startup experience is like a roller coaster, but with the key difference that when you're high, you're on the top of the roller coaster." You can either make \$800 million or dominate the world. The reality is that you're not actually as high as you think you are. But the inverse is also true. When you're at the low part of the roller coaster, you're probably not as badly off as you feel that particular day. And trying to avoid riding the roller coaster, I think, is a really critical part of success.

Obviously, there's passion for it. I think people greatly underrate the importance of leadership, character flexibility, and all those traits that make other people follow that person into the fire.

Lee: And they have to want to follow you, especially in the startup world.

Elizabeth: Exactly.

Larry: Boy, I tell you what, you mentioned earlier that many people joined your company that you have today that were with the other company. That really does say a lot about you and the management team you put together.

Lucy: So, Elizabeth, considering this is the second startup you've done, how do you bring balance into your personal and professional lives? Because we all know startups are seven by 24.

Elizabeth: Nobody ever likes this answer, but the truth of it is you can't do both. Maybe at some point you can, but startups are 24 by 7, so either you have enough people at the right positions to really delegate everything to you in such a way that you can not have to work massive numbers of hours. But I've never really seen that happen in practice. I do work less than I did two or three years ago. Probably a year or two from now, I'll work a little bit less. But if you want 40 or 50-hour weeks, startups, but especially being a startup CEO, is not for you.

I do make sure I exercise and do yoga and make some time for the things that I really have to. Fortunately, my husband works here, so that is a simplifying assumption.

Lucy: [laughs] That is something that you do to bring balance. Make sure that you employ your husband.

Larry: One of the things that author, John Nesheim, had brought up about, "If failure is going to crush you," or something to that effect, I think the idea is, also, if the entrepreneur has this fear of failure, that's what they really also have to avoid.

Lucy: Right. So, Elizabeth, you've really achieved a lot in your career so far. What's next for you? Give our listeners a little hint of what you're thinking about for the future.

Elizabeth: Well, we think Cataphora is a great opportunity. As anybody who's been out there in the tech world knows, it's not just a matter of having a really good idea; it's also the timing of it. Timing is everything in these things, and so we intend to stick with this for quite a while. And who knows? Maybe my next one will have to do with robots.

Larry: [laughs]

Elizabeth: But right now, I am very much focused on making Cataphora the next big software company. And I think it can be. And that's what I'm looking forward to doing.

Lucy: Well, and in fact, with the robots, we'll make sure that you and Helen get together.

Larry: [laughs]

Lucy: Helen has shown us little pictures of Roombas in costumes and things like that, which are pretty exciting.

So, we really do want to thank you, Elizabeth, for your time. We know you're busy. And I know our listeners will really appreciate hearing your views on entrepreneurship. I wanted to also congratulate you on your "Fast Company" Fast 50 article. It was a great picture. I loved it. The caption, like, "So don't mess with Elizabeth Charnock, CEO of Cataphora."

Larry: That's why we were so gentle to begin with.

[laughter]

Lucy: We really do appreciate your time. Thank you very much.

And I wanted to remind listeners where they can find this podcast. It's at www.ncwit.org. And it will also be syndicated on...

Larry: www.w3w3.com.

Lucy: And please make sure you pass this podcast along to a friend. Thanks very much, Elizabeth.

Elizabeth: Thank you.

Lee: Bye-bye.

Larry: See you soon. Bye-bye.