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Education & Technology: Now Is the Time – HotChalk CEO Edward Fields

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Technology has long been a tool in the classroom but hasn't always been the most effective one. Edward Fields, founder & CEO of HotChalk, an online learning resource for pre K-12 teachers, is looking to change that.

SM: Let's start with your background. Where do you come from, what is your family like, how was your upbringing? What are the roots of your career?

EF: My parents were educators. My father chaired the Molecular Genetics program at Harvard and my mother taught art at the School of the Museum of Fine Arts in Boston. Education is a crucial part of my family's story and that has strengthened since I had my four children, three of whom currently attend public school and one is in college. I launched HotChalk to actively involve myself in raising the quality of education worldwide.

SM: What did you do before you established HotChalk?

EF: I was the founder, President and CEO of ProductFactory, a product lifecycle management company. Prior to ProductFactory I was director of Interactive Publishing at The Learning Company which is an education software company focused on the consumer market.

SM: What type of company was ProductFactory and how did you conceive the idea?

EF: ProductFactory provided product development program and portfolio management solutions to Global 1000 enterprises. The offering was spun out of a client-server PLM company called WorkGroup Technology (formerly NASDAQ: WKGP).

SM: What was the value proposition of ProductFactory?

EF: It was all about delivering a product development / program management application that used deliverables as a central organizing principal. The application could push complex, globally deployed supply chains through the phase-gate product development methodology. It was an innovative approach which made it possible to include suppliers in the product development process thus helping companies accelerate time-to-market, reduce costs and improved quality across the product lifecycle.

SM: How did you fund ProductFactory?

EF: ProductFactory was bootstrapped with a \$1M friends and family round.

SM: What were the major milestones behind ProductFactory?

EF: Obviously the founding was memorable, which was in November of 1999. After a year of product development, the company delivered an Internet enabled solution that was selected for deployment by some early adopter firms including Eclipse Aviation and PlugPower, one of the first companies attempting to commercialize fuel cell technology. We were very proud of the fact that companies trying to break existing product paradigms chose ProductFactory as a management tool. We enabled a radically new approach to innovation by leveraging the Internet for supply chain collaboration at the innovation stage of the product lifecycle. Later, the product was chosen to manage complex, globally deployed supply chain innovations for GlaxoSmithKline, Cisco and Dell.

SM: What were ProductFactory's revenues?

EF: It was a low seven figure run-rate business with a handful of leading edge customers when Agile Software licensed the product and ultimately acquired ProductFactory, in 2003. I stayed on at Agile as Senior Vice President, Marketing for a year and then went on to start HotChalk.

SM: What was the final exit value?

EF: The terms of the acquisition were not published and the information is restricted by the acquisition agreement. That said, because we had bootstrapped the business, it was a great financial outcome for the founder, executive staff and our investors at a time when positive outcomes were few and far between because of the dot com meltdown.

SM: How was the transition from ProductFactory to HotChalk?

EF: My experience at an enterprise software company like ProductFactory coupled with my consumer focused educational software experiences at The Learning Company set me up for HotChalk. Through these experiences I realized the tremendous potential of web-based educational technology resources. I was inspired by my own experience as a parent and the frustration that parent teacher conferences always seemed filled with surprises.

SM: What was the market landscape when you founded the company? Who was your competition and what was their positioning?

EF: Online education resources like Blackboard and Moodle were doing quite well then, although none of the other companies had a collaborative community element. On HotChalk, teachers contribute their own content, use resources uploaded by other teachers, create tests and rate materials. This enables teachers to find things that work in the classroom, aggregating the best information from resources worldwide when creating lesson plans. This is one of our key differentiators in the marketplace.

Teachers can send notes, assignments and grades to students electronically. Today all students are accustomed to communicating via email or text messages so it is essential to incorporate this aspect into their education. Not to mention the added convenience this gives teachers.

Another differentiator between HotChalk and the rest of the field is our unique partnership with NBC News that brings news video into the classroom. On-demand access to NBC News' 70 years of television coverage, pre-television film footage and radio broadcasts provides a historical background for lessons, adds relevance and improves learning outcomes for all students. Students can use HotChalk's resources at their own pace giving the many US students who do not speak English as their first language the ability to comprehend more readily. This content is updated continuously so educators can teach current events right up to the minute.

SM: What is it that truly makes HotChalk unique?

EF: HotChalk is the first free online community application to connect preK-12 teachers, students and parents. It's the true essence of Web 2.0 since each teacher's individual experience and overall community experience become richer and more dynamic with each user's contribution. HotChalk is content agnostic! We work with education providers from every niche including textbooks, supplements and

assessment publishers. Our range of content is continuing to expand; we are in discussions with many key learning and publishing institutions.

We know teachers intimately. We speak with them daily through surveys, feedback forms and phone/email dialogues. These open lines of communication with teachers enable us to offer resources on their sites known to provide value to educators. Teachers are often presented with technology products by administrators that they actually don't adopt for a variety of reasons. This has led to a gross misuse of funds by school systems. We have found that administrations in some areas has been known to purchase programs costing more than \$1,000,000 yet have under a 5% adoption rate by teachers. Schools cannot afford to waste funding on products that do not benefit their teachers, yet it happens all the time.

We have a revolutionary offering. Others have noticed, and it's exciting. In our first year alone hundreds of teachers joined the service. In 2008, membership has climbed to more than 375,000 teachers. More than 7.1 million monthly unique visitors from 188 countries are using our site. The value HotChalk provides for its members has created an organic marketing phenomenon that continues to multiply our user base.

SM: What types of strategic partnerships have you been able to create?

EF: Strategic alliances are critical to our success and enable us to provide many resources for free to teachers, students and parents. Our partnerships with NBC and McGraw-Hill means HotChalk can provide time-tested, proven digital news video and teacher development resources offerings at a low cost to schools.

SM: How did you achieve these alliances?

EF: In August 2007, William Oldsey, Executive Vice President, McGraw-Hill learned about HotChalk. He came to us and initiated a partnership that would bring McGraw-Hill's significant teacher training and certification tools to our users. Then NBC learned about HotChalk's vision and its management proposed a partnership with HotChalk to distribute their comprehensive news archive as a supplement to traditional educational materials.

The resulting affiliation has led NBC to take a much more active role than anticipated including equity participation in HotChalk's C round financing. The success of both ventures ensures that there will be more curriculum-related joint offerings in the near future on a national and regional level.

SM: Let's examine the marketplace. How big is your market? How do you calculate TAM?

EF: Our target market is teachers, students and parents. Teachers globally lack essential educational resources. There are 3.2 million teachers, 55 million students and over 140,000 public and private schools in the United States. Globally, there are 29 million teachers and 464 million students. The English-speaking international market alone includes an additional 1.3 million teachers. We define the comprehensive global education marketplace as our total available market (TAM).

Our business model is to provide all teachers worldwide with a free, safe, easy and cherished tool to bring their classes online with the ability to interact with other teachers and share their best resources. HotChalk aims to be an advocate for teachers so they have the resources and support that government, administration and corporations have promised to offer, but have not. We enable these teachers to readily communicate with students and parents online.

SM: How do you specifically provide value for schools, teachers, parents and students?

EF: Teachers are an extraordinary leverage point in the system because there are on average more than 100 students per secondary school teacher. While we're focusing on serving all of the different constituencies, out of the gate for HotChalk it's about teachers. When teachers work together with students and parents, academic achievement follows. One of the things we're most excited about at HotChalk is this dynamic and the role that an online learning management system like ours can play in this communication process.

SM: Venture capitalists tend to avoid education startups. How did you fund HotChalk? Did you bootstrap again?

EF: There was not a lot of venture funding of education technology in 2004. Sales cycles in school districts can be unpredictable due to funding instability, school board changes and politics. This has made traditional investors wary of our market.

Our Series A was a friends and family round, and was \$150,000. As we continued to make progress, we began to attract more traditional forms of venture capital from players like Berg and Berg and the Meriwether Group. That led to a Series B of \$3.5M, of which 50% came from VCs and 50% came from existing investors. Our Series C was for \$10.5M of which 95% was institutional and 5% was from existing investors.

We have always had a strong foundation of people who are experts in Web-based technology and investors who believed in us. We are quite fortunate that investors are business partners and long-time colleagues who are well respected in their fields.

SM: Who were your initial institutional investors?

EF: They include members of the team that bought ProductFactory, Jay Fulcher and Bryan Stolle. These partners provided more than just capital. Bryan Stolle, a partner at Mohr Davidow Ventures, gave valuable coaching and support instrumental to the development of HotChalk.

SM: Who were the Series C institutional investors?

EF: Last summer we inked the term sheet on our Series C financing with NBC News, McGraw-Hill, Peacock Equity Fund, Mohr Davidow Ventures and existing investors participating. This financing provides a platform for continuing our dramatic growth and we're pleased that these influential partners have stepped up to help us make an impact on the lives of teachers

SM: Will you be raising more money? What is your time frame and who is your ideal investor?

EF: We now have the resources to achieve our domestic growth goals. HotChalk is poised to begin fundraising in the next 18-24 months for our international expansion phase. Our ideal investor is one who knows the education marketplace and can support mutual growth objectives.

SM: What stage are you at now in terms of revenue, profitability and users? What metrics do you use for evaluation – traffic, unique visitors, other metrics?

EF: In banker's parlance, HotChalk is a Stage 4 Company with shipping product, revenue and sustainable growth. We will begin fundraising for global expansion in a year or so. Our traffic is continuing to expand: 7.1 million monthly unique visitors and 375,000 teachers use our service in 66,315 schools and 188 countries. Our largest teacher concentration is in Florida where we have more than 10,000 registered teachers.

SM: What is your business model? What is the value proposition for investors?

EF: Advertising is the key to the HotChalk business model. We are able to provide free services and content as corporations place relevant advertising throughout our network. HotChalk never advertises to

students during the school day and we never advertise to students in elementary school. We do not accept advertising from fast food companies or anything that is sexually suggestive. HotChalk only presents tasteful advertising to meet the needs of students in a positive way.

We recognize we have a responsibility to the pre K–12 audience because of the age and the educational environment where our application is viewed.

SM: Can you describe your team building process and philosophy? Is your team complete?

EF: We are always looking for the best and brightest who share our passion for education. Our management team is seasoned in software development, education technology and, perhaps most important, technology adoption in the public preK–12 setting. Those who are an ideal fit also have all-important experience building tech startups from ground up into successful organizations. HotChalk is a “small but mighty” company where every individual makes an impact on the organization and as a result makes a significant impact on teachers worldwide.

As a graduate of the Marine Officer Candidate program, I’m a believer in the inverted management pyramid. Leaders work for their followers and it’s the leader’s job to make sure that the team has the tools, training and resources necessary to carry the day.

SM: What is your continued growth strategy? How will you manage growth selling to schools, something other companies have found difficult so far?

EF: HotChalk approaches school districts and individual schools directly to sell premium services. Based on data gathered from our free offerings for teachers, when we approach a district we can tell them with precision how teachers in their area are using specific HotChalk programs and how those programs that affect their teaching. Districts see that HotChalk brings immediate value since, more often than not, their teachers are already on our system. Administrators often end up reconsidering proposals from companies with products that are interesting and yet provide limited value because of adoption challenges.

SM: How do you view the current market landscape today and going forward into the future?

EF: There are 3.2 million teachers teaching and many are headed out the door. Some are retiring, but almost all are fed up with increased demands and little support. 2.8 million teachers need to be recruited over the next

eight years to meet education demands. These future teachers are students in universities who use Web 2.0 applications daily, so using a Web-based application is second nature. The high potential for adoption by these future educators is the foundation of our enterprise value. HotChalk's product is simple and easy to use, so even less technologically-savvy teachers can get on board.

Looking ahead, HotChalk will assess partnership opportunities and consider funding opportunities to enhance our model. Our primary focus is to keep advocating for teachers, while increasing shareholder value by providing depth and value of services.

SM: What are your thoughts on the education technology market overall? Why is there so little activity and funding? It's a vast and important segment operating under archaic assumptions. How do we turn it around?

EF: The market is relatively tough to crack due to its seasonal nature and the dysfunctional sales cycle which results in wary investors. We can turn this market around by taking care to understand the marketplace and who needs resources the most - namely teachers. Taking the time to listen, understand and adequately address this segment enables us to provide immediate value to our target market. Programs need to stop catering only to administration and IT professionals. This group often perpetuates the archaic assumptions you mention.

Initiatives need to demonstrate value at the outset. They must be easy-to-use and teacher/classroom friendly to encourage early adoption. Any teacher can sign up on HotChalk for free. In five minutes they will be able to view another teacher's classroom materials and upload their own lesson plans and get feedback from other teachers. This ease-of-use, as well as other extensive resources available to educators, provides immediate value for the school.

SM: Have you given much thought about a potential exit?

EF: I don't spend a lot of time thinking about the exit. We're focused on making a meaningful impact on the lives of teachers to drive student results. Getting that right will drive sustainable shareholder value which is what our investors are most interested in.

SM: What have been the key lessons learned from this journey?

EF: Each technology market segment is unique and requires a fresh approach. What I discovered in education is that there are numerous

constituencies locked in a dysfunctional state to a large extent because education has become so politicized. That must change in order for real reform and progress to occur. It's time for us to remove politics from education and support teachers, making sure they are given the resources they need. How else can they equip our children with the tools they need to positively impact the 21st century? That is the question we are asking here.