



Hanselminutes

Hanselminutes is a weekly audio talk show with noted web developer and technologist Scott Hanselman and hosted by Carl Franklin. Scott discusses utilities and tools, gives practical how-to advice, and discusses ASP.NET or Windows issues and workarounds.

Text transcript of show #100

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Building Community with Norm Judah - CTO of Microsoft Services

Scott chats with Norm Judah, the CTO of Microsoft Services. They talk about running a multi-cultural organization of 16,000 consultants, building online community, and writing green software.

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Lawrence Ryan: From hanselminutes.com, it's Hanselminutes, a weekly discussion with web developer and technologist, Scott Hanselman, hosted by Carl Franklin. This is Lawrence Ryan, announcing show #100, recorded live Tuesday, February 12, 2008. Support for Hanselminutes is provided by Telerik RadControls, the most comprehensive suite of components for Windows Forms and ASP.NET web applications, online at www.telerik.com. In this episode, Scott talks with Microsoft CTO, Norm Judah.

Scott Hanselman: Hi! This is Scott Hanselman and this is another episode of Hanselminutes. This is in fact our 100th show and I am lucky enough to be sitting here at Microsoft TechReady 6 in Seattle, Washington, with Norm Judah, the CTO of Microsoft Services. Thank you, sir, for taking time out of your busy schedule to talk to me.

Norm Judah: Hey Scott. Nice to be here.

Scott Hanselman: So, you're the CTO, chief technology officer, of a very, very, very large section of Microsoft, if not, I mean do we have more than one CTO?

Norm Judah: Not inside of the Services Organization. In the field, I'm the only one right now.

Scott Hanselman: Okay. So, how many people do you have underneath you?

Norm Judah: The Microsoft Services is a worldwide organization spread across all the geographies from consumer support all the way through enterprise support and consulting; and all up MCS is about 16,000 people.

Scott Hanselman: That's a non trivial number and we're talking about people all over the world. So your point is that you might have MCS Poland and MCS South Africa and MCS whatever.

Norm Judah: And MCS Vietnam that is just opening up and Thailand and Latin America.

Scott Hanselman: Wow.

Norm Judah: So, it's both big and small.

Scott Hanselman: And they have local MCS people, so if you're in MCS Thailand, you might very well be Thai or you could be from anywhere in the world.

Norm Judah: Yup and as Microsoft opens up offices around the world, one of the first part of the office is we got to provide support if we are going to sell product, how do we provide support and consulting? So, very early in the incubation of new countries services is there.

Scott Hanselman: These are people have their own culture and have their own style but at the same time the company has to have its certain culture and certain style. I mean when I got hired at Microsoft they were asking the question and I didn't realize this until the interview but, "Is this a Microsoft hire? Will he fit in with the culture? We hire for the company, not the position." How do you make sure you have consistency of talent, of culture across 16,000 people?

Norm Judah: There are actually three dimensions to the hiring problem and one is the Microsoft culture, which is how do we, you know, the Microsoft type A personality and Microsoft is not right for everybody. So, do you fit in to the company? The second one is do you fit in to the local culture and that is very different as we expand through new geographies in Eastern Europe, Latin America. The local culture is also very important but some work that we did about three years ago inside of services is to layer in top of that technical communities. In other words if you are a database guy and you are in Malaysia, how do you connect with the database who is in Brazil or who is in Chicago or who is in Paris? So, we've led in this big matrix organization both the geography and both the technical communities. So we provide the connection across those multiple dimensions and then we add industry on top of that. So, any individual for example sits at an intersection in a multidimensional space of country, geography, technology, industry, maybe vertical, maybe horizontal that really starts to define who you are as an individual and how you contribute into the overall company.

Scott Hanselman: That's really interesting. Now, as someone who has built a small online community, one of those things that I try to foster is the sense of positivity, of welcoming, a sense if you don't know the answer, it's okay. It needs to be a safe place to ask questions. Not every culture in the world, for lack of better word, values competence much like the US does, like some countries do. Do you have any trouble with people being so good and so type A that that aspect of the culture is -- do you understand what I'm saying?

Norm Judah: We see interesting behaviors inside of the communities. We do see a lot of that. We see those who contribute into the communities, those who ask questions, those who give good answers. We actually also see the people who come in and say, "No, no, no. This has been answered a long time ago. Go look at the fact. You can find it. Do your homework." Communities have to be self-managing and it turns out that in the Microsoft culture, there's enough self-management to spank the people when they are ill-behaved and to instruct the people when they need help.

Scott Hanselman: Interesting.



Norm Judah: Our communities are about a thousand people each some are smaller, some are larger. The interesting fact is how long it took us to get the communities running. When we started, we went out and did quite a lot of research on the open source communities and some of the other consulting companies, but nobody had really done what we are trying to do. We couldn't find anybody so we did it bottoms up. We looked at the MVP process that is in place at the Microsoft outreach to folks out and our customer and partner base and then we sort of implemented our own version of that. What we figured out is that it took us about two years to get it to be to self-sustaining and self-feeding. You have to get to that critical massive activity. There are a couple of key things that we did along the way to drive that. But once we get there you cannot stop it. Once you get over the edge over the chasm it becomes that you got to care and feed for it. I have for example reporting to me community directors whose job it is to care and feed for those communities and networks so you have to have that. Self-sustaining communities always have to have some notion of somebody who is causing it to happen. Not necessarily leading it but causing it to happen.

Scott Hanselman: Yeah, kind of the eternal watch maker. You build that watch and you let that work and you may have to turn it up a little bit and point it at a certain direction but for the most part it will handle itself. As someone who has a number of years of history in the business I always find it very interesting to talk to people who are in the business a lot longer than I have. I have been doing this for about 15 years and the speed at which things have happen even with my 15 years I have ran a bulletin board and if I have three people dialed into my bulletin board at once that level of concurrency and multiple chat was amazing. So I have built my little community with a couple of hundred people and now you can throw up a forum board and put together a community with a couple hundred people and a couple thousand spammers within a few seconds. What is your sense of history as far as how community builds over the last 30 years? I mean communities were labs in colleges before, weren't they?

Norm Judah: The cultural aspect of community to me is not turned out to be one of the interesting social engineering problems that we have tackled deeply in this case. The historical perspective has always been the community was very local because you weren't connected. So it was a bunch of guys who got together for beer and pizza on Friday but what you missed with that is the diversity of the community because the guys who are getting together for beer and pizza are all the people who are in the same office, in the same space, in the same geography. The value of community is the diversity. There are many folks who look around at systems

and applications produced in this country and I have typically and intricately I do this all the time give stereotypical examples of applications that are not here. I will give you a quick example.

Scott Hanselman: Okay.

Norm Judah: We have had a great application that we are writing in China with one of the mobile operators in Beijing and that is around creating an instant messaging system driven off an SMS backbone. They are going to pilot the system just to test it out. The pilot is going to be with seven million users. If the pilot works then they will scale it to about 200 million and if that works they then will roll it out to billions and so the magnitude with the problem set is so different so that the diversity of the community is really important and there is always another guy who is somewhere else who actually has another interesting aspect on it. So historically the span of contact has been the thing that has been changed. What are the tools that we have got to be able to do that? Beyond the guys having beer and pizza you might have helped an event. That was a North American event or European event. So you might have start to get some people together there so your geographic span has expanded because of air travel and maybe you are running a dial up bulletin board as you say but generally the people who are in the bulletin board are pretty dedicated. What you have to do is make it a natural way of people's lives. For the community to work they have to have a place where they can go when they are in the customer situation don't have access to your private networks and they can get to that information and get to it immediately. So the change of the internet and the immediacy of information you have to replicate that in your community because if I confine it quickly I am gone.

Scott Hanselman: We had had a discussion on my blog a couple of months ago about the concept of the third place in the idea that in sociality someone needs home, work and elsewhere where elsewhere is either a bar, or church or whatever. People were saying that for a lot of people that the internet has become that third place or a blog or a forum. Whether or not that was a healthy thing and it is interesting to see other cultures find that third place. It is interesting like in Africa, my wife is from Southern Africa and we have been to Tanzania, Zimbabwe and South Africa and the third place is SMS. It is chat. That is amongst people who don't necessarily have computers but that sense of mobile information is been getting me thinking about that gap between the laptop and the phone that seems need to be filled. People keep trying to shove devices in there. Microsoft Origami and different tablets and things like that. I keep on kind of rambling but I keep on wondering if we are going to have some sort of a roll up tablet device that is going to give us that 4 x 6 card.



Norm Judah: I think the interesting thing about the mobile device is across the generations that you have described is that the half life of the device and the rate of change in the device far exceeds the laptops that we have seen and that the good thing is that phones are kind of disposable. It is a good thing and a bad thing because we are not sure what to do with those disposable phones and how we treat the garbage that we create with that but the recycling of the phones and the generational movements about the movement that we have gone from barely connected telephones into 3G phones today and then three and a half and 4G phones and your ability is the immediacy of information contact and how that is going to provide access either through voice you will talk to your phone and somebody will come back to you and might be a Turing machine on the other side. It is going to come back and give you this information but as people travel around and as you are not always in your first place at home you are actually still connected.

Scott Hanselman: Exactly. You will always be in your third place.

Norm Judah: Yeah you will always have this notion of partially connected and connected when I really need to be.

Scott Hanselman: Yeah we have been watching this community called Tweeter Development and Tweeter is...other than the fact that you have to use your thumb keyboard to get your 140 characters out. It is basically is whatever thought that is in your head at that time something goes out in the wire and the scary part is that it is archived for all eternity.

Norm Judah: Wow. The thing I found fascinating about this is that we have done a lot of work looking at the generational aspects of user experience. The user experience that we might have and the expectations that we might have are very different of those of my kids. I have two kids who are just in college, one is a junior and one is a freshman and their ability to deal with multiple streams of information concurrently across multiple modalities: the phone, IM, music and god knows what else going on and some of it's about work and some of it is not. Their ability to do that is one thing. The second thing is the anonymity of information that they will publish is both frightening and fascinating. The thing I find... the part that we are interested in looking is that generation in five years time starts to be the strength of the work force. What are they going to expect from business applications, from CRM applications. How are they going to apply for a mortgage? It is not going to be on 11 x 14 pages with 17 signatures on it. It is going to be different. That is the part that emerges I want to come full circle because you are seemed to be eluded to it a little bit earlier on which is what is a CTO do? That is one of the things that a CTO does is what are things that we have to be doing as a

technology company that empowers the scenario I just described. What are we going to do from a tools perspective, from an infrastructure perspective, that allows those applications to be built? There is a talk that I have done periodically which is called architectural discontinuities in the last mile which is what are the architectural discontinuities that are coming and then how do we close the gap of that architectural last mile and laying that out to 16,000 of your closest friends so that they can communicate it to their customers. Here are the problems set and by the way here is a company. This is what Microsoft is going to do about that.

Scott Hanselman: You have got all these cultures and all those modalities and all these multiple dimensions and at this point these things cannot be described on three-dimensional graph anymore. I mean we have got more dimensions than we can visualize. How do you take things that are just part of the business like certifications? Like if someone says all our customers are MCS whatever *.* maybe all of our consultants should be MCS *.*. I am sure discussions like that must happen but maybe they are not appropriate or a cultural basis maybe one culture doesn't think that the testing is appropriate. Are those the kind of fights that you deal with? Because we happen to deal it with our company. I have worked for Microsoft for four months. Previously to keep our status we have to be a solution developer or whatever. Are MCS people certified?

Norm Judah: That is actually something that we are driving. This event TechReady which is an internal Microsoft event for our technical field it is sort of like our Tech Ed internal. It is the way of thinking about it.

Scott Hanselman: Yeah, exactly.

Norm Judah: We sort of have a way for people to take certification courses here and it will be about 1,200 that will take. By the way not everybody passes the first time through.

Scott Hanselman: I know that.

Norm Judah: I know that too. So we actually have a lot of these things that are going on here to actually drive that same level of certification but we have a double dimension problem that somebody outside of Microsoft doesn't have as one you have to know the current set products and as a Microsoft consultant and having come...I actually join Microsoft in 1990 as the first architect in consulting when there were 20 people. It is interesting when you are a Microsoft consultant and you are inside a customer you are the Excel macro guide, the PowerPoint color code guide. You may actually the middle tier data architect as well but you are Microsoft when you are there and the expectation of the customer is that you actually know or can find out about a lot of stuff. So



this expectation of ambient level of information which is almost impossible to sustain and then you have to know about what is coming and how the current things, the current technologies are going to be morphing and changing of the time to be something else. The accreditation problem actually is necessary but insufficient and in this case you got to be beyond there.

Scott Hanselman: Yeah you went exactly where you thought you want to go with that. I appreciate that. As someone who worked with large banks in all over the US I worked for the company that did banking and we always come up against IBM. The joke was in the early 2000s is that my IBM consulting services person has 20 years experience and my Microsoft consulting person is 20 and this was the case in the late 1990s and it has been really been interesting to interact with a lot of MCS people in the last five to six years that have really have hard core experience 10 to 15 years working at large banks at the north east. Is it just a matter of the maturity of the organization? MCS had to get older?

Norm Judah: Well, it is older and more mature. The problems set that we are dealing with changes. Instead of MCS version 1 is about infrastructure it was about deploying or it was 2 at that time getting an infrastructure in place followed by the apps. Today it is actually very different. Today there is a part that there is infrastructure, there is a part about applications and there is actually a new initiative that we are driving and we are just creating this called engineered for health. How do you actually design applications that are built to be healthy? How do you design applications that are built to be green? So there is a lot of work that is going on in that space. There are different problems being solved and the altitudes, the level of sophistication on those problems is different than it might have been 20 years ago.

Scott Hanselman: Well, writing an application to be green is really...did we know that the background spell checker in Word was going to cost us battery life.

Norm Judah: Right.

Scott Hanselman: To write an application that has to deal with that additional set of input. We used to think that input started in the keyboard and it kind of ended up in the program and we have got other bits of context flowing into the machine.

Norm Judah: Well there are many notions about the stimuli that drive the system be it input or remote access or whatever but there is also have been this fundamental architectural assumption that was made with most applications which is big stuff at the middle of the application. By the way the big stuff is always there that is always synchronous. If you are going to build an application that is green that

assumption is no longer valid because your database might be quiesce for power reasons or a device might not be that you have to wake it up. So when you start to superimpose green assumptions your programming model changes completely and that your assumptions has to be that the other guy should be there but might not be. How do you wake it up?

Scott Hanselman: Wow I am coming to the end of our time and I have got to talk to you and sit down with me and talk with me about green computing because you just blew my mind. I know that a rise of asynchronicity was upon us. Certainly within the word war doesn't exist previously in the Microsoft programming model for a lot of people grow up and VB 6 and tried to shoehorn asynchronicity and now we have things like WCF and rest of the models. Wow you blew my mind. I will go and think about that.

Norm Judah: Well I would add one more thing to...

Scott Hanselman: Please.

Norm Judah: Which is virtualization becomes a key part of that because my app server might be completely virtualized and if I actually need to add another virtual image of the app server because of load the consumer of that app server might have to quiesce for a minute while the virtualization engines actually provisions of another app server that might be in another geography.

Scott Hanselman: Yeah that is hard. I mean Outlook and Exchange is a canonical example. When sometimes this has been the case for outlook so don't feel like I am picking on them. You send an email and then maybe the internet goes down or the wireless goes down and everything stops because putting a byte on the wire is a Perl or blocking call. It is challenge that goes all the way down the stack.

Norm Judah: It does so we are thinking a little bit of that green and what it actually means to our apps and I am not sure of how much people have thought about the fundamental changes to the application architecture.

Scott Hanselman: Wow that has given me a whole host of ideas for future shows and I know that you have got another meeting right now. I appreciate you sitting down and talking to me. This has been another episode of Hanselminutes and we will see you again next week.