

COTE: Hello, everybody. Here we are at RSC 2009, the Rational Software Conference in, as always, a lovely Orlando, Florida. And I've got another guest here with myself, would you like to introduce yourself?

BOOCH: You bet. My identity was stolen not too long ago, I used to be Brad Pitt.

[LAUGHTER]

But I'm not now. This is Grady Booch.

COTE: We talked last year, I remember...

BOOCH: Yes, we did indeed.

COTE: ...in a finely wood-paneled room, if I recall correctly.

BOOCH: I think it was. And now you've got this wonderful peat green kind of thing back here.

COTE: You know, you've probably come across this notion, I'm always trying to figure out where I picked this up or if I made it up, but this sort of, well, I'll just say it. This sort of atrocious design that you see in carpets in conference rooms and things.

BOOCH: Yes.

COTE: Somehow I have in my mind that they do that

because it's easier to clean up and hide stains.

BOOCH: I think that's true. It's sort of this, you know, early, Gothic, bordello look that you see in a number of places.

[LAUGHTER]

COTE: You just sort of string together all the undesirable aesthetic movements...

[LAUGHTER]

BOOCH: Precisely, and you've reached a common mediocrity, not unlike what we see in software in some cases.

[LAUGHTER]

Let's not go there.

COTE: One thing we were talking about before we were recording was this sort of, I guess it's all sort of fun ideas to talk about there's a sort of, I don't know, messed up balance between how cheap software is and sort of like the scarcity that you have to actually pay for that software.

Or just like money. You have one resource that's constrained and then you have this other resource that is potentially infinite in supply...

BOOCH: Sure.

COTE:           ...if you can do it correctly.

And I'm curious, you know, we sort of stopped ourselves so we could actually get it on tape, but I'm curious to hear what your thoughts there are.

BOOCH:           Sure. And I'm really sorry we didn't get that on tape, because we solved every known problem.

[LAUGHTER]

COTE:           Well, that's what always happens here.

BOOCH:           I know, it's a shame.

So, the theme that I've been developing for the executive session here was the notion of the tension between the presence of a software abundance, and yet the presence or in the face of economic scarcity. So, reality is, in technical terms, the global economy sucks. The common reaction in such circumstances...well, actually let me go back.

This isn't the first time, and so the bad news is the economy sucks; the good news is, I guess, is that this, too, shall pass. I saw a report once that since 19...no 1885, going way back then, the market has dropped greater than 40 percent in value nine times. So it's not like this is the first time.

You can even go back further looking at what happened around

that time, around 1870-something you had the...there was a panic around that time, usually because of speculation of stocks in railroads. There was a panic before that due to problems with the gold standard, and so on. So you can go back to a number of timeframes and realize there are periods of economic scarcity.

But we're a little bit different now and a sense that we have this material, software, which is very fungible, it's very adaptable, very, very flexible. And it's not like the normal resources that we are pulling out of the ground or creating from atoms.

So the question for me then is, how does one attend to economic scarcity in the face of potential software abundance? And a natural reaction, the classic reaction in the face of economic scarcity, is it that you retreat and panic, and you slash things.

So, this is what's happened with GM, of course, that their only means of survival has been, well, now bankruptcy, but looking at eliminating data and reducing cost. And that's applicable if you view software development as a cost center.

But if you view software development as a source of innovation and the source of the power of your business,

then you want to have a completely different reaction which is to say that, no, in the face of economic scarcity, I'm going to attack with software because it's actually something that's very fungible, et cetera, and gives me a resource that I can use to get an edge.

COTE:           It seems like, essentially, it's sort of cheap, if you will, then other sort of physical commodities. And cheap at least in the long term in the sense that it's not going to sort of increase in cost as you run out of it.

BOOCH:          Right, you can't run out of it. In fact, that's an important element. There was this delightful presentation done at one of Tim O'Reilly's conferences recently, Ethan, can't think of the guys name, in which he was pointing out that there is a surplus of cognitive skills.

So, I think he put it in his presentation that if you look at, if you look at Wikipedia it represents probably around 100 million cognitive hours. And in a yearly basis, we Americans watch about 200 billion hours of television.

So there's a cognitive surplus out, there and software being primarily an element that comes from the cognition and the mental labor thereof. It says, there's a surplus of things we can draw upon that don't, you know, increase the carbon

footprint, [we're living], and that's not going to increase if we're writing software or watching TV. And we can tap into that as a means of competitive advantage.

COTE:           Makes me sort of tangentially connect to one of the, the sort of reoccurring themes that I've been coming across here at RSC this year.

BOOCH:          You don't mean, rustic, do you? You mean, oh, RSC.

COTE:           Or RSC or whatever it may be.

[LAUGHTER]

But it seems like with a lot of the higher-level reporting and analytical tools and, I'm forgetting what it stands for, but the MCIF framework and sort of the, I don't know, I mean the further evolution of RUP principles into more higher-level business things as well...

It seems like a lot of, or at least what I'm seeing a lot of, what seems to go on there, is the idea of giving business people, if you will, as us software people would call them, the ability to more closely interact with software and do something with software more directly than just sort of tell all the crazy developers over there to deliver me an application.

It seems like what Rational is thinking about nowadays is sort of, I don't know, it's sort of going up against that window or Holy Grail if you will, of like finally having business/IT alignment where we'll finally have some business guy drag and dropping something and it will just work out perfectly.

BOOCH: I'm not sure exactly that's how I'd characterize where Rational is headed in that space...

[LAUGHTER]

COTE: Right.

BOOCH: Because it brings to mind what happened with the CODASYL committee back in the sixties with COBOL, because one of the things that Grace Murray Hopper and others in the CODASYL committee were pushing is this notion that the great thing about COBOL is now that business people can actually write down business rules and make it executable.

So, the same argument was done back then, and of course, it didn't come to fruition, because you simply changed the level of abstraction and the problems of building executable things and extracting and all this, you're just shifting the language it's in, and they haven't really solved the root problem.

And so, I would characterize or reframe your problem a little bit differently to say that no, what's really happening is that it's not so much we're interested in business people programming per se, but rather it's a recognition that there are so many businesses that depend upon software as their lifeblood.

And insofar as I can couple the evolution of that software to the business needs and a wonderful dance between the two, that's the Holy Grail of what I wish to have.

There's a delightful book whose author has escaped me at the moment that characterize market leaders, and they described that there are one of three categories. There's the ones who have really worry about efficiency, and they put Dell in that category. There are ones who focus upon innovation, and they put Apple and IBM in that. And there's a third category that Amazon was in that deals with customer intimacy.

And the point they're making is that if you look at any one of those businesses there is...software is the thing that fuels them and makes impossible. And insofar as they can couple where they're trying to head with the business with the software itself, then that's the dance you want to have happen. And so, if I were to reframe it, is that what Rational trying to do? Sure. But we're not trying to do



what the COBOL folks did.

COTE:           So, on a completely different topic, when I was walking away from the keynote I overheard you, you know, I guess I eavesdropped a little bit in the hallway, and you were telling someone that you have, you know, there's a lot of demands on your time and travel and things like that and there's all these different input sources. And I'm kind of generalizing the problem, if you will.

And you know, I think everyone in quotes has this problem nowadays that there's too much stuff going on. And I think that the thing that sort of made me remember this, overhearing this conversation was you had this funny thing you said that even telling people no takes too much time, narrowing down.

I mean, I'm curious, for as busy as you laid out that you were, like, what are some of the coping strategies that you're going through at the moment to sort of deal with these things? Because saying no even takes too long.

BOOCH:           Sure. Even no takes time. There are times where I have to just shut myself off from the world. I shut off my e-mail, I shut off my phone, I shut off everything so I can be alone to think for some period of time. And so, in that regard I'll crawl into a cave, metaphorically and not

quite literally, but almost so.

[LAUGHTER]

The other coping strategy I'll do is I do a bit of a triage.

I ask the questions like, well, this is travel involved going near a beach, which puts it higher in the priority for me.

COTE: Right.

BOOCH: Does this, that's facetious, well, maybe not entirely.

[LAUGHTER]

BOOCH: But I also look at, is it something that I can make a difference by physically showing up versus doing something else more creatively. And to that end, I've actually been doing quite a few things in SecondLife.

In the last year or so I've probably given 50, 60 presentations in SecondLife, and that's a means of extending my reach while reducing the cost of my time. And it's been absolutely wonderful as I can see more people in some ways by doing that. So that's made a big difference.

So I guess I'd reframe that by saying one of the things I'll do is to really understand if they need to move my atoms or if I can just move by bits...

COTE: I mean, it seems like you're spending a little bit more time up front to actually evaluate if you're going to spend a lot of time by doing something, which, I think most people go about something where they are, they sort of want to clear out their inbox, if you will.

BOOCH: Yes.

COTE: And so they end up overcommitting in the future to save a little bit of time in the present. You also mentioned SecondLife and I'm curious, I mean, SecondLife specifically, but it seems like there's been a lot more, or I've seen a lot more emphasis on not only sort of like online meetings and stuff like that.

But I don't know, I guess it's curious to me because I'm not really into videoconferencing stuff.

BOOCH: Sure.

COTE: But I've seen a lot of people doing, more enthusiastically doing remote sort of meetings.

BOOCH: Sure.

COTE: And narrowing down to SecondLife, I mean, it's been a while since I've sort of caught up on how things have been going over in SecondLife world, but so, how has it been evolving over the past year or so?

BOOCH:           Wow. Tremendous strides in that regard. As an example of how IBM's made a commitment in this case, we have a group called the Academy of Technology, which is the 3,000 or so, I think that's the right number, most senior technical people throughout the corporation.

And last year was the first year we didn't do this, but we used to have an annual meeting where we'd physically get together and due to costs, we said, we're not going to do that.

So instead, the Academy meeting was held in SecondLife. And it's not quite the same, and we have the new, you know, startup kinds of things. But the ability to still interact with people and have these watercooler conversations. If we canceled the meeting, we would have had nothing, but by doing it in SecondLife you get some degree of that value.

The other thing that's happened, I think that's pretty profound, is that IBM and Linden have worked together to allow us to take the server for SecondLife and separate it from the public grid and put it behind the firewall. So, we can now have a truly secure virtual experience.

COTE:            So you can now have your own SecondLife?

BOOCH:           You can have your own SecondLife, some people

have flippantly called that your third life.

COTE:           That's right.

BOOCH:          Your first and second life aren't good enough.

COTE:           Your corporate life or something.

BOOCH:          And so, by doing so you built an air gap around everything there and this is to some degree where the Sametime 3-D folks have headed. So, you know, in Sametime, I can bring up a chat window and say, oh, you three or four people come join me.

You can now click a button and say come meet me in SecondLife, and you come to this meeting room which has little Post-it notes and whiteboards and things around it. So, it's just like being there but in a third dimension.

COTE:           Sure. Despite the fact that we're doing a video here, I tend to be a pretty plain text oriented guy, or pretty text oriented guy. I mean, I do a lot of instant messaging and e-mail and all this sort of stuff.

And since obviously you do a lot of SecondLife stuff, and then like, I was saying, I see a lot of people interested in videoconferencing. And I wonder, in doing all these things like, what do you feel like that extra visual dimension adds that something like whether you're IM-ing or IRC-ing or

whatever doesn't quite have on its own?

BOOCH: Both the general video in SecondLife offer me some visual cues of body language. And especially if I'm working with somebody adept in SecondLife, I can see where they're looking, see what their attention is, and I can pick up cues like I'm doing with you here in real life.

The other great thing that SecondLife offers to me that I don't get for video conferences is that it deals with serendipitous connection. Last week I gave a presentation to 65 people enrolled to a group in D.C., and I was in...where was I? Kansas City at the time.

And I did the meeting, I did the presentation. And what was very cool just like a real meeting, but I don't get from a video meeting, is that it breaks up and people come gather around in small groups.

So, you have the spontaneously created groups that form that you can't get in the video presentation because you just don't have that kind of clustering. And the cool thing in SecondLife is with the three-dimensional audio, I can pick up conversation in the distance and say, I'd like to walk over there and see what's happening.

So you get some of the same kinds of things you can in real

life without, you know, getting near enough to smell somebody which is not always necessarily a downside.

COTE:           That's right. And we haven't perfected, maybe you guys in Research are working on this, but we don't have the smell of things, the peripheral smell device.

BOOCH:          Small trivia -- [David Horrell], who was the inventor behind [state charts], was apparently working on one time on the notion of smell phenomes, so, you could come up with the discrete units of smell and attach that a Web site. One thing that I'd like to highlight is the notion of the MASTOR thing that I showed in the keynote as well.

COTE:           Yes, yes.

BOOCH:          That was very cool, but basically a universal translator kind of thing, and the fact that we've able to, given, I think we gave 10,000 copies to the Army to use in Iraq, that's pretty cool.

COTE:           You know, you have 10,000 units running around there, so there is some certain confidence that it actually works, if you will. And the demo was, it was pretty funny.

There was a guy speaking Mandarin, he's obviously having a heart attack...I'm having a heart attack.

[LAUGHTER]

But I'm going to spend the time punching this...and then maybe I might have been over interpolating, but it seemed liked the guy he was talking with was actually speaking English as a second language. I mean, he had some sort of accent.

BOOCH: I think he was Swedish.

COTE: Yes, which was kind of funny in itself. But I mean, I'm curious with these kind of devices because I'm, my assumption is there somewhat expensive per unit. And I wonder what you, I mean, how long you think he would be before they get to be sort of affordable devices like even, you know, sort of iPod nano affordable?

BOOCH: Yes, a great question because the cost of them is not the hardware, it's just pretty stock hardware. It's the research behind it and the software. I mean, even IBM's ViaVoice is largely a software intensive kind of application and MASTOR is pretty much that as well, too.

MASTOR has, if you hadn't followed it, stands for Multilingual Speech Translator, I think it is. And as it turns out, there's an open source framework to some degree behind it as well, too, that's out there.

COTE: Great. Well, I don't want to take up too much



more of your time, so...

BOOCH: Thank you.

COTE: I appreciate you spending all this time.

BOOCH: I'm happy to do so. It was a pleasure to do  
so.

[END OF SEGMENT]