

Interview with Nathan Clevenger

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*Clevenger previews his presentation to a [one-day workshop](#) co-sponsored by [CENDI](#) and [NFAIS](#), *Mobile Computing: Delivering Content to the Research Community*, November 18, 2010, at the National Archives, Washington, DC.*

ANNOUNCER: Welcome to a Podcast of Beyond The Book, a presentation of the not-for-profit Copyright Clearance Center. Copyright Clearance Center is the world's largest provider of copyright compliance solutions through a wide range of innovative licensing services, and comprehensive educational programs for authors, publishers, and their audiences in academia, business, and research institutions. Become a fan of Beyond The Book on Facebook and follow us on Twitter. Subscribe to the free podcast and never miss a program at www.beyondthebook.com.

KENNEALLY: Well, come on everybody, let's get appy. We're going to talk about applications in the mobile world, not the kind you worry about as a consumer, but the ones you're beginning to expect as a professional.

Welcome to Beyond The Book. This is Chris Kenneally, your host for Copyright Clearance Center. And joining me on the line from Minneapolis is Nathan Clevenger. Nathan, welcome to Beyond The Book.

CLEVENGER: Hi, Chris, thank you very much for inviting me.

KENNEALLY: Well, it's a pleasure to have you join us. We'll tell people that you are both the Chief Mobility Evangelist at ITR Group, and an enterprise editor at Smartphone Magazine.

But our reason for inviting you on the show today is to chat about a presentation you'll be making in November in Washington about mobile computing delivering content to the research community. It's a one-day workshop that's co-sponsored by CENDI and NFAIS. And we should tell people what all of that is about.

NFAIS is a membership organization of the world's leading producers of databases, information services, and information technology in the sciences and social sciences. And CENDI is the federal STI managers group. It brings together a number of government agencies: commerce, energy, NASA, and defense.

These are all people concerned with the long-term management of scientific and technical information, all of that a mouthful. But these very much forward thinking

organizations that are always thinking about how the availability and the dispersion of information is changing their professions. And so by putting together a program about mobile computing, I guess their signaling, Nathan, that the app, the smartphone app, isn't just for teenagers anymore.

CLEVENGER: Yes, exactly, Chris. If we look at the industry as a whole, we're seeing a pretty significant shift away from the traditional model, where computer technology was sold from technology provider directly to company or organization. And as a result, consumers are taking their consumer personally owned devices into the work place.

And if we were to, for instance, look from 2008 to 2010, Apple achieved 80% penetration of the Fortune 100, all the while actually IT was kicking and screaming most of the time. Those employees, those workers, are beginning to bleed their consumer expectations for there's an app for everything into their professional and workplace contexts.

KENNEALLY: Well, as a matter of your work for Smartphone Magazine, you're the Enterprise Editor there, tell us, just generally before we kind of focus in on the scientific community, what these expectations are about. Because an app is a term that is used to cover a multitude of IT sins. But for the business world what really are we talking about?

CLEVENGER: Sure. It could be anything from business intelligence or key performance metrics of an executive. So while he's on the go, he could be alerted to any number of data points that are being captured in real time within his business and pushed to the bubble device.

Or on the other hand, there could be a sales rep who needs to access current inventory information and place orders directly from their hand-held smartphone device.

So the types of apps that we think about as consumers, everything from ordering your chipotle burrito, or paying your bills, to anything, really. Those same expectations that the applications that you need to do your job will be available on your mobile devices.

And it's not there today, but if I think if we look forward a few years, professionals will really need the same apps they have access to on their desktop and laptop computing devices from their hand-held and tablet-based devices.

KENNEALLY: Right. I mean they won't be walking the aisles of the supermarket counting calories with the apps. But they might be walking through a plant taking inventory and CENDIng reports back to the home base, if you will, about what's needed, and so forth.

CLEVENGER: Exactly.

KENNEALLY: And what's interesting to me about all of this is the way that the office is now in your pocket. I mean, the connection to the office, with all the information that we once needed to be at the office for, can now come to us wherever we are if we've got one of these phones.

CLEVENGER: Exactly. I think if you look at how mobile technology has evolved, most of the rich data-driven applications used within corporate and government contexts today are for task-oriented chains. Everything from blood inventory on the battlefield that the Department of Defense uses to – inspections of railroad tracks from the Department of Transportation, all the way to Census Bureau using hand held devices to capture information.

Or on the other hand, your UPS driver keeping track of your packages and capturing your signature when they're delivered.

I think the recent wave of applications – you know, I think the iPhone was the catalyst, but now Andoid and REM, Blackberry, and even Microsoft with their new platform launching this fall, are really just coming into the game. And mainstream expectations for that same type of rich business and productivity application will be coming to the information worker, where for the last 10 or 15 years it's been mostly in the domain of the task worker.

KENNEALLY: Right. And here at Copyright Clearance Center we're concerned about a very particular kind of information, published information, information that's publicly available, if you will. And so I wonder if I could ask if you know of any ways that publishers are beginning to recognize this shift into applications moving from the home into the office, and how they are responding?

CLEVENGER: Sure. I think rather than thinking about the publishing of information, or data, or content in the traditional format, which would be printed media or even rich hyper text with interlinking content, and/or images, I think applications, especially mobile applications, expose a lot more opportunities for interactivity with the data, visualizations of the data, being able to input value, see results.

I think what the World Bank actually has done with their very large collection of global KPI's around a number of metrics that the World Bank measures, they have developed, as a version one, a very interesting application that allows users to select different countries, or different metrics, and drill into the content, interact with it in a way that really hasn't been available in a mobile context before.

KENNEALLY: Yes. It's very important, I think, to re-emphasize that point about the interactivity of all of this. And again, as you mentioned, publishing even online had

often been very much a one-way. Certainly you could comment online about an article, or something like that. But to really dig in, get the information, and move it around for your own purposes was impossible. Now with these kinds of apps we have truly reached that point where it's a two-way conversation.

CLEVENGER: And not only that, mobile technology offers integration with things like GPS, or camera, even bar code scanning through the camera. And so, when you think about all of the different ways that location and input from sound or audio – excuse me, or images could be used in the context of interacting with data or content, I think the possibilities are endless.

KENNEALLY: Yes. Really that's true. We're talking with Nathan Clevenger, who is the Enterprise Editor at Smartphone Magazine, and Chief Mobility Evangelist at ITR Group. He's based in Minneapolis-St. Paul, and he'll be part of a program coming up November 18th in Washington D.C., called Mobile Computing: Delivering Content to the Research Community.

Chief Mobility Evangelist, that's a fun title there. What does it mean in the context of your work for ITR Group?

CLEVENGER: Sure. So ITR is a management and IT consulting firm. And we help our clients figure out how to take advantage of mobile technology. And many organizations today are struggling with this shift we were talking about, from the devices, and technology being selected and evaluated, and deployed and managed by the organization. And now there's an expectation that employees and workers, who are consumers themselves, are bringing consumer decisions into the workplace.

So, for instance, as more and more consumers buy iPhones, those same consumers are also employees at these organizations. And the penetration of iPhones, whether officially supported by the organization or not, the users might be carrying two devices, say their corporate Blackberry in one hand and their personal iPhone in the other, to try to help organizations understand how to take advantage of this trend, and embrace some of the aspects of consumerization to see productivity improvements and even a boost in morale.

KENNEALLY: You know what's interesting to me, Nathan, I was thinking about it just as you were speaking of this process, is that things have kind of flipped. In my father's day, and he was part of the very first computing generation. Of course, the computer was as big as a house, practically, and was, therefore, part of whatever the institution or the corporation that one worked for.

As the computer moved into the house, there was a bit of a crossover. Now that's very much – and when we say computer, I mean any kind of intelligent device, if you will. Because it has become so personal to us, as we were saying before -- it's in our pockets, we bring that wherever we go. And so now, what we are thinking about

when we use these devices, we're taking it back to the office and changing the office. Do you see what I mean? Things have come, in a curious way, full circle.

CLEVENGER: Exactly. And what I think is going to be very interesting to observe over the next six, 12, and 18 months, is how that landscape will continue to evolve as the smartphone grows into the tablet. And so, as the iPad representing very much the consumerization trend being brought into the organization by consumers. Although a wide variety of organizations are actually evaluating pilots with iPads as corporately-owned devices.

But with RIM's new device, the Playbook coming down the line, they're really focusing on this device as an enterprise device, selling to the corporations and government agencies directly, as opposed to trying to go after that consumer market.

And so it's going to see how these competing products, actually being sold to two very different audiences, will actually work, and whether that middle ground between the laptop and the smartphone will, if Apple gets what they want, will be able to move up the value chain, a classic Clayton Christensen innovators dilemma, chipping away from the low-hanging fruit up the value chain. Or whether RIM will be able to keep their stronghold in the corporate and government type of disciplines.

KENNEALLY: Right. Well, as you say, the answers are going to come pretty fast. I mean, it used to be we would have to wait a few years for some of this. But how remarkable is it to recall that the iPad was introduced only in April of this year? And we're speaking today at the very end of October. So six months ago nobody had ever held an iPad. Today there are something more than seven million of them, I believe. And they have changed the thinking for publishers, for newspaper publishers, for book publishers, for all of their readers and users. And it's just a remarkably fast pace that all of this is taking place at.

CLEVENGER: Well, exactly. And I had mentioned before that Apple had achieved an 80% penetration rate of the Fortune 100 with the iPhone over a two-year period. AT&T and Apple announced in July that they had achieved a 50% penetration rate of the Fortune 100 – of the iPad within 90 days. So the acceleration of adoption of this ever-innovative technology is, I think, only going to continue to accelerate.

KENNEALLY: Really? Well, we've been chatting with Nathan Clevenger. And before we let you go back to your work, Nathan, there's a question I want to ask, which is to help our listeners who may be attending the program in November in Washington, sponsored by NFAIS and CENDI. And that is, based on your work as a consultant, what are some questions that are important for an organization to be asking about how they can begin to not only adopt these mobile devices into the enterprise, but also how they can begin to push out applications to their customers? What are some important things to be thinking about?

CLEVENGER: Sure. I think the two most significant factors in the success of any mobile application is, number one, usability and user experience. Because from the perspective of the user, with the average interaction with an app like around 30 seconds, the average user doesn't have time to waste navigating around with excess clicks and unintuitive interface design. The nature of the application, just to be available and very intuitive, is critical to the success of this deployment.

The other factor is that most of these organizations that I work with that try to develop mobile applications, it turns out that getting the data, exposing the content, and getting it into the right format, that's optimized for the mobile device, not to mention the security issues and the IP protection issues, and all of those other topics. That turns out many times to be three, four, five, even 10 times the effort of the mobile application itself, just because the demands on back-end systems and exposing content in ways that in many times hasn't really been done before by the organization. I think those are some of the critical success factors that organizations need to be thinking about.

KENNEALLY: Well, thank you for those insights, Nathan. And for a bit of a hint of what we'll be hearing next month in Washington at a program called "Mobile Computing: Delivering Content To The Research Community." We'll have information on our website, Beyond The Book, to tell people how they can learn more about that program.

Nathan Clevenger is Chief Mobility Evangelist at ITR Group, and Enterprise Editor at Smartphone Magazine. So Nathan, again thank you very much indeed for joining us today on Beyond The Book.

CLEVENGER: Thank you, Chris. Anytime.

KENNEALLY: Well, we appreciate your joining us. This is Chris Kenneally. For everybody at Copyright Clearance Center, have a great day.

ANNOUNCER: Beyond The Book, is an educational presentation of the not-for-profit Copyright Clearance Center, with conferences and seminars featuring leading authors and editors, publishing analysts and information technology specialists. Beyond the Book is the premiere source for knowledge on the latest business issues facing today's dynamic publishing industry from initial research to final publication and beyond.

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