

Movers & Shakers Interview with
Donald Wong, Vice President & Chief Technology
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Donald Wong leads the development and execution of EMC's vision and growth strategy in rich media. In this role, he is also responsible for identifying product, partnership and acquisition opportunities in this rapidly evolving and growing market.

Previously, Wong was VP of Sony Pictures' Digital Media Group where he was charged with the research, development and deployment of digital media technologies, infrastructure and workflows serving all lines of business. He has extensive experience working across the entertainment value-chain, from business affairs, production, marketing, sales, fulfillment, and anti-piracy. Prior to joining Sony, he held management and technical consulting positions at Deloitte Consulting, ABB Asea Brown Boveri, and General Electric's highly respected Corporate Audit Staff.

Donald holds a B.S. in Civil & Environmental Engineering from Cornell University, and an MBA from the Anderson School of Management at UCLA ('96). Donald is married with three young children. He is also an active fundraiser for the Los Angeles Downtown Women's Center, a charitable organization that, since 1978, has been providing hope and a safe place for women who are without a home.

Introducing Donald Wong: Why EMC? How is EMC positioned in the market to tackle the big issues surrounding digital media?

Mukul Krishna (Frost & Sullivan): Hi Donald. You were the Vice President of the Digital Media Group at Sony Pictures, one of the seven major studios in Hollywood. What was it about the opportunity at EMC that encouraged you to join them and leave Sony?

Donald Wong (EMC): That's a great question! One of the things about EMC is that it's a company with a lot of resources, and a lot of smart people. It has a terrific track record of asking "What are the big ideas out there and how do we go about tackling some of those big ideas?" – coupled with making sure we can monetize those ideas, and enable a role for us going forward. Whether its virtualization, storage management, as well as content management - and a host of other things such as security, EMC has just got a great track record, especially over the last five-to-six years.

I spent eight years at Sony Pictures Entertainment. A terrific company: really on the cutting edge of a lot of fronts, obviously owned by one of the leading consumer electronics companies in the world. So, I had a terrific experience there. What I wanted to do was to be able to take that experience and work with a company like EMC to tackle those big ideas, especially in the digital media front. That's why I took the new challenge.

MK: Perfect. So, from what I see you've been on the demand side, and now you're looking at an ideal marriage on the supply side - bringing all that experience that is many times missing on the supply side, and bringing that knowledge base onboard so that you can further define the product and solution strategy for EMC going forward.

DW: That's right. I think the most important thing that we need to continue to do, and we've got a great track record doing, is continue to listen to our customers. I bring that customer perspective, especially on the media front. One of our customers described me as the guy who's built it, lived through the pain, broken it, gotten midnight phone calls when things don't work and have made things happen in an operating environment.

This is especially important in a time when a lot of companies, both inside and outside the entertainment business, are living through the painful transition of going from the physical analog world to the virtual-digital, file-based world. And it's a completely different set of workflows that needs to be enabled - some of it is a change management exercise, there's some cultural change to it - and it's key to work with technology partners that have a customer perspective.

A good part of my time is spent working with and talking to our customers. That's probably the most important thing that we need to continue to excel at.

Addressing key market challenges and end-user pain-points

MK: Excellent. But since you brought up pain, I would like to question you about that, what sort of challenges and pain points do you feel are being faced by the digital media market right now and going forward?

DW: Well, it's interesting. There are some significant pain points, and that's what makes it a worthwhile challenge. Because where there are challenges, there's definitely an opportunity - especially for a company like EMC - to provide solutions and products and services around those pain points.

If you were to break out the digital media market, you'd start by segmenting it into who the different players are. And I would very loosely characterize it in terms of creation, management, and the distribution and monetization components. On the creation front, you've got significant players, whether it's in the media and entertainment side, publishing, and so forth. But even for enterprise-type accounts, whether it's for a global shoe company or a greeting card company, they have their own set of issues around management of digital media - whether its digital media for advertising, marketing collaterals and so on. This also applies to training programs or blogs that their own employees are starting.

The management component is very interesting. Let's take a step back and look at ourselves as consumers: I've got three children, I shoot a number of videos with my kids playing around, or at their school plays, musicals, things like that. A lot of these camcorders that are out today actually don't even record to tapes anymore...they're either flash media or hard disk based. What do you do with all that data?

After you're done shooting, you download it to your computer, you have to go edit it. After you're done editing or after you're done transcoding it to different formats in your computer, how do you search for that? How do you find that one funny blooper scene, or that one scene from the wedding, or that one part where your child did a great job playing the piano? How do you search for that five or ten years from now when you really want to be able to pull it up? So clearly, there are significant pain points from even just the consumer perspective.

Extrapolate to the enterprise or media companies...that gets multiplied more than a thousand fold. That's where I think a company like EMC - with our assets around security, content management, storage management - we have some significant resources that we're bringing to bear around some of these big challenges.

Getting to the distribution component: If you think about the traditional media and entertainment world, where you've got discrete windows of distribution: theatrical, home entertainment, television and so forth, these would roll out over time, maybe over a 9-to-18 month period. These were very discrete windows, there were clear delineations between how each window operated and what enabled success as a content distributor.

Well that's obviously all breaking down. If you were to look at a typical studio with several thousand film titles and tens of thousands of hours of television content - how are you able to take all those assets, much of it still in physical form, and in a very efficient manner, be able to get those assets out to market for monetization? How do you work with some of the distributors - whether it's within your traditional windows or the mobile space?. How do you enable that process to be efficient so you don't end up with negative operating margins?

So I think that's where there are some major pain points around control of your assets, monetization processes, visibility to the usage information, enabling real-time decision making for release-related decisions, and new workflows for the digital media markets.

Looking at the future: Growth opportunities

MK: I totally agree with you because we've been tracking these market for many years now, and one of the things that always keeps coming up because – and as you very rightly pointed out - we are looking at both the enterprise as well as the media entertainment market moving toward digital workflows, and that has not been all in step. Many times it is in a very silo'ed environment and very divisional environment. Many times we have seen on the end-user side the left hand does not know what the right hand is doing; you are looking at a lot of silo'ed systems.

You talked about security, rights management, taken altogether with the underlying asset management, a lot of people are just now trying to get their hands around what all of this means to their strategy going forward. Because whether you're on the enterprise side -where content is a facilitator or whether you're on the media entertainment side - where your content is your product, the learning curve that end-user markets have had, they haven't had a lot of time to get on to that. Definitely we're looking at a lot of vendors trying to help enable that transition from the legacy analog environment to the digital requirements.

Keeping that in focus, when we're looking at the digital media market getting ready to explode worldwide - especially when you look at the media entertainment market, it's traditionally very conservative when it comes to spending, but when you're looking at government regulation and mandates globally - most of them are occurring from now to 2015, you're looking at that entire market explode. What do you feel are going to be the key factors that will sustain this growth?

DW: It's definitely a market with significant growth opportunities, especially as bandwidth continues to become more prevalent and more efficient, and as storage price continues to come down, processing power obviously becomes cheaper and more powerful by the day. So you've got on the technology side some significant inflection points that are key enablers.

I think one of the biggest challenges for the distributors and the content owners will be to manage and get visibility to the rights around their content. And I don't mean digital rights management (DRM), because for a lot of people that's a four letter word. What I'm really talking about is knowing what your rights are, your "rights in", if you will, to a particular piece of content - whether it's actually a movie or a short form piece, user generated content, whatever. What are you allowed to do with that piece of content? And also important, what rights have you traded out?

If you look at how movies are typically funded, produced and released, those rights are sliced and diced and carved out in a pretty complex, complicated fashion. You might for a piece of content, have traded your rights in Germany for the next five years, and then it reverts back to you for home video, but only for another three years at which point it goes back to someone else, a third party altogether different. That's just for one distribution window, for one territory, for one title. Imagine

that blown out across all distribution windows, for tens of thousands of titles, worldwide. It quickly gets complicated.

In the traditional content distribution windows, these issues are all pain-points that you need to manage, but they're manageable. What you might do is throw in more man-power, more contracts, more business affairs staff, and more legal staff. But in the digital media world, this is impossible, because now - instead of releasing to a fairly discrete set of windows - you're now perhaps releasing to multiple windows, multiple platforms, multiple deals that you're striking, as opposed to maybe three-to-five distribution outlets, you're striking it with the top 1,000 portals and so forth. So, there are some pretty significant challenges, and it's not a scalable model. You can't afford to throw 200-times more bodies at it, nor would it be more effective even if you were to do so.

So there is a huge demand for content-related solutions, and on the consumer end, there are plenty of technologies that support consumer appetites. Where is the supply coming from? There's no shortage of content online, but much of it is in the form of non-cleared or pirated content. There's relatively very little legal content available. Nature abhors a vacuum, and when consumers' desires and needs aren't necessarily being filled, they're going to find somewhere to fill it.

I think where you're seeing a significant amount of pirated content, whether its P2P sites or even on YouTube, I think a certain amount of that is driven by the content owners' difficulties with – certainly not caused by lack of will – but literal inability to fulfill that demand due to the rights management limitations. And I think that's the one thing, if there is one thing that's going to hold back the growth of digital media over the next five to ten years, it's going to be the difficulties experienced by the content owners and distributors to effectively oversee, manage, and track their rights to the content over a span of time.

Monetizing on the explosion of content and rights management

MK: So we are looking really at a scenario where the amount of content and outlets outpaces the ability to manage. Maybe the market grew really, really fast; you pointed out a lot of factors that influenced it, especially when you're looking at content creation, emergence of user generated content, where everyone and their cousin has access to some sort of a capture device in terms of a handheld, and the ability to have that uploaded on to some web site. You have a lot of infrastructure issues that earlier used to ail the market in terms of processing power, bandwidth, all of those are easing very rapidly, globally. Also a lot of creation tools from nonlinear editing systems to a lot of the content creation aspects being well in the reach of the average consumer that has seen the genesis of this huge content creation spree.

And its not just content creation, as you very rightly pointed out, you're also looking at people ripping off content that they shouldn't be and then uploading it. So we are looking at this burst of content. In fact to an extent on the enterprise side, not so much paper is being pushed...right now everything is going electronic, and all of that also is a form of unstructured content, be it a spreadsheet, a Word document, be it a PDF or Quark file, there are a lot of corporate audio, video, animation, graphics, all of that should be taken into consideration. Now all of a sudden we are looking at a flood of digitized content, and it happened so fast that people did not realized how much they will need to manage. And that is where some of the challenges are and that is also where I see the opportunities going, right?

DW: Absolutely. And you've got to think about the "good old days" when we dealt with 8-millimeter or VHS tapes, I remember when there were stacks and stacks of VHS tapes that people would have in their homes, whether it was movies or football games, home movies, etc. And now DVDs – I'm a huge movie buff and with over 1,000 DVDs, and it's gotten so crowded and messy that my wife has

told me I'm not allowed to buy anymore unless I throw some of movies out. In this day and age, why am I unable, and it's not for a lack of technical ability or resources, why am I not allowed to archive my collection to a home server, and be able to access it within my home and anyplace else where I've got broadband. Right now, consumers are not allowed to do that because of the Digital Millennium Copyright Act, and obviously we need to respect and abide by the law, but it doesn't mean we shouldn't try to work with the content owners to obtain and enable these legal rights.

So is there a way for the content owners to work with the consumers, to work with the infrastructure companies, to say, "You've purchased this particular piece of content on a DVD, you might have it in this physical form, but we're going to enable a legal way, a value-added service, where you're now cleared to have this content for your personal use. We're going to have it available to you, whether it's sitting on your home server or in a centralized data center, and anywhere you go in the world where you have good bandwidth, whether it's a mobile phone, or you're in your vacation home, you're legally able to access it. So you no longer have to carry this stuff around, or worry about forgetting a DVD at home."

So I think there are some huge opportunities and I think there is a real willingness from the consumer perspective to pay for that. And that's got to be important to the content owners and distributors because if they do not enable these capabilities, someone else will, and pirates already are. And for every pirate out there, that's another lost revenue-generating customer.

EMC's core capabilities to provide solutions for the digital media world

MK: Very true. And as you pointed out, we're doing user authentication anyway on the enterprise side to access content. Why can't it move to the consumer side, and in many cases, at least in some level it is, right?

And that leads us to how EMC might be playing towards these opportunities. How well do you see EMC doing, especially given some of the key acquisitions and investments EMC has made over the last seven years? Whether it's Documentum which had before that bought Bulldog...that would be a perfect play either on the media entertainment side or the enterprise side, correct?

DW: I feel strongly about our capabilities, and that's the primary reason why I joined EMC. EMC is a company that has the resources, the will, and the talent to make things happen.

Being someone who has built and lived through the transition from analog/physical to the digital/virtual, I've seen a lot of one-off solutions and as you mentioned - a lot of silos. It's one of the ironies of the digital transition that we've created a lot of one-off solutions to solve one-off problems. So now, we've created islands of digital technology stacks that don't talk nor work well with one another. Sometimes, the only way to bridge the islands is to output from one stack to a tape or portable hard drive, and then ingest to another stack. The industry jargon for this work-around is the "sneaker-net", the backwards cousin to the Internet.

So here's an all-too-familiar recap of the past 10 years in content creation: We wanted to move from shooting on film to shooting on digital - whatever digital meant - so we created one-off solutions that do a terrific job enabling a certain workflow. We then needed to manage our marketing assets, trailers, one-sheets, posters, banners, and so forth. So we created another one-off solution that accomplished that very well. Now we needed something that does digital dailies. So we went ahead and created another, third solution. And that is how we arrived at our current state of affairs. It's typical of any evolving, immature technological market.

The challenge then becomes making sure the content and associated metadata is made visible and enabled for the enterprise, so whether it's 5 months or five years from now, the content owner can leverage whatever has been created and will be able to efficiently repurpose it for a new digital market, whether its mobile or something else.

And I think that's where EMC has some relevant and significant resources to bring to bear. If you look at Documentum for example, it is *the* leading content management and archival solution in the enterprise space. No one else even comes close. If you look at the interactive content management piece of Documentum – building up from Bulldog five years ago, it's very, very powerful. So how do you take that and translate that lead from the enterprise space to the point customers? For example, whether you're in marketing, production, or props management, you've got to do that job very well, and you might not really be concerned with the enterprise benefits, because that's not what you're paid to do, and that's not how you're measured.

So we need to step back and be able to paint both the big and detailed picture for our customers. We need to be able to articulate and illustrate the advantages of our point solutions, whether it's around storage management, metadata management, etc. that will be terrific for solving point problems, but are also easily enabled for the enterprise. Anyone in the company who is authorized will have visibility to the relevant assets is now able to do so and will be in a better position to make money for the company.

MK: In fact, you mentioned some key points. One of the things we have repeatedly heard from the market - and that's why it's a very good time to be a librarian - it's the importance of the taxonomy that goes along with all the metadata that's being captured. You just mentioned how, in many cases, these are these one-off silo'ed solutions that are being created, without any sort of a cohesive workflow to manage different tasks.

And then you have the entire problem about metadata, and now marketing might be looking at the same asset with a different taxonomy, creators will be looking at it differently, production would be looking at it differently, finance would be looking at it differently, and then trying to integrate all of that seamlessly, it - at least in the early days - used to be a nightmare for some of the early end-users, and that was again largely because of many point solutions, not looking at the big picture, but sort of a quick fix. It is that sort of mentality that characterized the early development of these solutions, especially when you look at the late 90s and the early 2000s.

But there has been a tremendous learning curve both from the demand side and the supply side. Right now the solutions we are seeing are highly sophisticated, and in fact, based on our latest numbers, EMC in 2007 is arguably the market share leader in the digital asset management space. It's an attractive market we're looking at, in the range of \$400 million world-wide, and seeing some very attractive double-digit growth rate.

Talking about storage; a lot of people were looking at storage getting commoditized, but again when you're looking at digital media and having some sort of a content management or an asset management system married to that storage system, suddenly you can have a central repository where all your content is neatly indexed, and you can tie-in with all of your traditional silo'ed systems. You can access content and repurpose content - that seems to be one of the key capabilities that we're seeing a lot of people looking for.

I would probably see EMC in that light, and I wanted to ask you in terms of your go forward strategy, do you see your ICM initiative - and what all you're doing within the asset management / content management space - as being the nerve center which also provides an integration platform within the workflow that will bring all these traditionally silo'ed third party systems together, seamlessly?

DW: Absolutely. When technology projects get green lit at an account, they tend to get a lot of customer support at the rank and file level. They typically demand that their particular workflow problems get fixed.

The challenge, I think for any enterprise solution, is to not only be “enterprise class” but also be flexible enough to solve point problems without a lot of overhead. I think that’s the problem. For a majority of customers there is a lack of willingness, and a lack of budgets to be “enterprise class.” Their experience, and perception, of what it means to be enterprise class is something that takes three times as long, cost four times as much, and with half the specific functionality that they need.

Understandably, there’s an inability and a lack of will to pay for something like that. This is where EMC has headroom to be able to come in and say to the customers, “Not only do we have point solutions that will work for you, we will seamlessly enable this for the entire enterprise. We serve 100% of the Fortune 500 telecom, media & entertainment companies. This is what we excel at doing.”

Regarding the idea of a centralized repository, I’d like to elaborate on that further. The future is about federated repositories, so that we virtualize the visibility across multiple repositories, so that it appears centralized to whoever is looking for that content. Whether it’s through taxonomy, metadata, and so forth, or some sort of central registry, the key is to enable easy search for assets across the entire enterprise. The end-user may not know that they’re actually hitting three or four or maybe 35 different repositories across multiple departments and functions, but for them it will be a seamless experience. I think that’s where Documentum has significant assets to bring to bear.

Looks look at the role that storage plays – and whether it’s becoming commoditized. On the hardware side, we’ve seen it’s certainly subject to forces similar to Moore’s Law. But there are some things that have not improved, and in fact have become greater pain points: power, cooling, certainly, floor space and weight loading. These are continuing challenges. But there is also a science and art, if you will, behind the management of storage and storage systems: enabling five-9’s reliability, enabling storage-virtualization, de-duplication, etc. Performance and through-put are critical in the digital media space. So if you examine EMC’s current technology portfolio, and expansion capabilities through acquisitions, it’s a pretty powerful toolbox. I think the key for us will be to wrap all of this stuff up, build turn-key solutions that are enterprise-class, quick to deploy, easy to support, and easy to use by end-users. I can’t overstate how important these qualities are, especially in the rich digital media space.

EMC and emerging digital media markets

MK: Excellent. And in terms of all these emerging markets that we had spoken about earlier, particularly the user generated content side, IPTV is coming along in a big way, globally and now also in the U.S. There’s so much more content, all sorts of content that’s been created. Does your strategy target all vertical markets, or are you focusing on any particular ones that you have seen as the fastest growing ones?

DW: We’ll focus on opportunities that are big right now and are fairly significant. There is an EMC footprint in 100% of the Fortune 500 telecom, media & entertainment accounts. Pretty significant. So we want to start there. There is growth and willingness to spend in these accounts.

But also I think we want to look at the Global 2000 accounts, and beyond. Where is the next MySpace, where is the next Facebook coming from? If you were a global brand company, whether it’s in consumer products or snack foods, you might have 35 or 40 different product lines, how do you manage those brands on a global basis? How do you manage your advertising campaigns, and also just

as important, how do you manage that interaction now with your end consumer? For example, if a consumer has a negative experience with your product, he or she is able to go online and express some negative things about you, whether it's in a blog or in a video or podcast. How do you get visibility to that, how do you track that, how do you track the perception around your brand and your portfolio of brands so that you're able to respond to it? Content management has an important role to play here.

So I think we need to look at what's big now but also what's growing really fast. To answer your question, we definitely want to look at the current size but also the growth rates.

EMC's Value Proposition

MK: Perfect. And one of the things that I've alluded to a lot during this call, it seems to be the value proposition behind any particular solution in the market. Correct me if I'm wrong, we're looking at a lot of cycle time acceleration, increased collaboration, migrating from a legacy analog environment to a digital environment, savings terms of physical storage. That is, you're saving on the cost of real estate, the cost of maintenance comes down, and the cost of lost or misplaced work comes down. So you have a significant return on investment as a customer when you're looking at that sort of a solution.

So in terms of value proposition, I'm not only looking at being able to do things faster, I'm also looking at being able to do things better, and cheaper. Which would probably also tie into the fact that once I'm able to do that, instead of sending someone physically into a warehouse, trying to find some content and then FedExing it to some other location, I can have someone do that all now digitally, saving a lot of time that can then be redeployed from doing a mundane task towards more productive tasks. It is a two-part scenario where it's not only the cost benefit, but it has also increased productivity, increased revenue generation capacity. Is that something that you're also hearing a lot - or through your experience - that you feel that is the strongest value proposition when speaking to the customers?

DW: Yes. I'm a huge fan of 'faster, better, cheaper' and I recall instances where, in my former role, we would go through green light meetings for various technology projects, and we'd have a six-month payback on a project with an ROI of three, four hundred percent or even sometimes much, much higher. I remember working with finance, and they thought the numbers were wrong...impossible. And we would need to go through an education about the fundamental process changes we were enabling: getting rid of this, getting rid of that, and no longer needing 10 people to do something, and so forth...all with rate-card numbers straight from the end-users. The savings were hard to believe but they're there and they're real.

With that said, and I can't hammer this point enough, we're moving away from the "nice to have." Depending on who you are, if you're a content provider or distributor - it's nice to save money, it's nice to do things more efficiently, and do it in a better way because it's no longer analog, it's more digital and so on. But those are all issues and benefits that can be delayed for a year. You could probably live with that because despite the inefficiencies of the "sneaker net," getting in a van, shuttling hard drives or tapes around or film reels around town, despite all of the inefficiencies associated with that, it actually works better than most people would think. That's because there's an entire cottage industry that's built up over the last 50 years around servicing these inefficiencies to make it appear efficient to the end user.

The inefficient has become efficient in its own strange way. The irony is that it's pretty hard to beat the price per megabyte that FedEx provides. You can put a one terabyte drive in a FedEx envelope, and for \$35, overnight that to someone. I challenge anyone without at least a dedicated T3 line to be

able to go through the public Internet and reliably get a terabyte to anyone across the country, never mind across the globe, overnight. So that process works, and it works okay.

So I think that the big challenge/opportunity isn't necessarily faster, better, cheaper, but in fact there are some businesses-models that will not survive in the next ten years without change.

I talked about the problem earlier of how nature abhors a vacuum and that's why we've got so much piracy. I think the vast majority of consumers out there are honest and would pay for content. That said, the inability of the content providers to manage their content rights, and lack of availability of legal content to the end consumers, these create a huge vacuum. The vacuum is basically filled by pirated content. As a result, we're looking at some major businesses - institutions of our economy - that may not exist in ten years. The problem of not being able to service new digital markets needs to be resolved and resolved quickly.

Look at what's happened to the music business. That business in the last seven years has been transformed. It used to be, if you recall back in the 80s and 90s, a hit record could sell 10 million copies. I remember when "Born in the USA" sold 15 million copies. "Thriller" sold close to 30 million copies. That doesn't happen anymore. With a hit record now might be lucky to sell two or three million units. So that industry has gone through some very painful transitions and in the next couple of years - it will not exist in the form that we knew it even 10 years ago. So I think that type of shift is going to apply to different types of content providers and content distributors; if the vacuum doesn't get filled, the businesses will go undergo some very painful transitions.

MK: It's more about competitiveness, right? And moving away from that mentality of "if it ain't broke, don't fix it." Because it is a "must have" in many cases right now, and increasingly so as we start going forward, because the value proposition that we've been looking at, the significant benefits that we're looking at, they're no longer a leap of faith. We are looking at tangible numbers; it's not just a nice new philosophy out there in the market, we really are looking at something that needs to be done, and needs to be done fast, but also needs to be done in a comprehensive manner, not sporadically, correct?

DW: Correct. There are some technological problems, there are some challenges around workflows, but I think one of the biggest gaps is not being able to articulate the message that technology is not a bad thing to the right key decision makers.

I think the challenge is getting the message to the key decision makers at the C-suite level, the CxOs, or the CEO level, and being able to articulate a message around creating and enabling entirely markets - ones that will open up and bring-in top-line growth, as well as potentially reducing your cost structure and protect and increase your bottom line at multiples of GDP growth. How do we communicate that message - because I think technology companies, whether you're looking at EMC or any one of our competitors - typically we sell to the technology people inside companies, and not the business folks.

I really see a major opportunity for the IT business to transition away from that kind of selling and migrate more towards working directly with the business customers, whether it's the head of business affairs, head of legal, head of sales and so forth, and solving their problems with them in conjunction with the folks in IT. Not just sell based on the "nuts & bolts" - our file system caches better than theirs, and you have five-9's instead of four-9's, that type of thing - but what are the particular business problems that we can help you solve, and what are the resources that we need to solve them? So I think that's one of the most important things that we need to do a much better job of in the IT business overall, and EMC is certainly making some great traction towards that.

In the first few weeks that I joined, we acquired a company called BusinessEdge, based out of New Jersey, and they provide business process, strategy and technology consulting services. Having a company like that in our portfolio, as well as deep relationships that we've got with the major integrators out there, further enables us to solve business challenges, as opposed to particular point technology problems.

MK: So what I understand is it's not just going to one person in an organization but really having probably a three-pronged approach, where the business manager who understands the problem and needs the solution, getting further buy-in from the technocrat, who's going to deploy it, and then having them work with the bureaucrat in the organization who's going to sign off the check.

DW: Yes. I'm not sure if they would call themselves bureaucrats, but key decision makers; absolutely.

MK: Perfect. With that in mind are there any comments, advice, or suggestions you have for present and future customers?

DW: Any particular advice around?

MK: Any of these things that we just talked about. About just how digital media is proliferating, what needs, what pain points are there, what challenges are there, anything you would like to tell prospective customers or present customers about what they need to be aware of or what they need to look out for, anything you'd like to add to that.

DW: I would basically say this: whether you're a current customer living through this transition or you're about to, or are in the planning phase, or maybe you've built something and you realize, "This really isn't working, how do we get it to the next level?" - I would advise those customers to take a deep breath, take a step back, and take spend some time to think about what the end-vision should look like, what they want it to look like, and how to go about achieving it.

I think a lot of the pain points that we encounter today were caused by decisions that were made on the fly, that were made to attack some particular challenges. But I think there's an opportune time right now to look at how to become enabled for growth - not just the next two or three or four quarters, but five years from now.

Few of us can accurately predict what's going to happen five years from now, but I think there's a way to build out the architecture of whatever solutions we're looking to embark on to make it flexible, to make it sort of like Lego blocks so that - despite not knowing what the structure is going to look like five years from now - we will be able to scale it, tune it and deploy new solutions and services on the fly, whatever the market challenges may look like. EMC will work with our customers to figure this out and to take the time to figure it out - because that's the most critical thing to do right now.

MK: Excellent. And being an analyst, I just cannot stop myself from talking about five years in the future. Looking through our crystal ball, you guys are sitting in a sweet spot because of all the factors we spoke about. When you're looking at digital asset management capabilities, we are looking at that market to grow to well over \$1.5 billion by 2013. In fact, in this particular market we have seen some of the most aggressive growth rates of any of the markets we have covered - well over 20% CAGR. So when we're looking at opportunity, the market size, the readiness of the market, it is right here and now, when a lot of people are looking at striking gold, and we see EMC in a very good position to do that. As I mentioned earlier, we've already seen you in a market leadership position.

With that in mind, I'd like to ask you my last question right now. What sort of advice or any comments or suggestions would you have for your competition?

DW: I think for the competition and the IT provider business in general, I think we should work together to help our customers figure out what their business ecosystems should look like. What are their business challenges and how do we go about solving those challenges for them and help them be profitable? As for what customers want – they obviously want performance, price, and so forth – but they also want something that’s flexible, lower cost of ownership, something that works well and plays nice in an ecosystem.

I think gone are the days where we can sell a particular product and say, “This is three times faster than something else, and therefore use it.” I think customers are asking, “That’s great, but how does it integrate into my current system, and what’s your technology roadmap for growth 18 or 24 months out? How do you play nice with competitor XYZ, because we have some installations, some footprint from them?”

So I think for our competitors, we all need to do a better job working closely together, whether it’s around standardization, taxonomy, metadata and so forth, to make sure that we are adding overall value to our customers.

MK: Touché. And with that I thank you so much, Donald, for taking time today to speak with us, and I’m looking forward to seeing many more announcements from EMC and learning more about the awesome job you are doing for the market.

DW: Thank you very much for the opportunity.

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