

JOHN WHITE

ORAL HISTORY

COMPUTERWORLD HONORS PROGRAM
INTERNATIONAL ARCHIVES

Transcript of a Video History Interview with
John White
Head of Manufacturing, RBS Americas
The Royal Bank of Scotland

Recipient of the 2008 EMC Information Leadership Award

Interviewer: Ron Milton (RM)
Chairman, Board of Trustees,
Computerworld Information Technology Awards
Foundation

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Greenwich, Connecticut

Ron Milton: Today is Tuesday, April 1, 2008 and we're interviewing John White, Head of Manufacturing, RBS Americas, The Royal Bank of Scotland.

John White is the 2008 recipient of the EMC Information Leadership Award.

The interview is taking place at Royal Bank of Scotland offices in Greenwich, Connecticut, and is made possible by EMC and the Computerworld Honors Program. The interviewer is Ron Milton, Chairman of the Board of Trustees for the Computerworld Information Technology Awards Foundation.

The Honors program was established in 1988 to seek out, honor, and preserve the history of the global information technology revolution. It was founded by Patrick McGovern of International Data Group, Roger Kennedy of the Smithsonian Institution's National Museum of American History, and the Chairmen of forty of the world's leading information technology companies. It is now the world's largest IT awards program.

This oral history is being recorded for distribution to more than 350 national archives, museums, universities and research institutions in more than fifty countries on six continents around the world, and for the program's archives on-line.

Without objection, the complete video, audio and transcripts of this interview will become part of these international scholarly research collections and made available to the public on the web.

This discussion, however, is private and should any participant wish to withhold from the public record any part of these sessions, this request will be honored. All present here are honor-bound to respect this, and by remaining here, they accept the personal, professional and legal responsibility to abide by this agreement.

With no objections being heard, we will proceed.

Ron Milton: John let's start with your early years. When and where were you born?

John White: I was born in Helensburgh, which is a small country town to the west of Glasgow by some 25 miles.

RM: What was it like growing up in the 1940s, during the war and after the war?

JW: I guess it could be characterized as enjoyable. My memories of it are warm memories. I do remember things that were peculiar to that time period. Fruit was in short supply. Money was obviously in short supply. The United Kingdom would obviously have been surrounded, being an island. I do remember darkness. I do remember bombing believe it or not. I remember bombing on the other side of the river, which was a largely ship building area. I remember the flames. I remember getting down to see a submarine for the first time. There was a huge submarine base not far away from my home.

I remember the smell of diesel oil. I also remember my very first taste of; I guess it was mandarin oranges. I remember the feeling of these on my tongue and not liking it – slippery and kind of bitter sweet – and spitting it out. These are my memories from my very early days.

RM: Tell us about your family. I understand you are the youngest of four children.

JW: Yes I am. My brother sadly is no longer with us. He moved to California, to Newport Beach some 25, 30 years ago. I have two older sisters who live in Australia, and we keep in fairly close touch.

The family was broken up at a very early age when my father came back from the war. These things happen in wartime scenarios. Sadly I never saw my mother again after that break-up and she died in Australia, but after a 50-year gap, I found my sisters and we've been in fairly close touch over the past 10 years. So that's a very rewarding part of my life for me. I have two lovely sisters who, despite the gap in years, and the long time, still keep in touch.

RM: As a boy, during your formative years, what role models or heroes or figures in your life were important?

JW: I guess looking back that most of my role models, like most boys, would have been sporting heroes. I was a big soccer fan when I was a young child. So Scottish soccer players were always role models and heroes. And of course being a child of the war years, you were familiar with people like Montgomery, etcetera. I remember Churchill very well. I remember the great sadness at his loss of life and his state funeral in the United Kingdom. I remember major political figures, Eisenhower as one that stood out also. People like McCarthy, etcetera stood out. And that era of McCarthyism, I remember it being injected into the UK. So mostly sporting heroes, and political heroes were role models. People like Gandhi stand out to me, someone that I very much admired. And of course there were Scottish heroes – Bruce, Wallace, Robert Burns.

RM: Anyone significant in your grammar, high school years, a teacher that stood out, influenced you in any way?

JW: Oh, not too many of them. I do remember some teachers with a great deal of love I would say quite honestly. I had a fabulous French teacher, Miss King, a spinster lady who was the absolute soul of kindness, patience and tolerance with people like me. I remember a very good math teacher Cunningham who made math very, very interesting. And I had some wonderful teachers when I was a kid at school, at the very early primary years. I remember them well with fondness. I can also remember a few other teachers I wasn't quite so keen on, English teachers, Latin teachers, German language teachers, but I think all children have these memories.

RM: Tell us where you went to college and your field of study.

JW: I went to Strathclyde University, a new university established in Glasgow. My hometown is essentially Glasgow in the west of Scotland, although I live in Edinburgh these days.

Glasgow has a long tradition. It has the third oldest university in the United Kingdom, but Strathclyde was one of the newer scientific universities, and there I studied principally information technology. I think may have been in the day of valves etcetera, again, that was quite a long time ago.

RM: Do you remember your first job?

JW: Yes, one of my first jobs was working for a Swiss chemical company – Ciba-Geigy. I firmly enjoyed that. I was the IT boy in the midst of many PhDs who were doing research and development into organic pigments. My job was to try and find ways if you like, of recording patents for searching purposes.

When I look back I think that was an almost impossible task in those days, but it's a period in which I have very warm memories. I also gained tremendous insights into research techniques, and the number of failures that one would experience in life before one found something that was successful. It was quite an educational time.

RM: Did that make you want to stay in information technology, because it posed a challenge to you?

JW: Oh yes, IT was absolutely blossoming at that time, coming out of the dark ages. There were no personal computers. Machines like 1401s and I think 360s had just been invented, discovered. This was a hugely, hugely exciting time and few people understood about IT. Of course you know that IT developed a language of its own, almost like the medical industry has a language of its own. So you became a kind of the doyenne of your close friends because you worked in this magical scientific area of IT. It wasn't quite so magical for those of us who were in there - decks of cards that you could drop.

RM: And you went on to IBM from there?

JW: I left Ciba-Geigy and I went to join part of the NATO organization, North Atlantic Treaty Organization, where I spent some three to four years with them doing various jobs in the military side of it, in the Netherlands, and in Germany, and ultimately in Belgium as well, before I left to join IBM in the United Kingdom.

RM: And how long did you spend at IBM?

JW: I spent some 23 years with IBM, between the UK, France and the United States. It was also a very good period. I learned a lot in working with IBM.

RM: Were there important lessons learned at IBM, mentors that you recall?

JW: Yes I had. I was very fortunate. I had a number of very good mentors at IBM, and I look back and very fondly, with very good memories. I worked for a chap I can always remember, Donald McLaren, who was head of IT in the location where I worked. He had a superb brain in his head, very good business disciplines as well. He could translate IT into business usage. He could also run an IT function with good humor, and with a good set of business disciplines, which I unashamedly have stolen and borrowed throughout the rest of my working life.

I also worked for quite a period of time, for a chap called Alex Wilson, who was the director of our site, and eventually became an EVP with IBM. He was a manufacturing fellow. He was a traditional engineer, very logical. He had great foresight and great vision though, and he was also a man who would take business risks, but well thought out business risks. He was also a joy to work for as well. He drove you hard, but he looked after you well, which was also a great learning experience.

RM: So you were working for someone at IBM who took business risks in IT long before the alignment with business was popularized, that must have been a great learning experience for you.

JW: Oh gosh yes. When I look back at that period, you're not always aware when you are learning things because you're so tied up in the day-to-day job, but a couple of things I did learn was that investing in IT is for the benefit of the business, not for the benefit of the IT guys.

I also realized the failure in IT, and the impact it has on business and the ability of businesses to function. The other thing I learned looking back was, the high dependency that businesses have on IT commitments, that if you fail to deliver these commitments, the impact downstream is quite significant. Therefore it is not just a commitment in revenue, there's reputational risk as well, for yourself personally, and for the subject, and the industry as a whole. It was quite a learning experience.

We had a few serious failures in IBM, internal developments, very significant ones, cost a lot of pain. You learned also the benefit of testing. I have great memories in the learning of ensuring that the business would spend time articulating and arguing what it really wanted out of it so you got the specifications up front as early as possible. And of course you learn the joy of the business requirements changing as you develop, which I think all of us have experienced.

RM: John, as a child was there anything that gave a first indication your interest in science, building things, anything technologically related?

JW: I have to think here about that. My father was a bricklayer to trade, but he was also a very learned man. He was a great artist and a great sculptor, which proved itself later on in other parts of my family who became artists. It wasn't a gift given to me sadly. So to that extent of him being a bricklayer and very good at architecture or drawings, you became aware of shapes, etcetera.

Occasionally when he had time, on a Sunday morning he would go sketching buildings and churches and he would point out various aspects of it. It may sound silly in relationship to IT in today's environment, but it awakened you to look at things that you normally perhaps would not have done so.

In terms of science, probably not much, but my greatest joy of a Christmas present was a Meccano set. Now I don't know if you enjoyed the Meccano sets in the United States, but these were strips of pre-stressed metal. They were about a half-inch broad, and 12-inches long, and you could set some nuts and bolts with them, and you could construct cranes, motorcars, space ships. I had endless hours of enjoyment out of this, endless hours. Wonderful things, and I just wish we had them back today. Nowadays we have plastic clip-on bits. A sign of age.

RM: They don't stand up very well do they?

JW: No they don't. They aren't very robust these days. But Meccano sets were things that forced you to be innovative. You created weird things for all kinds of daft reasons, but it was great fun, endless hours of joy.

RM: And they were a function of where your mind wanted to go.

JW: Oh yes, yes. I was brought up in a very industrial town, where shipbuilding was a huge major industry. Ships and cranes were always very much part of your life. So you used Meccano sets to recreate that environment. You soon realized that bending the metal strips to create the bow of a ship was not a good idea.

RM: Did you build a Meccano submarine?

JW: I think there was but I hate to tell you it sank pretty quickly.

RM: So let's fast forward to your first banking job in IT, tell us about the National Australia bank.

JW: National Australia Bank had its head office in Melbourne, so it had four small subsidiary banks in what the Australians classified as Europe. It really was United Kingdom and the Republic of Ireland. They had a mid-sized bank in England, a mid-sized bank in Scotland, smallish bank in Northern Ireland, and a bank in the Republic of Ireland.

My job joining them was to consolidate the IT from these four banks, and to also try to consolidate the platforms. This was an interesting introduction to banking, and also to the realms of powerbrokers. The dichotomy was that each of these chief executives wanted to hold onto their IT, it was a very precious part of their organization - whilst I was faced with the pressures of the merits of bringing them together and justifying this. It was a good time, lot of learning, and eventually we migrated two out of the four banks onto an independent platform, and realized an awful lot of synergy, much quicker product development, and at that point I moved on down to Australia.

RM: So I understand you first met Fred Goodwin at the Australian Bank, and he was a positive influence on you?

JW: Very positive influence. I have to say that he is the CEO of our Group. I met Fred when he was a younger man. He joined one of the subsidiaries of the Clydesdale Bank as the Deputy Chief Executive. He rapidly moved up to become the Chief Executive and he became Chief Executive of both large banks of the four. Fred moved on to Australia for a while before leaving National Australia Bank to become the Deputy Chief Executive of the much larger Royal Bank.

Yes, Fred has been quite a significant and positive experience in my life. We have had great debates about IT and the use of IT, but also great debates about the use of IT in business from a business benefit point of view. He will be embarrassed to hear me say this, but Goodwin is one of those leaders who is a very simple thinker. He can see situations very simply, very quickly, where I may see them in a complex basis. He can also challenge thinking in a very positive way that kind of shakes you. You sometimes wonder why you arrived at solutions. He's quite a leader, strong and positive, stunningly successful with a great sense of humour.

RM: Let's go to the 2000 time frame for a few minutes and talk about the IT and business challenges related to the Royal Bank of Scotland and the NatWest merger.

JW: I joined up with Fred again, in October 1999, and I had only been there a few days when the Royal Bank decided that it would go after NatWest. It was an attempt to take over this bank in England, which was three-and-a-half, four times the size of the Royal Bank. This was a time in banking, at least in the United Kingdom, when we realized that it was going to be a period of consolidation, and we were probably not big enough to survive on our own. I think the Royal Bank at that time was approximately the 33rd or 35th largest bank in the world. We had about 27, 28-thousand employees. We were making round about today's dollar rate, about one-and-a-half billion or \$1.6 billion in profit.

So this was quite a challenge to try and takeover and acquire an organization four times our size. When I joined Fred, Fred's boss was a chap named Sir George Mathewson, who was then the group Chief Executive. He and Fred took me on board and gave me a lot of trust and said, "We would like you to work in a small team and develop what you think the cost savings may be if we takeover NatWest, and what the technology process and technology platform would be in going forward." They were highly aware of course, that integrating technology platforms had been an area of significant difficulty, and in some cases a disaster for quite a few organizations, particularly in banking. I think also Fred and I were well aware that in attempting to integrate technology, it would be met with a high degree of skepticism among business analysts and city financial analysts, and that we had to have a very careful plan.

What was interesting about that, and in working with Fred - I find this amazing just to look back at this – I remember one Tuesday evening in the third week of November 1999, about 8 o'clock, Fred, myself, and a colleague of mine Bill Dickson, were discussing, would we move onto the NatWest platform - which was significantly bigger than the Royal Bank - or would we move NatWest onto Royal Bank? Then Fred asked a simple but very important question, "Who had the most cost efficient set of business processes?" Now banks tend to measure throughout the world what's called a cost income ratio. How much does it cost you to acquire a dollar or a pound's worth of business? Now at that time we knew that NatWest was running around about 70, 72%. The Royal was running round about 53%. So this becomes fairly obvious. It says, if you adopt the Royal Bank business processes you should be able to bring NatWest onboard and get them towards your cost efficiency ratio by adopting your business processes. It follows that if you adopt the Royal Bank business processes you must adopt the Royal Bank technology. And that's a very clear example about very simple thinking that says, let's not talk about technology, let's talk about the business processes, where the money is really tied up. That's what I mean about Fred being a simple thinker!

So we arrived very quickly, within a space of three or four minutes that that was the decision. The question would then be, what would the difficulties and the risk be? The difficulties for us at the Royal Bank were, our platform in many cases was not big enough to handle the volume and the scale of NatWest. So we set about building a capacity plan by realizing that in the early days if we were successful, we would have to grow our capacity to a size where we could take NatWest customers on. So we evolved a plan around that, and we invited IBM and I think at that time Price Waterhouse to give independent comment.

Now this was in the height of a very, very hostile takeover. That takeover approach of ours was also in competition with a sister bank in Scotland, called the Bank of Scotland, who was a very worthy bank as well, and in addition to NatWest, wanting to remain independent.

So I was very privileged to be invited by George Mathewson and Fred to join the head of our corporate banking and the head of our retail business to go around to key shareholders and effectively sell and persuade them that our plan for the takeover was the one that would be most successful. And of course, technology became a major battleground. Our plans were questioned, questioned by business analysts, questioned by very well known consultants around the business at that time, questioned by press comment – this would never succeed with the strength of the management – we had no experience doing integrations of this size - many businesses had folded and collapsed on the basis of trying to integrate IT systems - essentially there were anywhere between 50 and 70 comments in the press by analysts, by consultancies that this would fail. So it really was a fairly hostile environment.

But we won the day. We won the battle, and we took ownership of NatWest on the 6th of March 2000. And it was around that time that I received a shock because Fred Goodwin asked me to implement the plan, to head up the integration. I'm sure it will bring many smiles to many people who say, it's one thing to plan an action, it's another to be given the challenge of implementing it.

So I was given that challenge, and I have to say when you look back at the planning and you think, Lord, how will I achieve this at the end of the day? It was quite a daunting task. However, within 6 weeks of taking over NatWest we had closed down all of their development, stopped it immediately. They were spending hundreds of millions of pounds on development. We stopped it all. We also said, we are going to move all of you onto the Royal Bank base, all of the business, retail business, credit card business, corporate business, foreign exchange business, global markets, everything onto the Royal Bank. But first of all we have to scale it.

This brought rather large surprises from the NatWest IT guys who thought this would be impossible. In stopping the development work in NatWest we worked very hard with the NatWest IT people, who were very, very good, very competent people, and turned them around to focus on scaling capacity and scaling applications. So the first year we spent on scaling up Royal Bank systems, and then we also moved to develop the distribution channels. We had to make some difficult decisions that said, look the Royal Bank platform in this particular area cannot be scaled. Card technology was one item. We chose not to go onto the Royal Bank platform. We chose not to accept NatWest. We moved to a third party. So again, this is a brand new development rather than integration, and we did that in one or two circumstances.

It's pleasing to say that we completed full integration - general ledger, accountancy systems, HR systems, risk systems, all the retail, all the corporate bank, all of the distributions channels - we did all that in two years and seven months. I was given a challenge by Fred and by George Mathewson to achieve the task in three years. We were also very cognizant in my part of the world, in IT, that a number of very famous organizations were still trying to do this after five or six years, or had given up. So it was quite a momentous weekend in October 2002 that we did the big switch of moving all the back office stuff onto the Royal Bank processes and the Royal Bank technology. And I can't remember all of the numbers but I think we moved many millions of customers, many, many bank accounts, corporate and individual, and we didn't lose a penny. And no one was more relieved than I was. I think the downside of that not going well was probably a couple years in prison for professional negligence.

RM: You must have had some anxious moments. What contingency plans did you have?

JW: Well, we were running it on the backup systems as well. We had full disaster recovery if the main systems failed. We knew exactly where all the processes were. We also had 600 people from the business doing operational checking. We statistically took some 20,000 accounts that were in NatWest, and we had them all printed out- so your credit card statement, your savings account - and at the point before we finally cut over there, but after we had moved you over to the Royal Bank systems, we did the same check line for line. That was called "operational reconciliation." And we rehearsed that with the same teams of businesses people - many of them women out of branches that we based in.

We actually cancelled one of our trials. I remember walking around the floor over a weekend. I deliberately cancelled the 11th trial, and said, "We're not doing it. I want people to go home and rest, get a weekend off." And remember walking around the floor that week, and there were lots of kids, and saying to them, "What is your job this weekend?" And they would say, "I'm not involved." "Well what are you doing then?" I asked. "Well, we're working on a new HR system, it's nothing to do with the integration." And I remember coming away with that - with the number of people I found who were very, very disappointed not to be involved - quite amazing! One of my abiding memories of this was, a lot of people didn't want to know about this. This was risk that had never been seen before. This was serious risk, and these kids were upset that they had not been invited to join the weekend to make history. And it really was history. I remember, I don't know what the word for it would be, but being really heart-warmed that people were disappointed that they had not been asked to be on a shift on that weekend - because we started on a Wednesday - we staged it on a Wednesday, Thursday, and the real event started on a Friday night, and they weren't involved.

And it gave you a sense of history for that small moment in time, for people to be disappointed that they had not been invited to join this weekend. And believe you me we had 2,500 people working that weekend all over the place. We had UK Financial Services Authority monitoring it every two hours, which was civil service working through the night, which was quite interesting. But if we had failed, when you think of the damage it could have done to the UK monetary system - we have a significant part of the UK payment system - we have 5,500 ATMs, if we had not had all of them to work - think of the calamity in a country the size of the United Kingdom. So it was quite a period.

I also had a smashing team, super team of guys, super team of senior managers that I suppose looking back, that I left them to get on with it. We had a daily meeting, for two-and-a-half years we had a daily meeting at 8 o'clock in the morning, every single day. And it became quite a bit of folklore in the Royal Bank. It was called the "Integration Directorate." But I worked very closely with a great visionary colleague there, a chap who is now retired, George Adams. Now you had to encourage people to attend these morning meetings. They were quite sharp, "Why haven't you done this? Why haven't you done that?" And we would do that on a daily basis. But towards the end when the trials were becoming successful, we had a problem finding sufficient seats for the numbers wanting to turn up at these meetings. And at that point when we neared switch-off, I said to my colleague George, "If this doesn't work out George, you and I are in prison." And he smiled at me, he was a very quiet man, and said to me, "You know success has many fathers. Failure has only one." I never heard the expression before but I remember thinking very deeply about my colleague and his statement.

But it was a great time, we consumed something like 5,000 ice creams that weekend, and couple hundred thousand sandwiches that were all brought in, and I lost count of the number of pizzas.

RM: In 2003 you were named IT Director of the Year by the British Computing Society, tell us what that meant to you.

JW: Oh it meant a lot to me. We were invited to place a submission to be the top bank IT shop. The business case we submitted was to say we had the best IT shop in all of the banks in the United Kingdom, and that we had completed the most exciting program, the NatWest integration. The British Computing Society judged that to be the case and awarded it to the IT shop in the Royal Bank, and it was a combined Royal Bank NatWest event. But much to my surprise, I was absolutely delighted that they were generous enough to award someone like me the IT Director of the Year, the IT Leader of the year. It was really a humbling moment because there were 10, 12, and perhaps 10 or 12-hundred other people who were equally deserving of that award to be quite honest – particularly the guys on my exec team who worked with me. It was they who did the job rather than I.

RM: John you recently came to the United States, that was just this year?

JW: Yes I came to the United States on February 14th, Valentine's Day, and being a cheap Scotsman, that was my gift to my wife. I was taking her to New York for Valentine's Day, but thank you to the Royal Bank for paying for the flight tickets.

RM: What are some of the challenges you see here in the US with the explosive growth of the Royal Bank of Scotland and Citizens Bank?

JW: Well, the main challenge for us at the moment in Royal Bank is the acquisition we made of ABN AMRO in conjunction with the consortium partners, Banco Santander and Fortis of Belgium.

For us in the Royal Bank, the pieces of the ABN AMRO group that are of particular interest to us are the global banking markets, and global transactions services. These are really the key, key bits for us going forward. So one of my responsibilities here in the United States is to lead the separation of the ABN AMRO business in the United States from the rest of the consortium, and also integrate it into the Royal Bank's business process and technology platforms. So that is making great progress. We have picked up quite a head of steam in that. It's very much a global effort in conjunction with my colleagues in the United Kingdom, my colleagues in Europe, and my colleagues in Asia Pacific. That is quite interesting in adopting and adapting ABN AMRO's approach to business here, and taking people through the Royal Bank way of doing things, and getting them on board to grow the business. So it represents a huge opportunity for us, with the combined strength of what we bought from ABN AMRO together with the strong retail foundation we have with Citizens Financial Group, which stretches all way from Chicago to Boston, down to New Jersey. I'm always amazed at the size of Citizens Financial Group, and also to the huge investments we have with RBS Greenwich, our investment bank.

I also have other responsibilities here. One is to establish firmly in North America a unique part of our business model, which is to create a manufacturing division. And to add to all of these things, we have a large new head office being built in Stamford. Some 1,050,000 square feet is being developed there, and hopefully we will start occupation of that building in April of next year.

So lots of work to be done here, but it's a great shop. It's always been very successful in the United States, both with Citizens CFG and with RBS Greenwich, but there's lots of opportunity to grow, particularly in the commercial marketplace and also in the transaction banking industry, lots of development.

RM: There's a phrase, "No risk, no reward," sounds like with the business risks that the Royal Bank of Scotland takes, and you take with some of the mergers and IT integration, that you would agree with that, "No risk, no reward?"

JW: Well I would agree with that. I think also in today's environment in the banking industry, which is a difficult, difficult environment, there's no doubt about that, that risk is a subject very, very much foremost in our minds and has to be very carefully balanced against reward opportunities.

So that's something that is on our agenda on a daily basis – risk versus reward – very, very focused at the moment.

RM: My Chairman regularly tells me that the biggest room in the world is the room for improvement. Is there room in the White legacy for future growth or improvement?

JW: Well, there's lots of room for improvement. I think that's what life is all about – improving. There are lots of improvements in business we could make, lots and lots of it - lots of improvement with myself and at my age as well. I don't think it ever stops and if it stops then I think it's time to move on, go on find some new challenges. It's a joy to get up in the morning and get on with it.

RM: The recipient of the 2007 Morgan Stanley Leadership Award, John Thompson, CEO of Symantec, and I'll quote him on this and get your reaction on this John, he said, "Information is the currency of our age and as such, has become invaluable." How do you feel about that statement?

JW: I could only but agree with it. I am fascinated with two major, major things that have happened in the past 8 or 9 years. The first one has to be Internet. The first thing I did when I got to the States was, "Hey guys, where's my PC in my home and I want an Internet connection." And in that short space of time of 8 years, you cannot live without the Internet. I can't. My wife can't. My kids can't. It's email. It's about finding train timetables. It's about finding news, about what's going on. I want to keep in touch with the UK. So what do I do? I bring up the local newspapers on the Internet. I bring up the BBC News. So Internet for me is a stunning, stunning innovation. I am blessed with having grandchildren as well, and it's amazing to watch them. To them, the Internet is almost like having a breakfast cereal.

The second thing that's at the other end of the scale that fascinates me is the iPod. Here's this simple thing, and iPod, that's so small, that fits in your pocket, and a pair of earphones, and I don't know, my wife is the one that's into music more than I am, but we have 3-and-a-half thousand items on our iPod. Then we have huge collections of photographs on it. And she's threatening to spend even more money, which will no doubt please Steve Jobs, she wants one that gets video as well.

These things are amazing. There are many others - digital cameras, so small so simple, the ability to take photographs and delete them, which happens frequently in my case – but the piece of information and having information so readily available is just stunning. And I defy anyone to think back 10 years and wonder how the heck they managed to live. You walk around New York today and you find 90% of the population has got a mobile glued to their ear. The things are just wonderful, wonderful.

RM: Let's talk a little about you and leadership in the Americas in IT. There's a lot published in IT, but little written about IT Leadership itself. What does leadership as an IT CIO mean to you?

JW: IT Leadership? Leadership is very much an individual thing. Irrespective of the industry or profession I think it needs vision, courage, and integrity above all other factors. And if you are a good communicator it helps. Perhaps I would add consistency to the list – colleagues, peers, employees are comfortable when you are consistent. Also an optimist – yes definitely need to be an optimist. If you want to study leadership, study Goodwin. In terms of IT you need to know your subject matter, not the detail, but the trends. You need to understand the language of IT, and you need to know what can be useful in your industry. The IT industry is good at inventing wonderful new concepts and innovations, many of which have consumed large amounts of business capital and yielded heartburn.

We have not, if we are honest, always delivered what we thought we would deliver, and I think quite a lot of industry leaders view IT as being as somewhere between an innovator and a necessary evil, something that consumes large amounts of their capital. Then somewhere in there lies elements of truth, that in the IT industry we could be more aware of.

In terms of leadership in IT, I think these things depend on the actual individual, but I think it depends on the quality you want to bring to it. I think the ability to articulate business requirements into IT terms is absolutely vital. I think the ability to translate IT – what it can do for business – into business language, is perhaps even more vital. I think you need to understand what, in my case, banking is all about is absolutely significant. And I think also you need to remember very, very much so, that while vast new developments in new technology are exciting, the most important thing of all is keeping your services running.

We at Royal Bank have, goodness knows now, tens and tens millions of customers around the world that range from the individual citizen, right through the huge, enormous 101corporations. If we cannot keep our services running reliably and efficiently, the damage we do to these businesses is untold. The frustration we bring to individual citizens is untold.

All of us know the simple things, to go up to an ATM and find out it's not working, particularly if you're down to your last dollar and you have a taxi fare to pay, and I think that's happened to a lot of us. Keeping the system up and running is something I think the CIO should never keep his eye off, and I'm afraid sometimes that happens.

RM: I want to move next to the topic of innovation. Where do you think innovation in IT is appropriate?

JW: Where do I think innovation in IT is appropriate? I think IT innovation is appropriate across all avenues of the business. I think that ranges from the immediate core of the business, in our case, it's banking, but I think it also applies as much to financial systems, to risk systems, to human resources systems, where you see the opportunity from an IT point of view to offer lower cost, to offer more functionality at a reasonable price, to offer better quality of information, to offer better predictive tools. Then I think IT people should be up there developing the concept, developing the business case, and taking it forward to business people.

Business people love the opportunity to see where IT can help them grow more revenue, and reduce risk. I think it's incumbent on all of us in the industry to do that, and to innovate. IT people are great innovators. Every single day innovation takes place in IT. When I left the Royal Bank in the United Kingdom, I know that the technology function there was introducing change, of somewhere around 5-thousand changes per month. Now some of that would be routine in many cases, but some of it would bring lots of new innovation, all of it introduced seamlessly without causing disruption to the business. That in itself is a tremendous record. We're good at that in our business, and I'm quite sure many other banks and many other industries are good at it.

And a lot of this innovation goes unnoticed in IT. I detect that innovation in IT is something that's looked upon as a new edition of Windows, or a new Apple computer. And these are very important and very vital, but every single day in development shops and services shops there is innovation being introduced, and it's a kind of unsung hero. Even I have to ask myself, well what did I do about bringing that to the front, and projecting it to our business leaders to say that, "Hey, do you realize how much of this is going on?" I look back and that perhaps is a failing in my leadership. And I think it happens quite often with other CIOs, that inside your own IT arena, there is lots of innovation going on, and we're not marketing it.

RM: Geoff Moore talked in his book “Dealing with Darwin,” talked about learning about learning from the past and transforming your internal dynamics to overcome the inertia that threatens every bold innovation. When there is inertia in an IT operation, how does that effect trying to innovate?

JW: Well, let me just take this thing about innovation and inertia. I think one of the things that people innovate and have good ideas, I think what they need, particularly in larger corporations, they need a mentor, someone to help them to find their way through bureaucracy of any organization to get to the people who could really use the innovation. I suspect that quite a bit of innovation doesn't really get beyond birth. It kind of dies in the early days. That goes to the quality of leadership in management.

For people like me, it means encouraging the line management to look for innovation, to mentor it, to have faith in it, and have faith in the individuals who are reporting – to trust them, but also to bring a sense of reality to it as well. There are some things that you may look at from an experienced point of view that you say, “Good idea, tried before, but failed for the following reasons.” You also have to be honest with people who innovated, that you really think the innovation might not fly, but to be honest with them in the sense that it's not discouragement – to mentor them – to say, “Terrific idea, great, great thoughts in there. I recognize that, but this won't work for these reasons. What's your next idea?” And I wonder how often managers actually say to people, “Here are the reasons this may not go. Thank you for bringing it up, but what's your next idea? Don't let it discourage you.” Often many of us would turn around and say, “Can I recognize this idea that you've got, that might not fly, and give you some form of recognition?” I wonder how many of us do that? I do know it happens in my own business. I only question does that happens frequently enough or often enough?

RM: So that leadership sounds very personally important to you as your career has grown, in terms of mentoring others?

JW: I do remember when I was younger and having some ideas, and they kind of foundered in the rock of the organization, by the organizational politics or the organizational bureaucracy, or because it didn't fit into someone else's agenda. There were other priorities. I can remember feeling a bit kind of hurt about that, but I've seen it happening time and again. And I fear that I probably contributed to it when I looked down at people that worked for me. I don't mean looking down at them or not listening carefully enough, I just have to question whether I have done enough to encourage innovation. I think lots of people in my role and job should question themselves, as to whether they've done enough, if we strangled ideas at birth, if we've not given people sufficient encouragement, taking innovation to the side. A lot of has to do with the culture, and a lot of has got to do with the leadership that has to encourage it, and to recognize it, to reward it, even rewarding failed ideas, or ideas that have been invented before.

RM: I'll ask you this question John, but I think your answer is obvious based on listening to you, but I'll ask it anyway, do you think information management lies at the center of strategy and gives a competitive advantage?

JW: I think it can realize it, but I think it is like a dance, you need a good dance partner to take onto the floor with you. I think you as a CIO, as a leader of technology, I think you have to enjoy the trust of your colleagues in the business. I think you need to be able to understand their business, empathize with their business. I think you need to have a sympathetic view to the problems that their business brings. I think when you can do that, you know that kind of dialogue, they will be much more receptive as to what technology can bring to them. One of the great things that anyone in my position can do is encourage the people who work for them to take that position.

One of my great joys in life at the Royal Bank, one that I will look back on when my day comes to leave, is that we introduced a Master of Science Degree inside the Royal Bank in conjunction with a major university in Scotland. The university laid down the criteria by which it would accept students from inside the Royal Bank. These are employees, no age barrier. If you wanted to apply to study over three years to get a masters degree, we would encourage you. We would give you X number of hours of our time. You had to put up your own hours, but effectively we were investing in the program for you.

This has been producing somewhere in the region of 30 to 40 graduates per year. I find that very, very rewarding. People from their 20s up through their 50s are taking a masters of science degree in information technology from a highly respected university, and in that masters of science degree, there is a 20% mix in banking. I personally would like to see more banking knowledge and requirements in there, but it means we are producing people who not only understand technology, but understand the business it requires to make technology financially viable, and understand the industry in which they are working. I would love to see more of that, love to see more degree courses, particularly masters courses for not only technology, but also the strong element of focusing in major industries. It could be the aerospace industry, pharmaceutical industry. I would like to see more of that.

RM: We're going to switch to questions that relate to the mission of the Computerworld Honors Program, which started 20 years ago, and whose mission is to honor those who innovate with information technology to benefit humankind, today and in the future. What are your hopes for humankind in the context of what the IT industry can help achieve through the use of innovative technology?

JW: What are my hopes for the IT industry for mankind? Let me divide that into two things. For the prosperous countries in this world, I think IT can bring and manage a whole host of situations. You think about situations that can present risk to us, weather systems for example, and better knowledge surrounding that, and the predictive modeling that has been done to forecast weather. I must say I've been very impressed in my short time in the United States about the accuracy of the weather forecasts. I have no doubt you will probably dispute that personally. But that can bring tremendous insight. Obviously you can point recently to the tremendous happenings that have gone awry in that area.

You think of the advances in medical science that are down to mathematical modeling and the power of computing. You think of the ability to take x-rays and analyses 1,000 miles away over networks where it be analyzed in another center. You think of the work that has been done to model to design new compounds to produce better drugs. All of these things in the wealthy countries, technology and the innovation that goes with IT, we're only at the beginning of it. I think there's probably a couple hundred years to run before we get to the age of computer steam engines.

For the underdeveloped countries in the world, I think it is even much more exciting. You think of the difficulties facing the populations in Africa, India, and various other parts of the world, what technology can bring to them. The ability to use a laptop to get in to see what's happening in other parts of the world - that opens up huge domains of knowledge and information to them when you think of the villages that are remote from water and communications. I had been to South Africa a couple of years ago. I did visit a township out in what we would call the sticks, far away from any major town where they had installed some 30 computers, and installed some self-teaching. And these desks were full of young, young children who were so articulate on the keyboard. They could rattle up and down the keyboard like a pianist. They knew their stuff. All of that was impossible 20 years ago.

This must be one of the most exciting industries in the world to work in.

RM: In terms of information technology to benefit humankind, do you think the greatest obstacles going forward are technical, or are they social?

JW: I think they are social. I think in most cases and all forms of new technology, most of the problems have been social rather than technical. Technical problems are overcome, or a new technology replaces them. But then to the question to the social aspects of that, I think history is full of social reaction to technology.

Technology innovation brings change, and to most people in many countries who encounter change it represents threat. I think that's the first reaction, the human reaction, instead of thinking that change perhaps can bring opportunity and benefit.

I am old enough to remember well the development and introduction of ATMS, teller machines. Banks had them for quite a number of years before they thought they may have to educate the public in how to use them. I mean the thought of putting a plastic card into a machine and getting money out, albeit your own money, was really quite innovative, and quite scary to a lot of people. It took the banking industry a little while to understand they had to take people with them. So that's an example of developing technology but not bringing the social factors, having a better understanding of the social requirements. And I think you can find many examples of that, but social change is something that technology innovators don't always reflect on.

RM: John your legacy remembered, how would you like to be remembered in this 40-odd-year-old revolution?

JW: How would I like to be remembered? That's quite a difficult one. I guess I would like to be remembered as a guy who was very, very lucky. Who had marvelous, marvelous business colleagues, marvelous teams of people supporting him, and whose been blessed particularly in these latter years with wonderful leadership from above as well, leadership that gave trust and freedom to operate. I shall always be grateful for that, to the guys who worked with me, and for the chaps above me who gave me the opportunity to get on with it. I don't think it had an awful lot to do with me. I've often said, despite leadership, we've managed to deliver.

RM: John White, Head of Manufacturing, RBS Americas, The Royal Bank of Scotland, the 2008 recipient of the EMC Information Leadership Award with the Computerworld Honors Program. Thank you so much.

JW: Thank you so much.