

DEBATE: IS IT A STRESS GENERATOR OR A STRESS RELIEVER?

Chair: John Riddle
ICA Chair

For The Motion:
Robert Assirati UK

Against the Motion:
Martin Wagner USA

John Riddle, Chair ICA. This year we announced in our program that we are reintroducing the debate after a one year lapse. We have two gladiators this morning; two champions; two speakers on a topical subject which I am sure is well balanced. The trick in achieving a lively debate is to not to discuss a subject that is lop-sided. In other words where no side has a clear advantage.

I have four roles

- to explain the format;
- to give you the context;
- to introduce the participants; and
- to manage the time.

Let me start.

The format is essentially a classic debate with one little wrinkle. We are going to allow the presenters, that is the affirmative side and the negative side to speak for up to 12 minutes. Present their point of view. Next they will be given the opportunity to give a rebuttal. That will be three to five minutes. A red card will be in effect; if the red card goes up boom – stop. The unique part is that we will then open the debate to the floor for observations and contributions from the floor. With one caveat, speakers from the floor will have only one minute. If you have an observation – make it. I want to make sure we get as many people as we possibly can. We will not be totally brutal, but let's try and get as many points of views possible from the floor. We will then let the participants make their closing remarks. Again, limited to 3 to 4 minutes. Vote – every person here has a vote. So it's not a question of country. We will then tally up the vote, declare a winner and thank the participants. That's the format.

Now to the context. The resolution is: **Advances in information technology contribute to workplace productivity and personal fulfilment.**

For years the world has been promised the benefit of information technology in a form of personal leisure and measurable productivity gain. These benefits have been realised with our increased ability to juggle multiple transactions, maintain a global reach on information, actively participate in decision-making, and balance the demands of professional and personal life.

or

The contrary view would be, we are drowning in information and technological functionality beyond our capacity to absorb, that reflection real thinking on any issue is a thing of the past and that full time connectedness means there is no line and thus no balance between professional and personal life.

That's the context. Let me add one statement. This is not a frivolous topic. We who work in information technology are either are a force for good in the world or not. That's the context.

Let me now turn our two participants, two able gentlemen.

For the affirmative; Bob Assirati, UK. At Oxford, he read Philosophy, Political Science and Economy and I thought to myself what an interesting combination. He then went on to get a degree in computer science. He has worked in the private sector with Honeywell. He has run his own private contracting business during which time he did work frequently for the public service and some years ago was invited back to lead an agency in the British UK government which he continues to do today. Let me tell you something more important. He has been happily married for the last 34 years to the same lady, two children, two grandchildren, loves to ski on powder snow in Canada or in the Alps, and it perhaps happiest playing with trains with his grandson on the carpet in the drawing room – Bob Assirati - Welcome.

For the Negative; Marty Wagner, USA, An Economist. The majority of his career has been with the public sector at government service administrative, although not exclusively there. I recalled him working on e-Commerce. Devoted family man also married a long time with 3 girls. The youngest of which is 12 and I believe he has a twinkle in his eye when he talks about his 12 year old because I think he believe she is actually going to turn about 27 or 28. Eclectic interests, reads widely, loves music, speaks French. His mother was French speaking, travels extensively and has become an expert on expensive jewellery, notably on amber because of his trip here! He is a provocative speaker; a friend to ICA, welcome Marty.

Are you all clear on the process? I now welcome Bob Assirati to speak on behalf of the affirmative.

Bob Assirati. Thank you John. Just before I start, I wanted to add my thanks to our hosts in Estonia and Tallinn. I think we have all found it a quite remarkable city and I think the people very friendly, very helpful. It also helped that what I thought was the guide, left in the bedrooms. Because it tells us exactly where to go and what to see. But also how to behave. How to cross the road and how to tip. I thought... did you read this bit... under medical help... it says... If you have a serious medical problem, you might consider leaving the country! So I hope you are all feeling well! Now when John asked me take part in this debate, I thought it gave me the poisoned chalice. I was just recovering from a complete system failure on my pc at home. We all know how much frustration we get from IT. Is it going too fast for us? Well, of course, people have said this for 100's or 1,000's of years. The information revolution is too difficult. Well the industrial revolution was too difficult and the agricultural revolution was too difficult. I think we will survive. I just checked things out. In the UK over the last 30 years, which is really where we've come to use the technology, household consumption, expenditure has doubled in real terms. We are all twice as well off as we were 30 years ago in the UK. And the basic factor there is productivity driven by technology. We know that in our offices, in factories in retail, we've made huge productivity improvements. Our government wishes to put more money into technology, into schools, into hospitals, into criminal justice because we think we can have the same effect. An interesting thing though is that, 30 years ago I remember discussing what impact the technology would have. We were told it would be an age of leisure. We would all work

perhaps 15 hour a week and enjoy ourselves the rest of the time. This clearly has not happened. I think this is a conscience decision. I think we have chosen to take the benefits of the productivity in greater consumption. I think we buy more services, we travel more, we enjoy more entertainment. But it is interesting that in all those areas it is the technology which is enabled our consumption, because at the same time, the technology has facilitated the growth of an affordable airline industry. So we can visit different parts of the world. It has increased communication, so we can all carry our mobile phones when we go and talk to our loved ones. It has enable entertainment, whether it is digital television or the CD. All these things come from the same information technology.

Now we all know and Marty is about to remind us, of the grief that we can get from technology and the pressures it will put on us. But I'd like you to think about this as the scales of justice. We know we get a lot of benefits from the technology and will continue to do so. We know we have a lot of problems with the technology. Our argument is the scales are very much in favour of the benefits and that we all have an opportunity to manage the problems and to ameliorate them and that is our responsibility. Now before I pass over to Marty, I just want to talk a little bit about the impact that the technology can have on us personally, because I think I can convince you about the productivity that we get from the technology, but can I convince you about the personal fulfilment. Well, I just listed a few things I can do today that make my life more enjoyable, more bearable. First of all, wherever I go I can keep in touch with my family and friends by email, even if I don't know where in the world they are. Secondly, I can keep in touch by mobile and I think that the ability for our families and their children to have mobile phones so that if they get into difficulties of any sort, they can contact us. It is not just a benefit for them, its peace of mind for us. Thirdly, as people travel around and live in different parts of the world, we can now exchange digital photographs, so perhaps a grandchild gets born on the other side of the world and within hours we have the photograph and we can see what the new arrival looks like. Fourthly, I sit in my home and I have access to a million times more information than I could ever have provided to my family through encyclopaedia's or reference books.

Next when I want to make arrangements I can do it immediately from my home, so at the weekend some of us go onto St Petersburg, it was very easy for me to find out that in St Petersburg this weekend they are showing the ballet Romeo and Juliet. I can see the time the location, I could book my tickets and I can pay for them over the internet. Now 20 years ago, I would have had to wait until I got to St Petersburg and looked through some magazines and probably could never have made the arrangements. Next, I have the ability to work flexibly. I can work in an hotel, I can work at home. This gives me a lot of options and I'd argue that those options are good. I don't have to take them, it is not an imposition but it gives me flexibility and lastly, and perhaps most important, without the technology revolution there would be no ICA. There would be no comrades here and we would not have had the opportunity to visit Tallinn. Thank you John.

Marty Wagner, USA. Thank you Bob, I have to take a different view. I am going to begin with a metaphor from not Alice in Wonderland but the Alice Through The Looking Glass, where the Red Queen is in a race with Alice and the whole field is keeping up with her and no matter how hard she runs, she is still in the same place relative to everyone else.

I am going to go through a fairly straightforward argument. I am going to talk a little bit about productivity in the work place. I am going to look a little bit at what that productivity revolution is doing to our private lives, maybe even our soles. I am going to talk about some of the reasons that this is a poison challis to take the phrase and I am going to try to lead you to what is unfortunately a inescapable conclusion in favour of con. I would also like to thank Estonia for making it possible for to make this argument in such a lovely place.

First the productivity argument. Right now businesses buy about 100 million personal computers per year. Most of those computers only use a fraction of their computing power, the world economy apparently spends about 2 trillion dollars a year on IT; these figures are from various studies and drawings. A recent Harvard business review article is whether some of my data is coming from. There is a positive correlation between IT investments and the productivity in industries in only 6 of 59 industries covered. The other 53 sectors represent 70% of the economy. If you look at IT expenditures and financial results, you are looking at 7500 US companies, unfortunately I had to only look at only US companies. You have those that spent least on IT had the best results. 0.8% of their revenues were doing better, when average expenditures were 3.7% of revenues. From this I think we conclude that IT can have a big impact, certainly does have a big impact, but it doesn't always have a big impact and isn't always in the right way. Most people haven't figured it out yet, to quote John Nesbit, "we are drowning in information, but starving for knowledge." That's the productivity point. There is another way to frame it though. There is a famous quote from Bill Gates, who said "...if Microsoft was doing cars the way they did software, we would be driving 25 dollar cars that got 1,000 miles to the gallon. That's the productivity argument. General Motors came back the next day; I won't give you all their counterpoints, but just a few. One; if General Motors did cars the way Microsoft does software, every time they repainted the lines in the road, you would have to buy a new car! "The oil, water, temperature and alternator warnings would be replaced by single general car fault light," and my favourite "occasionally for no reason whatsoever your car would lock you out and in order to get back in you would have to simultaneously have to lift the door, turn the key, and hold the radio antenna." Actually, it goes on and on but I have get to substance. Now lets get moved to the quality of life argument.

I am from the USA; we have to invent things including new diseases. We have managed to come up with what is called new economy depression syndrome. New economy depression syndrome, this is actually real data I am giving you, and I'll give you some statistics from surveys from a group called Heartmap. This is a self-reinforcing depression brought on by information overload and frequently interruptions leading to an erosion of close personal relationships. Symptoms including anxiety, exhaustion, burnout, difficulty making decisions, irritability, sadness and disturbed sleep. Information workers scan 100's of pages daily while enduring a constant flow of interruptions from cellphones, instant messaging, pagers and blackberries. Now I don't know if you have blackberries here, we have them in the United States. They are now being called crackberries after crack cocaine because they are addictive. I have spent a lot of time in meetings; actually sometimes the meetings gain from the blackberries! But everyone is actually doing their email somewhere else using the blackberries.

Now let's do the results of the survey. There is a significant relationship between symptoms of depression and the experience of the information overload and a number of hours using the Internet: the more hours spent on the Internet the higher the symptoms of depression. Of those who reported more than thirty hours weekly of internet usage, 45% feel exhausted often, or most of the time, 37% reported having sleep related problems. Of those who reported more than thirty hours weekly Internet use 17% feel less connected with friends and family and that was more than they did a year before. Those who experienced high levels of information overload also reported increased symptoms of depression. If they reported feeling information overload three or more times a week, 41% feel tense, 43% have difficulty remembering things often or most of the time. This explains why my children think I am so forgetful. Of those who reported being interrupted by digital devices more than ten times per day, 41% feel exhausted often or most of the time. In measuring symptoms of depression and information overload 6.3% of the respondents are

candidates for this. So this is 6.3% of the group out here. Interestingly, men seem more prone to this syndrome than women, but watch out women, the trend is not in your favour. Why is this happening? Go back to the Red Queen metaphor – we are running in place, we run faster and faster and everyone else runs faster and faster with us. We don't have boundaries between our work life and our private life, we don't have boundaries between one piece of our work, and some other piece of our work.

It's not just in the United States. I recently saw a television programme about how globalisation was ruining the French vacation: they had to go to places and bring their email and their instant messaging and all their things with us, 18,025 hours is what the U.S. works per year. That is 280 – 480 more than Norway, France or Belgium. Watch out, don't go on our stead, you may want us to try to grip those vacations that grasp on leisure time, the powder skiing in the Alps or even Canada. It even came up in our conference. Andrea DiMaio talked about email: he had to do email right away. If people send an email to anyone they expect an answer in about four hours. If they send a letter, it is about two weeks.

This is a real story from the Internal Revenue Service. They were adding and expanding their voicemail system in the eighties, going to ten thousand users. All the executives were fighting against the expansion and they were being juiced up by their spouses who were saying don't do this, don't do this you are ruining your life. In fact, the voicemails would follow them home, follow them across the weekends, and follow them on vacation. Blackberries, crackberries, voicemail, its all the same thing. I once heard a sermon about two men chopping wood. In one man chopped wood straight through an eight-hour day, and the other man rested every hour for five minutes. At the end of the day, the one who rested every hour for five minutes had chopped more wood, and the one who had worked steadily through said, well how come you did more? And the man who rested said, well in the five minutes rest I sharpened my axe. This is what we have to recognise; we are doing this wrong. Our informal keeps encroaching on the formal that I think mentioned email making faster decisions but worse decisions. Part of it is because we are taking what we think of as an informal medium, email, eliminating all boundaries or structure or process and we should not be surprised that things are getting harder and harder to do.

Let me edit out as the bottom line. You can get some productivity in some areas, certainly not in all. We are creating and risking the creation of a generation of alienated robots and androids, and the more we implement the more we run, the more everyone runs faster so we are never going to get ahead, and I have a really good joke to close but I'll save it for later, because you have hit me with a red card!

Bob Assirati. Thank you very much Marty. I think you did a superb job of underlining the problems that technology can bring, and I would not argue with any of those. I come back to the fact that we have to understand the balance between the benefits and the dis-benefits of the technology. I am interested in the surveys that Marty was quoting; the new economy depression syndrome. And I wonder if we had done similar surveys at different points in the past, if we did surveys in Estonia during the period of Soviet rule, or if we did surveys during the industrial revolution or surveys during the Black Death I am quite sure we would have found that people were suffering far greater levels of stress than they are in today's free economy.

The problems that Marty is talking about are extremely serious and I think we all have a responsibility to think about them with respect to our user population for our technology and indeed, for us as individuals, and I think these problems need analysing. I think we need to break them down, and I want to break them down into three separate categories.

The first source of technology stress is that technology that does not work or is not fit for the purpose or is too difficult to use. We all have this. We all joke about Microsoft operating systems but this is a part of development. When the motorcar was first introduced, they broke down all the time. Today, they very rarely break down. The answer, of course, for us as individuals and for our organisations is to make better judgements about when we adopt the new technology. Some of us really enjoy having the latest gizmo, finding out how it works, what it will do, what it won't do. If you are not like that, don't buy it. Wait, until it becomes more reliable. Don't be a follower of fashion. Now this becomes increasingly important, I think, when we are making decisions, not just for ourselves but also for our organisations. So that is the first type, the first source of our stress.

The second source of our stress is quite different. It is that the technology opens up the world and gives us much more communication and much more information. The problem there is that we have not adapted our working methods to take advantage of that bandwidth that it gives us. We feel we have too much email, too much information is available to us on the web, when we use a search engine, it gives us too many results. Now I have to say that we have a responsibility to learn how to manage that volume. This access is a good thing. Once upon a time, people said the railway train went too fast. The motorcar went too fast, we couldn't control it but we learnt to. The answer is discipline. We all have to decide how we are going to manage our lives, our work, our time. We all do this. We all find ways. Take the cellphone. Only two people should have my cellphone number; my wife and my secretary. No one else needs to ring me, they can ring my secretary in the office, and she will pass the message on to me if necessary. If more people have my cellphone number I have no peace. Email: people expect you to answer an email within four hours, Marty? That is a nonsense. I am not even going to look at my email every four hours. I deal with my email perhaps once a day. Why do it faster? People become to reply on you answering, if they want to get you quickly, they can use the telephone. Email: the number of times I get emails to a whole list of recipients and I reply to all. Nonsense.

Third source of stress is that older people are not less intelligent than younger people but they have more experience, they find it more difficult to adapt. I think this is very important because when we have problems with technology, we should ask the younger people do they have problems so that we can separate out the age effect. I think we have to think about other people within our organisations. I say we can make decisions about whether we use the technology personally but they don't get to make that choice. We impose it on them. So lets be careful about adopting new technology without working out the effect it is going to have on our users.

Finally the Red Queen syndrome. I recognise this. I have an answer to it. It is the red flag. When the motorcar was introduced in the U.K. people said this is terrible, we can't live with this, and every motorcar they made someone walk with a red flag

in front of it to make sure the car could not go faster than a walking person. This did not last very long Marty.

Marty Wagner. I would like to thank Bob for conceding the debate. I want it read again what we are arguing. The argument be it resolved, advances in information technology contribute to workplace productivity and personal fulfilment. Not that may contribute, done right contribute but do contribute, and all of Bob's arguments really actually boil down to how we ought to operate. They are really not arguments about how most of us are actually operating, so I think that would be my first response. Let me actually get a little bit into where we go wrong, because there are some very good points made about, for example, using your secretary to filter calls. I can do that to, but not every body in my organisation has a secretary, a voice actuated system that you can say, please do this and it happens automatically. Many of us have to deal with the fact that they don't have secretaries, they only have technology. There may be an argument; I think there is an argument, for establishing better technological filters. Frankly, a lot of the problems that I see in terms of information technology are not inherent in the technology, they are inherent in how we are actually using it, and in fact it would behove us at ICA to think a little more about, say for example the need for formalism. Just because I can send emails quickly, maybe I need to build in structures that slow me down. There are a lot of decisions that I have regretted. Emails I have regretted sending because I went click too quickly. Frankly, there is a lot of people who think you can start doing contracts with the click of a mouse button. Wrong. If you are going to do a multi-million contract you better be thinking about how you are going to do it. We have also got a few problems with people who are turning the crank on technology; lets do another PowerPoint presentation. I have a fellow who works for me who came with a 73 PowerPoint slide presentation; he was going to talk me through it. It did not help. Again, ways we ought to do it not ways we are actually doing it. We need to slow ourselves down, react a little less quickly. I have noticed that if I want things to get done in my organisation, one of the things I don't want to do is to interject myself into the email debates. Two things would happen: I will screw up the decision because they actually know what is going on, second thing is I will never be cc'd in the future because my staff will be unhappy that I am screwing up their decisions. So we need to come up with some new way of operating but I submit, most of us are not operating in that way.

So let me conclude with that old, old joke about the people who invented the first computer, the first super computer, the really powerful computer and they asked the question of the computer – you can tell how old this joke is – is there a God? And the computer said, there is now. Let us stop worshipping false gods. Thank you.

John Riddle. The floor is now yours so may I have comments, Olov first.

Olov Ostberg, Sweden. Marty, you complained about the crackberry. The blueberry is built on the Swedish mobile phone protocol, and I think you have to learn, you talk about the business of speed but if just like alcohol: you have to learn to enjoy the business.

Benny Raab, Israel. I was a workaholic for thirty five years but nevertheless when it came to Friday noon, until Sunday morning because we work Sundays, when

somebody called me up about business I would tell him call me up on Sunday because this is a day of rest, not because of the Sabbath, but because I wanted to rest, that is one thing. The other thing is with all the technology; my brother's phone only operates when I am in my car just in case I want to get my family. There are very few other people who know the phone number, my friends Nachman and a colleague of mine, and my family. Otherwise it's my own as Bob says. But I agree with Bob; in ne sentence: I wrote it while they are speaking. I do it because my widespread experience tells me so.

Peter Hearson, UK. Yes I would like to support Marty on the email issue. It is a thing known as the procrastinating factor of thought, it takes time to think whether you do it four hours or forty hours. It is a creative process and indeed how often have we been in the position, if only I had worded that differently but I clicked too soon. Thank you.

Costas Agrotis, Cyprus. What I wanted to add was that I agree with Bob that we have to get used to what we are doing. It is the same as the example of the car at that time. The same thing happens when you are getting used to it, we regulate and we set out our rules when we are using technology, so I believe that in some years' time we won't be creating any stress to us. Thank you.

Diane Fulford, Canada. While I thoroughly enjoyed the debate on both sides, I am disappointed in both of you for not postulating for what the future might hold. Both of you looked at the past and the current but did not look towards the future and what may happen in the future with all of this. I think we need to think about some of the issues not just what they are today but what they may be like in ten years, in twenty years. I will just say one other thing is that I am terribly concerned with the continuing of deficit of attention syndrome that we all have in this day and age with technology and just with the overwhelming amount of information, and where that will go in terms of quality of relationships or the quality of thinking that we need to do in a complex, and an ever increasing complex, society so it leads me to wonder where this is all going.

Kieran Coyle, Ireland. A couple of points. First of all, I think life is getting more complex anyway and technology is helping us to address that complexity rather than hindering it. Secondly, if you look back to the industrial revolution most people worked on an average of about eighty hours a week, the quality of work was much poorer and the quality of their leisure time was much poorer. I think that technology has helped that. I think also that people who lived years ago had very few options about what they did during their working life, and during their spare time. Now, they have options. Look at the statistics again. I think that the health of the people has a whole is much better, I think people live longer despite the technology, and if you look at the recent things here and the fact that was mentioned I think that SARS had happened without the technology in communication it could have been another Black Death rather than a minor catastrophe, thanks.

Claudio Interdonato Giumarra, Mexico. Marty, you are right, I am very concerned – much more than ever – my mailbox is full and there is too much. But, on the other side, I think that what we are doing now with information is something a little – something very important for our evolution. And we never talked so much about

business processes, the way we are doing our work. Information technology has brought us to rethink the way we see the world and the way we work, and that is very important because I think it is an interface – it is a intermediary stage – we are going across to a new way of working. We are going to the fourth – not only the third way but we are going to the fourth way now of creativity and new organisation.

Jean-Jacques Didisheim, Switzerland. I would like to pick up the idea of Bob to look at younger people to answer the question whether IT is a stress-relater or a stress reliever. I have a very short remark when I look at how my two teenage daughters behave. They are very much stressed when they have no IT and no connections.

John Riddle. Excellent! Dave, and then we will go to Nachman.

Dave Molchany, USA. I think I would fall in with your daughters, because I am definitely addicted my Blackberry. Having it turned off here in Estonia, I can use the phone but not the text. It has actually driven me crazy. I blackberry all the time from places you shouldn't even blackberry from. But I think in the end I do put a lot more pressure on myself now to have instantaneous contact with people and I put a lot of pressure on people to have instantaneous contact back to me. Four hours of an email would probably kill me. I would be on the phone trying to find the person if I really wanted an answer to the question. So I think it has added a great deal of stress. I take a lot of time to unwind at night and I absolutely have to work out every day. If I don't people suffer because of that so, I would agree with Marty.

Nachman Oron, Israel.

I wanted to give you some information about a very interesting study that I read relating to this debate of today. It compares the status of life forms executive levels in comparing the medieval times to our times. Did the life of the executive improve? Now think about it in medieval times, the servants would have to wake up very early in the morning and he would heat up the oven and prepare. The King would wake up late, servants would dress him, he would have leisure time during the day. Maybe work one hour or two. Look at today's executives, we wake up very early in the morning, run to the emails, sometimes I get emails at 5 o'clock in the morning from Itzik Cohen and stay until very late at night while our lower workers spend much less time at work. So is it good for us?

John Riddle. Excellent. Any other comments?

Choy Peng Wu, Singapore. I just wanted to remind everybody that you can still pull the plug on your computer and you can still switch off your hand phone. I think a lot of it is the individual who controls. And also a lot of it is how we use our technology. I have the hand phone number of all my direct reports in my hand phone, but I never call any one of them unless it is crisis management. So it has got to the point where if they see my number flashing, they know it is important and I never call them after office hours and I never call them over the weekend. And likewise they have learnt, including my bosses, not to call me on my hand phone because I will never answer it and I will leave my hand phone on a silent mode at meetings and after office hours and they have learned that if it is really urgent they should just send an SMS to me

and I will respond in my time. So I think this is something that, it is really up to us how we want to use the technology.

Mait Heidelberg, Estonia. I'm thinking that technology actually is not creating something new. It's an accelerator, an amplifier done in a more efficient way. If you want to have a rest, you have a greater possibility to do so. There are disturbing people in the world. There are better tools to disturb you. Also these processes are existing but they are much more efficient than before.

John Riddle. We are now going break. Stop. We are going to hear the final closing arguments of our colleagues and then we will conduct the vote. You have heard things about the future, reflection, the ability to reflect. Generation gap, balance, personal discipline and other themes. Over to Bob Assirati for closing remarks.

Bob Assirati. Okay well, the first point I think, Diane said that perhaps we should have thought a bit more about the future. But I think I agree with Marty, that this proposition is about the situation today. It's about whether the balance of benefits that we have got from the technology is greater than the frustration that we live with. I think that the main message that came through from the contributions from the floor is that we need to be much more disciplined about the way we use it if we are going to manage down the frustrations.

I am very interested in people's reactions to email. These problems started with the telephone. I still find the telephone is far more intrusive than email. And of course, we learnt to cope with the telephone, we learnt to go away from the telephone if we wanted to think and to plan. I don't think I like the world that Dave suggests where we are all expected to respond instantaneously. When are we going to do our thinking in that case. It may be that we have to organise our work places in a different way. May be we have two types of jobs, may be we have some people who are going to spend all their time being our communicators and other people who spending their time sitting back thinking, planning and strategy. This is a very difficult debate, we could have both have argued either side I am sure, but please do think of it in terms of the balance. Have we got more benefits from the technology that it has cost us.

I would like to come back to the Red Queen and everyone running to keep up. Because it does again remind me of previous revolutions. It reminds me of the car. Trying to slow the cars down so they cannot go faster than a man walking or a man running. Do we think that we want to slow the technology down so that we can cope with it in the way we have always been used to, of course not. We need to learn to live in a different world and we the CIOs, I think have the responsibility to lead us in that direction. Thank you John.

Marty Wagner. All good points. A couple of observations, correlation is not causality because we see a lot of information technology in the airline industry, doesn't mean that there wasn't a lot of other things going on. I used to be an aeronautical engineer, I notice that aircraft today are somewhat more sophisticated than when I finished at university. So I am not sure I want to put all of the productivity gains on information technology. I think they are not all of equal importance. I remember taking two little girls ages 3 and 1 to an emergency room, and it turned out they had pneumonia and they got a shot of penicillin and they were

fine a few hours later. A hundred years ago, that would have been a different story. That is a major, major change. The difference between a telephone call and an email is not in that league. Second observation is, I think that scales of justice that this metaphor is a false metaphor. We do not have the choice, like when you go into a store and you buy a product and you think is it worth this much money to me to have a product. We are in a game, we are in a race where we have to run faster and faster in order to keep up and we need to think our ways through and how you can run faster and faster. And frankly to answer Diane's questions, there are a lot of things we can do. There are new social contracts we can start writing. As more and more people, at least in the USA are starting to not be in employees but work essentially contractors on behalf of other organisations. They can set boundaries on what they can do if they want to. Children – I can tell you that I too have children, one is addicted to all the technology. In fact, I have two. One can handle her addiction and one cannot. I am sorry, I not going to let her be running five instant messages on the phone while working on the computer and TV being watched out the corner of her eye. She needs to focus down. The older one could do that no sweat. So you got to really adjust around. It's not just age, its also personality. I also have a child who couldn't care less about the Internet or technology. She only goes and uses it when she wants to. So I think that the Red Queen is the right metaphor that you can... that we ought to be striving to find is, maybe there is a horse she can ride, so it's a little less tiring and will have to be designing that. But in terms of the debate of how it is working now, we haven't yet figured it out. I think that is an important job for all of us. Thank you very much.

John Riddle. Well there you have it ladies and gentlemen, the two sides of this argument. You have the scales and your have the Red Queen. Now we are going to do a vote, it is a show of hands, it is as scientific as that. I am going to ask Larry to help me with the counts so we have a further count. If I could have the resolution one more time.

So I am going read the resolution and votes will be for the affirmative first. The resolution is; be it resolved, advances in information technology contribute to work place productivity and personal fulfilment. All those in favour of that proposition, please stick your hand out.

One more time... 26 for the affirmative.

All those in support of the contrary view, stick their hand up, the negative proposition;...14.

I declare the winner the affirmative side of the proposition and congratulate and thank both of our participants.