<u>Life, Work and Careers in the 21st Century</u>

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I want to make it clear that I speak in a personal capacity, and not as a representative of any of the organisations and companies with which I am connected. This is specifically because I want to practice the art of the caricaturist to capture some of the essential features of organisations, life, work and careers in the future. I do not expect that you will agree with everything I have to say, but I trust my remarks will stimulate some discussion.

A recent conversation with a most experienced, respected and intelligent senior executive in industry late one evening was revealing. He said 'I don't understand the world anymore'.

Was this mere world-weariness or an unusual sensitivity to what is going on the world?

Let us attempt to think systematically about some of the radical changes the world is going through.

First the impact of IT. We know that it has grown so quickly over the last 20 and particularly the last 10 years, that it has profound implications for our immediate futures. We all must not merely become IT literate, but also at least begin to understand how IT is changing society, government, politics, economics, corporations, industries, and indeed the boundaries between industries.

A few months ago, I published research into the 1996 Global 100 companies - the largest companies in the world. We explored how IT-competent top teams in these companies were (i.e. the five to ten most senior people in a company, including the MD and the Chairman). The results were not surprising, yet shocking: hardly anyone understood how IT is reshaping business; worse, few seemed to be doing anything about ameliorating their incompetence.

I have developed a simple 5-Stage Model which helps explain the impact of IT on our world :

Stage A - <u>Automates</u> Existing Processes.

This stage is simple to see and understand, yet the impact is every bit as profound as the subsequent stages and neither businesses nor society have yet come to terms with it, for even in this first stage IT abolishes whole classes of occupation. Take the example the Chief Exec dictating a letter to his secretary who took short-hand, typed it and presented it for proof reading; a back and forth process of several iterations. One little machine, a word-processor, replaces the entire process; exit the typists, filing clerks, copiers etc. But it does not end there. Machines that recognise the Voice turn speech into digital form which can be delivered anywhere in the world. Voice-recognition software will revolutionize the appeal and reach of IT many fold as children and old people, the disabled and everyone who hates machines, in other words all who are outside the IT world at present will find it easy to enter it: here will be the ultimate in user-friendliness, but also therefore the ultimate in job-reduction as most repetitive jobs are eliminated.

Including some fairly sophisticated ones. Perhaps you don't think of a doctor's job as repetitive or an equity trader's job as repetitive, since the average Equity trader in good times can earn $6 million (1996). But do we need equity trading to be done by human beings any more when we are developing software systems that can emulate what they do? These can capture that elusive and very personal 'know-how' gathered over years of experience. And, so far as doctors are concerned, not merely the efficient working out of prescriptions but even surgery need no longer be done by human beings: the Lausanne University School of Medicine has invented a robot that can carry out brain operations!

In ten years' time will there be any job not deeply changed by the impact of IT?

Stage B - <u>Builds bridges</u> between parts of the corporation that had little to do with each other.

Marketing and R&D did not have much contact with each other 20 years ago. But now, information can be moved easily from one domain to another, closer to where it is really needed without intervening 'silos' of command and control. Result? The entire value chain has changed from (functional) silos to horizontal processes.

The transfer of the value chain from vertical to horizontal has led directly to the outsourcing of certain parts of the value chain. Look at the call centres set up to handle customer requests on behalf of a wide range of companies who would otherwise have to carry a substantially greater cost. At present, these employ thousands of people, and dealing with the call centre is of course pretty repetitive. But outsourcing (and its converse, insourcing, if you already have an operation large and sophisticated enough) is only one impact of business process re-engineering. Lean production is another, leading to an enormous increase in the speed with which new products can be launched. This means of course a shorter and shorter shelf life for all products, necessitating a shorter time in which to recoup investments in research, design, manufacture, distribution, sales and marketing and infrastructure – making all enterprise inherently more uncertain than earlier, and increasing risks in all sophisticated manufacturing activity.

Stage C - <u>Cancels</u> traditional divisions and <u>creates</u> entirely new divisions in the way you organise a company.

Until at most 5 years ago most financial service companies were organised along national lines, now they are organised in global businesses . This applies too to most other sort of business, except extraction and construction. As companies have re-organised along lines that cross international borders, they have had to form transnational teams for each business line. The result is that former communication and synergy problems between countries have been replaced by communication and synergy problems between business lines.

Stage D - <u>destroys</u> the walls between an organisation's internal divisions. This has not yet had a great impact, but it will happen.

For example in boom times we in the financial services industry need lots of Equity traders, but in times of recession, we need lots of Bonds traders instead. Why do we go into the market looking for such people when there are shortages…and sack them at the time when nobody wants them…paying them high salaries when they are wanted with high redundancy costs when they are not wanted? It's crazy and cannot continue.

But if you speak to the people who run these business they will tell you: 'Ah these are very special people…you can't teach a Bond Trader to act like an Equity Trader…entirely different animals". This is sheer mythology, and expensive mythology at that. In future, we will look for people who have the capacity to do both jobs. Very few such people, do you say? Well, as I hope I have demonstrated, we will need very few people and the people we will need, in all industries, will need to be multiskilled at a far higher level than we have dreamt of yet.

These will be rather different kinds of people to be recruited, trained and retained.

Stage E: <u>Eliminates</u> the boundaries between industries.

A 'financial services industry' will not exist in the very near future, as this industry integrates with the information industry, the entertainmnet industry, the retail industry, the manufacturing industry, and so on..

The tendency is clearly for the emergence of "mega-corporations" spanning the existing industrial divisions. How will these mega-corporations be different from old-fashioned conglomerates? Well, conglomerates held an unrelated portfolio of business for the purpose of balancing potential income over differing business cycles in different industrial sectors, and the reason they failed was that understanding and experience of one industry did not necessarily enable you to manage another industry; moreover, having a conglomerate was fine when your industries were doing well, but of course we have seen supposedly counter-cyclical industries converge, so that they have turned sour at very similar times. In any case, the new megacorporations will leverage the emerging changes in the relationship between customers and producers across industries. They will reconstruct the value chain – again across industries - by providing customers a confidential, convenient, quick, cheap way of getting an extremely wide range of products and services electronically.

This is already beginning to happen in many industries. Banking has already begun to merge insurance and capital market activity to become financial services. And this in turn is beginning to merge with retail and leisure and manufacturing. At present, the "merging" is one-way. That is companies formerly only in retailing or manufacturing or information services or leisure or transport are entering the financial services field. Naturally, this cannot remain a one-way affair. Financial services companies, notwithstanding Deutsche Bank's abandonment of its cross-sectoral portfolio, will enter other industries. Because the question is going to be: who will build the chain across industries which can supply a range of cross-sectoral products and services to the customer. Some people don't believe this is possible. They will of course never attempt to build such megacorporations. But some people believe this is possible. They are the people who will attempt to build these megacorporations. Many will fail in their attempts to build these megacorporations. But you don't need many megacorporations to succeed. In fact, not many can succeed. There is room for somewhere between twelve and twenty-five megacorporations, allowing for effective anti-trust activity on the part of government. Without that activity, there is room for perhaps five megacorporations in the world. Today's industrial logic is undoubtedly in favour of the creation of megacorporations.

But megacorporations are in the future, even if the not-very-distant future. Let us look at <u>the impact of all this on the present</u>:

AS A RESULT OF THE I.T. REVOLUTION, THE WORLD IS FLYING BLIND

1. Never before have we been confronted with over-capacity and over-supply in every single industry across the entire globe.

The single most important assumption upon which economic theory is based is, as you know, exactly the opposite: all economic theory is built on the assumption of scarcity of resources, not super-abundance. So all economic theory is in principle redundant and we need to revisit the fundamentals of economics. This is why economists are having such extreme trouble understanding our world.

2. Yet in this world of over-supply and over-capacity 3,500 children died yesterday… because there was not enough food, not enough water. What was merely a tragedy yesterday is both a tragedy and an obscenity to-day because none of this needs to happen and we can provide for the poorest in the world with no perceptible difference to our quality or standard of life. In fact, it is estimated that the additional cost of achieving and maintaining universal access to basic education for all, basic health care for all, reproductive health care for all women, adequate food for all, and clean water and safe sewers for all is roughly $40 billion a year--or less than 4% of the combined wealth of the 225 richest people in the world! This raises questions about the kind of world we are living in. It forces us to revisit the assumptions behind the services we all provide in terms of not just *what* we do, but also *why*!

In any case, forget trickle-down theory – it doesn't work in reality.

Though there is over supply, there are entire nations that are poorer than they have ever been, and the split between rich and poor has widened both within countries and across countries.

3. Theoretically, in capitalism, there should be no booms or busts because the free market should take care of individual distortions in the market place. Until the fall of the Berlin Wall…we all worked within very strong national boundaries so that was held up as the reason for "market distortions". Today we have a global market, with far fewer national distortions, yet the reality is that there is more boom and more bust. The result of this global market place is *unprecedented* boom and bust. Clearly, something is wrong with or at least lacking in our theories.

The result of this globalised economy is that it makes you vulnerable to parts of the world you do not know or care very much about. Who cared about the Baht? Or had even heard of the Baht? Foreign Direct Investment into China by starry-eyed Western capitalism created a flood of cheap exports from China which was the fundamental though not the immediate cause for the devaluation of the Thai Baht…which.created a knock on effect in SE Asia and thence to all emerging markets. Russia went into a tail-spin… which unleashed a global credit crunch and market jitters to this day.

Let me emphasis this point: Where did the problem start? Not with political incompetence in Thailand (which was predictable), but with a rush of capital into China! This is a strange world we have never been in before.

4. The result is that we need to be prepared for a whole range of scenarios - something which we have never had to do earlier. Companies and individuals need to prepare for *all eventualities.*

As an example close to home, lets look at the uncertainty created by the simple introduction of the Euro.

The intention of the Euro is to stabilise exchange rates across Europe, harmonise production costs and make trading across borders easier. Admirable. But is it going to work? There are in fact, so far as I can see, five different scenarios which might result from this admirable venture:

Scenario 1: Rapid corporate consolidation, and therefore immense socio-political problems.

If there is rapid corporate consolidation, this will be excellent for European customers, in terms of prices. It will also be excellent for company executives and shareholders in terms of European competitiveness against players from other parts of the world. But corporate consolidation will lead to a huge loss of jobs, at least in the short term. Already 20 million are unemployed in Europe. How many more jobs will be lost? We don't know. What will be the impact on the bottom line of each country's social and economic balance sheet? We don't know. Will the Stability and Growth Pact hold? We don't know.

But let us imagine, for miraculous reasons, that a different scenario occurs:

Scenario 2: Rapid corporate consolidation <u>and</u> socio-political success.

If this happened, the Euro would quickly supplant the dollar as the world reserve currency. Impact? A tidal shift in geo-economics. Currently 70% of world trade is dominate by the dollar, even though the US has 24% of world GDP, and the Euro-zone (as distinct from Euroland) has 29%. Remember too that the long-term fundamentals of the dollar are weak: it is overvalued, there is an unprecedented current account deficit, a growth slowdown, and US household savings are at the point where they could go negative. In my view it is not so much a case of IF the Euro takes over from the dollar, but a case of WHEN. And if there is rapid corporate consolidation in Europe combined with socio-political success, there is no doubt in my mind at all that there would be an enormous geopolitical shift to the Euro.

However, a third scenario is possible too:

Scenario 3: Economic and socio-political <u>failure</u>

Never have so many people subjected to so astonishing an economic experiment. What if the experiment fails? Europe will descend into a new dark ages. 30-40% of the world is already in some kind of recession. Another 29% (Euro-zone) will not be fun and games for the rest of the world.

So let us turn to a more pleasant scenario:

Scenario 4: Little economic consolidation but socio-political stability.

Within Europe, it is still possible that little economic consolidation may take place. Why? Because the credit crunch bites and there are not enough resources available; or people may simply not have the stomach for it. It is tough enough just surviving, and the extra risks from mergers and acquisitions may not be offset by any real advantages for many players. In such a scenario, there would be few benefits to customers, executives, companies or shareholders, but there would be little increase in crime, little political and social instability or upheaval.

This leads to what I hope is the most likely option:

Scenario 5: Slow consolidation - and political stability.

The difference between this scenario and the previous ones is simply that of the time-frame: in all the previous scenarios I am looking at developments over five years. In this scenario, I am assuming the fourth scenario but suggesting that corporate consolidation takes place slowly after that, somewhere between 5 and 25 years, time so that we have the time to work through the socio-political issues wisely, for example the issue of the lack of synchronisation of our political and economic systems in the Euro zone.

This is definitely the best scenario overall, and I happen to believe that this is what is most likely to happen, certainly at the level of the middle-sized companies which are the heart and stomach and muscles of Europe (whatever may happen to the few giants we have). But it may be that my belief in this scenario is just because I am an optimist! But the point is this:

If you are the top team of any company anywhere in the world you have to prepare equally hard for five different worldwide scenarios – simply as the result of this single factor, the introduction of the Euro.

Let me recapitulate up to this point my argument about our being in a world in which we are “flying blind”. We live today in:

A world of over production and over-capacity in every industry (alongside unprecedented starvation and deprivation across the globe), calling all economic theory fundamentally into question

A world of ‘booms and busts’, which should not in theory be happening in worldwide free markets

A world of global interdependence (meaning that small adjustments in one corner of the world can lead to major over-adjustments in other parts).

A world where captains of industry need to prepare equally hard for many fundamentally different eventualities.

I come now to the last point which I think is absolutely necessary to understand the world in which we are “flying blind”:

The global market by its very structure biases things towards mega-corporations on the one hand, and on the other hand towards a great number of niche players represented by entrepreneurs who are able to move faster and exploit windows of opportunity either before the megacorporations step in or to which megacorporations are blind for some reason .

This means the stripping out of the middle-sized companies (through merger and acquisition), and the stripping out of the middle classes, as the professional groupings become smaller.

Let us look first at the stripping out of middle-sized companies and establish that this is in fact happening and let us look at my sector alone for the moment but I assure you the facts are similar in every industry:

- The number of US banks shrank from 14,210 in 1986 to 9,530 in 1996 (a decline of around a third in ten years!)
- In 1980, the biggest 25 US banks generated a third of the industry's net income, in 1997 they generated more than half
- In 1990 the top 25 US mortgage originators did 26% of the business, in 1997 they did 45%
- In 1987, the top 10 US credit card companies held 45% of all outstandings, in 1997 they held 57%
- The top ten mutual funds companies now control 47% of all assets
- The top 15 home and auto insurers write roughly 2/3rds of all policies….
- In California, Florida and North Carolina (where the "big bang" happened long ago), the top 3 banks control more than 50% of all deposits
- In the developed world as a whole, the top 3 banks share 58% of all deposits

By the way, the reason for the current over-valuation of the dollar as well as of the largest companies is simply the enormous amount of cash which has been transferred to the stock market and which focuses either on the largest currency or company, or on the smallest (many of the small currencies are also overvalued): 98 per cent of money allocated to the London market by the large investment firms is invested in FTSE 100 stocks (according to DKB).

If we agree that the stripping out of middle-sized companies is happening, then it is worth asking why it is happening:

- As financial products are commoditised, only the biggest players will be able to support the colossal advertising and promotion efforts - anywhere from $100-300 million a year in the US alone - necessary to build and support a truly national financial brand. Global branding of course requires somewhere between three and four times that budget.
- So too with technology. The top 10 US banks today each lavish better than $1billion on technology every year.

These factors apply in every industry, but an additional factor in other industries is the cost of R&D – e.g. it costs many millions, even billions, to discover a new drug, invent a new plane or a new telecom switching system.

Further, in the manufacturing industries, the cost of compliance has increased steeply and will increase even more steeply.

Finally, the cost of even a day's delay in launching a product now cuts into profits so steeply, that the entire process from conception to delivery of finished and approved products needs to be made as efficient as possible, which means huge continuing investments in every area of a company: in pharmaceuticals, as our friends from that industry here will confirm, one day's delay in launching a product can mean a million dollars lost in profitability.

We now come to the most worrying fact:
If the middle-sized company is being strippped out, so is the middle-CLASS (that is, the middle-class individual and middle-class family). In the US and Europe, we see not only blue collar jobs disappear, but also white collar workers are being stripped out in what is becoming a world of short term employment, just-in-time production requirement, and substitution of skilled and unskilled work by software. Not surprisingly, real wages have fallen for 80% of Americans for the last twenty years. Sixty percent of all U.S. jobs created since 1979 pay less than $7,000 a year (Fian Fact Sheet, Welfare by Corporations is Corporate Welfare). If you want to check other facts of this nature, please visit >http://www.foodfirst.org>.

These are revolutionary times.

Without a middle class:

- how do you hold a society together

- how do you run an economy
- How do you contain the social tensions between the ‘haves’ and the ‘have nots’

The middle class is of course a purely post-Feudal invention. Henry VII in England almost created it single handed, due to his need for tax collectors. This was, however, a rather thin middle class, and it was not till Victorian times that a proper middle-class emerged, due to the social engineering of right-wing governments which recognised that they needed a middle class to hold society together. Why is a two-tier society so volatile? Enlightened or dissatisifed lower class leadership. But reversion to a have versus have-not situation is happenning despite the illusion of a middle class.

Fortunately, there are at least a few people who care enough to think systematically about how to create a world that is safe and just and peaceful for us all.

But let us take the next set of questions: how many people do we ***need*** to employ in an IT driven world? What sort of people do we need to employ in the not very distant future - say 10 years – within the life span of most in this room? And what do we do with all the rest of the people?

If we take that ten year timescale, many of the organizations represented here, will cease to exist. This is hard thing to say and a harder thing to hear. But the predictions are that between twelve and twenty-five megacorporations will dominate the world.

“Scared? Don’t Be!”

These are times of fundamental change for everyone. But these are also times of glorious opportunity for the clear-eyed and daring.

What do I mean by clear-eyed?: Those who don’t duck the new reality but look at it squarely in the eye. (Most of us are running around unable to look at the new realities because we are so taken up with busyness and activity!)

What do I mean by daring?: Those who face up to the worst that could happen and then decide to create the best that there could be.

This is the first time in history that we can really design organisations which will be fit for the future. If we wish to do so, we will need to re-examine:-

- What we want to achieve (purpose)
- How we set about trying to achieve it (methods)
- Why it is worth achieving (values, ethics and spirituality)

“Unless we look at ourselves very radically as individuals, as families or as corporations, the storms of the future will be so quick, so deep and so violent that not many will survive”

Yet it will be a wonderful world for entrepreneurs.

So we need to be daring. We need to be clear-eyed.

Friends, these are terrible times. They are also wonderful times. They are times of which we can make what we will. These are times of opportunity. The question is: will we use the opportunity? And will we use it only to cater to our own greed or will we use it also to make the world a place that is at least minimally human?

Thank you.

Main house: Selected points from discussion over dinner

- Object oriented technology will make an incredible impact by 2001, meaning that the current demand for IT specialists will wane.

- **-** 70% of the US population has no net wealth. 1% of the US pop owns 40% of the net national wealth.

- **-** Expectations doubled in the years 1986 to 1994 in terms of quality of life. Due to the expansion in consumer credit, people are living beyond their means.

- Not yet a willingness to look into a new way of thinking about the economy.

- Balance sheets do not tell us the whole story about the company, hence the current interest is measuring the prime asset, knowledge.

- Measures we use are out of date. Jobs disappear but are replaced by something more demanding eg the typist becomes the admin assistant, then moves up the managerial hierarchy. How many people will be capable of doing the enriched jobs in the future. Qualifications for employability are going up all the time.

- Not that far away 5-10 years is only two planning cycles.