21ST CENTURY TREASURERS

PROFESSOR DANIEL HODSON DISCUSSES THE IMPORTANT ROLE TECHNOLOGY HAS TO PLAY IN DECISION-MAKING. YET TREASURERS FEAR NOT, HUMANS ARE STILL FAR FROM BEING OBSOLETE.

There are those who argue that technology will grind on until it can ape human beings and all their activities, including their thought and decision processes. That may well be so in some era a long way ahead of us, but there are limitations, which we will look at in this article, on technology in predicting the future which impacts on their practical use in decision making.

THE TOTALLY UNEXPECTED RANDOM EVENT. The totally unexpected random event has a dramatic effect on outcomes. The sophisticated statistical approaches used in high-level risk analysis are technology driven and take account of such happenings – at least in terms of whether they are sufficiently possible to justify, for instance, the setting aside of capital by a firm to meet its financial impact, should it occur. These are marginal possibilities, but they have a tangible likelihood of occurring.

However, businessmen know that business is about risk, and their main concerns are about most likely outcomes – not about potential events with only a marginal chance of occurring. And yet they know that their skill may depend on predicting what the inexorable logic of a computer may miss. They know that the skill of successful decision-making depends on logic, knowledge of human nature (both individual and *en masse*) and intuition.

What is certain is that technology at its current stage of development and in the foreseeable future cannot totally understand or be a replacement for decision-making purposes with regards to either the complexities of human nature, and its contingent illogical emotions and motivations, or human intuition.

ILLOGICAL STRUCTURES. Nor does technology find it easy to deal with the frequently illogical structures created by human organisations and society itself. Therefore, Eurostar, to the casual observer an extraordinarily sleek example of technology, is actually a much more complex animal than need be, due to the fundamental differences between British and French railways. This is compounded by the various requirements of the Channel Tunnel which links them – for instance, different quality tracks and their bends and tilts, variations in the receipt of power and dissimilar signalling arrangements. It requires far more technology, with commensurate cost, to deal with these problems, which only man created. Such imperfections highlight the limitations of technology in the short term, in the face of human obstacles, and will continue to determine where the line can be drawn, where in effect the inexorable progress of technology is thwarted, until appropriate agreements can be made and procedures and regulation harmonised. Since it is often in the interests of intermediaries and others to perpetuate these imperfections (for they usually create more opportunities for profit than totally automated transactions), the progress towards the inevitable triumph of technology can be agonisingly slow.

HUMAN BARRIERS. To this add the existence of, and mechanisms associated with, financial organisations, and particularly governance and the normal hierarchical decision-making structure, which ensures human intervention, as laid down, in corporate and in particular trading decisions. In other words, nobody in any company has unlimited authority when it comes to committing that organisation. Human barriers to technological advance can also revolve round the sheer opaqueness of much of the crucial information needed to process a decision. A machine can only produce a half-baked answer if it simply has a fraction of the total information available to reach such a decision.

There is also, of course, the human interaction part of transactions. No machine has yet been able to reproduce the relationship-building, marketing and sales process, built as it is on a combination of logic, emotion and the intangible aspects of the building of regard and respect between individuals.

COMMUNICATIONS AND TECHNOLOGY. Finally in this generic analysis, let's look at communications and technology. While technology could and would greatly improve the immediacy of communications – for example, in ensuring that breaking news got across not just to the media, but direct to the ultimate audience – and could assist its subsequent editorial interpretation, commentary and spin, the latter would still require human intervention, particularly between news source and the media. This is why you find senior corporate figures talking one on one to powerful and

EXCHANGES AND INTERMEDIARIES

In my speech I dealt in more detail with the effects of technology on exchanges and intermediaries, areas which are perhaps not of such direct relevance to treasurers. The essence of my point is as follows.

EXCHANGES

Exchanges are likely to become electronic utilities, comprising a number of individual products, each having a mini-monopoly on global liquidity. Acquisitions will fulfil the inevitable strategic need for economies of scale and for adding more such mini-monopolies. Exchanges' marketing propositions will focus on liquidity and increasing listings and new products, many of which will be attracted from the OTC market by the advantages of transparent, automated trading.

INTERMEDIARIES

Intermediaries or brokers will, despite straight-through processing, continue to have a major role as technology advances, standing proxy for their clients in the clearing and settlement process, providing the fulcrum of most regulatory regimes, commentary on market news and events leading wherever possible to transactions, providing increased transparency in aspects of traded markets, and marketing ad distributing exchanges's products, to their own benefit.

A full transcript of the speech is available at www.gresham.ac.uk.

'TREASURERS ARE THE 'JOHNNY-COME-LATELIES' OF THE FINANCIAL WORLD AND AS A RESULT RATHER MISUNDERSTOOD'

respected journalists, to obtain the best possible construction on the events concerned. In communication of this kind, the best copy can depend greatly on human intervention.

WILL TREASURERS BECOME OBSOLETE? Although my lecture also dealt with the effects of technology on exchanges and intermediaries (see text box), here I will address only the issues relating to treasurers. Treasurers are the 'Johnny-come-latelies' of the financial world and as a result rather misunderstood. I well remember being asked, in rather deflationary terms, by my Chairman, as Group Treasurer of a top 100 company, what I exactly did because he hadn't a clue.

Treasurers have a comprehensive portfolio which might well be challenged by technology, for much of what they do is potentially simulated by intelligent computer systems, particularly in the transactional aspects of their roles. Treasury departments are highly automated, often with direct interfaces with banking and other suppliers. Treasurers, who often have a tendency towards 'techie-dom', usually pride themselves on their leading edge approach to available hardware and software. Nonetheless, their roles are protected by the limitations in technical advances set out at the start of this discussion.

For a start, they are if nothing else financial decision makers, financial engineers with a deep knowledge of financial markets. Therefore, they form an important role in the chain of command or governance of a company at the very basic level of 'what is the level of risk we wish to take in investing our surplus resources, and in the level of gearing which we are prepared to undertake – that is, how much debt of any type are we prepared to take on?' And within those parameters, 'what exposure are we ready to accept in relation to any one enterprise, for example, bank or issuer of bonds or other fixed interest securities?' These governance requirements and key decision-making of human organisations cannot be replaced by technology.

In making decisions on their own responsibility within these self-determined limits, they will, again, be mindful of the limitations of technology. The latter's inability, for instance, to predict recent corporate collapses, and, at a milder level, downgrading from a credit quality standpoint, indicates how a broader, intuitive, view of portfolio management can be of benefit, not only for making decisions in respect of individual situations, but also in terms of the setting of a risk framework for asset portfolios.

In addition, in their responsibility for internal corporate structure, so often driven by considerable and complex differences in tax regimes, they will also face decisions which may in part be driven by technical analysis, but may also require significant amounts of judgement beyond that offered at this point by computers. For instance, the likelihood of a particular tax-related decision to be subsequently challenged in the courts, and the extent to which control over corporate resources may safely be surrendered to offshore entities.

PROFESSIONAL JUDGEMENT. Of course, they will be in receipt of advice – which may be conflicting – not only from independent third-party advisers, but also from exactly those intermediaries, a part of whose existence in this age of technical development may be justified by its provision, as I argue above. A successful treasurer will be a person of keen business judgement, with both analytical qualities and the ability to take a wider view of human unpredictability in the context of portfolio investment, weighing it all in the balance and sifting it for the best possible decision.

Whereas technology operates best only in conditions of utmost transparency, the markets in which treasurers buy services range from totally transparent to totally opaque. Again, it is this at least partial lack of transparency that technology cannot plumb which treasurers must regard as part of their key professional skills. For instance, there is no more untransparent market than that for the charges relating to bank transactions, not least because comparisons are so difficult to achieve – and the banks like it that way. Also, part of a treasurer's skill is to find the lenders, the depositaries, the investment bankers with sophisticated products in a banking market place which does not always sell itself effectively, and where comparisons are often difficult to achieve, particularly where the product is available over the counter or one-to-one from banks, as well on a totally transparent exchange.

Nonetheless, marketing from suppliers will play an important part in their life, for because of the very opacity of much of the market, a wise treasurer will dedicate a certain amount of his or her time, or at least that of a trusted subordinate, to receiving calls from bankers

and others in order to keep in touch with whatever is on the market, both in terms of financial products, and, indeed, for reasons set out above, of software relevant to their activities.

I have dedicated a significant part of a recent lecture to the subject of bank and other relationships, concluding that their establishment and maintenance – on both sides – is not only key in ensuring that both make the best of the actual and potential business between them; but also that they (in the case of the treasurer, the banking counterparty) are available when times are tough. Bob Hope said that a banker is someone who will lend to you only when you don't need it; it is the treasurers job to see that the banker will lend precisely when the former needs it most. This is the greatest test of the quality of relationships both transactional and human, the latter incorporating trust, respect and positive experience, and virtually impossible to reproduce in a digital form at times of stress. Only intelligent and professional human beings can develop and manage such relationships.

Alongside relationship building, the greatest test of a treasurer's skills, and one which is constantly on display, is that of negotiation. He is usually constantly involved in transactions, borrowing money, buying ever more sophisticated derivative products, making strategic equity and fixed interest decisions on this own balance sheet and that of his pension fund and the like. The underlying products involved are often complex, both in terms of pricing, behaviour as markets move up and down, and structure. He must understand them thoroughly and negotiate accordingly with their purveyors. It is at this point that he can make the greatest impact, positive and negative on his corporate profit and loss account, and it involves human professional skills way beyond those which could be reproduced by technology.

REMORSELESS PROGRESS. Technology will continue remorselessly on its course of replacing human analysis and decision-making. Four areas where it is not likely to make rapid progress are:

- in predicting the logically unpredictable;
- providing commentary and editorial in communicating new and events;
- dealing with disparate human organisations, social, fiscal, political and corporate;
- coping with lack of transparency; and
- the emotional, non-tangible aspects of relationship building and marketing.

I believe treasurers too will embrace technology but will retain key roles beyond mere automation: setting the risk and structural parameters for their companies, decision-making within these limits, cutting through the opacity of much of global financial markets, relationship building and negotiation.

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This article is based on a lecture Professor Daniel Hodson gave in February, attended by Angela Knight, Chief Executive, APCIMS and Gareth Jones, former Managing Director Treasury and Wholesale Banking, Abbey National and former Chairman of the Association of Corporate Treasurers.
The lecture was part of a series of lectures on *Strategic Issues for the 21st Century Board*.