Organisational Leadership, Multitasking and Multiple Timescales*

Prof. Colin Coulson-Thomas

For organisational leaders multi-tasking can be a particular challenge. As a result of their positions, a wide range of internal issues are referred to them, while many external communications are initially addressed to them. Some protection my be provided by personal assistants, but with so many matters competing for their attention, devoting sufficient time to each of them can be difficult even when they are not in conflict. The challenge is compounded when leaders have to handle and balance the imperatives of short-term problems, some of which may require immediate responses, and longer-term issues such as climate change, protecting the environment and sustainability.

Organisations and their leaders need to find ways of screening issues, challenges and opportunities, assessing them and addressing them in an appropriate way in terms of how they are handled, when and by whom. Inappropriate treatment can have adverse consequences, as can the overloading of colleagues to whom leaders delegate. Individuals and other organisations may feel short-changed if a matter of great importance to them is quickly dealt with by an automated and/or standard response or by someone perceived as "junior". An inadequate reaction to a competitor's price cut, a new business model, a hacked system or product failure could threaten an organisation's existence.

Multitasking and Decision Making

Multitasking can result from circumstances. New demands may arise that need to be accommodated as headcount is reduced. From a positive perspective it could be evidence of flexibility, increased capacity to do more with less and greater competence of those concerned. Yet as tasks multiply might one become a Jack of all trades and master of none? Could trying to do too much result in less being achieved? Does multitasking harm relationships and reduce productivity (Crenshaw, 2008)? Sometimes it is only when particular situations arise that we learn that leaders and directors are reaching the limits of what they can handle and are not able to do justice to all of the items on the boardroom agenda. On occasion it may be the last straw that breaks the proverbial camel's back.

Allison's (1971) classic study of the Cuban missile crisis questions rational actor assumptions and raises issues that should concern boards in relation to the risk of overloading, its consequences and coping mechanisms such as oversimplification and reducing the number of options considered. Rewritten as more information has come to light and documents have been declassified, there is much that business leaders can learn from this case study examination and the literature relating to the management of international crises (Allison and Zelikow, 1999). In an area such as climate change, stakeholders may vary in their views on whether and when a crisis point has been reached.

Multitasking can make particular cognitive demands involving different parts of the brain concerned with retrospective memory, prospective memory and planning (Burgess et al, 2000). It can lead to a higher memory load. When interruptions result in a loss of information it can also cause mistakes, especially in a high pressure context (Laxmisan, et al, 2007). Given the longer-term challenge and consequences of climate change, should its consideration by a board and corporate responses be kept separate from short-term issues and where possible given undivided attention, perhaps involving a committee or working party of directors?

Categorising and Prioritising Issues

When a reaction is needed to a crisis, a marketplace event, a competitor move or a legal or

regulatory decision one's hand may be forced. Where there is a short window of opportunity to exploit the costs of delay and trade-offs could include the implications of missing the boat. How should one handle important issues that may be real and of concern to many people and, while an immediate and definitive response may not be expected or possible, could have serious and growing consequences over time if an appropriate series of actions are not initiated? How should one address a longer-term challenge such as coping with climate change or safeguarding the environment?

One can set routing and prioritisation criteria, whether scale, scope, reach, impact or value and agree priorities, for example to favour a key customer or particular opportunity, or to concentrate on areas that are visible to customers or a differentiator or source of competitive advantage. However, when faced with multiple tasks and competing claims upon time, there is a risk that urgent matters brought by those who are pushy and persuasive and backed by influential vested interests may be dealt with, while more strategic and longer-term matters involving interests that are more diverse and/or distant and might require a collective response are perpetually put on the back burner.

For some organisations there might be a risk of legislative, regulatory or public policy change. On the first of June 2017 President Donald Trump announced the withdrawal of the United States from the Paris Agreement (2015) on climate change. His decision attracted widespread criticism and expressions of regret from political leaders around the world. The decision was taken to fulfil a campaign pledge aimed at protecting American jobs in particular sectors and locations, yet already across the country many more people are employed in renewable energy and solar power than in coal mining, one of the activities the Paris Accord is seeking to reduce. Political uncertainty and public distrust can increase a board's sense of exposure and unease.

Handling both Challenges and Opportunities

External climate change, environmental and sustainability pressures often come together in the boardroom where directors are expected to take a balanced, holistic and responsible view from the perspective of a total organisation and its stakeholders. An integrated corporate response could be composed of short-term fixes and longer-term initiatives, some of which may be collaborative and many of which might impact different groups in varying ways. Within the mix of matters for decision, there could be both problems and opportunities. There may also be contending interests to balance or reconcile. Some changes take longer than others. The process can require multi-faceted juggling and uncertain start-up and crawl out costs against a background of market and political uncertainty, disruptive technologies and changing stakeholder expectations and priorities.

Whether international efforts to slow global warming succeed or fail, there are, and may continue to be, unprecedented opportunities for smart entrepreneurs (Coulson-Thomas, 2017a). Some companies may redesign their products or rethink their services in the light of whatever changes occur. Some potential beneficiaries are easy to identify. For example, higher rainfall and rising sea levels create opportunities for flood protection offerings and manufacturers of pumps and drying equipment. Those who might gain from a worsening situation may be less obvious. If temperatures rise should clothing manufactures launch lighter weight garments? Should food and catering businesses change their recipes and menus? Companies vary in how they respond to opportunity. Some leaders and boards are more positive and better able to juggle competing interests than others.

To reverse a phrase, one person's poison can be another's meat. A failure to reduce global warming will create opportunity for some alongside the problems it is likely to cause for many others. The potential beneficiaries of failure should not be regarded as vultures, but as welcome helpers for those coping with downsides and having to adjust to a deteriorating situation. For a period, many areas are likely to become worse before situations are stabilised. But what about turning the corner, reversing trends and positive opportunities to improve our prospects? Are there individual or

collective and complementary steps that businesses, entrepreneurs, communities and Governments could take and markets could deliver to control and even reduce global warming? If so are current corporate and public governance practices capable of making them a reality (Garratt, 2017)?

Shared Tasking and Collaborative Responses

Handling some tasks can require collaborative responses that take account of the actions of others. In areas such as solar power, prices continue to fall as technology advances, volumes crank up, manufacturers move along learning curves and take up increases. More home owners and communities have the prospect of off-grid independence or earning income at certain times by feeding the electricity generated by their solar panels into a grid. Future prospects are encouraging. Roofs represent a significant proportion of the footprint of many villages, towns and cities. From a sustainability perspective could they be used to collect rainwater and generate solar power?

In many arenas there is potential for public authorities, people and organisations that operate in different sectors, for example solar power manufacturers, builders, architects or planners, to collaborate. Some boards are reluctant to cooperate due to concerns over control, the protection of intellectual capital and the cost and potential distraction of concluding and managing collaborative arrangements in relation to the benefits. Governance arrangements that embrace networks of people and organisations who are working together to achieve common goals and encourage creative multi-actor collaborations can increase and enhance innovation (Torfing and Triantafillou, 2016).

In many situations, creativity and further innovation is or may be required. Markets can be flexible and quick to respond where there are opportunities and a relative absence of constraints. They can provide incentives to explore new areas of opportunity. They can harness the inputs and aggregate the independent decisions of a great many separate operators, which has advantages over political decision making through periodic elections and decisions by Governments and public bodies (Friedman, 1962). Ministers or officials can make the wrong call and only pursue one option which may fail, as opposed to many contending solutions, one or more of which might succeed.

In comparison with the dispersed and diverse responses that can emanate from markets and to which a great many people may have contributed, decisions taken by Government may take place behind closed doors and involve relatively few people who can become targets of lobbying. They may be influenced by vested interests or, in the case of politicians, a felt obligation to reward their supporters and financial backers. Consultation is often limited in order to preserve secrecy ahead of announcements. It is little wonder so many regulations and other Government measures are crude instruments that impose significant costs upon businesses and inhibit innovation (Crews, 2017). Some tasks are mandated or there are rules, laws or regulations covering how they should be handled. Leaders sometimes have to respond to Government diktats rather than be proactive.

Regulatory Influences on Task Handling

In many jurisdictions a variety of laws and regulations have been introduced to protect the environment. The supply of energy and water, and the utilities generally, tend to be relatively highly regulated with market players requiring a license to operate. Regulatory and legal controls can be blunt instruments as well as costly. If inflexible, they can inhibit innovation. In the environmental arena they may be difficult to develop, implement and monitor, can involve time and cost for all involved, and there is often a risk of unintended consequences (Mejia, 2009). If only periodically reviewed and updated, they can also lag behind technological developments, other innovation and the emergence of new business models. In addition, they may fail to address new possibilities.

Businesses in many countries could benefit from a review of the role regulatory and other public

bodies should play and how one ensures they remain current and relevant, without unfairly reflecting vested interests. Regulatory breaches can require an immediate reaction, while addressing the intentions of regulators and legislators may require longer-term and collective action. How should one protect, price and report the use of scarce natural capital? Should activities be rated and scarce resources be priced in such a way as to ensure that necessary, important and high value-added uses have a priority? Would it be better to focus upon incentives and other inducements to encourage a change of behaviour (Thaler and Sunstein, 2008)?

Mention has already been made of the scope that exists for collaboration across sectors. License conditions and regulations are sometimes sector specific. Addressing environmental and climate change issues may also require coordinated action across value chains to make them more sustainable, or separate arenas where there are interdependencies, such as between the environment, climate change and health. For example, both high levels of pollution and high temperatures can cause additional fatalities, particularly among vulnerable groups such as the elderly.

Boards need to consider how to integrate legal, regulatory and ethical issues and concerns, their accountability for environmental and related matters, whether to seek carbon neutral and other outcomes, and how to report their aims and achievements in such areas. A project plan may be required to manage the diversity of short and longer-term tasks a determined response might require. What forms of environmental risk and impact assessment should be used? Should integrated sustainability reporting be adopted? Who should undertake these activities? How should pricing or related subsidies and taxation be used to achieve environmental goals (Kreiser et al, 2015, Tybout, 1972)? How should one assess, rate, measure and verify what has been achieved?

Creative, Innovative and Entrepreneurial Responses

Existing approaches and incremental improvement may not be sufficient to achieve the changes required to cope with climate change. Pressure to conform and comply, shared assumptions and norms, and common approaches and understanding sometimes drive out the diversity and challenge needed for more creative, innovative and entrepreneurial responses (Bennis and Ward, 1997). If there is both a requirement and a desire to create new and better options and choices, companies should try to remove internal and external barriers to creativity, innovation and entrepreneurship and create an environment in which they can thrive (Coulson-Thomas, 1997, 2016b, 2017b and c). Creativity and innovation in how multiple tasks, involving multiple parties and interests and multiple timescales might best be handled and associated new ways of working may be required.

Openness to new ideas and a constant willingness to explore opportunities to develop and improve, including when at the height of success and when stakeholders are content, can be essential for remaining relevant and staying at the cutting edge (Catmull and Wallace, 2014). Engagement may need to proceed task handling. In a business and corporate context innovation, progress and even survival can depend upon continual engagement with stakeholders, to assess their views and appetites for change, risk and trade-offs. It can also require the constant monitoring of developments and possibilities, the challenging of past assumptions and the regular questioning of cherished beliefs and practices (Coulson-Thomas, 2001 and 2017b and c).

As tasks multiply, a scheme of delegation and the extent of empowerment might need to be reviewed. People may need a degree of freedom if they are to challenge, question and be creative (Williams, 2016). Some might welcome the opportunity to experiment with new ways of operating and the space to develop and test their ideas. The author has set out ten essential freedoms for removing organisational constraints and liberating latent potential by allowing people to work, learn and collaborate in ways, and at times and places, and with the support that best allow individuals and teams to give of their best and be creative and productive (Coulson-Thomas, 1997). When

conditions are right for the people and relationships involved they can flourish and be fruitful.

Throughout history significant breakthroughs in thinking have been caused by relative outsiders who have challenged complacent orthodoxy (Kuhn, 1962). Inspiring and successful directors are often more open to contributions from new sources and directions. They look beyond the "normal suspects" and welcome exposure to fresh ways of looking at situations, problems and opportunities. They are alert to new voices and are attracted to those who, like themselves, are curious and restless explorers. Openness, curiosity and non-conformity are associated with the creativity and entrepreneurship many organisations and their people require to cope with multiple pressures and changing requirements and recognise and address opportunities (Duxbury, 2012).

Sustainable and Longer-term Growth

Compliance with response time norms can complicate the handling of a portfolio of diverse tasks. Many families and institutional investors have a longer perspective than dealers who monitor share price movements, or those who think in terms of particular ventures or projects. They may prefer to carefully select, buy and hold shares for the longer term, and hence have more of an interest in sustainable business growth. In relation to the environment and climate change, the ability of most companies to have any influence over global trends is limited. Even in sectors that contribute significantly to environmental damage and/or global warming, a business may be one of many possible players. There may be variables over which a board has little or no control. Understanding this may cause some boards to allocate a lower priority to climate change related tasks.

An aggregation of similar decisions by many companies and their customers and suppliers can have more impact. In a field like solar power one can see the collective result of many entrepreneurs and companies responding to similar requirements and local, national and global opportunities. Some of them in certain jurisdictions have been motivated in part by incentives and public subsidies. The combined result of all this activity and supply chains achieving a critical mass is that innovation and the development of relevant technologies have occurred and renewable energy costs are falling. However, for many other companies and their boards, it is business as usual. Environmental and climate change debates can seem remote. Responses are more disparate and their consequences and trends are more difficult to discern. The consequences of insufficient private and public collective impact are apparent in mountains of rubbish, melting ice and retreating glaciers.

Are there strategies that can be adopted within market systems to achieve sustainable business and development goals and "green growth", or are new approaches and very different models required? Are directors focused upon, and agreed about, what "sustainable" and "green" mean in relation to the activities for which they are responsible? Is their thinking, objective setting and corporate strategy influenced by the United Nations (2015) sustainable development goals? To what extent will transformational thinking and further innovation be required if business and political leaders are to cope with contemporary challenges and contribute to collective responses to them?

Do the lessons of history give us cause for hope or alarm? The historian Arnold Toynbee (1969) has pointed out that over the ages, including during his own lifetime, many generations have faced severe challenges. Progress has not always been linear and civilisations have come and gone, including as a result of climate change and geology, but people have often displayed varying degrees of resilience (Durant and Durant, 1968). Today there is greater connectivity and the means of more rapid role out of solutions that emerge. Some ancient wisdom may have been lost, but our initiatives and responses can draw upon a more developed scientific and technological base.

Breaking Free of Task Handling Constraints

Are some tasks put into the "too difficult" category that causes them to be put on the "back burner"? If progress is to occur, is a shift of focus and change of priorities required? Is this possible to the extent of allowing us to satisfy the Brundland Report (1987) test of "meeting current needs without compromising the ability of future generations to meet their own needs". At both corporate and national level leaders are addicted to models and patterns of growth that seem to require ever more of the same. Do people feel so obliged to deliver growth, that simpler and more affordable and inclusive options are not considered? Consolidation or scaling back may not seem attractive options for executives looking for promotion and hoping further expansion will create opportunities for them to attain higher salaried positions. Are some directors simply content and/or complacent?

Some boards may lack an incentive or the drive to change. They may feel their organisations do not have the capabilities, resources and creativity required to handle a task such as coping with climate change or developing more sustainable offerings and operations. They might worry about market and stakeholder responses and be reluctant to champion the more sustainable options and lifestyles that would create sufficient demand for the production of a new or changed offering to be viable. They may also be risk averse. Contemporary approaches to compliance, governance and risk management can be an obstacle to innovation (Coulson-Thomas, 2017b).

Kerryn Higgs (2014) has questioned our contemporary preoccupation with growth in the context of a finite planet. The greenhouse gasses that result are a significant contributor to global warming. League tables are invariably computed on the basis of the volume of current activities. There is often intense competition to be "number one" or within a group of leading entities. Some organisations have programmes and teams whose purpose is to improve their league table positions. What new forms of league table might persuade companies to play different games? How might reward and recognition policies be used to encourage a redefinition of success?

Should graphical representations of outputs and achievement be expected to point ever upwards? When many of the current generation of business leaders were at business school, case discussions invariably focused on increasing rather than contracting output. For political leaders, a slackening of growth rates usually means fewer seats will be won at the next election. Are there alternative indicators such as quality of life and happiness indices that could re-frame public debates? Should one wait for a change of emphasis and priorities, or set out to be a catalyst in bringing them about? By giving a lead and announcing a commitment to change, might a company attract the talent and stakeholder support needed to pursue a more responsible development path?

Stakeholder Requirements and Perspectives

The board of a listed company that is considering a change of direction and the adoption of a more sustainable business strategy may feel obliged to hold confidential consultations with significant shareholders, key customers and important suppliers and business partners to assess their viewpoints and perspectives on related issues ahead of a public announcement or drafting the narrative of an annual report. What is their view on the imperative for change? How supportive would they be of developments related to climate change and national and international goals and commitments? How sensitive would they be to disruption and price changes? Assessments could be made of the the extent and depth of care and concern, the strength of certain relationships and what it would take to preserve them. Showing that one cares about the environment and climate change and sharing a passion for change may be acceptable and helpful (Hochschild, 1983, Cardon, 2008).

Shareholders usually seek a steady and hopefully increasing flow of dividend income. How many directors would be re-elected if they announced a costly and disruptive downsizing strategy of significantly scaling back corporate activities in order to reduce pressures on the environment? How many boards have active programmes to de-list in order to have greater freedom to pursue

strategies that would make fewer demands upon scarce natural capital? Family businesses and innovative entrepreneurs who seek crowd sourcing support may have an advantage over listed companies in terms of freedom of action, but listed company directors with climate change concerns could still try to connect with those who are applying ethical investment criteria.

Many individual shareholders may be no better or worse than business leaders when it comes to being schizophrenic in their choices and mismatches between their thoughts, words and deeds. How many ethical investors or supporters of green parties are aware of the true cost of meat and have stopped eating it in order to reduce the greenhouse gas emissions of cattle (Rowe, 2016)? They may well be concerned about the environment and global warming, but when voting with their credit cards in the marketplace they may add to the pressures. Hence the value of making people aware of the environmental consequences of selecting different options (Coulson-Thomas, 2007 and 2013).

Many boards discuss climate change and environmental issues as potential problems rather than as an arena of opportunity. They worry about what additional regulatory requirements and costs might emerge and the implications of developments for their company's existing operations. Why do so many boards view shareholders as a constraint when many investors may accept the need for change? With the scientific knowledge, ingenuity and resources at our command, should we be more positive and proactive? Should more directors and boards actively discuss environment and climate change issues with shareholders? Should they actively seek their support for using corporate capabilities to identify and grasp opportunities to reach out to concerned citizens and customers and develop more innovative and sustainable responses and solutions?

Uncertainty and Longer-term Task Handling

Too many boards are exclusively concerned with how external developments will effect them and their companies. They should also consider the potential impact of climate change and related developments upon their customers and other groups, and what if anything they could contribute to helping these other people and organisations to cope and respond (Coulson-Thomas, 2007). Directors need to read the road ahead and consider the impacts of current trends. How will they affect customers and corporate operations? What could or should be done in response, either to address issues or take advantage of windows of opportunity that emerge? Short-term actions may be needed while longer-term responses are determined and changes of strategy and/or policy agreed. In some cases, one may be able to make projections and develop alternative scenarios.

For many companies there are significant areas of uncertainty. How will Governments respond with new laws and regulations? How determined will they be to make changes and over what time-scales? How would extra taxes and price rises affect the profitability of different offerings? For how much longer can certain activities continue? What if the public mood changes? Maybe there will be more pressure and demand for more proactive and positive corporate responses. People may reconnect with nature and be more concerned and engaged with the impact of climate change upon it and the environment (Wilson, 1984). Not reacting might damage a corporate reputation or result in the loss an early mover advantage. Those who wait on the sidelines may miss the boat.

Boards may have views and can estimate or guess, but they can never be sure of how other parties will behave, whether discontinuous change or an acceleration of a trend might happen, or if a high profile incident will occur. A critical mass of interest, concern and/or desire for action can arise and result in a tipping point (Gladwell, 2000). Might customer priorities and public opinion suddenly change? Where an established business might be defensive, and seek to preserve, project and protect existing investments and perceived strengths, more entrepreneurial and flexible ones might actively look for alternatives. Are there latent feelings and requirements that could be tapped and substitutes that could be quickly activated or provided?

Changing Direction

There might be so much momentum behind current patterns of activity that easily and quickly stopping and/or changing direction may seem as problematic as steering a loaded oil tanker away from some rocks that have come into view. If there is a possibility that it might be too late, one's own contribution could be but a drop in the ocean, and markets reward those why carry on making hay while they can, business leaders have to be very committed to tell people to stop doing what they know and drop current activities that support their families. One may need determination, passion, persistence and tenacity to achieve a change of direction (Baker, 1982, Cardon, 2008)

A combination of incentives and penalties may also be required. However, even if certain initiatives worked or looked likely to reign back activity that damages the environment, how committed would a Government be to enforcement that might lower growth rates and a country's international ranking, while at the same time reducing the Government's own income for spending on high profile projects that might buy votes? Will some be tempted to follow President Trump and pull out of, or back from, Paris Agreement (2015) commitments? Are decisions that involve short-term penalties and which might prove unpopular with sections of the electorate likely to be postponed?

Where there are public policy options, policy makers should consult with those likely to be affected by changes and seek to work with them when considering how best to implement them (Agrawal, 2005). Scientific and technological breakthroughs are occurring. Consultation may reveal more of an appetite for positive, aligned and collective action than one might have expected based upon past experience. Have some policy makers and boards become too introverted and cautious? Where and when consultations occur, they can provide an opportunity for a board to put its point of view and assess the potential for collective and collaborative action.

Collective Climate Change Action

People and organisations do not need to act alone, either in responding to external developments or in providing novel solutions to emerging challenges. They can co-create, collaborate and co-operate (Coulson-Thomas, 2014). There are new and relatively quick alternatives to listing and share issues that could be a way of raising the finance that is required. Some of those who are creative and have been innovative, and who might make suitable collaborators, may be identifiable such as winners of Golden Peacock Awards for Eco-Innovation. Are some boards so overwhelmed with existing tasks that they are reluctant to initiate new ones, especially those involving working other parties? Their handling can be tricky when the priorities of parties differ and their objectives are not aligned.

Collective will may be required if countries are to meet their Paris Agreement (2015) on climate change commitments. There are various biodiversity, coastal ecosystem and food, energy and water security challenges to address, new carbon capture, replacement and trading arrangements to consider, and economic, educational, financial, scientific, social and technological adaptation and mitigation measures to put in place. Are directors and boards aware of these issues? Do they see them as an opportunity? Have they considered the areas in which they might make a contribution either alone or in collaboration with others?

How engaged are directors with environmental issues and climate change related debates? For example, are solutions such as carbon trading shifting responsibilities and creating new problems rather than offering solutions (Lohmann, 2006)? How many directors even know what was agreed in Paris, what voluntary obligations their and other countries have signed up to and how their companies might be affected? In relation to expectations, how many directors feel their responsibilities are primarily to owners and those who buy from them and work for them rather than

the public generally? Is participation in collective environment and climate change discussion, and action and a positive and responsible response, the social responsibility of business (Bowen, 1953)?

Implementing Collaborative Responses

Following President Trump's decision, some Governments may want to demonstrate their continuing commitment to action to address climate change. Ministers may realise that while they may be held responsible for the welfare of their country's citizens, Governments, especially those in democracies, are often relatively powerless to reverse certain trends and trajectories. Joint Government-business action may be required. Will companies respond to approaches, overtures and opportunities to play a part in collective and collaborative action? If they do, the challenge may be to ensure that corporate and political policies and strategies are aligned (Bleischwitz, 2004).

Government departments and companies may both need to rethink certain strategies and policies and their attitudes to cooperation as a consequence of how external developments are unfolding. Do they have the people and capabilities to make a contribution to dealing with environmental issues and climate change? Should boards be refreshed to include people with more awareness of related issues and options? Given America's intention to withdraw from the Paris Agreement (2015), the time could be ripe for both consultation with stakeholders to better understand their priorities and requirements and board consideration of how best to proceed.

Some boards may need to realistically assess whether they have the capabilities, experience and skills to participate in, manage and monitor collaborations involving multiple public and private partners. Are they equipped to handle any new tasks that result? A monthly board meeting alone may not provide the strategic direction and oversight that a portfolio of climate change related projects and initiatives of differing timescales may require. New corporate and public governance and regulatory arrangements for effective collective action may be required.

Factors Affecting Policy Options

Task handling may need to be preceded by policy change. Climate change and related environmental developments impact directly upon certain people and organisations, for example those concerned with secure and sustainable energy, water supply and waste disposal and management. Developments and how others respond can have wider implications, for example for those concerned with public health. Developments can also create new opportunities for discussion and cooperation, not just with Governments, but also at city, town and or village level. Some developments may have an impact upon all businesses. Water use in relation to its supply is already critical in many areas (Gleick, 2014). Some boards will be more aware than others about what is happening around them and how developments might affect them.

Many people are unwilling to pay a significantly higher price for an alternative that would cause less harm to the environment and/or might contribute less to climate change. In some areas further innovation may be required if significant change is to occur. There are grounds for optimism. The International Energy Agency (2017) believes systematic and coordinated financial and policy support of clean energy technologies to the limits of what innovation allows could reduce greenhouse gas emissions to levels consistent with the mid-point of Paris Agreement (2015) targets.

Concerned companies and Governments can exercise leverage through their own buying power. Much will depend upon the combination of carrots and sticks that are used. Are there industrial strategies and/or regulatory policies, with related incentives and penalties, that might encourage beneficial change and relevant innovation? How would vested interests respond? Could one work with the grain of human nature by appealing to self-interest, for example to show how eliminating

waste can reduce cost and its recycling can generate income, or by celebrating those who have been successful with entrepreneurial responses to certain challenges as a result of viewing them as business opportunities and making money by helping others to adapt (Coulson-Thomas, 2017a).

Companies like Governments may have policy options, such as bans and prohibitions, incentives and relative pricing, innovation or the adoption of a different way of operating or business model to avoid certain constraints. One can shift priorities and develop new options such as recycling or reuse. One can co-locate or link operations where the unwanted outputs of one process could be utilised by another, for example using biomass to generate energy. There are many areas in which creativity, innovation and entrepreneurship are occurring and in which there are further opportunities for both improvement and breakthroughs. Much progress could also be made by sharing, exploring digital options, learning from best practice and supporting existing initiatives.

Possible Future Scenarios

Not all activities, operations and entities will survive. It may be in the public interest for some of them to cease. Without renewal, regeneration and continuing relevance some of them will come to a natural end (McConnachie, 2017). New challenges are likely to arise. Inter-generational differences of experience and perspective may lead to conflict. Younger generations will be adversely affected by a failure to address climate change issues, yet in some countries their economic leverage is less than their parents, and often they have been less likely to vote. Could they be energised to form a stronger lobby? Might customers and other stakeholder communities disaggregate into groups with widely differing views of the way ahead? Are there options that might appeal to some of them?

Much of what happens tomorrow will depend upon the sensitivity of today's directors to shifting stakeholder concerns. Could values change? Will more people seek and gain the approval of their peers by adopting lifestyles and consumption habits that make fewer demands upon scarce natural capital? As automation, expert systems and 3D printing allow people to design and produce locally what they need, will the long championed transition from large bureaucratic organisations to more flexible and responsive networks of relationships be speeded up (Coulson-Thomas, 1992)? Will people think in terms of fulfilling activities rather than jobs? Involvement in many of the creative arts is more sustainable than the purchase of many manufactured and processed products (Coulson-Thomas, 2017d). Will we see a renaissance of local and community arts and craft activities?

How we use our time may change. Technological developments such as artificial intelligence, drones and robotics may reduce the requirement for many contemporary jobs (Ford, 2015). A new generation of social entrepreneurs may inspire and lead social enterprises and projects like Bridges of Sports, which aims to create a sustainable sports ecosystem across India. Unlike a polluting vehicle, arts and sporting activities can have positive externalities, and audiences and spectators as well as practitioners can participate. A whole community can follow and take pride in a local creative artist, sportsman, sportswoman or team. Simply watching and enjoying can be much less demanding of scarce resources than other forms of consumption and more uplifting.

The decline of the West has long been a subject of discussion (e.g. Spengler, 1926 and 1928). Climate change affects in varying degrees all countries and companies operating in various belief, governance and political systems. Might working towards a responsible, collective and shared response to it provide an opportunity for collaboration across civilisations as an alternative scenario to the impending clash of them suggested by Huntington (1993 and 2003). Could this result in a further and more widely supported wave of globalisation, leading to different consumption and production priorities and simpler and more inclusive, fulfilling and sustainable lifestyles? Will some follow a traditional path of ignoring consequences and striving for dominance and material wealth?

Patterns, Trends and Portfolios

Directors vary in their ability to take a holistic view of the portfolios of tasks being undertaken across the companies for which they are responsible, many of which may be interdependent while others are in conflict. A board's perspective should be that of an organisation as a whole rather than that of particular vested interests. Boards should look for patterns, trends and implications. Are there common drivers or underlying root causes? Are the individual tasks much less important than their collective implications for the continuing relevance and value of a corporate vision, strategy, objectives and priorities? Sometimes it is only when multi-tasking at a senior level fails that a matter is brought to the board and its consideration triggers a change of direction.

Some boards might conclude that a different business or market model could represent a more sustainable way of continuing to operate (Coulson-Thomas, 2016a)? The barter and sharing economies offer many opportunities for more people to benefit from what we already own or have (Sundarajan, 2016). Making more intensive use of existing possessions and capital helps to reduce the exploitation of scarce natural resources. Such exchanges and sharing could contribute to enabling lower growth to deliver a higher quality of life, as well as enabling more artistic, caring, creative, fulfilling, inclusive, independent and resilient communities (Coulson-Thomas, 2017d)?

Entrepreneurial, market and collaborative responses to climate change are possible and they could complement the responses and actions of regulators and Governments. Innovative and more inclusive and sustainable responses will require imaginative, responsible and visionary leadership. Different strategies, priorities, approaches and models might well be required. New governance arrangements for handling portfolios of projects involving different partners and timescales may have to be introduced. Whether or not our future quality of lie will decline or improve in the face of climate change will depend upon our ability to influence it and to ultimately control it. We need boards that are positive, proactive, opportunity focused and collaborative.

Note

This article is based upon a theme and convention paper prepared by Prof. Colin Coulson-Thomas for the 19th World Congress on Environment Management. The congress was organised by the Institute of Directors, India and held from 7th to 8th July 2017, at the HICC - NOVOTEL in Hyderabad, India.

REFERENCES

Agrawal, Arun (2005), Environmentality, *Current Anthropology*, Vol. 46 No. 2, pp 161-190

Allison, Graham T. (1971), *Essence of Decision: Explaining the Cuban Missile Crisis*, New York, NY., Little Brown

Allison, Graham T.and Zelikow, Philip (1999), *Essence of Decision: Explaining the Cuban Missile Crisis* [2nd edition], Harlow, Longman

Bennis, Warren G. and Ward, Patricia (1997), *Organizing Genius: The Secrets of Creative Collaboration*, Reading, MA, Addison-Wesley

Bleischwitz, R. (2004), Governance of sustainable development: co-evolution of corporate and political strategies, *International Journal of Sustainable Development*, Vol. 7 No. 1, pp 27-43

Bowen, Howard (1953), *Social Responsibilities of the Businessman*, New York, NY, Harper & Row

[Brundland Report] World Commission on Environment and Development (1987), *Our Common Future*, Oxford, Oxford University Press

Burgess, Paul W., Veitch Emma, Costello Angela de Lacy and Shallice Tim (2000), The Cognitive and neuroanatomical correlates of multitasking, *Neuropsychologia*. Vol. 38, Iss. 6, June, pp 848–863

Cardon, Melissa S (2008), Is passion contagious? The nature and experience of entrepreneurial passion, *Academy of Management Review*, 34(3), pp 511–32

Catmull, Edwin E. "Ed" and Wallace, Amy (2014), *Creativity, Inc.: Overcoming the Unseen Forces That Stand in the Way of True Inspiration*, London, Bantam Press

Coulson-Thomas, Colin (1992), *Transforming the Company*, *Bridging the Gap between Management Myth and Corporate Reality*, London, Kogan Page

Coulson-Thomas, Colin (1997), T*he Future of the Organisation, Achieving Excellence through Business Transformation*, London, Kogan Page

Coulson-Thomas, Colin (2001), *Shaping Things to Come*, *Strategies for Creating Alternative Enterprises*, Dublin, Blackhall Publishing

Coulson-Thomas, Colin (2007), *Winning Companies; Winning People*, *Making it easy for average performers to adopt winning behaviours*, Peterborough, Policy Publications

Coulson-Thomas, Colin (2013), *Transforming Knowledge Management*, *A quicker and affordable route to high performance organisations*, Peterborough, Policy Publications

Coulson-Thomas, Colin (2014), Collaborative Capitalism and CSR, in J S Ahluwalia (Editor), *Strategy to Leverage CSR for Competitive Advantage*, New Delhi, IOD Publishing, 17th January, pp 61-74

Coulson-Thomas, Colin (2016a), Innovation, New Business Models and the Board, *Director Today*, Vol. II Issue IV, April, pp 7-11

Coulson-Thomas, Colin (2016b), Leadership, Innovation and Business Growth, *Management Services*, Vol. 60 No. 2, Summer, pp 36-43

Coulson-Thomas, Colin (2017a), Climate Change Opportunity and Corporate Responses, in Ahluwalia J. S. (Editor), *Managing Environment & Climate Change: Transitioning to a Sustainable Economy*, Hyderabad, IOD Publishing, 7 July, pp 25-37

Coulson-Thomas, Colin (2017b), Free Your Mind, *Accounting and Business*, July/August, pp 46-47

Coulson-Thomas, Colin (2017c), Stimulating Creativity, Enabling Innovation and Supporting Entrepreneurship, *Management Services*, Summer, pp 26-29

Coulson-Thomas, Colin (2017d),*The Case for the Creative Arts* [Position Paper No. 1/17], Peterborough, Adaptation

Crenshaw, Dave (2008), The Myth of *Multitasking: How Doing it All Gets Nothing*, San Francisco, CA., Jossey-Bass

Crews, Clyde Wayne Jr (2017), *Ten Thousand Commandments*, *An Annual Snapshot of the Federal Regulatory State*, Washington, DC, Competitive Enterprise Institute

Durant, Will and Durant, Ariel (1968), *The Lessons of History*, New York, NY., Simon & Schuster

Duxbury, Tom (2012), Creativity: Linking Theory and Practice for Entrepreneurs, *Technology Innovation Management Review*, 2 (8), August, pp 10-15

Ford, Martin (2015), *Rise of the Robots*, *Technology and the Threat of a Jobless Future*, London, Oneworld Publications

Friedman, Milton (1962), *Capitalism and Freedom*, Chicago, ILL., University of Chicago Press

Garratt, Bob (2017), *Stop The Rot: Reframing Governance for Directors and Politicians*, London, Routledge

Gladwell, Malcolm (2000), *The Tipping Point*, *How Little Things Can Make a Big Difference*, Boston, MA., Little, Brown and Company

Gleick, Peter H (2014), *The World's Water Volume 8: The Biennial Report on Fresh Water Resources*, Washington, DC, Island Press, January

Higgs, Kerryn (2014), *Collision Course: Endless growth on a finite planet*, Cambridge, MA, MIT Press

Hochschild, Airlie (1983), *The Managed Heart*, Berkeley, CA, University of California Press

Huntington, Samuel P. (1993), The Clash of Civilizations?, *Foreign Affairs*, Vol. 72, No. 3 (Summer), pp. 22-49

Huntington, Samuel P. (2003), *The Clash of Civilizations and the Remaking of World Order*, New York, NY., Simon & Schuster

International Energy Agency (2017), *Energy Technology Perspectives 2017,* Paris, International Energy Agency, June

Kreiser, Larry, Andersen, Mikael Skou, Olsen, Birgitte Egelund, Speck, Stefan, Milne, Janet E, Ashiabor, Hope (2015), *Environmental Pricing: Studies in Policy Choices and Interactions*, Cheltenham, Edward Elgar

Kuhn, Thomas S. (1962), *The Structure of Scientific Revolutions*, Chicago, IL, University of Chicago Press

Laxmisan, Archana, Hakimzada, Forogh, Sayan, Osman R., Green, Robert A., Zhang, Jiajie and Patel Vimla L. (2007), The multitasking clinician: Decision-making and cognitive demand during and after team handoffs in emergency care, *International Journal of Medical Informatics*, Vol. 76, Iss. 11-12, November-December, pp 801-811

Lohmann, Larry (2006), *Carbon Trading: A Critical Conversation on Climate Change, Privatisation and Power* [Development Dialogue No. 48], New York, NY, The Dag Hammarskjold Centre

McConnachie, James (2017), *Scale: The Universal Laws of Life and Death in Organisms, Cities and Companies*, London, Weidenfeld

Paris Agreement (2015) [Agreement adopted on 12 December 2015 at the twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change], United Nations Treaty Collection, Chapter XXVII Environment, New York, NY, United Nations

Mejia, Robin (2009), The challenge of environmental regulation in India, *Environmental Science & Technology*, Vol. 43 No. 23, pp 8714-8715

Rowe, Mark (2016), The true cost of meat, *Geographical*, Vol. 88 No. 03, March, pp 36-43

Spengler, Oswald (1926), *The Decline of the West: Form and Actuality* [Volume 1], New York, NY., Alfred A. Knopf

Spengler, Oswald (1928), *The Decline of the West:Perspectives of World History* [Volume 2], New York, NY., Alfred A. Knopf

Sundarajan, Arun (2016), *The Sharing Economy*, *The end of employment and the rise of crowd-based capitalism*, Cambridge, MA., The MIT Press

Thaler, Richard H. and Sunstein, Cass R. (2008), *Nudge, Improving Decisions About Health, Wealth, and Happiness*, London and New Haven, CT, Yale University Press

Torfing, Jacob and Triantafillou, Peter (Editors) (2016), *Enhancing Public Innovation by Transforming Public Governance*, Cambridge, Cambridge University Press

Toynbee, Arnold (1969), *Experiences*, London, Oxford University Press

Tybout, Richard A. (1972), Pricing Pollution and Other Negative Externalities, *The Bell Journal of Economics and Management Science,* Vol. 3, No. 1 (Spring), pp. 252-266

United Nations (2015), *Transforming our world: the 2030 Agenda for Sustainable Development* [Resolution adopted by the General Assembly on 25 September 2015], 70/1, New York, NY, UN General Assembly

Williams, Joanna (2016), *Academic Freedom in an Age of Conformity, Confronting the Fear of Knowledge*, London, Palgrave MacMillan UK

Wilson, Edward O (1984), *Biophilia,* Cambridge, MA, Harvard University Press

Author

Prof. Colin Coulson-Thomas has helped entrepreneurs, companies and public and professional bodies in over 40 countries to harness more of the potential of directors, boards, management teams and corporate organisations in order to build a business, improve performance and simultaneously deliver multiple objectives. In addition to board appointments, he leads the International Governance Initiative of the Order of St Lazarus and is Director-General, IOD India, UK and Europe Operations, Chancellor and a Professorial Fellow at the School for the Creative Arts, Honorary Professor at the Aston India Centre for Applied Research, Distinguished Professor at the

Sri Sharada Institute of Indian Management-Research, a member of the advisory board of Bridges of Sports and chair of the Audit and Risk Committee of United Learning. Colin has served on public sector boards at national, regional and local level. Author of over 60 books and reports he has held professorial appointments in Europe, North and South America, Africa, the Middle East, India and China. He was educated at the London School of Economics, the London Business School, UNISA and the Universities of Aston, Chicago and Southern California. A fellow of seven chartered bodies he secured first place prizes in the final examinations of three professions. He can be contacted at colin@coulson-thomas.com. His latest books and reports are available from www.policypublications.com.

Abstract

Multitasking is not a panacea and it can have adverse consequences. For organisational leaders multi-tasking can be a particular challenge that is compounded when they have to handle and balance the imperatives of short-term problems, some of which may require immediate responses, and longer-term issues such as climate change, protecting the environment and sustainability. Handling some tasks can require collaborative responses that take account of the actions of others. As tasks multiply and/or involve external parties their management and monitoring can become more demanding. A scheme of delegation and the extent of empowerment may need to be reviewed. In some cases, task routing and handling might have to be preceded by a change of policy.

Boards should take a holistic view of the portfolios of tasks being undertaken across the companies for which they are responsible, many of which may be interdependent while others are in conflict. They should look for patterns, trends, common drivers and/or underlying root causes. Individual tasks may be much less important than their collective implications for the continuing relevance and value of a corporate vision, strategy, objectives and priorities. A monthly board meeting alone may not provide the strategic direction and oversight a portfolio of climate change related tasks, projects and initiatives of differing timescales may require. Sometimes only when multi-tasking fails is a matter brought to a board and its consideration triggers a change of direction. Effective collective responses to climate change can build bridges across belief, governance and political systems but for this to occur we need boards that are positive, proactive, opportunity focused and collaborative.