



Innovation Insight

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Personalised technology intelligence

Decision support for business leaders dealing
with technological disruption

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DeltaHedron Innovation Insight is a series of white papers, reports and newsletters exploring aspects of the technological future and technological innovation, with a specific focus on the strategic business impact, opportunities, risks and threats presented by emerging technologies and the dynamics of technological change

Personalised technology intelligence

Decision support for business leaders dealing with technological disruption

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“DeltaHedron launches *Executive Innovation Insight*, a personalised technology intelligence and decision support service for executives and business leaders”

Are artificial intelligence, drones, blockchain, robotics, 3D printing, 5G and augmented reality, to name but a few emerging technologies, disrupting your company and industry - even as you read this? How do you know? Why is it really important that you do?

The executive's dilemma

Emerging technologies and the dynamics of technological change have a *strategic* business impact and present strategic business opportunities, risks and threats to *all* companies and industries. Business leaders, C-level executives and senior decision-makers operate on this level where their decisions determine the company's direction, profitability, competitiveness and its ability to survive. They need to exploit the strategic business opportunities and mitigate the risks and threats presented by emerging technologies – mindful that these are real, ubiquitous, significant and dynamic. To neglect or abdicate a strategic view on emerging technologies and not to take proactive action would be tantamount to deliberately ‘fumbling the future’ and inviting failure.

Business leaders need to know which emerging technologies (or combination of technologies) will impact on their business, either as an opportunity or a threat. Knowing when and how their industry and company can be disrupted or alternatively when and how they can be the disruptor, is ‘must have’ intelligence.

One of the dilemmas that business leaders and executives face, is that they are *very* busy people. Even though they may recognise the strategic importance of the impact of emerging technologies, irrespective whether they have a background or

particular interest in technology or not, there are a myriad of other issues they need to attend to as well, all at the same time, all urgent and all important.



Executives and decision-makers hence value decision support that will enable them to make decisions regarding the strategic business impact presented by emerging technologies - technology intelligence that can support them to understand the evolving technological landscape and envision their company's future in it, to formulate the right questions, assess options and make confident decisions.

The dynamics of technological change - driving disruptive innovation

Technologies are dynamic and continuously developing. They are constantly being improved to be ‘better, faster and cheaper’, making yesterday's model obsolete. Some evolve at a gentle and incremental pace, others change more rapidly... and then there are the radical innovations which completely disrupt the business, technological, societal, political and natural environmental landscapes – the ‘wave of creative destruction’.

The disruption of an industry and the companies that make up the industry is typically underpinned by one or more emerging technologies, dynamically interacting with one another and mature technologies. The disrupted industry is characterised by new business models, new value propositions, a new competitive environment, new skills requirements as well as new logistics and procurement chains. It is not surprising to find new market entrants and new market leaders, often coming from unexpected quarters, different technological sectors and companies with their roots in other industries.

At the same time, the disruption also destroys the established structures and order, triggering the demise of mature technologies, labour markets, jobs and skills. It is not uncommon for companies and industries that have built their business and fortunes on mature and obsolete technologies to perish in the process - very often because they have become so good and efficient using the mature technologies that they just cannot adapt to or adopt the emerging technologies. Many companies which were once considered to be 'world-class', 'industry leading' and 'best managed' have fallen prey to the manifestation of disruptive innovation.

Technology intelligence to support strategic decision-making

Technology intelligence for business leaders is not, in the first instance, about the technical details or understanding the intricacies of the physics. It is about supporting them to make better decisions regarding the impact that emerging technologies and technological change will have on their companies and enabling them to exercise the strategic leadership required to create value and gain competitive advantage through innovation.

There is a bewildering array of emerging technologies 'out there' and it is difficult to keep track of all the developments in real-time, particularly if you have many other things on your mind. Businesses are usually aware of many important technological developments in their direct area of interest. However, very often the

disruptions may come from areas which would not normally be in their field of view, and hence would not be detected (...until it is too late).

Tracking the developmental trajectories of emerging technologies lies at the heart of technology intelligence. It is much more than 'a casual scanning of the blogs from time to time'. Instead it requires a systematic, consistent and continuous mining of a broad spectrum of new information covering a wide range of emerging technologies - the next opportunity or threat can come from anywhere. To be useful to executives, technology signals (which are often weak, faint and not obvious) need to be detected, interpreted and analysed within the context of the company and its competitive environment, rather than in general and popular terms.

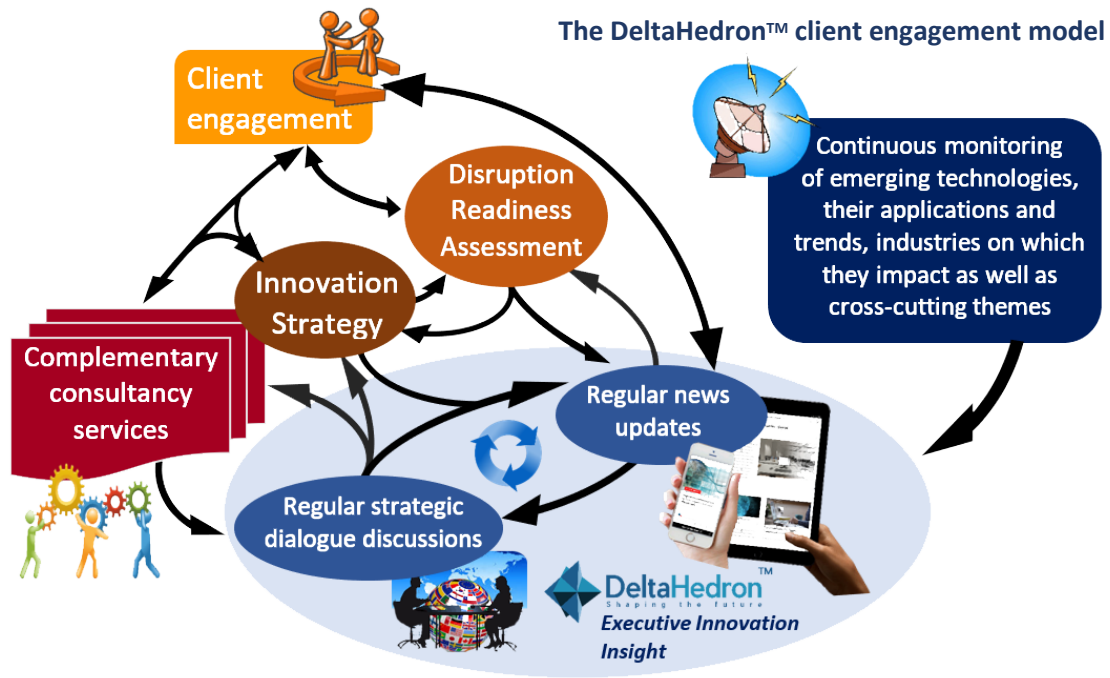
Executive Innovation Insight - personalised technology intelligence and decision support

DeltaHedron's *Executive Innovation Insight* is a personalised technology intelligence and decision support service designed to address the 'disruptive innovation executive dilemma' faced by business leaders, executives and senior decision-makers. Using proprietary software, the company continuously monitors a wide range of emerging technologies, their applications, industries on which they can impact as well as a number of cross-cutting themes (such as their impact on the world of work). DeltaHedron engages with individual executives as its clients and provides them with regular updates and news alerts on emerging technologies of interest to the individual client, in a user-friendly personal e-journal which the client can assess at his/her convenience on a computer, smartphone or tablet. The updates are complemented with regular one-to-one strategic dialogue discussions to explore the impacts, opportunities and threats presented by emerging technologies of specific interest to the client and his/her company. *Executive Innovation Insight* is a personalised service and is configured to suit the working preferences and technology interests of individual clients.



"I accost an American sailor and inquire why the ships of his country are built so as to last for a short time; he answers without hesitation that the art of navigation is every day making such rapid progress that the finest vessel would become almost useless if it lasted beyond a few years"

Alexis de Tocqueville, *Democracy in America*, 1840



Dr Calie Pistorius is the Chief Executive and Principal Consultant of DeltaHedron™, and has extensive experience of consulting and research in the management of technological innovation. He is a former Chair of the *National Advisory Council on Innovation* in South Africa, former Vice-Chancellor of the University of Hull in the UK and Emeritus Vice-Chancellor and Principal of the University of Pretoria in South Africa, where was also the Director of the *Institute of Technological Innovation*. He is registered as a Chartered Engineer in the UK and holds a PhD degree in electrical engineering from the Ohio State University, a masters degree in the management of technology from the Massachusetts Institute of Technology, a bachelors degree in electronics engineering from the University of Pretoria and is an alumnus of Harvard Business School.

DeltaHedron Ltd is a UK-based consulting firm with a global reach, specialising in the management of technological innovation. Our focus is on supporting our clients to assess and manage the strategic business impact, opportunities, risks and threats presented by emerging technologies and the dynamics of technological change.

“A company with an engineering soul, an innovation mindset and a business outlook”

Please contact DeltaHedron™ to discuss how we can provide you with personalised technology intelligence, decision support and strategic dialogue regarding the emerging technologies that will have an impact on your company and industry.

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