nu Angle Newsletter

More effective and efficient technology investment decisions

nu Angle's approach to Technology strategy builds on many years of practical experience. This approach is now supported with two types of software tools – one is Excel-based, and the other is a web-based application available from Innovation Framework Technologies.

Technology investment decisions require structured analysis. The toolset we have developed closely reflects a highly practical and robust approach to developing a commercially relevant technology strategy. With this solution, it is now possible to dynamically create technology strategies, integrate them with development roadmaps, perform 'what-if' analyses and translate plans immediately into detailed resource and financial forecasts.

The web-based solution is available via IFT either as a stand alone module sold as SaaS, or integrated with IFT's other Stage-Gate® certified modules for innovation management, including Portfolio Management, Ideation, and Stage-Gate Development. An example of the Excel solution can be downloaded from:

http://www.nu-angle.com/nu-Angle/Technology_Strategy_software.html

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Special points of interest

- nu Angle's technology strategy toolset will soon be available on a web-based application

- nu Angle associate Matt Ovenden has launched Green Shoots

- nu Angle joins forces with Habar Consulting in web based innovation management

A new efficient process for selecting R&D projects with confidence

nu Angle has just completed an assignment to re-engineer the research project selection process for a large European company. The old process was taking far too many resources to manage and the outputs were not on time to feed into the necessary financial budgets. It was also difficult to properly allocate the right competencies and make predictions about what type of researchers to hire in the future. We mapped the current process (As-Is) and then in a series of working sessions generated a new, simpler and more efficient process (To-Be).

The process had to take short term technology strategy requirements from various business units and convert them into well-articulated research project proposals. Prioritisation was based on a clear link to commercial importance now and in the near future. The process also had to deal with longer term recruitment of the right competencies based on inputs from future-looking foresight exercises. New IT tools were also created to support and drive the new process to allow for timely information input and communication of results.

We simulated the process several times using different individuals from research, marketing and the business units and also obtained remote feedback from sites in different locations including China and USA.

The outcome is a process that generates high quality information so that management can make better informed decisions about research projects with transparency back to the business needs.

How good is your technology roadmapping?

The assessment tool is divided into three parts - **Framing** (deciding on scope) - **Delivery** (creating the roadmap) - **Application** (making choices based on the output). The first part (Framing) is shown below. The full tool is available on request from moreinfo@nu-angle.com.

Elements	Questions
Requirement	• How is commercial strategy/needs translated into scope for the roadmap? • What documents and techniques are utilized to develop these scope boundaries (What's in, out or maybe in)? • What timescales does the strategy cover? • How integrated are IP considerations within the scope? • What emphasis is given to competitors and trends within the scope? • What is the attitude to adjacent markets/technologies and the implications for managing risk? • Breadth *vs.* money (gearing issue)
Resolve	• Who sponsors the roadmap activity, and what is their span of control within the business? • How broad (organizationally) is the involvement in the sponsoring, scoping, delivery and implementation conclusions of the roadmap? • What level of investment (time, resources, external expense) has been made in the development of the roadmap?
Ramifications	• Has the aim for the roadmap been clearly articulated - is it (the aim) limited to technology? • How directly do the conclusions of the roadmap influence strategy? • Has the size of the size of the 'prize' for an accurate roadmap been articulated - if so how is it captured? • In what way is the roadmap regarded/configured as a knowledge asset? • How do we deal with adjacent markets/technologies

Set the right carbon reduction plans through best practice innovation and technology management

The new mandatory UK Government scheme called the Carbon Reduction Commitment (CRC) launched in April is forcing any organization spending ~£0.5m on energy annually to measure and reduce their carbon footprints by any way possible or face heavy fines as a consequence.

"We see the CRC as much more than a compliance issue. We see it as an opportunity to show green credentials and enhance the brand as well as it being a new driver for technology and innovation. Once you've made the quick and easy changes it will be those organisations who are better at technology and innovation management who will do well in the CRC" says Matt Ovenden at Green Shoots, nu Angle's green innovations partner company.
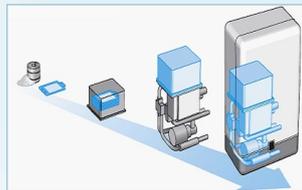
Greening an organisation's operations is the challenge of the CRC, and the technologies and innovations needed often lay outside the scope of traditional R&D strategies, which typically just focus on the products or services and the customer needs. One critical aspect of the CRC is that it forces organizations to take a good, hard look at the way they use energy and emit carbon when going about their business. It challenges them to look for new technologies and innovations can be applied to improve the overall carbon footprint.

Matt says: "A comprehensive carbon reduction strategy should cover the application of leading off-the-shelf, low carbon technologies, as well as inputs from R&D and technology strategy. The clean-tech green technology sector for example is developing at an ever increasing rate and Green Shoots has plans to launch a Low Carbon Technology Approval Group later this year.

The group will harness investors and a large number of R&D sources to understand, plan for and facilitate the commercialisation of new green technologies that will positively impact the CRC. Structured and best practice technology strategy and road mapping will therefore be a very important part of this work"

Habar Consulting has become a key Partner of nu Angle in deploying effective use of web-based collaboration in innovation management.

"New insights and ways to solve problems always occur if managed well"

About nu Angle

We were formed over 5 years ago to assist senior management with technology and innovation management issues – we select only senior and experienced staff to work on our projects. We made a large investment in a growing network of many thousands of experts, making us able to provide technical and commercial advice that companies many hundreds of times larger than us, find impossible to replicate.

Using key factors in effective collaboration to generate new innovations

By: Colin Nelson, Habar Consulting Ltd.

Complex organisations are looking to get more value from their workforce, customers and partners. Involving more people in innovation, continuous improvement and change programmes is crucial to finding new ideas, obtaining faster results and solving problems. Every business is stretched and needs to do much more with less, more efficiently and at a higher level of quality. These tensions mean we must consider new ways of getting the most out of what we have and determine whether we're using all the resources at our disposal in the most effective ways.

For a number of years now, complex organisations have been looking at social networking, such as Facebook and Twitter; they've also been studying new social observation publications such as 'The Wisdom of Crowds' and 'The Tipping Point'. Understanding how to make organisational and cross organisational collaboration work 'effectively' is a challenge, not solved only by technology, but by enabling your employees with a process that takes into account all of the 50 key factors in effective collaboration. These factors include: the amount of information requested, question asked, audience selected, and whether to allow participants to be anonymous.

We have found that applying these 50 key factors to challenges within a business can produce astonishing results, headline activities include CSC making over $100m in cash-flow improvements, Walmart saving $32m by engaging customers and staff and Goodyear developing new products by leveraging the global knowledge of 16 key suppliers. The ability to engage thousands of people, very quickly, to support a business challenges helps ensure access to the collective expertise of people you can't normally reach, all with minimal impact on the day job. New insights and ways to solve problems always occur if managed well.

Much of web-based collaboration is counter intuitive. People are not always predicable and often don't conform to our assumptions about culture, roles and expertise. Organisations that put time into learning how to apply the 50 factors generate significant savings, better quality innovations, increased levels of employee engagement.