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Innovate or perish The RSM Insight debate

Although innovation is one the hottest management topics of the 21st century, very few firms excel at it. Here, in the first RSM Insight debate, three of the school's leading management scholars discuss how firms should approach the subject of innovation and what it takes to be successful at it.

> The three panellists, each an acknowledged expert on innovation, are: Jan van den Ende, Professor of Management of Technology and Innovation; Eric van Heck, Professor of Information Management and Markets, and Henk Volberda, Professor of Strategic Management & Business Policy. Moderating the discussion is Anieke Wierenga, Innovation Director Food at Corbion Purac, a world market leader in natural food preservation and bio-based building blocks.

> Anieke Wierenga (AW): Let's start with the obvious question. What is innovation?

> Prof. Eric van Heck (EvH): Innovation is about rethinking the ways in which companies work, how they do business, and how they serve customers. No matter whether an organisation wants to change its relationship with employees, partners, suppliers or customers, digitalisation is both a driver and an enabler of reinvention and innovation.

> At RSM, we build cutting-edge systems and software prototypes

with companies. One exciting project centres on the development of intelligent software agents for FloraHolland, the world's largest flower auction. By data mining FloraHolland's customer transactions and using the information to develop intelligent algorithms, we're actively helping auctioneers in their daily decision-making. The algorithms are embedded in a decision support system and process vast amounts of data very quickly. The system will be a crucial element of the next generation flower auctions. This is innovation through digitalisation.

Prof. Jan van den Ende (JvdE): Innovation is about developing new offerings for your customers. This can be in the form of new products and services, or novel business models that enable organisations to develop new ways of reaching, communicating and doing business with clients.

Central to success is excellent innovation management. Innovation management involves successfully creating and implementing innovations. This includes having the right processes, organisational structures and leadership

styles that help the development of innovation. An example is Philips, which has created clear processes for developing and commercialising innovation. Attention should not be only given to the generation of ideas; a process for implementation is just as crucial. Typically, companies are often stronger in one aspect than the other.

We worked with Shell to understand what they call the "game changer". Shell developed a process to collect ideas that originate inside and outside of the company. Its GameChanger programme has saved Shell hundreds of millions of euros because of the ideas that have come out of it.

Innovation processes must be supported by the right organisational structure. An organisation with very little structure may be good at creativity, but will not be good at implementation. And, while firms must consider how every aspect of the business might be improved, they should not have everybody working on developing new products or services.

Possibly the most over-looked form of innovation is disruptive innovation. This is where changes made to a product or service - usually at the low end of a market - gradually gain widespread acceptance so that it eventually usurps the established competition. A good example is Ryanair, which offers lower quality services than



traditional airlines and still makes huge profits today while competing airlines make losses. It's overlooked because companies want to make an immediate impact at the top end of the market. Prof. Henk Volberda (HV): Innovation can be about developing completely new products and services in new markets - radical innovation - or improved products and services for existing

Radical innovation, where firms create new business models and reinvent themselves, is seen as being very exciting. A perfect example is the science-based company DSM. It has reinvented itself several times with its core focus shifting from mining to chemicals to life sciences and materials. Today its focus also includes sustainability.

markets - incremental innovation.

doesn't necessarily result in innovation. When organisational structures are too hierarchical and lack horizontal linkages, it is very difficult to transform an invention into an innovation. For technological innovations to be successfully realised requires innovation in management.

Studies we've conducted at INSCOPE - Research for Innovation into the effects of technological innovation versus management innovation show that while technological innovation is important, and firms should invest more in research and development (R&D), it contributes just 25 per cent to innovation success. By contrast, 75 per cent of innovation success is determined by management innovation, that is, by the leadership style, the ways in which processes are organised, the

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Eric van Heck, Professor of Information Management and Markets.

Additionally, DSM insists that 15 per cent of all annual sales must come from new products and services. This enables the company to significantly boost its innovation performance.

Technological innovation is aligned to invention - the process of creating something new. However, invention firm's investments in human capital and by co-creation with external partners. Findings of the Erasmus Competition and Innovation Monitor show that firms which not only invest in technological innovation, but also make complementary innovations through new ways of managing, organising, and

working (Innovation 3.0), can multiply their sales of new products and services by a factor of four.

JvdE: I completely agree that management is essential for successful innovation. As I said earlier, proper innovation management is crucial, and firms should look to improve how they manage innovation. However, "innovation management" is different from "management innovation". Innovation management is about managing the innovation process, while management innovation is much broader, and involves changing your rules, structures and processes in a company on a permanent basis.

Although firms should not remain stationary, I do not believe in a management policy of continual change just for its own sake. If firms reach a point where they are satisfied with what they are doing then there is no value in changing. In addition, it is my belief that there is insufficient academic evidence to conclude that management innovation has a positive effect.

HV: Studies we've conducted at INSCOPE into the impact of management innovation on innovation performance show that it has very positive effects on incremental innovation. However, if firms make small steps towards management innovation - experiment with transformational leadership, flat horizontal structures >



Innovate or perish The RSM Insight debate (continued)

and self-organising teams, for example - we see that at low levels there is a negative effect on radical innovation. At high levels of management innovation we see an increasing positive effect on radical innovation

AW: Where do you begin when advising a CEO who wants to make their company more innovative?

JvdE: A number of questions need to be asked. Who is doing the innovating? Are people from different units involved, and are there processes in place to manage it? I would also ask how the project portfolio is managed so that the criteria for project selection are ascertained. Is there an explicit understanding what's happening. It's part of the CEO's responsibility.

The next question to ask is how much time they are spending on the digitalisation of the company, not just in discussion with the board, but actually hands on.

Then it comes down to budgets; how much is spent on R&D, and how much is spent on using IT as a strategic asset? Most companies spend 70 per cent of IT budgets on legacy systems and 30 per cent on new developments. Truly innovative companies have those amounts reversed, and this is only possible if you are an IT-savvy firm.

HV: I would also want to know about the company's R&D effectiveness. By that I mean how many projects really I would also want to know whether the CEO has an exploitation mindset geared to financial results, or whether they offer transformational leadership more focused on exploration and radical innovation.

AW: What role should Human Resource departments play in innovation?

HV: When visiting companies, I always ask HR managers what they think about innovation. They invariably reply that it's not their department!

EvH: This is a really fundamental issue. Most firms are organised in old-fashioned, functional ways, and real innovations are the result of combinations of capabilities from different areas. Therefore, a key capability for organisations is how these traditionally oriented departments can work together to come up with new and creative solutions. This means that HR teams need to work with all departments. This is a challenge because every department speaks a different language and has different concepts.

JvdE: Collaboration between different business units is imperative if a firm is to innovate. More than that, people have to be willing - and able - to work with others; and their collaborations have to be supported by IT as far as possible.

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Jan van den Ende, Professor of Management of Technology and Innovation.

innovation strategy; does the company proactively seek innovation, or does it reactively wait for good ideas to come along?

EvH: I would ask the CEO how many hours they have personally spent on R&D. By that I mean actually going into the company's labs and really

deliver innovations. In my experience many CEOs are disappointed with the results they're getting.

This leads to questions about the governance system, and whether the company is focused on short-term shareholder value, or whether it is investing in R&D for the long-term.

organisation to support innovation and helps foster an innovation culture. And, if a company has clear processes in place for the management of ideas it expresses to the whole company that ideas are important - and that the involvement of employees in generating ideas is valued.

HV: Creating an innovation culture requires leveraging human capital and investing heavily in the capabilities of people. People should have "T capabilities". These consist of a depth of knowledge, ie, specialist expertise, and breadth of knowledge, which comes from a broad understanding of management issues like innovation.

Of greatest importance is a tolerance for ambiguity. This requires people to be open-minded to new and crazy ideas. We should tolerate the radicals in the workplace.

AW: How important are collaboration and co-creation to innovation?

HV: Innovation can be very expensive. so it makes sense to co-create with customers, suppliers, knowledge institutes and even competitors. Our recent Erasmus Innovation Monitor findings show that when firms cocreate with knowledge institutes such as universities and consultancies, their radical innovation is improved. This effect is the strongest for SMEs, but unfortunately there are still Chinese walls between universities and these small firms

EvH: Collaboration within the firm is also enabled by a factor that is sometimes undervalued: the physical layout of the building. Professor Thomas Allen at MIT developed the so-called Allen Curve, which basically says that R&D, innovation and collaboration will not happen if people are more than 50m away from each other physically. This is because communication can drop to zero as a result of employees not meeting each other. Buildings need to be designed so that people can interact with each other easily.

This is very interesting because in the age of digital communication companies are exploring new ways of working in which employees no longer need to be office-based. By contrast, our research at Erasmus@Work shows that getting a balance between faceto-face and digital interaction results in more creative ideas.

JvdE: Our research shows that collaborating with customers has a positive effect for functional innovations. meaning that customers can help in adding new functions to products. At the same time, collaborating with customers has a negative effect for design innovation ie, those innovations that connect to emotions and identity.

The clear message is that customers do not help developers of products or services in creating design-driven innovations. Instead, firms should develop these innovations themselves.

Regardless, companies should always be open to potential sources of ideas and that includes their customers.

Watch the RSM Insight debate in full at WEB http://bit.ly/1hkLHP1

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