the 5 rejection strategies that stop you from developing disruptive innovations

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introduction

Organisational innovation effort is traditionally focused upon performance improvement in attributes most valued by the most demanding customers - those willing to pay higher prices. Thus, both incremental and radical innovations offer performance improvements that lead-customers desire and expect. However, significant breakthroughs do occur and have a discontinuous impact upon this steady state. These breakthroughs are often called disruptive innovations and examples include:

- Cannon's introduction of simple table and desk-top photocopiers into small and medium sized enterprises, which eventually disrupted Xerox's control of the high-speed photocopying industry.
- Seagate's 5.25 inch disk drives used to launch the Personal Computer, which disrupted the more complex and more expensive 8 inch drives, produced for use in mini-computers by the likes of Shugart and Quantum.
- eBay's introduction of a facility whereby items, not sellable in traditional auction houses, could now be sold in a similar "to the highest bidder" fashion.
- Henry Ford's introduction of comparatively inexpensive cars to non-auto consumers, transformed the traditional industry of expensive, customised car manufacturing.

An analysis of the Standard & Poor's index of 90 important US companies, conducted by Foster and Kaplan (2001), found that an organisation joining the index in the 1930s, could expect to remain listed for 65 years. This had dropped to just 10 years for companies joining in 1998. Clearly, today's organisations face increasingly discontinuous business environments and will therefore need to periodically engage in the process of disruptive innovation for long-term survival. However, while many companies achieve successful sustaining innovation, few organisations have established track records for repeatedly undertaking successful disruptive change. An article in businesswire.com concludes that one-third of the companies listed in the 1970 Fortune 500 had vanished by 1983. This was largely attributed to their inability to anticipate and embrace disruptive innovations.

The research project, DISRUPT-IT, funded in part by the European Commission, identified four top barriers to disruptive innovation: (1) the strategic importance of disruptive innovation is not understood; (2) there exists an inability to recognise or generate disruptive concepts; (3) there are inappropriate funding routines, which fail to initiate or support potentially disruptive projects; and (4) traditional new product/service development routines strangle all but continuous innovation.

This article explores the "inappropriate funding routines" barrier in more detail and proposes a solution to overcome it.

inappropriate funding routines

Although some advice is available to managers on how to manage potentially disruptive projects and how to launch these products into the market place, little help exists around how to actually ensure these ideas get funded in the first place. The director of R&D in a large manufacturing organisation said: "… this knowledge on disruptive innovations will 'fall on deaf ears' if there's no money for such initiatives in the first place". If the funding barrier to disruptive innovation could be better understood, then more potentially disruptive ideas could be pursued and successfully brought to market, helping to ensure that more organisations can survive an increasingly changing future.

The (Disrupt-IT) research showed that there are 5 rejection strategies that prevent managers from funding potentially disruptive innovations:

rejection strategy 1: rewarding incrementalism:

One strategy used by management to avoid funding potentially disruptive ideas was to focus on current organisational rewards. It was found that explicit rewards offered, for example promotions and financial incentives, had a negative effect upon managers' decisions to pursue disruptive innovation. The rewards reduced creativity and caused management to disregard evidence that suggested their organisation's current technologies or business models may be put to better use in opportunities differing to current practice. In one company we worked with, job creation was one of the major measures that was rewarded, thus the initiation of new product development projects for small niche markets, as characterised by disruptive innovation, was not supported. In another organisation, explicit rewards were focused upon current production line enhancements – once again steering management's attention to incrementalism.

rejection strategy 2: ignoring positive aspects of disruptive opportunities

Managers admitted to occasions where they rejected disruptive opportunities, in favour of sustaining innovation. They had diminished the positive aspects of the disruptive opportunity and at the same time had played up the positive aspects and diminished any negative aspects of the sustaining innovation. For example, in one of the organisations that the research team worked with, the management team had recently faced a decision between two dissonant projects. Should they increase the allocation of resources to a project that was to deliver a new high-end product in their existing range or invest resources into a project with disruptive potential in a new and totally different emerging market? The senior management team were insistent that they could deliver new wealth generation by encouraging customers to move into the high-end of their market (where they forecasted higher revenues and higher margins). In doing so, they ignored the evidence which showed that most of their customer losses were to be found at the low-end of the market and that the high-end was small, shrinking and already saturated. Much of the customer base, it would seem, were now happy to purchase cheaper, lower quality, substitute products from China. Alternatively, evidence showed that the emerging market within the unfamiliar industry (although currently small with only potential for large growth) could provide them with a new high margin revenue stream. Competitive intensity within the market for the new concept was low and the current players were ignoring non-consumers and low-end customers who were in a situation of massive technology oversupply. Furthermore, the current players and potential competitors did not have the technology and facilities to deliver the potentially disruptive proposition, which was based upon a cluster of simpler technologies. Despite the evidence, the potentially disruptive opportunity was labelled by the senior management team as 'too risky' for two reasons: (1) they felt the emerging market was "*not yet large enough*" and (2) they were "*too unfamiliar with the emerging industry*". The positive aspects of the opportunity with disruptive potential were removed and the lack of promise in manufacturing high-end products was ignored – and so any feelings of uneasiness surrounding the disruptive opportunity were alleviated with the decision taken in favour of incrementalism.

rejection strategy 3: focusing upon historical perceptions of success

"*We've always been the world leaders in 'product X'*" said the director of R&D in a large manufacturing organisation. "*We are the best in the world, no-one can make those like we do*". Almost the whole management team in this organisation were comfortable with the idea that they could generate 'disruptions' in unfamiliar market places. However, past success, with world beating technologies, made many of them believe that they would not be disrupted in their current mainstream markets, despite preliminary evidence of technology over-supply in several product categories which was creating a vacuum that could potentially be filled by new disruptive products. It would seem that the organisational memory for the factors that have been responsible for recent successes become embedded in manager's thought processes. Current perceptions of success prevent managers from perceiving the potential for disruptive change in their primary technologies and customer offerings. Thus, ideas that go against the grain of history generate feelings of uneasiness and do not get funded.

rejection strategy 4: creating perception of success with high effort

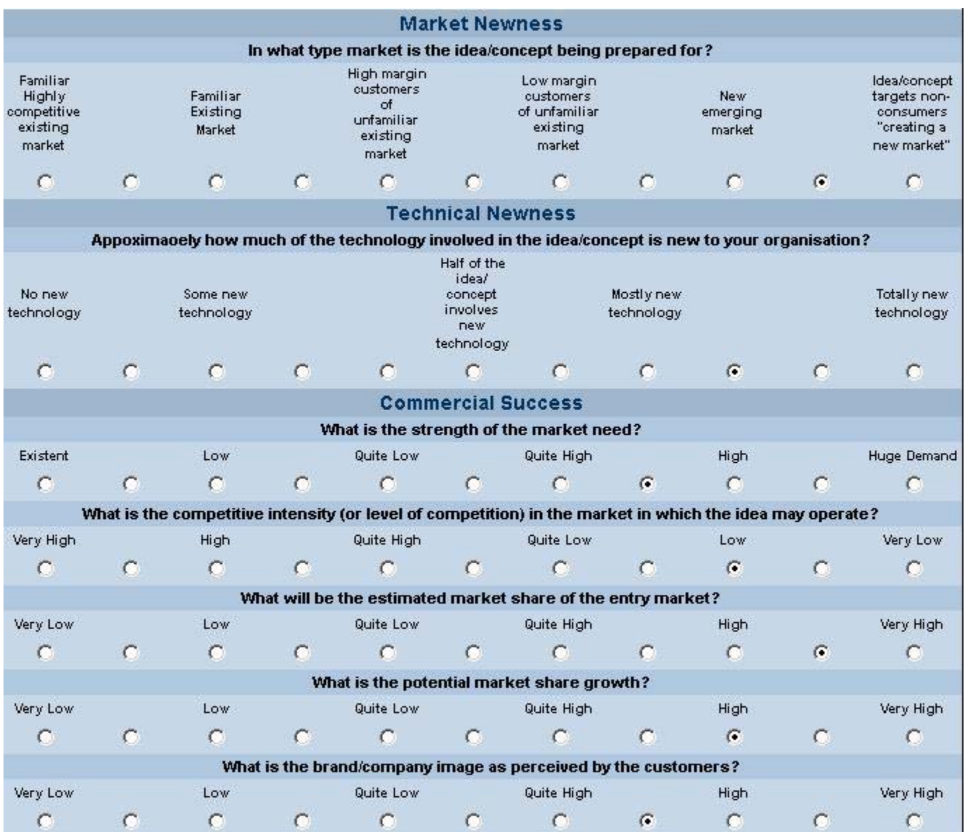
Many organisations have examples of "prestige innovation projects" where huge amounts of effort are invested. The targets of the high-activity, prestige projects are nearly always the improvement of highly mature products and/or technologies for familiar markets. In one of the organisations we worked with, for example, resources invested into prestige projects were targeted at improving core offerings, to retain market share and to remain competitive with insurgent Chinese rivals. It was observed that the managers, in the face of growing year on year competition, were committing more and more effort, yet were being less and less successful at defending their position against these new low-cost competitors. Despite data that illustrated that the project team had hit the point of diminishing returns, senior management appeared keen to exaggerate the benefits of their high effort project, both in their own minds and to the rest of the business. The more effort and resource the management teams had invested into these prestige projects, the more they sought to exaggerate the potential benefits of these investments, in the face of disconfirming data. This was inevitably discouraging the pursuit and funding of other potentially disruptive alternatives

rejection strategy 5: holding beliefs in the face of disconfirming information

As already mentioned, managers have a tendency to hold on to their beliefs in the face of disconfirming information. One organisation had identified a potentially disruptive business opportunity in an unfamiliar market. When the importance of initially launching disruptive innovations using comparatively small projects for specific niche markets, as demonstrated by many successful disruptive innovation projects in the past, was discussed, the majority of the senior project team dismissed these cases. They also sought to persuade other senior managers within the organisation to do the same. They believed in the potential of their concept so much that they wanted to launch a multi-million dollar, 5-10 year project that would compete directly with industry incumbents in the mainstream market.

using portfolio management tools

Figure 1: A section of the questionnaire


Market Newness
In what type market is the idea/concept being prepared for?
Familiar Highly competitive existing market
Familiar Existing Market
High margin customers of unfamiliar existing market
Low margin customers of unfamiliar existing market
New emerging market
Idea/concept targets non-consumers "creating a new market"

Technical Newness
Appoximaoely how much of the technology involved in the idea/concept is new to your organisation?
No new technology
Some new technology
Half of the idea/ concept involves new technology
Mostly new technology
Totally new technology

Commercial Success
What is the strength of the market need?
Existent
Low
Quite Low
Quite High
High
Huge Demand

What is the competitive intensity (or level of competition) in the market in which the idea may operate?
Very High
High
Quite High
Quite Low
Low
Very Low

What will be the estimated market share of the entry market?
Very Low
Low
Quite Low
Quite High
High
Very High

What is the potential market share growth?
Very Low
Low
Quite Low
Quite High
High
Very High

What is the brand/company image as perceived by the customers?
Very Low
Low
Quite Low
Quite High
High
Very High

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Based on this understanding of why many disruptive ideas fail to get funding and are rejected, a tool has been designed to help managers overcome this barrier. It was felt that if managers could see how and why *they* inhibit the allocation of funding to disruptive innovations, then they would be in a more self aware position to tackle the barrier. For the senior management teams to fund disruptive innovation, they needed to be able to *see* differently, so it was decided that a visual tool was required that could deliver an holistic understanding of the innovation dilemma.

Portfolio Management is used by many of the world's most innovative organisations to improve resource allocation decisions and assess project's fit with organisational strategy. In their current form, Portfolio Management methods have not been developed to encourage the funding of potentially disruptive initiatives. Therefore this shortfall has been addressed with the development of a Disruptive Portfolio Management Tool.

The DPM Tool uses a simple questionnaire to;

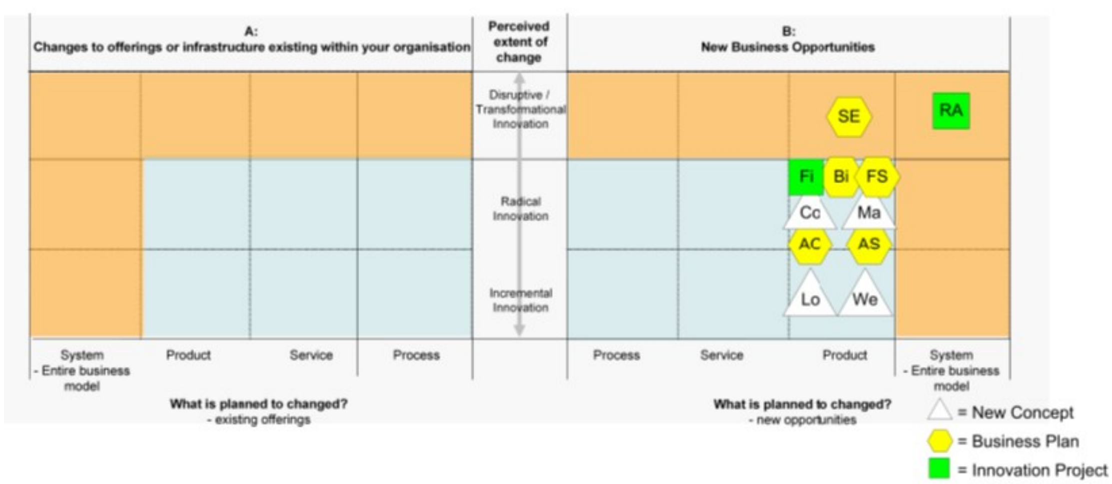
1) assess individual innovation initiatives on a range of standard innovation measures, plus a cluster of qualitative and quantitative measures focused upon how disruptive the innovation is and

2) assess individual innovation initiatives at varying stages of maturity, from early stage idea to advanced innovation project.

The questionnaires, a portion of which can be seen in Figure 1, are completed as 'homework' by the relevant project managers or R&D team and they are asked to include current live projects as well as some recently killed projects in their assessments.

The questionnaire responses are then mapped onto seven large scale portfolio maps, an example of which is shown in Figure 2. This map plots the innovation projects against whether they are incremental, radical or potentially disruptive and it also assesses whether they are process innovations, service innovations, product innovations or entire business model (system) innovations. Four of the maps are standard portfolio management views (for example, plotting market newness of the concept against technical newness of the concept on a scale of low, medium, high) and three are designed to specifically account for disruptive innovation. These maps combine to give an holistic graphical representation of the organisation's innovation projects. The senior management team responsible for innovation strategy and resource allocation are then facilitated through a workshop which reviews the portfolio maps (which are drawn up on 1m^2 paper and placed around the walls) and creates a forum for discussion of the issues arising.

Figure 2: Example of a portfolio map designed to include disruptive innovations



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the results

The Portfolio Management Tool questionnaire and workshops was implemented in several organisations during the research project. The evaluation of the tool in action showed that:

- Graphical 'maps' generated to illustrate an holistic view of the innovation activity can be employed to create an understanding that is otherwise very difficult to achieve. Holistic understanding is essential when justifying investments into disruptive innovation. The maps can also reveal a narrow approach to innovation (see Figure 2 and note how the projects are clustered in one small area of the map, which indicates that the company is taking a narrow product-focused view of innovation and not considering process or service innovations, which may also offer them significant opportunities).

- Management meetings to discuss innovation become significantly more focused on the task in hand when graphical 'maps' are used to illustrate a holistic view of innovation activity. "What we've delivered in this workshop in two days would have taken us weeks without your help, and we still wouldn't have been able to see what was really happening" said one R&D director.

- Holistic graphical representations improve dialogue and communication. This generates more directed, open discussion and prevents one person or one group from dominating the resource allocation process.

- Holistic tools such as the DPM can, with positive effects, increase management's self awareness of their mental models and their impact. Interventions that assist management teams to surface, test and improve their internal mental models of how the world works help to generate business benefits.

- It is essential to reduce the perception of risk surrounding potentially disruptive innovation in order to remove the 'funding routines' barrier. Reducing the perception of risk can be achieved through the combination of (1) knowledge on the theory of disruptive innovation; (2) recognition of prevailing mental models and an understanding of why potentially disruptive opportunities have been 'killed' in the past; (3) an holistic view of innovation activity, which can be used to legitimise 'ring-fencing' resources for potentially disruptive initiatives.

- Top management must deliver a strategic commitment to disruptive innovation and hold supporting mental models. If such a commitment exists, an holistic view of the innovation activity can help organisations to align actions with strategic goals, thus facilitating the selection and initiation of potentially disruptive projects.

- The understanding of disruptive innovation must be communicated across a wider audience than just those responsible for resource allocation for it to be absorbed and adopted by organisations.

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recommended reading

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See also the 2006 Special edition of the Journal of Product Innovation, which focused on disruptive innovation.

