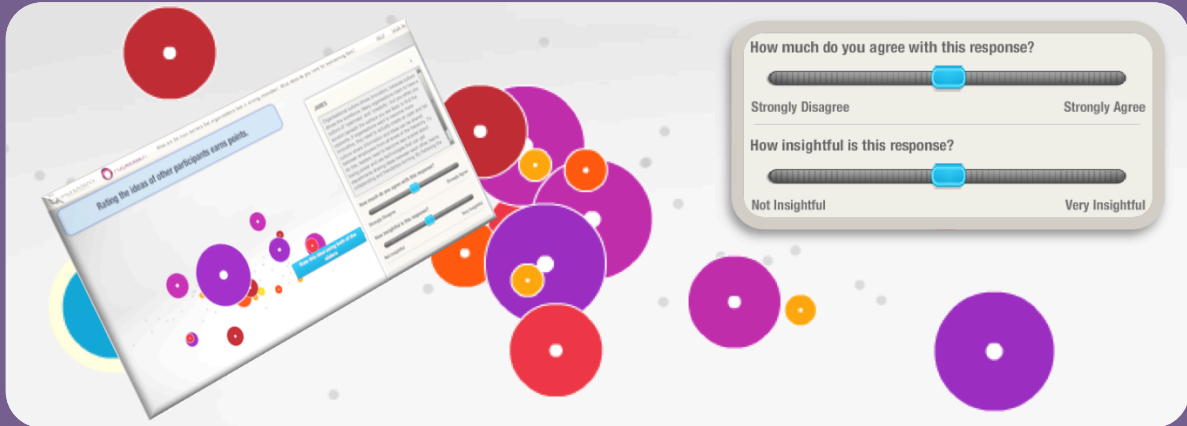# The Innovation Garden

Driving Innovation at Work through Social Technologies

Executive Summary

The Innovation Garden is an open-access research project that uses the wisdom of crowds to generate insight about the barriers organisations face in driving innovation – and solutions to overcome them. It is in itself a demonstration of innovation in action. This new way of uncovering opinion through a collaborative approach promises to change the way we engage in discussions via social technologies.

The approach allows a deeper level of insight and a more interactive means of exchanging knowledge about our opinions, experiences and ideas. As the importance of innovation in the workplace continues to rise, there is no better time to investigate the factors that may inhibit the progress of innovation at work.

This research indicates that leadership, organisational culture, aversion to risk, lack of time and incentivisation are the predominant barriers that organisations face in driving innovation. Participants also agreed that a lack of cross-functional working makes effective implementation of a sustainable innovation mindset difficult.

Exploratory workshops were conducted to examine the research findings and possible interventions to prevent the suppression of innovation at work.

The themes that arose from this were around the notions of language, fear, and motivation – and how addressing these could result in greater innovation. The conclusion reinforces the need for the field of innovation to reflect on its own innovativeness.

SILVERMAN RESEARCH

PurpleBeach

1. Why we conducted this project

In August 2013 PurpleBeach locked ten people in a room for ten hours. Their purpose was to identify ten new, actionable insights to help organisations unlock and embed sustainable innovation in their day-to-day operations. Our taskforce comprised a diverse group of innovators, business leaders, academics and authors. The group was tasked with filtering, analysing and responding to opinion shared through The Innovation Garden.

This report sets out 10 new actions that will help unlock innovation in any organisation. However, in order to sustainably embed innovation and an organisational culture of innovation, three additional themes emerged that will require further research by PurpleBeach.

The group concluded that unless organisations are aware of and pay attention to the impact of *fear*, *language* and *motivation*, unlocking or embedding innovation sustainably, will be almost impossible. PurpleBeach will be exploring these themes further in the coming months.

As an outcome of this additional research, we will again produce ten practical Postcards from the Future, which will provide insight into how organisations can overcome *fear*, *language* and *motivation* as innovation tools.

A huge thank you to Paul Rein at Silverman Research and our taskforce members: MJ Petroni, Jean Gomes, Linda Holbeche, Warren Weertman, Elvin Turner, Arpit Kaushik, Bjoern T Atterstam, Kyra Maya Phillips and Maijastiina Rouhiainen-Neunhäuserer. Please use our First 10 Postcards from the Future and let us know how they go in your organisation.

Annemie Ress
Founder
PurpleBeach

Through the use of new and innovative technologies we are able to gain a deeper level of insight into people's shared opinions. Using a collaborative and interactive feedback approach, participants in this study identified the main barriers that organisations face in driving innovation, and gave suggestions on how to overcome them.

This research project was conducted firstly, in order to gain some genuine insight into people's views on innovation in the workplace, and secondly, to generate new and innovative strategies into how to overcome the barriers that prevent sustainable innovation practices being embraced in organisations.

The findings from The Innovation Garden were then fed into the next stage in the research process where the ten new actionable insights were born.

Hopefully the conclusions presented will prove to be helpful to organisations attempting to introduce, or emphasise the importance of, more innovative practices.

I would like to thank the 94 conference delegates that participated in the study, and the PurpleBeach team who worked with us on the project.

Paul Rein
Research Manager
Silverman Research

2. How it Works

The Garden is a collaborative environment that displays comments using data visualisation instead of a traditional list-based format. Conversations displayed in lists can quickly lead to information overload, so The Garden employs advanced statistics to produce an intuitive graphical map. In addition to allowing participants to navigate the discussion more easily, the visualisation also ensures that each participant has an equal chance of being heard. Participants' ratings of each other's comments are used to give prominence to the most insightful comments without the need for a moderator.

1. Participants use sliders to express their opinion on five 'positioning' statements about innovation in organisations – this determines the location of their bloom.

2. Participants are then prompted to respond to the discussion question: *"What are the main barriers that organisations face in driving innovation? What suggestions do you have for overcoming them?"*

3. The Garden's visualisation (see understanding the visualisation overleaf) allows participants to see where they stand relative to other participants – those with similar opinions are located closer to one another.


4. Participants can then read, rate and respond to the suggestions of other participants - this allows the best insights to be identified and the authentic voice of the community to be heard.

3. Understanding the Visualisation

1. Opinions on two statements can easily be plotted on a two-dimensional graph. Here, the more a person agrees with the first proposition, the further the point is to the right and the more a person agrees with the second proposition, the higher the point. Therefore, a user who rated two statements as illustrated by the sliders opposite would be plotted as shown.
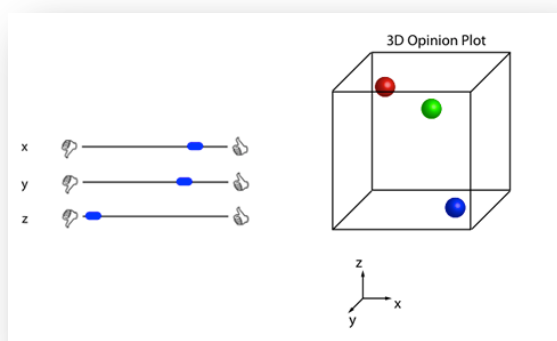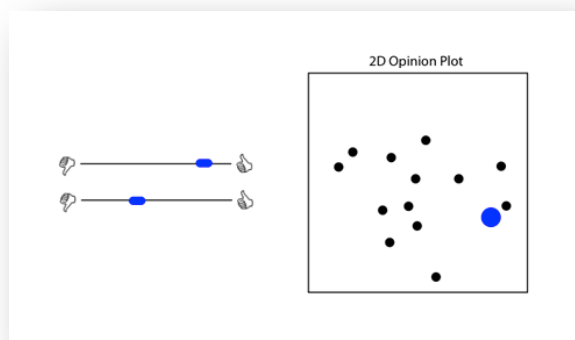
2. Opinions on three statements can be plotted in a similar manner in three dimensions. Notice, however, that it's difficult to interpret just how far away data points are from each other because the three-dimensional image is only shown in two dimensions. In other words, since you can't walk around the illustration there is no depth perception.

3. Using statistics, multiple opinions can be projected onto two dimensions while maintaining distance relationship between the resulting points. It's like shining a light onto a set of balls and observing their shadows. In the bad projection, from looking at the shadows, the blue ball looks closer to the green ball. Yet in reality, the green ball is closer to the red ball. In the good projection, however, the distance relationships are better preserved because the angle of the light was adjusted.
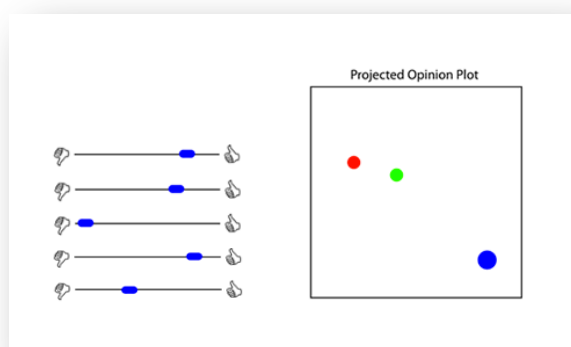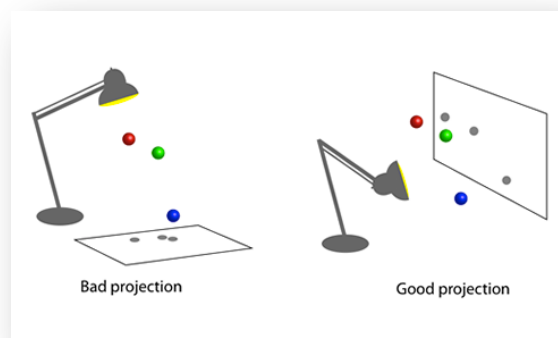

4. Similarly, The Garden's algorithms use the information provided on the five positioning statements to find the best projection of data points in two dimensions. In this way, participants can interpret points near them as people who are similar to them and points that are far away as people who are different from them.

4. Results

4.1 Positioning statements

Responses to the five positioning statements are shown in Chart 1. The data for these questions was collected using sliders (a visual analogue scale). Each bar shows a histogram of responses.

Chart 1: Overall responses to positioning statements (n=94)
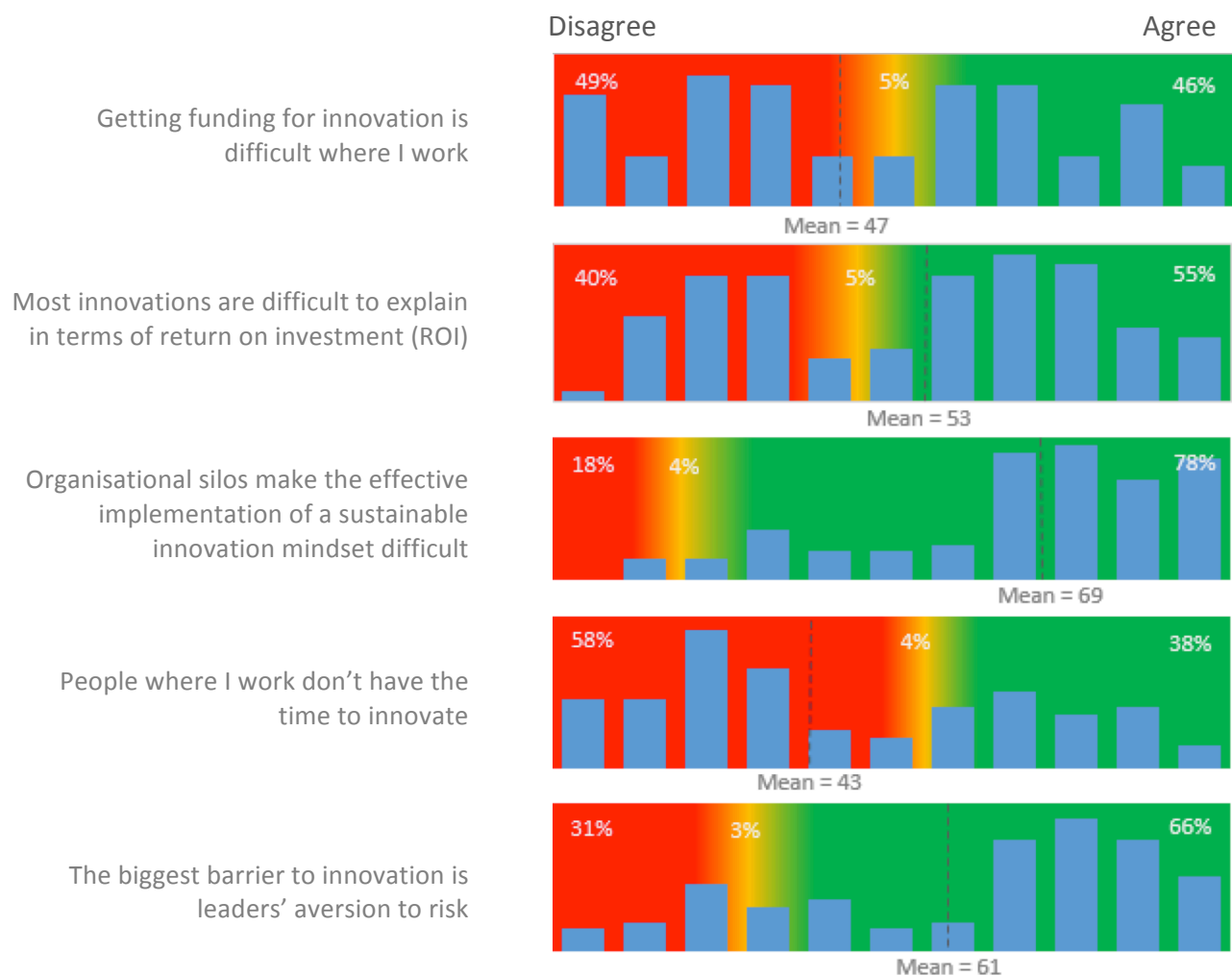
There was a relatively even split between participants in terms of difficulty in getting funding for innovation where they work (46% agree). There was, however, a small majority of participants who thought that most innovations are difficult to explain in terms of ROI (55%). The greatest consensus in the sample was that organisational silos make it difficult to maintain a mindset for driving innovation (78%). Many participants reported that they *do* have the time to innovate where they work (58%), while leaders' aversion to risk was reported as the biggest barrier in driving innovation (66%).

4.2 Top comments

Each participant receives an author score that reflects how other participants have evaluated their response to the discussion question. The score is based on four measures:

- the extent to which other participants agree with their comment
- the extent to which other participants think their comment is insightful
- a confidence score (the comment must have received enough ratings to be statistically reliable)
- a measure of the distance between the rater's and author's blooms (we especially want to identify consensus comments – responses that are highly rated irrespective of difference in underlying opinions of author and rater).

The outcome is that we are able to rank each author in terms of how much their comment has resonated with the community. The top three comments are shown below.

Innovation is about allowing people to take risks and accept failure. In large hierarchical organisations, where compensation and reward systems are strictly tagged to hard measures of performance the willingness to take risks, or to incur in failure is stifled. Furthermore an excessively controlling leadership style that doesn't allow self-expression and risk-taking is also stifling of the intrinsic capacity of people to innovate. Therefore in order to drive innovation organisations need to be very mindful about what type of leadership they promote and what kind of reward system they use. A leadership style that allows risk taking and tolerates a certain amount of failure is therefore a driver of innovation, as well as a reward system that doesn't just give prizes based on hard measures of performance but also the capacity to connect, take risks and create. If people do not feel value they are not capable of self-expression and creativity.

Innovation is taking action on creativity. Creativity is not necessarily rewarded at most companies. When people have new ideas or want to try something new there is not a framework or cultural support for being creative. Budgeting happens a year in advance so if there are no funds allocated then there is no opportunity to see your idea developed. The funding framework, the operational framework, even the development framework does not support creativity and innovation. Perhaps to overcome innovation culturally encourage reflective time, provide environment for exploration and to try an idea out without worrying about failing - failures should be seen as useful as they provide information. Diversity of experience stimulates innovation. Also invite ideas from employees on how they would like to be supported to be more creative and innovative.

Organisational culture drives innovation, because culture drives the workforce. Many organisations claim to have a culture of "openness" and "creativity", but when you scratch beneath the surface you are likely to find the opposite. If organisations want to become more innovative, they need to actually create an open and fair culture where information and ideas can be shared between employees from all levels of the hierarchy. To do this, leaders need to become less scared about losing power and use technologies that can get departments sharing ideas between each other, teams collaborating and friendships forming. By flattening the informal hierarchy, I think employees will not only be more engaged, but more creative.

The benefit of being able to identify the top authors (as rated by the community) is that the most important issues can be distinguished simply by reading their comments. This can be thought of as a form of 'crowd-sourced text analysis' – instead of using text analysis software, the analysis itself is done by participants at source.

In reading through these comments, we can quickly identify that the barriers organisations face in driving innovation relate to organizational culture, hierarchy, risk-taking and leadership. Without doing any analysis, we are able to get a good handle on the issues that are resonating with the community. The next stage delves deeper into participants' comments.

4.3 Analysis of Comments

A manual text analysis was conducted from the comments in the garden where themes were identified and tallied. Fifteen barriers emerged from this analysis. These are shown in Chart 2 and described below.

Chart 2: Main barriers for organisations in driving innovation:
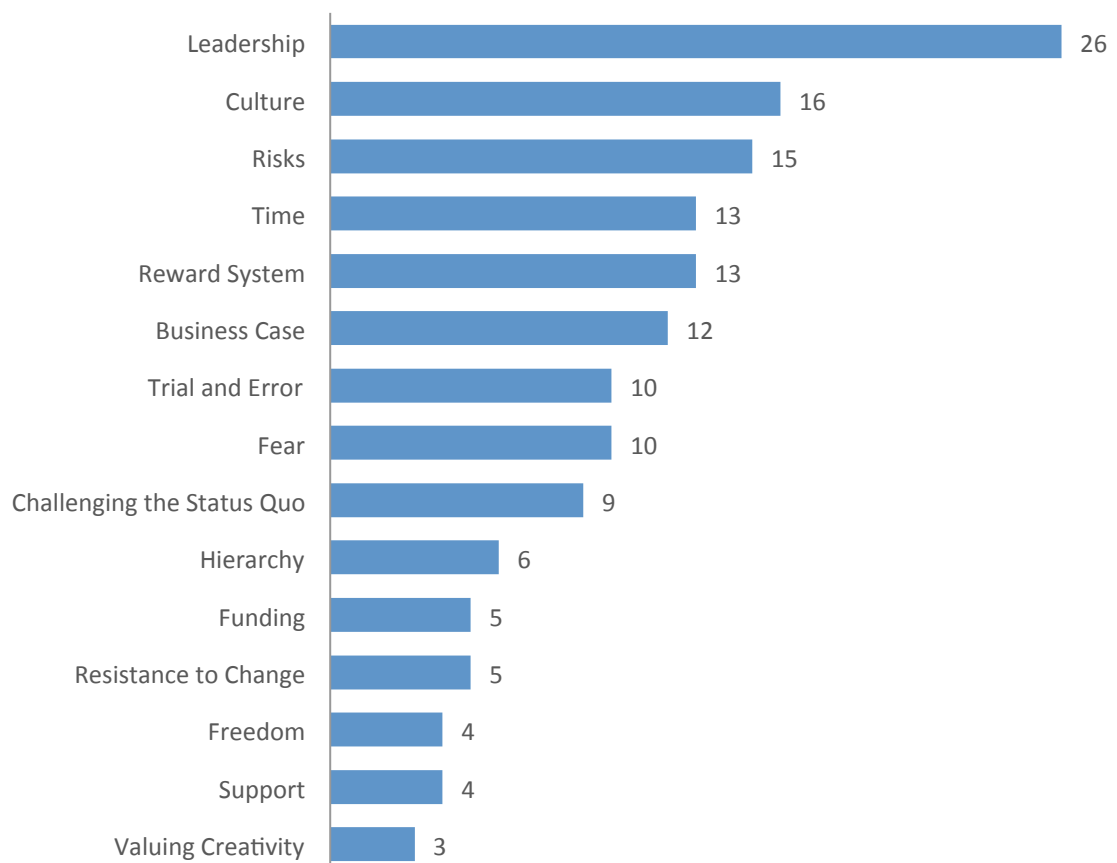
1. Leadership: Leaders being risk averse, a reluctance to listen to new ideas and the need for leaders to encourage innovation.

2. Culture: The organisational culture must encourage innovation and make innovation a part of the every-day working life. A more open and less rigid rule-based culture may fuel innovation.

3. Risks: Innovative ideas can be a risk. In order to drive innovation it may be necessary to take some risks, or create scenarios where risks can be taken without severe losses if the ideas fail.

4. Time: Time must be allocated for innovation.

5. Reward Systems: Issues surrounding existing reward systems being based on measurable pre-defined tasks, not innovation. Innovation should be rewarded in order to drive it.

6. Business Case: Organisations may require some demonstration of ROI to be more inclined to invest in innovation, but this may be the wrong way round – innovation requires backing before it can provide bottom line results.

7. Trial and Error: Organisations need to try new things even if they fail, and employees need to be re-assured that they will not be punished for innovative ideas that do not work.

8. Fear: Fear among leaders and the organisation as a whole. Employees may fear suggesting new ideas, and leaders may fear implementing them.

9. Challenging the Status Quo: Suggesting new ideas can be seen as an attack on the current processes and be received negatively – this is not conducive to fostering innovation.

10. Hierarchy: Rigid hierarchy structures may inhibit the free-flow of new ideas and stifle innovation. It can be difficult to get sign-off due to levels of hierarchy.

11. Funding: Organisations may be reluctant to allocate money to fund innovation. Funds and resources need to be made available specifically for innovation.

12. Resistance to Change: An inherent problem for innovation. People often have rigid views of what the job involves and may intentionally or unintentionally impede the progress of new ideas.

13. Freedom: People need a greater degree of freedom in their roles to be able to be creative and think outside the box.

14. Support: A support framework needs to be in place that allows people to feel comfortable and encouraged to be innovative.

15. Valuing Creativity: Embracing creativity and encourage it at every opportunity.

5. Overcoming the Barriers

The top five most frequently mentioned barriers that research has identified and warrant further exploration are: Leadership, Culture, Risk, Time and Reward Systems. In addition to assessing the barriers to driving innovation, the research question also asked participants to suggest ideas about how these barriers could be overcome. This allows us to report highly rated practical suggestions as well as outlining each issue in more detail.

5.1 Leadership

"Leadership is the capacity to translate vision into reality." Warren Bennis

Many of the comments in this category refer to the difficulties associated with leaders being risk averse. The suggestions relate to how leaders should act.

A leadership style that allows risk taking and tolerates a certain amount of failure is a driver of innovation.

Tolerating failure, rewarding trial and error and the associated role of leadership within these concepts was a predominant and recurring theme across the comments.

Leaders and senior managers should be coached in the importance of transformational management style in order to increase innovation throughout the organisation.

While coaching was not something that was mentioned often, it is a real and practical solution to problems in certain situations.

> *All organisations can benefit from innovation so an idea to overcome this barrier is to present the benefits to leadership teams via case studies and show them how investment into innovation would directly benefit an organisation.*

This suggestion combines leadership with demonstrating the business case. ROI was the sixth most frequently named barrier to innovation.

5.2 Culture

"In most organizational change efforts, it is much easier to draw on the strengths of the culture than to overcome the constraints by changing the culture."
Edgar Schein

Many of the comments mention organisational culture. It is talked about in terms of the necessity to foster a culture of embracing innovation, where it's okay to make mistakes when trying out new ideas.

> *If organisations want to become more innovative, they need to actually create an open and fair culture where information and ideas can be shared between employees from all levels of the hierarchy.*

Hierarchy was also mentioned on a number of comments. The free flow of information across boundaries in organisations would seem to help knock down barriers to innovation.

> *To increase innovation we need to value creativity and that means allowing people the space to create ideas that don't work, that are risky and that are sometimes a bit daft. Somewhere in that sort of culture will be the ideas that are really good and we can turn into innovation.*

> *If individuals can be recognised and given the resources (and the safety to fail) organisations can foster a culture of innovation and effectiveness to meet today's hyper-competitive markets.*

Once again, the notion of trial and error comes up – this time in relation to culture.

5.3 Risk

"Only those who will risk going too far can possibly find out how far one can go"

T.S. Eliot

A common theme to emerge was the association between innovation and risk. It is easy to understand how innovative ideas can be risky, and sometime a leap of faith is required. Organisations need to be prepared to take risks, even if they don't always work.

> *The main barrier to innovation is fear. People, being naturally risk averse, fear change will render their role/department less significant or even redundant…. The fear of innovation will never be entirely cured, but by being aware of the reasons it is feared, you at least improve the chances of overcoming it.*

> *One of my big observations is people feeling comfortable and open to talk about taking risks, looking for new and different ways of doing or thinking - people need to hear it is ok to do this and then perhaps we might start to see some small shifts.*

A greater level of understanding of the possible benefits of risk taking could be a first step in addressing the issue.

> *Demonstrate to the leaders the return on investment generated by innovation, the risks of stunting innovation and the impact on the bottom line.*

It is evident that many of the themes are inter-linked. In this suggestion ROI is associated with the risk of stunting innovation.

5.4 Time

"Time is what we want most, but use worst."
William Penn

Issues raised in this theme concerned not having enough time allocated for generating new ideas. There was a general consensus that innovation requires people-hours. An appropriate space and time needs to be set aside where the focus is targeted at innovation.

> *Working in a large organisation, it is difficult to find the time or the right people to speak to about innovation. There doesn't seem to be the availability or the opportunity to express ideas because there are so many levels of hierarchy.*

> *Time. Both for thinking & collaborating to consider how we move the business forward, and for the activities required to show clients and potential clients that we are able to help them in new areas. Rather than planning how we come up with new concepts, innovative ideas happen from time to time, often when least expected.*

It may be necessary to expend time and resources in order to fuel innovation, in the example above, hierarchy acts as a barrier to creating the time and space to discuss innovation.

> *I suggest taking an 80/20 approach, where 80% of your time is spent on your normal role, but 20% of your time is designated to other work for the organisation where creativity and innovation are the goals.*

While not a new idea itself, it has proved to be a useful channel for instigating innovation in organisations like Google.

5.5 Reward Systems

"If people are good only because they fear punishment, and hope for reward, then we are a sorry lot indeed." Albert Einstein

Comments suggested that in many organisations, employees are rewarded for concrete, often performance-related criteria, rather than rewarded for thinking 'outside the box' and embracing new ideas.

> *In order to drive innovation organisations need to be very mindful about what type of leadership they promote and what kind of reward system they use... [what is needed is] a reward system that doesn't just give prizes for hard measures of performance, but also the capacity to connect, take risks and create. If people do not feel valued they are not capable of self-expression and creativity.*

> *Innovation is taking action on creativity. Creativity is not necessarily rewarded at most companies. When people have new ideas or want to try something new there is not a framework or cultural support for being creative.*

It is not the responsibility of leaders to be innovative – it is the responsibility of everyone in the organisation. It only takes one good idea from one person to spark a great innovation. However, this individual needs to feel valued for doing this. Innovation is unlikely to thrive in an organisation where its antecedents are not rewarded.

> *In my experience barriers include:- rewarding performance and financials over ideas... Changing the culture requires 1. rewarding for creativity, 2. a commitment to creating the space (time and environment) and skills for creative thinking - is it a dedicated R&D, or an 80/20 time allocation 3. being clear as organisation where people can and can't be creative e.g. you have to deliver the organisational brand, but how you engage your local market/customer is down to you 4. coaching leaders so they unlearn habits that reinforce the barriers.*

This comment combines several of the other comments made. There appears to be somewhat of a consensus about what is necessary to overcome the constraints on innovation within organisations.

6. Conclusion and Workshop Outputs

Innovation seems to be a more pressing matter in some organisations than others. Whether or not this is how it should be is another question. This research demonstrates that innovation is important, and organisations should provide time and resources specifically for fostering an environment to promote innovation – not stifle or suppress it.

The five most common themes were discussed in some detail above. There were some other interesting themes that emerged that are worth mentioning. The first of which is concerning the business case and how it can be very difficult to demonstrate a return on investment in innovation. This idea goes hand in hand with another issue that was raised: that funding can be a real barrier. If business leaders are serious about embracing innovation, it would seem then that they need to invest in it. Further comments discussed fear, both in terms of fear from leaders in taking risks, and fear from employees in speaking out and bucking the trend. The phrase "challenging the status quo" was mentioned numerous times, which is indicative of this sentiment: People can often be afraid of making new suggestions in the fear of being ridiculed or branded a troublemaker.

One of the most commonly stated suggestions in overcoming the barriers, was about organisations fostering an environment or a culture where employees have the freedom to try new things even if they fail. This idea of having the freedom of trial and error without fear of retribution is a real implication of this study that can hopefully be taken on board by organisations.

The following actions arise from our workshop discussions. They are ten practical actions that organisations can take to start addressing the most common leadership, cultural, risk, time and systemic constraints to innovation. We believe that by focusing on all or a combination of them,

organisations can build more creative and sustainably innovative businesses. (More detailed outline of these actions can be found at www.purplebeach.com - Postcards from the Future).

6.1 Start with clarity and the undeniable problem

Necessity really is the mother of invention, so start your innovation journey with an undeniable problem, something everyone you wish to involve recognises needs solving. Remember that innovation is the means and not the end. People don't want innovation per se, they want its benefits: financial rewards, confidence and progression.

6.2 Work like pirates

Organisations wanting to embed sustainable innovation would do well to look to pirates and their approach to corporate structuring. The flattening of hierarchy amongst buccaneers in the 18th Century provides interesting insights. Pirate ships were incredibly democratic. Everyone on board would be required to sign up to a set of common objectives before setting sail and no-one was paid until treasure was captured and the quartermaster distributed the pay. This approach created a group of highly committed people and unlocked innovation in a very powerful way. More importantly: Everyone was aware what the common purpose was.

6.3 Open you mind, eyes and ears

Approach innovation with an open mind and keep your eyes peeled and ears tuned for clues. Leaders looking to unlock innovation must be open to the fact that the organisation (and potentially themselves as individuals) will need to change. Keep this in mind as you listen with an open mind and keep your eyes and ears peeled for those clues that are not so obvious.

6.4 Challenge the status quo

Fear is the fastest route to innovation failure. Overcoming fear and uncertainty is integral to the innovation journey. Every act of innovation is a challenge to the status quo, a potential new way of doing things that will disrupt (positively or negatively) the way things are done now. Remember, some might experience challenging the status quo as suggesting that something or someone is wrong that something needs fixing. People cannot innovate if they don't feel secure, therefore it is critical to cultivate a culture of leadership that allows risk taking and tolerates a certain amount of failure.

6.5 Riff, jazz and improvise

It has been said that great innovation is often the marriage of creativity and pragmatism. While innovation is often undertaken in a long term, coordinated fashion, improvisation can be a powerful means of responding to opportunities in the moment. Improvisation is an important aspect of jazz music. Teams of musicians will give themselves time and space for thinking, collaboration and bouncing off each other to compose new melodies as a group. In business, improvisation can be used to engage participants in solving a problem and creating something new. Participants need to understand the area of focus and be prepared to collaborate, bounce ideas around and combine elements from previous successes.

6.6 Dream of infinity & beyond

Focusing on intrinsic motivation - the beliefs within all of us that get us going - can be phenomenally useful tool in unlocking innovation potential. Help people find meaning in the work and unlock their altruism by using the power of possibility. Reach for the stars. Dream and paint a picture of what could be possible if you didn't constrain your efforts with existing boundaries. If leaders dream about changing the world, those who follow them will too. Inspire people to buy in to your

innovation journey with a vision of the future that will take them right to the edge. Understand the beliefs, motivations and goals of your people, and create personal connections between what drives them personally and as part of the organisation.

6.7 Don't cultivate a cult of the individual

While many successful organisations have made champions of their innovators and leaders when communicating with the outside world, it is crucial that – internally – you **don't** make innovation 'heroes' out of individuals. The cult of the individual innovator can undermine overall value creation. Lone voices fighting the status quo are often spat out by the systems they seek to serve. Have fun contributing to a common purpose in a way that is meaningful for everyone involved.

6.8 Don't label "failures" as "failures"

Communicate, communicate, communicate…and yes, do so frequently and with care. Innovation doesn't just happen from big ideas dropping out of the sky. Often it occurs when you connect with people and share your hunches. Communication is the key to innovation. Language can be one of the most powerful ways of making connections that harness human potential. It needs to be handled with care, as it has a huge bearing on the process and can sometimes only serve to reflect dominant thinking to the extent that other options are ignored or withheld.

6.9 Don't forget those near misses

Innovating costs time and money. It represents a challenge to the existing order and can be risky. Make the process fun and rewarding for those involved and you'll be rewarded with greater participation and better ideas. When you fail, fail small and often. This means you can turn your attentions to what might prove to be a far better bet. Don't punish the doomed projects and unprofitable products if they are genuinely "smart". Be realistic but compassionate with your teams. Learn from your near misses.

6.10 Make the future part of the furniture

Don't force innovation. Instead create an environment that gives it the best chance of flourishing. Innovation should be a habit, an ongoing process to drive value creation across the business. It shouldn't be something organisations turn to when they don't know what else to do.