How do we know when a creative idea is worth developing & implementing in the process of innovation?

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Summary

Evaluation is crucial in selecting creative ideas to be invested in, or rejected. However, there appears to be much more academic research and literature on the idea generation stage of innovation compared with the stage of evaluation. Therefore, this article focuses specifically on the stage of evaluation of ideas, highlighting some of the limitations of 29 commonly used evaluation tools reviewed by (Bradac, 2018)

A Systems Thinking approach is advocated for overcoming some of these limitations, although it is acknowledged that neither the systems thinking approach nor the most commonly used evaluation tools, explicitly account for unconscious drivers that may influence our evaluations.

Further research is recommended, to explore the impact of environmental conditions that may facilitate the conscious use of unconscious influences, through critical thinking, self-reflection and contemplation. Recognition of the multi-faceted, complex, inter-woven relationships in the process of evaluation may enhance ethical sustainability in favourable or adverse evaluations during the process of innovation.

Introduction

What is the image you associate with the word “innovation”?

Judging by the responses to my Google search for images using the keyword #innovation, it seems that a lightbulb is one of the most common pictorial associations with innovation. We may take the lightbulb for granted nowadays but like all manmade things, at some point in our history it was a novel and valuable idea which has endured the test of time through the process of innovation.

In this article, I will outline the process of innovation and refer to the 29 commonly used evaluation tools for selecting creative ideas to be put forward for development and implementation in the process of innovation. You may be familiar with several of these evaluation tools and for those that you are not familiar with, I refer you to the article by Bradac (2018) for a concise description of each evaluation method. This article avoids replicating a review of the methods and instead focuses on three main limitations of these evaluation tools, suggesting a systems thinking approach for a more ethically inclusive approach. Gaps in academic literature regarding the role of unconscious drivers that influence our evaluations remain to be explored in future research.

What do we mean by innovation?

Academically, there are numerous definitions of innovation which highlight the impact of novelty (which may be in systems, products or designs). This novelty is then implemented, transforming the lives of all those who become directly or indirectly associated with it. Even if we do not personally use the innovative product, service or system such as Facebook, we must accept that it has changed the way that many friends and families communicate with each other, which in turn has an indirect, implicit impact on our own lives. We may appear in photos taken at parties and then uploaded to Facebook without even being aware that our personal life has so easily become public paraphernalia through innovative means of communication.

Radical vs incremental innovation

Broadly speaking, radical innovation arises from a dramatic new idea whereas incremental innovation improves an existing product or service in some way, for example by making it cheaper, faster or more convenient.

If we are not immersed in industry or business, we can use the metaphor of our own lives to understand radical and incremental innovation. As we grow and mature, there will inevitably be many instances when our lives undergo incremental or radical innovation; sudden or gradual changes that improve the quality of our lives. For example, from time to time, we may go for a radical hairstyle that causes a dramatic impact, or we may prefer incremental innovation, changing the shade of our hair more gradually.

Every time we decide to walk the untrodden path and take a radically unexpected turn in our career, it takes courage and resilience to overcome implicit and explicit challenges, just like when we propose radical ideas in the front end of the innovation process in an organisation. When we leave one job for another that is more lucrative

or more convenient or more enjoyable, the process resembles the journey of creative ideas in an organisation, stimulating an incremental innovation where the purpose is to make better, faster or cheaper products and services.

Another radical innovation in our lives may be when we move to another country which involves great risks and an ability to adapt to a new environment. As in industrial innovation, the change is not guaranteed to produce more beneficial outcomes, especially in the short-term. We may find that we were happier in the previous environment, but it is difficult to go backwards. Incremental innovation in our lives, for example when we choose to redecorate our homes instead of selling up and moving to a new location, is a safer option with less risks and perhaps also less benefits.

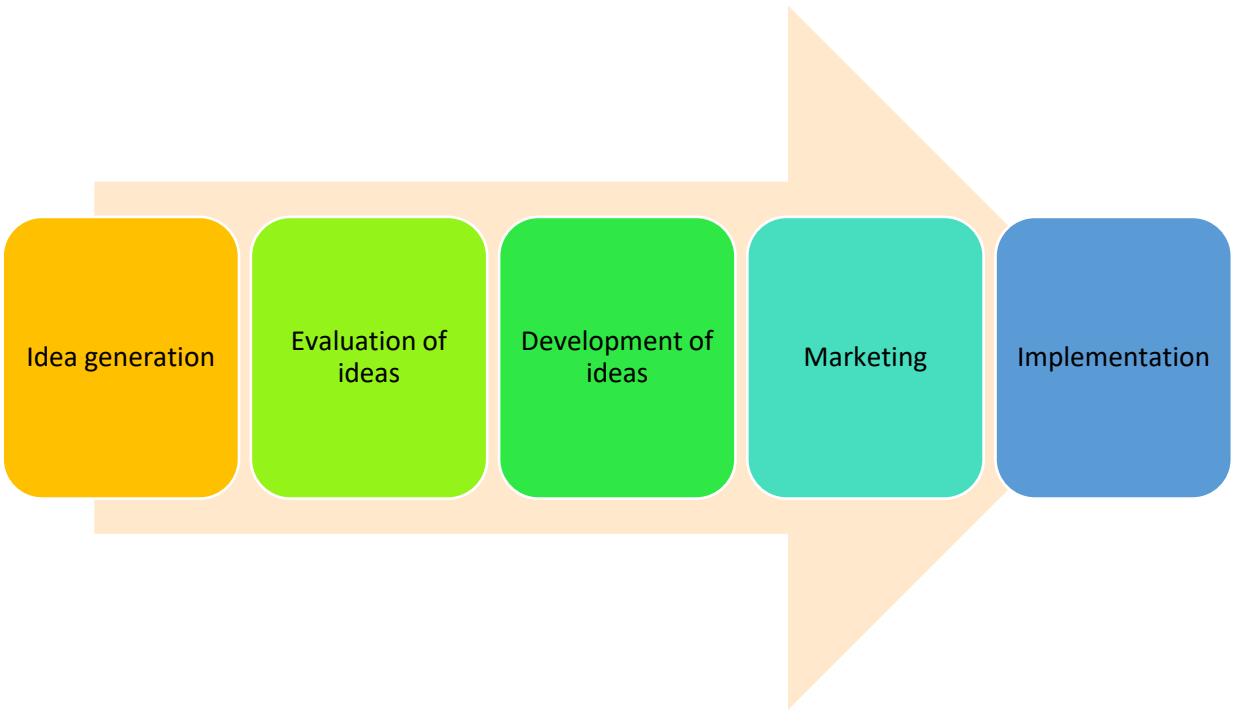
Innovation and change are integrally connected and the metaphor of change and innovation in our own lives is useful as a starting point for understanding the process of innovation in business and industry.

The process of innovation

In business, the process of innovation usually begins with generation of ideas in response to a business problem, an identified gap in existing products or services, or a desired outcome to meet seen or unforeseen needs.

Creative ideas are then evaluated and selected for further development. To avoid wasting resources, only the ideas that are likely to be valuable in bringing a healthy return on investment for those funding the innovation process are put forward to the next stage of development.

Figure 1: The process of innovation



Work environments designed to stimulate creative ideas

Modern, innovative companies such as Google and Apple pride themselves on creating work environments where there is:

- Trust between team members,
- Freedom to take risks,
- Time and space to play & have fun
- Reflection on random ideas.
- Flexible working hours
- A low level of stress

This kind of work environment is appropriate for the first stage of innovation which is **generation of ideas**, rather than **evaluation of ideas.**

We need to use different thinking styles when generating ideas and when evaluating ideas. For example, divergent thinking and acceptance of random ideas without criticism is associated with idea generation activities such as brainstorming. In contrast, convergent and critical thinking to consider whether the idea is in alignment with organizational values and desired outcomes is more appropriate at the evaluation stage. Whereas in the idea generation stage we need to encourage risk taking and discourage criticism, in the idea evaluation stage we need to discourage risk taking and encourage critical thinking. In the idea generation stage, we are more interested in being open whereas in the idea evaluation stage we aim to be selective instead.

Figure 2: Idea generation vs idea evaluation

Idea Generation	Idea Evaluation
Divergent thinking	Convergent thinking
Encourage risk-taking	Discourage risk-taking
Discourage criticism	Apply critical thinking
Be open	Be selective

29 tools & techniques commonly used for evaluation of ideas

Although in comparison to the idea generation stage, there is less academic research that focuses specifically on the evaluation of ideas stage, there are nevertheless dozens of methods and tools being used to facilitate the process of evaluation and selection of creative ideas. Bradac (2018) investigated 29 idea evaluation methods and techniques listed below:

1. ABC analysis
2. AHP-based approach
3. Anonymous voting
4. A-T-A-R model
5. Check lists for business idea evaluation
6. Consensus mapping
7. Cost-benefit analysis
8. Decision trees
9. Delphi technique
10. Evaluation matrix
11. FMEA -Failure Modes and Effects Analysis
12. Force field analysis
13. Grid analysis
14. Idea advocate
15. Impact analysis
16. Kano model
17. Kepner Tregoe matrix
18. NAF-Novelty Attractiveness Feasibility
19. Nominal group technique
20. Paired comparison analysis
21. Pareto analysis
22. PMI analysis
23. Prioritisation
24. Repeatable questions diagrams
25. Sticking dots
26. SWOT analysis
27. TRIZ
28. Value analysis
29. Vroom-Yetton-Jago Decision Model

Bradac (2018: 12) decomposes the process from identification of ideas to their implementation, into 7 consecutive phases as follows:

1. Identification and organisation of ideas
2. Making a list of available methods and techniques
3. Building up a set of criteria to select a particular method or tool
4. **Selecting the tool or method**
5. Implementing the method
6. **Selecting the idea**
7. Idea implementation

This analysis highlights that before we arrive at point number 6, *selecting an idea*, we have explicitly made at least one previous judgment, at point number 4, selecting the tool or method by which to select the creative ideas.

In addition to practical, external variables that inform our selection of evaluation methodology, there may be numerous unconscious or implicit variables influencing our choice. Bradac's 7 phase analysis of the process from identification to implementation of ideas, suggests a need for criteria to select a method or tool. Defining the set of criteria against which we assess the suitability of the evaluation method for our purpose may begin with comparisons of essential features of the method to identify similarities and differences.

How do we choose our evaluation tools?

Our choice of evaluation tools may be determined by responses to questions such as:

1. Do we want to evaluate Individually or in groups or a mixture of both?
2. Do we want to use an objective or subjective approach to interpreting information?
3. What type of criteria will the evaluation method allow us to use?
4. Do we want to cluster ideas through categorisation, prioritisation or weighting?
5. How appropriate is the level of complexity of the method in meeting our needs?

Individual or group

We may be evaluating creative ideas individually or as part of a group. The concluding evaluation may derive from a combination of individual and group evaluation. Individual preferences and choices are often very different to group selections as there is variation in assumptions, biases and openness to unfamiliar ideas which cause us discomfort. Many evaluation methods adopt a combination of individual and group evaluation to allow space for multiple perspectives and diversity in judgments. For example, individuals may vote anonymously for their preferred ideas and then participate in a group discussion until a consensus has been reached regarding which ideas to put forward and which to reject.

Objective or subjective

When we are evaluating a creative idea, it is helpful to clarify whether our evaluation is to be based on quantitative, objective factual information, or whether we are basing our judgments on qualitative, subjective opinions or interpretations. Credible experts in the field in which the creative idea is presented, may feel confident making intuitive evaluations whereas a novice in the field may need to rely on more tried and tested information upon which to base their evaluations. Likewise, subjective, intuitive evaluations offered by experts rather than novices are likely to appear more credible and valid.

Criteria

Even informal evaluations, such as whether to try out a new place to eat, are usually based on a set of criteria: is the restaurant affordable, accessible and pleasant? In business, the criteria used for evaluation of creative ideas may vary in terms of complexity and contextual factors. At the initial stage of evaluation, novelty of the creative idea may be an important criterion whereas at a later stage, feasibility and potential return on investment may be more important in selecting ideas worthy of further development in the process of innovation.

Clustering ideas through categorisation, prioritisation or weighting

When we have a large number of creative ideas to evaluate, categorization, prioritisation or weighting of ideas can facilitate the process through clustering of ideas into manageable groups. This clustering could begin by being quite rustic, for example, ideas that are a strategic fit and those that are not; those that are ethical and legal and those that are not; those that make existing products faster, cheaper or more beautiful and those that are radical and entail a great deal of risk.

Level of complexity

When creative ideas appear to be very simple, we may not necessarily need tools and techniques to assist us in the process of selection. However, since time and financial resources are invested in the process of innovation, we need to justify the methodology that influenced our selection, so we need to take greater care in making sure we are using the most appropriate evaluation tool available to us.

When there is a low level of complexity, tools such as a simple SWOT (strengths, weaknesses, opportunities and threats) analysis may be more appropriate than methods such as TRIZ (Teoriya Resheniya Izobretatelsskikh Zadatch) or the Kepner Tregoe matrix, which are very complex and require training (Bradac, 2018).

Limitations of commonly used evaluation tools

There are several limitations of commonly used methods for selection of creative ideas in the process of innovation. One of these limitations is that they tend to isolate the ideas within a narrow focus. Secondly, many ideas are rejected without feedback loops to salvage those that may simply be in the wrong place at the wrong time. Thirdly, selection and evaluation of creative ideas is likely to be influenced by unconscious drivers but these are rarely acknowledged in popular evaluation tools.

Isolation of creative ideas

When ideas are evaluated in isolation, the contextual parameters are usually localized, and selections are made based on the outcomes desired by the organisation. Using a narrow, local focus for evaluating ideas may result in a failure to notice the potential for emergence of innovative ideas which may serve at a global level through shifting patterns of complexity or synthesis.

Lack of effective feedback for rejected ideas

Ideas may be rejected for reasons such as:

they do not fit the selected criteria;

they are low on the level of priority scale

or they have been tried and tested with unsuccessful results, previously.

Feedback for these rejected ideas is often cursory or ineffective and we do not usually see responses to questions such as:

Which criteria could the rejected creative ideas potentially fulfill?

When or where might these ideas be a higher priority?

If these rejected ideas have been tried previously, why did they fail? Can some of those previous challenges be overcome in the near future?

Lack of acknowledgment of unconscious influences

Highly creative people often say that their most creative ideas come to them from their unconscious, when they are engaged in activities where their conscious mind is at rest, for example while they are sleeping, taking a shower or walking through the countryside. When we are evaluating creative ideas, we may feel that the quality of one idea is better than another based on our ‘gut instinct’. We sometimes need time to mull over an idea, or ‘sleep on it’ and contemplate the idea for a while. However, despite these indications that we draw on unconscious knowledge or intuition, periods of incubation so that reflection and contemplation of the idea can occur, are rarely built in to formal evaluation systems.

Ways in which a Systems Thinking approach can overcome some of these limitations

There are several ways that systems thinking can make the process of evaluation more inclusive, ethical and sustainable for example through

1. Contextualisation of ideas
2. Identification of relationships and patterns
3. Synthesis of different ideas
4. Emergence of new ideas
5. Feedback loops for ideas that are rejected

Context

Systems Thinking is a way of seeing life as complex, interwoven relationships that connect all of life physically, emotionally, socially and ecologically. This way of thinking is often associated with the phrase attributed to ancient Greek philosophers (Midgley, 2007) “The whole is greater than the sum of its parts”.

The well-known management consultant, Senge (2006: 66) uses this concept to remind us that “Dividing an elephant in half does not produce two small elephants”. Similarly Midgley (2007: 19) notes that, “A random heap of organs is not a human being”.

Cause and effect are not seen to be simplistic, linear relationships in Systems Thinking. Advocates of Systems Thinking, such as Senge (2006: 63) Craft et al. (1997: 93) and Bausch (2001: 379) explain that conceptual knowledge and creative ideas, are circular rather than linear and their impact or effect is often so far removed that the complexity of inter-connected variables make it difficult to identify linear causal relationships. When we evaluate ideas in isolation, it is difficult to take into account circular causal relationships in which ideas are constantly changing. An idea that is perfect in one context is likely to be inappropriate for another context.

There are many parallels between systems thinking and the process of innovation. For example, Lee (2013) notes that “…..innovation is a complex, nonlinear and collective process enacted over varying but often very long (decadal) timescales and over multiple sectors (scientific, industrial, retail, financial, etc.)” This description could just as easily describe the systems thinking approach.

Stakeholders

In business, ideas are often evaluated in reference to a relatively small number of stakeholders, for example, customers, employees, suppliers, local community and competitors. A Systems Thinking approach broadens the scope to include a much more diverse range of stakeholders who may potentially be directly or indirectly associated or influenced by the creative idea.

Including a wider range of stakeholders in our evaluations could lead to more accountability in mitigating adverse effects and sustainability of the new product or service.

Figure 3: Diverse range of stakeholders may offer diverse range of evaluations for a creative idea

When we take a more inclusive approach and take into consideration the impact on a wider range of stakeholders, including future generations, of innovations such as fast food, we may be able to avoid what Ritchie (2004: 178) describes as “The High Price of Cheap Food”. Ritchie discusses the “food and agriculture system that puts products on the shelves of supermarkets at blinding speed but poisons land and water and damages the health and happiness of farmers and food workers.” He argues (Ritchie, 2004: 179) that factory farm agriculture externalizes significant environmental, social, and political costs. In doing so, businesses based around agriculture push the costs of air and water pollution, disease resulting from toxic exposure, and social dislocation onto individuals, the public sector, and future generations.

Rarely do businesses take into consideration the impact of a creative idea on stakeholders that include future generations or those that are located in distant parts of the world. In contrast, a Systems Thinking approach enables us to take account of these stakeholders that are not physically present in time and space.

Networks vs hierarchies

Taking into consideration the context in which an idea is generated and presented, we can account for organizational structures, for example a network or a hierarchical structure may differ in the way an idea is evaluated and developed in the process of innovation. Highly innovative companies such as Apple, tend to favour networks rather than hierarchies. For example, Steve Jobs took great pride in encouraging

creative collaboration in his organisation through members of staff working in circles rather than hierarchies. Networks are often associated with ecological organisation, for example the natural dynamics of plants and micro-organisms seem to revolve around systemic networks rather than structural hierarchies.

One of the criticisms of hierarchies when it comes to evaluation of ideas is that we may feel inclined to favour ideas that come from those higher up in the hierarchy, and therefore associated with power, rather than those proposed by peers in a network. As a child from a large family, I often observed that ideas expressed by siblings who had higher status in the family due to their age, were often perceived to be better ideas. Therefore, the strategy I used to persuade my parents about something was to first gain allegiance from an older brother who would present the idea as if it were his own. In a similar vein, in the workplace, acceptance of an idea by the ultimate decision maker at the top of the hierarchy, needs to go through the hierarchical management channels. If we are unable to convince our direct manager of the value of an idea, it is unlikely to see the light of day or gain the attention of the senior managers with the power to make decisions or take actions to push the idea forward in the process of innovation.

On the other hand, in networks, especially when ideas arise in explicit collaboration and there is joint ownership of the idea, there is likely to be a greater level of accountability and commitment to giving the desired attention to creative ideas that emerged in a collaborative team effort.

If we are evaluating ideas in a hierarchy, we may ignore valuable ideas offered by those who are powerless, marginalised and on the fringes of society. For example, Brem and Wolfram (2014) argue that creative and clever ideas of slum dwellers contribute to the development of many small enterprises in India. However, in a hierarchical organizational structure, these slum dwellers would probably not have a seat at the board table and their voices would not be acknowledged.

Language and perception

Language is another very important contextual feature. The language that is used to present an idea may inevitably influence our perception and therefore the quality of evaluation. Senge (2006: 73) explains that,

> Language shapes perception. What we see depends on what we are prepared to see. Western languages, with their subject-verb-object structure, are biased toward a linear view. *P.73*

Languages that constrict us to follow a linear structure where a sentence only makes sense if it follows rigid rules may distort our perception unless, as advocated by the systems thinking approach, we take into consideration a broader world view where a diverse range of languages may indeed present an enriched contextual understanding and awareness.

There are important implications of the influence of language and distorted perceptions in selecting methods for evaluation of ideas. Yet, in the idea evaluation methods explored by Bradac (2018) there is rarely, if ever, safeguarding measures installed to protect ideas that have been presented using inaccurate or ineffective

language which may be because the person presenting the idea is using a second or third language for communicating with their audience.

To minimise an adverse impact when evaluators fail to grasp the essence of the creative idea presented due to language barriers, systems thinking encourages us to create feedback loops so that ideas may potentially be expressed in a variety of languages, including not only the first languages of the evaluators, but also the first languages or dialects of those who have generated the ideas.

Relationships and Patterns

Creativity is more likely to be found in dynamic relationships rather than inanimate objects and Capra and Luisi (2014: 80) (Jackson and McKergow, 2002: 40) advise that it is more appropriate to map these relationships, to identify patterns and configurations, rather than attempting to measure and weigh them.

When we evaluate ideas in isolation, measuring their likely return on investment or weighing their value against previously identified criteria, rather than in relationship to other ideas, we may overlook or ignore the value generated in the patterns created through the relationships between ideas.

In contrast, when we evaluate a creative idea within a context, we may be able to identify the patterns it forms with existing ideas. If it is a radical idea, it may disrupt existing patterns to generate chaos (Armesto, 2004) and turbulence; if it is an incremental idea, the patterns around the idea may appear to enhance previous patterns.

The essence of Systems Thinking seems to lie in the mystery of apparently void spaces and patterns that reveal themselves when we shift our perspective or connect the dots in a complex array of disparate events. For example, when we see the reverse side of an embroidered picture, it can look very messy with long threads that dive in and out without forming a coherent pattern. It is only when we turn the embroidery the right side out that we see the different coloured threads forming aesthetically pleasing pictures. Likewise, some of the ideas we reject during the process of evaluation may simply be presented to us the wrong way around. If we were to tilt that idea on its head, we may discover patterns that were previously imperceptible.

Figure 4: Importance of perspective

Complexity Theory: Small changes can lead to huge impact

Unless we use our imagination to envisage the potential impact of a creative idea not only in present time but also on future generations and life that is distant to us in space and time, it is difficult to foresee the consequences generated by a seemingly insignificant idea. The notion that “small actions can leade to huge impact” (Patton, 2011: 5) (Lorenz, 2000: 66). (Senge, 2006: 63) explains how tiny ideas could lead to a massive shift in perception and innovation that transforms culture. For example, Facebook started with an idea to vote for popularity of students studying at one University and the value generated in acting on this small idea led to dramatic worldwide changes in the way we remain in contact with our friends.

Synthesis vs analysis

Many evaluation methods, such as the 29 reviewed by Bradac (2018), analyse or decompose the creative idea being evaluated. In contrast, Systems Thinking seeks to evaluate the influence of a ceative idea through synthesis rather than analysis. Whereas analysis breaks and separates individual pieces of the subject being researched, synthesis looks at the interactions between these individual pieces within a larger and larger context. Through synthesis we can explore the emergence of creative ideas in the spaces between ideas whereas decomposing the idea with analysis often means that the spaces between ideas remain void and unexplored.

Emergence

When we evaluate ideas in isolation, the likelihood of emergent ideas is restricted. Emergence is described by Capra and Luisi (2014: 154) as “the novel properties that arise when a higher level of complexity is reached by putting together components of lower complexity.” These new properties are not present in the parts. They emerge as a result of the relationships and interactions between the parts. For example,

animated films are made up of thousands of static pictures which are shown in sequence at such a fast speed that apparent motion is created. The complex interweaving of interactions between ideas or concepts makes it difficult to predict the impact of the creative idea in advance. Evaluation methods often adopt a linear approach which ignores the nonlinear process of emergence. Narrow limitations and parameters that overlook emergence, can result in many creative ideas being discarded because they lie beyond the scope of the evaluation.

Rejected ideas

To reflect on the importance of paying attention to ideas that we reject, we could use the metaphor of a work-related selection process that we will experience at some point in our lives: when we are rejected as potential employees for an organisation, which could be because we are not a strategic match or because we fall short, in comparison with other candidates, in meeting their criteria for selection. When this occurs, we may challenge our rejection by asking:

> Who made the decision?
>
> Was it an individual or a group?
>
> What tools and techniques did they use to make the decision?
>
> Why did they choose those tools and techniques?
>
> Were the criteria used to evaluate our performance, fair, unbiased and accurate?

Unfortunately, none of these questions are answered in the typically cursory standard feedback letter for those who are rejected following a job interview:

> “The standard was very high in all the applications and it was difficult for us to make a decision”.

Similarly, when our creative ideas are rejected in the workplace in favour of those presented by a charismatic, popular and influential member of staff, how do we deal with the possibility that these rejected ideas, like a rejected job candidate, may flourish and thrive in a different socio-cultural context and location and at a different point in time?

Popular informal methods for selection of ideas such as responding to our ‘gut instinct’ and formal methods such as those explored by Bradac (2018), fall short of ‘thinking outside of the box’ that contains our selected ideas. The Systems Thinking approach helps us in dealing with this gap or limitation of methods used to evaluate creative ideas for development and implementation in the process of innovation.

Feedback loops

Advocates of systems thinking such as Senge (2006: 79) Capra and Luisi (2014: 92) and (Midgley, 2007: 20) emphasise the importance of feedback mechanisms in systems thinking, using various metaphors, for example the way a thermostat controls the temperature in a room through feedback mechanisms built in the system.

Applying this metaphor of the feedback loop that controls the temperature of a room, we may be able to ascertain the impact of positive and negative feedback we receive from those evaluating our ideas. This feedback may be visible, invisible, conscious, unconscious, verbal or non-verbal. Like a radiator thermostat, it can either turn on or turn off the warmth of energy we feel when sharing our ideas. A cold reception for our most creative ideas is likely to inhibit the flow of creative energy in presenting the idea whereas a warm reception may create a more fertile environment for the creative idea to be shared, nurtured and developed.

Temporality

The temporal life span of a creative idea is difficult to evaluate in real time, without the benefit of hindsight. However, Bausch (2001: 345) explains that temporality is seen in all aspects of reality; all kinds of living systems, including psychic and social systems, undergo constant circular processes, reshaping themselves in response to new situations and with every act of communication. Nothing is permanent in systems. Ideas are constantly changing, decomposing and reshaping.

Limitation of Systems Thinking

The systems thinking approach tends to focus on external factors that influence our choices rather than cognitive or unconcsious influences. Therefore, further research needs to be carried out on the impact of our intuition or gut instinct when we are evaluating. We also know relatively little about the impact of a good night's rest, sleeping and dreaming before evaluating a creative idea. The period required for incubation while an idea is being evaluated will vary depending on the contextual complexity in which the idea is embedded. However, there appears to be little research reporting on the optimum periods for incubation, reflection and contemplation of the creative idea.

When evaluators are under pressure to make evaluations quickly to meet deadlines, the stress and anxiety may distort their judgments. Environments designed for relaxation are more often associated with the idea generation stage of innovation rather than the idea evaluation stage. However, just like those involved in the idea generation stage, evaluators may also need to feel relaxed to formulate effective evaluations. Formal evaluation methods do not usually take account of the context in which the evaluation is made. For example, were the evaluators under stress, anxious or politically inclined to favour some ideas rather than others?

Conclusion

There are many ways in which a Systems Thinking approach can raise the quality of our evaluations. For example, contextualising rather than isolating the creative idea allows us to be more inclusive, to contemplate the process of emergence and synthesis of ideas.

By establishing useful feedback loops that nurture and sustain the creative idea until the time and place are appropriate for it to germinate, we can avoid loss of ideas which may be imbued with a great deal of creative potential. If we fail to see aesthetic patterns in the creative ideas we are evaluating, it may be that we need to shift our own perspective, or change the angle at which the idea is being presented, to see its inherent quality and value.

Using the metaphor of selection of candidates for a job, there may be many cases when the best candidate is rejected because their performance was seen by an unfavourably positioned panel. Likewise, a creative idea may simply be positioned in the wrong place at the wrong time with the wrong selection panel or wrong evaluation tool. Using effective feedback loops and taking a broader contextual perspective which includes linguistic and socio-cultural diversity, may enable us to make more inclusive, ethical and sustainable evaluations resulting in a greater number of creative ideas being developed, shaped and implemented to make a positive impact on our communities and societies.

With greater sensitivity to a complex contextual environment in which the evaluation is being made, we are more likely to make an ethical evaluation about whether a creative idea is worth developing and implementing With effective feedback loops we may avoid wastage of potentially creative ideas. Deep reflection on our unconscious drivers which may have an adverse impact on the evaluations we make, recognise the multi-faceted, complex rather than linear causal relationship between an evaluator and their evaluation.

One of the limitations of the Systems Thinking approach is that it does not readily provide us with insight into the influence of the unconscious in our evaluations of creative ideas in the process of innovation. This may be an area worthy of further exploration

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