

# Ideation for New Ventures: The Reasonings-Outcomes matrix, Models and Tools

Meir Russ, Ph.D.

Professor Emeritus

Austin E. Cofrin School of Business University of Wisconsin - Green Bay, USA

[russm@uwgb.edu](mailto:russm@uwgb.edu) ; [meir.russ@gmail.com](mailto:meir.russ@gmail.com)

Draft<sup>1</sup> – April 4, 2021

## Abstract

The paper summarizes in a step by step ‘recipe’ format a model of developing new ideas (Ideation) that can be used to form a new venture or develop a new product. The proposed ‘recipes’ are widely used and can be applied in tandem with other prevalently available models or tools. The intention of the paper is also to serve as a resource for entrepreneurs and innovators, and the links and references munificently used in the paper are serving this purpose. The author has used the outline and the tools described here in numerous Ideation classes taught for over a decade in several countries around the world. The paper’s intention is not to conduct a systematic review on the subject of new venture creation or propose new research agenda (for that, see for example Shepherd et al., 2021). The purpose is to provide an effective and efficient set of tools, models and techniques that can assist the entrepreneur in her journey to create and achieve her dreams. One such tool is the matrix of Reasonings-Outcomes introduced here for the first time.

**Keywords:** Ideation, innovation, creativity, Reasonings-Outcomes Matrix, data, knowledge management, future.

## Introduction

Innovation is the driving force of advancement in society and organizations. Nimble start-up firms are rapidly generating innovative product/service ideas with customer-centered strategies at an increasingly faster rate, and some of them are changing the society as well. Personally, I became aware of this phenomenon and the power of new ideas as a founder of a new venture in the Israeli kibbutz (that I was a member of at that time) in the late 1980s. Since then, in my research, teaching and consulting, ideation, entrepreneurship and new venture formation were a passion and a corner stone of my professional growth. Following my latest paper, discussing the new economic and social era of continuous technological revolutions, (Russ, 2021a) I thought now would be a good time to revisit my thinking and update my earlier model (draft) of ideation for entrepreneurs and innovators. This manuscript is the result of this process and is written less so as an academic paper and more as a ‘recipe’ or a guide.

---

<sup>1</sup> Draft - please do not circulate or cite without permission of the author.

## Process

One early critical stage of an innovation process is the idea development, or what has been referred to as ‘concept generation’ or Ideation. To develop ideas effectively and efficiently, one needs to marshal and utilize the needed resources and the access to networks within their environment that specifically includes: leadership, culture of creativity and action, culture of learning, access to talent, digital systems and process. Such access and use of will also be needed later on, when the ideas are managed into fruition as a new product, service, process and/or business model. Let us start with Process.

The traditional approach for innovation calls for a staged process (see abundant resources at [https://en.wikipedia.org/wiki/Phase-gate\\_process](https://en.wikipedia.org/wiki/Phase-gate_process) ) and for using the innovation funnel (see also at <http://www.ifm.eng.cam.ac.uk/research/dstools/innovation-funnel/> ). Here, in this paper, the author is proposing a more organic, cycled, integrated and iterative approach (see Figure 1A and 1a below), similar to what can be found at (<https://www.openinnovation.eu/22-01-2016/the-lean-scale-up-innovation-entrepreneurship-for-new-ventures/> ). The models described in Figure 1 identify four different aspects/ingredients needed to be carried by an actor for successful ideation, specifically, an issue to be solved, a solution to resolve the issue, a practical (physical, biological or digital) prototype, and a sustainable (financial, social and environmental) business model that can take the idea into the real world and make it a reality in an economic, socially and environmentally sustainable manner. Such a process is dynamic, interactive, and symbiotic; it can start almost at any point in time, BUT the process must pass successfully (at least once) throughout all the aspects and be carried on/driven by an action oriented, visionary and creative actor/leader, collaborating with internal and external talents and partners.

The volcano metaphor described in Figure 1A is helpful but has limitations, since the background view (not showed here) or the business landscape (or eco-system) is continuously changing (using the Industrial-Organizational model as the strategic paradigm – outside-in) and/or the volcano can move to a whole different scenery (using the Resource-Base strategic paradigm-inside out). To elaborate briefly on this point, the Industrial-Organizational model’s focus on satisfying current or latent customer needs as a starting point. Everything else revolves around that (which is why it is outside-in). On the other hand, the Resource-Based model’s starting point are the unique internal resources and going out, finding the landscape where they can be used fruitfully (which is why it is inside-out).

For example, the classic stage process suggests defining the issue (gap, problem) first and then looking for a creative solution. But sometimes, the solution comes first, or the first duo (issue [1]- solution [2]) does not work; and the ‘actor’ needs to redefine the issue-solution, before proceeding to the next stage (evaluation). Here, the four loops of learning (see Figure 2) can be useful for opening a broader set of options (out of box thinking), both for framing the issue and for defining the solution. And what if after successfully passing the evaluation stage (using Table 1 below), it is determined that the goals are NOT being achieved, then what? Change the goals? Reevaluate? Find another solution? Redefine the issue? Again, the four loops of learning can be helpful here. Similar dynamics can be seen when exerting rapid prototyping [3] and business model development [4]. Which comes first: building a prototype according to a business model

(as is the Japanese or the Lean approach to innovation, e.g., Blank, 2013), or developing a business model enabled by a prototype (the western approach)? And if the performances of the prototype are not satisfactory, what should be changed, the evaluation criteria? The business model? Or, if the business model does not deliver the financial outcomes, what should be done? So, the leader/actor (e.g., company owner) can have an insight at any stage, which can energize each one of the four stages, as well as build on itself. Also, below are four evaluations (for which there should be clear criteria for passing) centered around five questions: 1) What is the issue? 2) What is the solution? 3) Could it work? 4) Can the founder/owner make money on this? 5) Is the solution socially and environmentally responsible and sustainable? But a word of warning; an evaluation too early can stifle creativity.

Speaking about evaluation (or thinking, reasoning), there are numerous reasoning approaches that the entrepreneur can use. For example, deduction, induction (enumerative or eliminative), and abductive (e.g., presencing) reasoning are some of the common (e.g., Güss et al., 2021) reasoning perspectives. Others may include: counterfactual, intuitive, logical (e.g., critical or scientific thinking), backward, defeasible, heuristic and causal (e.g., Bryant, 2007; Duggan, 2013; Gaglio, 2004; Krueger Jr, & Day, 2010). As for the outcome of the insight, the entrepreneur can try to develop a new: knowledge, data, language, tools, experience, system, process and affect (in tandem with the new product or service) she wants to offer. This will offer an intriguing matrix (see Table 1) of reasonings-outcomes possibilities that the entrepreneur can use while going through the iterative stages discussed above. Each cell in the matrix is an option the entrepreneur can use/proceed, and the author's recommendation to the entrepreneur is to develop (or use) a basket of options, while considering how to invest their resources (attention, time, capital, etc.) and what outcomes to go after (see examples at Scharmer, 2016).

The models below (Figure 1 and Figure 2) describe the dynamic process as mentioned above, as the author sees them. Please note that one part of the model is the three dimensional "space" of Ethics, Cybersecurity and Time (Figure 1b). Ethical considerations, as well as sustainability must always be a part of the entrepreneurs' concerns. Cybersecurity should be considered today from the inception of the business and incorporated at every step of the venture development and implementation. Managing time effectively and efficiently is one characteristic of successful entrepreneurs. See more about the three aspects in Russ (2021a) and also about the decision-making process and the quadruple learning in Russ (2021b).

An alternative integrative process was described recently by Güss et al., (2021), based on their study of the work of Leonardo, one that contains nine iterative stages.

In order to develop ideas rapidly the founder needs to familiarize herself and get practice with a number of tools. Here are a few the author is recommending based on his practical experience, consulting, and teaching.

### *Data and Knowledge*

At every stage and at every point, the founder has access to data and knowledge that she can utilize. The author proposes the use of the new model of Knowledge Management (Figure 1c) that was recently proposed by Russ, (2021a). The model suggests that the founder learns new

knowledge and makes decisions, at the same time, continuously and seamlessly. As such, the founder is developing new knowledge while using her existing knowledge (see Fig 1A and 1c above) at the same time. In the process, data is accessed, and it is expected that big data and machine learning will be engaged in the process as well at different stages in the very near future (if they are not already).

Table 1: The matrix of reasonings-outcomes to be considered while using the four evaluations

<b>New outcome \ Reasoning</b>	knowledge	data	language	tools	experience	system	process	affect	product	service
deduction										
induction- enumerative										
induction- eliminative										
abductive (e.g., presencing)										
counterfactual										
intuitive										
critical thinking										
scientific thinking										
backward										
defeasible										
heuristic										
causal										

To enable new venture's agility and resilience for the future, the author is recommending to develop ambidextrous knowledge management strategies, using for example, the C<sup>3</sup>EEP topology (see Russ & Jones, 2011) that includes the capabilities needed to respond to the six strategic knowledge management dilemmas of: Codification-Tacitness; Complementary-Destroying; Concealment-Transparent; External Acquisition-Internal Development; Exploration-Exploitation; and Product-Process.

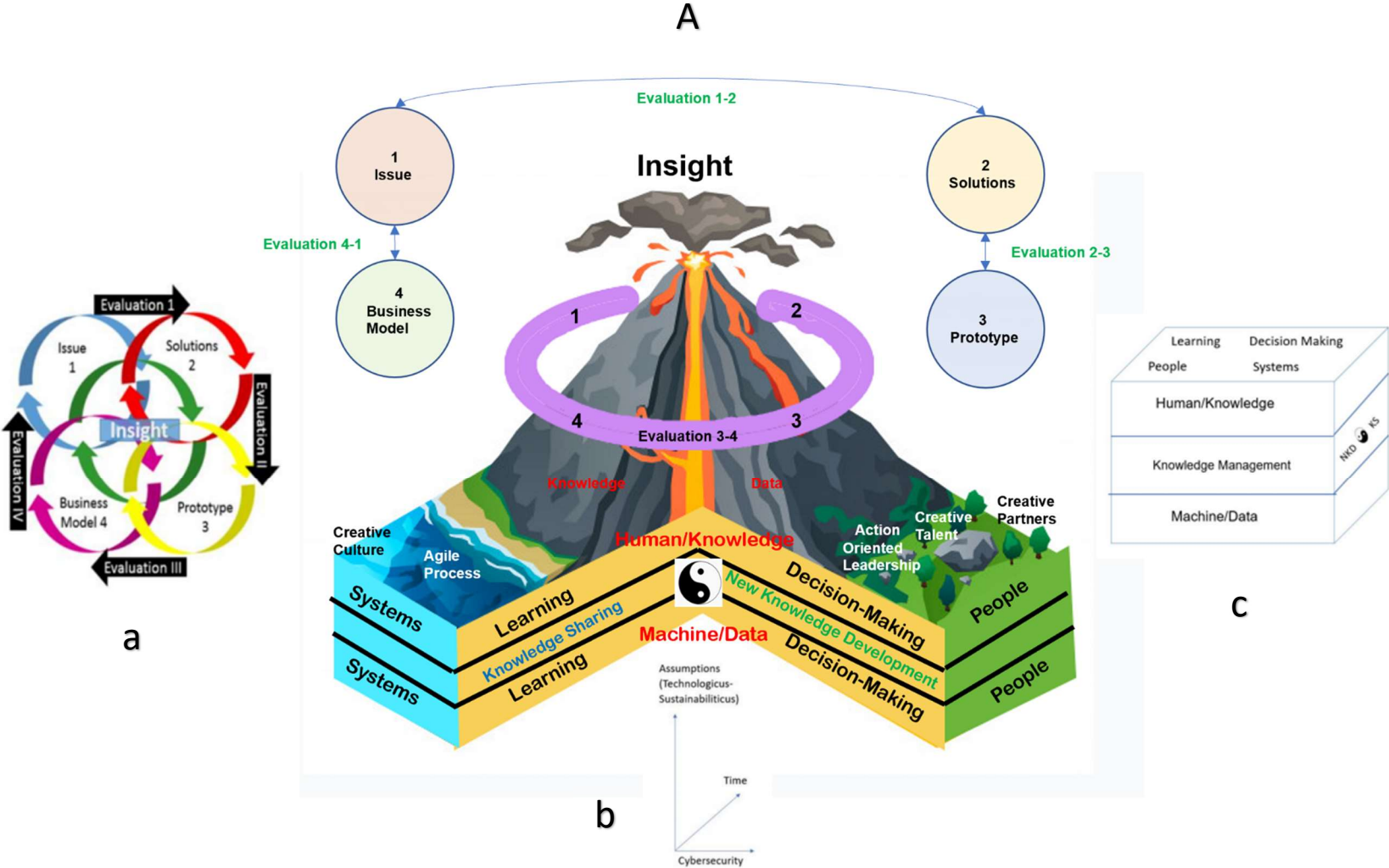


Figure 1: Ideation: Process, actors, and models (author elaborations and Russ, 2021a)

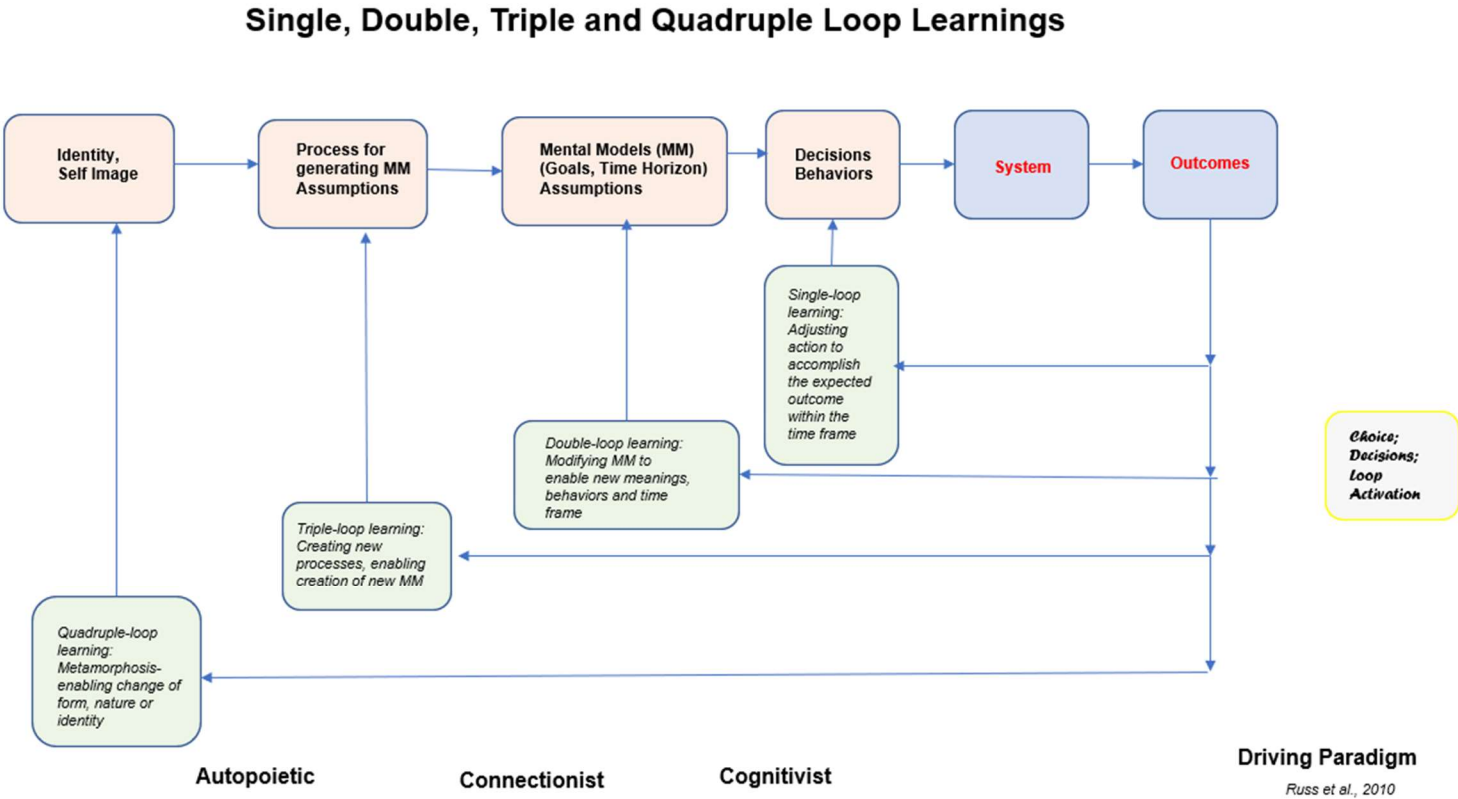


Figure 2: Single, Double, Triple and Quadruple Loop Learnings (adopted from Russ, 2021b)

*Idea generation (issues and solutions)*

A large number of creativity (individual or group) methods are available. See good examples at the MindTools website [https://www.mindtools.com/pages/article/newCT\\_88.htm](https://www.mindtools.com/pages/article/newCT_88.htm) and [https://www.mindtools.com/pages/main/newMN\\_CT.htm](https://www.mindtools.com/pages/main/newMN_CT.htm) .

Ideas have a life cycle. This means that ideas should also be allowed to die, especially when they fail. As Einstein said, if you did not fail, you did not take a risk. So, in some cases the company founder needs to develop an immune system (personal and/or organizational) that kills ideas (especially if they are bad or fail). This is one more reason why the company founder/owner needs to have measurable key success indicators and/or use a business model (see below). Such constraints will help the founder to be creative in her context, since creativity lives on the edge of chaos. No constraints (as well as too many) are not helpful for creativity, but counter-intuitively, constraints create a “space” for creativity.

Warning: Ideas or concepts are the source of innovation and are vital, but NOT sufficient, to the successful launch of a new platform, products or service. Also, do not confuse creativity with innovation; they are not synonymous. Every innovation starts with creativity, but NOT every creative idea ends up in being an innovation.

Regardless of the source of the idea, insight, serendipity, or tool used, the generation of ideas should be practiced extensively, since the success rate is very low (there is a need for over 100 ideas for one successful venture). Using an idea log and visual thinking (see below) might be a healthy practice.

*Idea log*

An idea log is a record of one’s thinking--issues and solutions; it can be graphic (see for example <http://hci.stanford.edu/courses/cs247/2011/idealog.html> ) or written (see for example <http://cs247.stanford.edu/2007/handouts/WhatsAnIdeaLog.pdf> and <http://www.cherylreif.com/2014/04/07/boost-creativity-with-an-idea-log/> )

Here are the author’s guidelines for how to write an idea log:

- Record the issue to be resolved (it is OK to refine it again and again). List at least three solutions. There is nothing wrong with starting with an ‘aha’ moment (solution), then defining the issue, and then suggesting at least two additional solutions (always can have more than three).
- Do it daily; incorporate it into a daily routine.
- Record everything.
- Have a clear set of “success” criteria--write them down; They MUST be specific, measurable and within a time frame (see for example SMART goals at <https://www.clearvoice.com/blog/smart-goal-examples/> ).
- Review them (the criteria, the issues, the solutions) occasionally; choose the best; and reflect.



- While reflecting, consider this (at least, you can always add) questions:
  - Was the idea challenging?
  - Did I force myself out of my comfort zone?
  - Would I accomplish the goals I intended to?
  - Am I using the right criteria?
  - Was I clear about how to make it work?
  - Did I consider all possible scenarios, contingencies?
  - What did I learn from this?
- Involve other trusted people; be sure to collect both positive and negative feedback (see more for example in Verganti, 2016).

### *Visual thinking<sup>2</sup>*

There are four steps of visual thinking (Roam, 2009, pp. 32-42); For a summary watch the short videos at <https://www.youtube.com/watch?v=7oSAuGjBN8w> and <https://www.youtube.com/watch?v=aGnns7VqMug>

1. Look -- semi-passive process of observing the situation (using existing meta-data, baskets).
2. See – proactively re-categorizing the view of the situation (rearranging the metadata and data into ‘new’ information which will enable the creation of ‘new’ knowledge). See also <https://www.youtube.com/watch?v=NcbS0t2WfzI>
3. Imagine -- utilizing the new knowledge for creative possibilities enabling value creation.
4. Show – effectively communicating the output to the audience of interest.

The process is not always linear (1 to 4), and may require reprocessing, consistent with the models introduced in Figure 1 and Figure 2 above. In his book, Roam (2009) elaborates on each of the four steps listed above. Below, the author will briefly cover a few of the most important aspects of these steps (in the author opinion).

Roam (2009, pp. 67-88) suggested six formulas to structure the proactive re-categorizing of the situation (mentioned above) by using the 6w’s (or 5w2h) --see a brief introduction in <https://www.designersreviewofbooks.com/2009/01/the-back-of-the-napkin/> .

---

<sup>2</sup> The author is suggesting that the reader, while reading this part (pages 8-12), have a specific issue at hand, and, after watching the examples and videos embedded in this document, apply them to her specific issue, so the tools will make sense and are practiced.



The 6w's are:

1. Objects -- relate to who and what
2. Quantities -- measurement of how many and how much
3. Position in space -- where in space and process
4. Position in time -- when and timing
5. Influence/cause and effect -- how (system thinking)
6. Putting it together (the big picture) – why

Roam (2009, pp. 89-120) also suggested five dilemmas (the SQVID) to consider and resolve when thinking about visualization (see a summary video at <https://www.youtube.com/watch?v=oZjFICkW7UU>) . These five are:

1. Simple vs. elaborate
2. Quality vs. quantity
3. Vision vs. execution
4. Individual attributes vs. comparison
5. Change vs. status quo

To facilitate the visual thinking process, Roam (2009, pp. 121-130) also proposed a framework and a set of specific tools for showing – what we see and what we show – see summary in <https://www.youtube.com/watch?v=NcbS0t2WfzI>

1. Why -- multiple variable plot
2. How -- flowchart
3. When -- timeline
4. Where -- map
5. How many -- chart
6. Who, what -- portrait

Two additional examples of the graphic tools by Roam can be found at: Visual Thinking Codex -- Six W by SQVID; Roam (2009, pp. 131-136). See at <https://www.youtube.com/watch?v=QphzPHGmByk> and the VIVID grammar at <https://www.youtube.com/watch?v=kSpBxwkRZjE>

Three more examples of visual thinking from other sources that you may want to consider:

- A new advanced tool: visual thinking for business and a video, can be found at [https://www.youtube.com/watch?v=vcW1\\_l-nRes](https://www.youtube.com/watch?v=vcW1_l-nRes)
- One from Stanford, <https://stanfordgsb.tumblr.com/post/51889767187/5-core-skills-of-disruptive-visual-thinking>
- A Master project from Buffalo State College by Melinda Walker, M. (2012). "Visual Thinking: Sketching my Future as a Visual Practitioner". Available at <http://digitalcommons.buffalostate.edu/cgi/viewcontent.cgi?article=1169&context=creativeprojects>

At this point, the founder should have gone iteratively through steps 1-3 (in Figure 1 above) a few times and have practiced all the tools described above at least once, prior to moving to the next stage.

### *Value Proposition and Evaluation-Business model*

For the business model, the author likes to use Osterwalder and Peigner (2010) as a canvas. See a great preview at

[http://www.businessmodelgeneration.com/downloads/businessmodelgeneration\\_preview.pdf](http://www.businessmodelgeneration.com/downloads/businessmodelgeneration_preview.pdf)

Important considerations about the business model at the stage of idea development and management include the following:

- Have some numbers, so if asked by a banker or a Chief Financial Officer, the supporting numbers and data (based on insight) will be available.
- Using the canvas and its nine building blocks (customer segments, value proposition, channels, customer relationships, key resources, key activities, key partnerships, revenue stream and cost structure) is one way to explicitly formalize a value proposition (which is the core of the canvas) from the customer's perspective (NOT the founder's) and how value will be created (or profit) from the idea.
- What is really important is the focus on cash flow, which is the 'killer' of any new idea or new venture. Using this tool will force the founder to think in terms of customer needs and finance and will help to crystalize key success indicators.
- You can also check canvases that consider or focus on sustainability (see for example Cardeal et al., 2020).

See additional resources at <http://www.alexandercowan.com/business-model-canvas-templates/> and <http://blog.strategyzer.com/posts/2014/7/25/great-ideas-need-great-business-models>

### *Evaluation- Six hats*

Another technique that the author likes to use for evaluation is the 'Six thinking hats' developed by de Bono (1985). Using this technique will allow the business founder to access multiple perspectives, and will be helpful in the evaluation of her idea. The six hats are:

1. Green--Creativity -- statements of new ideas, possibilities; visualizing a potential future; go-with-the-flow and out-of-the-box thinking.
2. White--Information, data -- considering what information is available, what are the facts, what data is missing and needed?
3. Red--Emotions -- intuitive or instinctive (no need for justification or rationale) reactions of emotional feeling.

4. Black--Judgment – cold, practical, realistic logic; reasons to be cautious and conservative. The devil's advocate (this is the ONLY time disagreement is acceptable and the only time it is required).

5. Yellow--Optimistic response -- logic applied to identifying benefits and value. Sees the positive, sunny side of the state of affairs.

6. Blue--Managing the six hats thinking process -- what is the subject? What are we thinking about (which hat are we using now)? What is the goal? Preventing negative, disagreement thinking (unless you are using the black hat). Look at the big picture.

The above is based on and modified from [http://www.debonogroup.com/six\\_thinking\\_hats.php](http://www.debonogroup.com/six_thinking_hats.php) and [https://en.wikipedia.org/wiki/Six\\_Thinking\\_Hats](https://en.wikipedia.org/wiki/Six_Thinking_Hats)

### *Planning for application – Leading with a culture of creativity and action*

To succeed, the founder will need to create some kind of an organization (since seldom is anything accomplished alone) and lead and think with a bias toward action while being creative. As Belsky (2010) suggested, to make ideas happen, the founder will need: ideas, organization, communal forces and leadership capability. For that, she will need innovation, which is ideation and execution (to create value), and to increase impact, she will have to combine creativity and organization. In order to accomplish this, the founder will need to harness a community and the forces around her. Such an organization should include a network of different players like dreamers, doers, and incrementalists (Belsky, 2010), so stimulation from serendipity can be sought, and complementary skill sets can be cultivated. As a leader, the founder/owner should also learn to talk last, develop a tolerance for failure and ambiguity, and avoid the trap of visionary narcissism.

### *Planning for communication*

There are two types of communication the founder needs to plan for: internal, within her organization and, external.

Internally, the key points for planning communication are: 1) to frame the space where creativity can and should happen; and 2) ongoing alignment of activities, processes, resources (time, social, human and financial capital) and actors.

Externally, the founder must communicate effectively with a diverse constituent base, including: supporters, naysayers, customers, suppliers, etc. Academic studies have shown that involving customers and suppliers in the innovation process could result in a greater success in new product/service development. This is especially so, when the founder can identify lead users, those who seek new products or innovative services. An alternative approach could be using experts' opinions and/or open innovation (see for example <https://openinnovation.eu/22-01->

[2016/the-lean-scale-up-innovation-entrepreneurship-for-new-ventures/](#) ). Employees, when appropriate, can be helpful as well.

Kotter and Whitehead (2010) present an interesting perspective on how to understand the generic attack strategies that naysayers and obfuscators utilize and how to minimize the risk of their potential, future attacks. They also suggest how to encounter these adversaries with tactics tailored to each strategy. For example, by "inviting in the lions" to critique an idea--and being prepared for them--the attention of busy people will be captured, which will help them grasp the value of the proposal, and secure their commitment to implementing the solution. By considering probable attacks and responses, value proposition can be crystalized and the image and brand strategy sharpened. Founders can also use prosumers to improve on their products and/or services (see for example <https://brandminds.live/the-rise-of-prosumers-is-the-latest-challenge-for-marketers/> ).

**Acknowledgments:** The author is grateful to Chayale Szarfer for her help with the graphics.

#### Additional reading-Reference

##### 1. Books

Belsky, S. (2010). *Making Ideas Happen: Overcoming the Obstacles between Vision and Reality*. ISBN-13: 9781591843122

de Bono, E. (1985). *Six Thinking Hats: An Essential Approach to Business Management*. Little, Brown, & Company. ISBN 0-316-17791-1

Duggan, W. (2013). *Strategic intuition: The creative spark in human achievement*. ISBN: 9780231142694

Kotter, J.P. and Whitehead, L.A. (2010). *Buy-In: Saving Your Good Idea from Getting Shot Down*. ISBN-13: 9781422157299.

Miller, D. (2021). *Business Made Simple*. ISBN 978-1-4002-0381-9

Osterwalder, A. and Peigner, I. (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. ISBN-13: 9780470876411.

Roam, D. (2009). *The Back of the Napkin: Solving Problems and Selling Ideas with Pictures*. ISBN-13: 9781591843061.

Sedniev, A. (2013). *The Business Idea Factory*. ISBN 978-1-49368-220-1

## 2. Articles

- Alam, I. (2002). An exploratory investigation of user involvement in new service deployment. *Journal of the Academy of Marketing Science*, 30(3), 250-261.
- Blank, S. (2013). Why the lean start-up changes everything. *Harvard Business Review*, 91(5), 63-72.
- Bryant, P. (2007). Self-regulation and decision heuristics in entrepreneurial opportunity evaluation and exploitation. *Management Decision*, 45(4), 732-745.
- Cardeal, G., Höse, K., Ribeiro, I., & Götze, U. (2020). Sustainable business models–canvas for sustainability, evaluation method, and their application to additive manufacturing in aircraft maintenance. *Sustainability*, 12(21), 9130.
- Chesbrough, H. W., & Appleyard, M. M. (2007). Open innovation and strategy. *California Management Review*, 50(1), 57-76.
- Fairbank, F. J., & Williams, S. D. (2001). Motivating creativity and enhancing innovation through employee suggestion system technology. *Creativity and Innovation Management*, 10(2), 68-74.
- Franke, N., Von Hippel, E., & Schreier, M. (2006). Finding commercially attractive user innovations: A test of lead user theory. *Journal of Product Innovation Management*, 23(4), 301-315.
- Gaglio, C. M. (2004). The role of mental simulations and counterfactual thinking in the opportunity identification process. *Entrepreneurship Theory and Practice*, 28(6), 533-552.
- Girotra, K., Terwiesch, C., & Ulrich, K. T. (2010). Idea generation and the quality of the best idea. *Management Science*, 56(4), 591-605.
- Grunlund, J., Sjodin, D. R., & Frishammar, J. (2010). Open innovation and the StageGate process: A revised model for new product development. *California Management Review*, 52(3), 106-131.
- Güss C. D., Ahmed, S., & Dörner D. (2021). From da Vinci's flying machines to a theory of the creative process. *Perspectives on Psychological Science*. Advance online publication. <https://doi.org/10.1177/1745691620966790> . Available at [file:///C:/Users/Meir/Downloads/Da\\_Vinci\\_Flying\\_Creativity\\_Guess\\_et\\_al\\_2021.pdf](file:///C:/Users/Meir/Downloads/Da_Vinci_Flying_Creativity_Guess_et_al_2021.pdf) .
- Howard, J. T., Culley, S. J., & Dekoninck, E. (2008, March). Describing the creative design process by the integration of engineering design and cognitive psychology literature. *Design Studies*, 29(2), 160-180.
- Krueger Jr, N. F., & Day, M. (2010). Looking forward, looking backward: From entrepreneurial cognition to neuroentrepreneurship. In *Handbook of Entrepreneurship Research* (pp. 321-357). Springer, New York, NY.

Poetz, K. M., & Schreier, M. (2012). The value of crowdsourcing: Can users really compete with professionals in generating new product ideas? *Journal of Product Innovation Management*, 29(2), 245-256.

Russ M. (2021a). Knowledge management for sustainable development in the era of continuously accelerating technological revolutions: A framework and models. *Sustainability*, 13(6):3353. <https://doi.org/10.3390/su13063353> .

Russ, M. (2021b) The individual and the organizational model of quantum decision-making and learning (MQDM&L): An introduction and the application of the quadruple loop learning. *Preprints 2021*, 2021030667 (doi: 10.20944/preprints202103.0667.v1). <https://www.preprints.org/manuscript/202103.0667/v1>

Russ, M., Fineman, R., & Jones, J.K. (2010). Conceptual theory: What do you know? in M. Russ, (Ed.) *Knowledge Management Strategies for Business Development* (pp. 1-22). Hershey, PA: Business Science Reference. DOI: 10.4018/978-1-60566-348-7.ch001. Draft available at [https://www.uwgb.edu/UWGBCMS/media/faculty-site-russm/files/chapter\\_1\\_russ\\_fineman\\_jones\\_2008.pdf](https://www.uwgb.edu/UWGBCMS/media/faculty-site-russm/files/chapter_1_russ_fineman_jones_2008.pdf)

Russ, M., & Jones, J. K. (2011). Knowledge management's strategic dilemmas typology. In D.G. Schwartz and D. Te'eni (Eds.) *Encyclopedia of Knowledge Management*, 2nd Edition, (pp. 804-821). Hershey, PA: IGI Reference. DOI: 10.4018/978-1-59904-931-1.ch078

Scharmer, C. O. (2016). *Addressing the blind spot of our time*. Available at [https://solonline.org/wp-content/uploads/2016/12/Exec\\_Summary\\_Sept19-Theory-U-leading-from-the-emerging-future-copy.pdf](https://solonline.org/wp-content/uploads/2016/12/Exec_Summary_Sept19-Theory-U-leading-from-the-emerging-future-copy.pdf)

Shepherd, D. A., Souitaris, V., & Gruber, M. (2021). Creating new ventures: A review and research agenda. *Journal of Management*, 47(1), 11-42.

Shin, S. J., Kim, T., Lee, J., & Bian, L. (2012). Cognitive team diversity and individual team member creativity: A cross-level interaction. *Academy of Management Journal*, 55(1), 197-212.

Verganti, R. (2016). The innovative power of criticism. *Harvard Business Review*, 94(1- 2), 88-95.

Walker, M. (2012). *Visual Thinking: Sketching my Future as a Visual Practitioner*. Creative Studies Graduate Student Master's Projects. Paper 156. <http://digitalcommons.buffalostate.edu/cgi/viewcontent.cgi?article=1169&context=creativeprojects>

3. TED lectures on creativity

<https://www.ted.com/topics/creativity>

[https://www.ted.com/playlists/20/where\\_do\\_ideas\\_come\\_from](https://www.ted.com/playlists/20/where_do_ideas_come_from)

[https://www.ted.com/playlists/11/the\\_creative\\_spark](https://www.ted.com/playlists/11/the_creative_spark)

[https://www.ted.com/talks/astro\\_teller\\_the\\_unexpected\\_benefit\\_of\\_celebrating\\_failure](https://www.ted.com/talks/astro_teller_the_unexpected_benefit_of_celebrating_failure)

[https://www.ted.com/talks/knut\\_haanaes\\_two\\_reasons\\_companies\\_fail\\_and\\_how\\_to\\_avoid\\_them](https://www.ted.com/talks/knut_haanaes_two_reasons_companies_fail_and_how_to_avoid_them)

[https://www.ted.com/playlists/28/sustainability\\_by\\_design](https://www.ted.com/playlists/28/sustainability_by_design)

<http://ideas.ted.com/the-surprising-stories-behind-clever-inventions/>

[https://www.ted.com/talks/neri\\_oxman\\_design\\_at\\_the\\_intersection\\_of\\_technology\\_and\\_biology/transcript?language=en](https://www.ted.com/talks/neri_oxman_design_at_the_intersection_of_technology_and_biology/transcript?language=en)