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Bisociation Teaching Exercise Spurs Business Model Innovation

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This teaching exercise focuses on generating novel combinations of existing business models, products/services and markets.

Diverse paths lead to entrepreneurial opportunities and innovative business models. Some entrepreneurs arrive at their destination via a deliberate, rational process of search and causal thinking. Others arrive by building on actions that were originally driven by some other purpose and applying effectual logic to make creative use of pre-existing means and create new markets.

We often start by defining a problem or “pain point” in the market and then looking for a solution. However, at times the path to success starts with identifying available resources and finding new ways to combine and deploy them, or new problems to solve with existing solutions. Entrepreneurship development and education should focus on introducing a diverse range of paths that might lead to business opportunities and successful ventures–rather than teaching a single correct route. This “bisociation” exercise aims to spark ideation, opportunity development and business model innovation by having participants combine existing business models, products/services and markets in new ways.

Innovation and entrepreneurship can be daunting endeavors, especially for those lacking extensive training or experience. The bisociation exercise illustrates how innovation results from novel combinations of business models, products/services and markets that already exist. The exercise can be used to develop business opportunities, generate innovative business models, and help students strengthen their entrepreneurial skills by recognizing the value creation opportunities from using resources that are already in reach.

Overview

Some key considerations for adopting and implementing the exercise follow:

- **Audience:** We have used this exercise with more than 1,000 undergraduates, MBA and Executive MBA students from diverse backgrounds and diverse majors within business. The exercise should also work well with younger students, but might require more explanation of the concepts.
- **Modality:** The exercise works well for both face-to-face and synchronous online modalities, so that participants can synchronously co-create novel combinations. Using the exercise in asynchronous formats would require adjustments to maintain the social element.
- **Duration:** 40-100 minutes, including 10-20 minutes of introduction, 5 minutes for initial individual ideation, 10-30 minutes for group ideation, and 15-45 minutes of debriefing and discussion. Additional time may be needed if key concepts require introduction (e.g., business models, market segmentation).
- **Technology:** The exercise works best when participants can contribute toward a collective document. We set it up as a Padlet (www.padlet.com(http://www.padlet.com/)) shared among all participants, but a shared document file also works well, as do printed worksheets. Samples appear in the appendix, and the exercise template can be replicated or

adapted from this site (https://padlet.com/ddigregorio2/bisociation-exercise-innovative-combinations-of-business-mod-ranqgflvap4hmco) . (See a diagram of Padlet in Appendix 1, which can be downloaded above.)

Learning Objectives

Learning objectives for which this exercise is designed include the following, and the length of time dedicated to the exercise will influence how many learning objectives can be addressed in the implementation and debriefing:

- **Design innovative business models.** Business models articulate the logic by which an entrepreneurial venture creates, delivers and captures value (Teece, 2010) (https://www.zotero.org/google-docs/?RdcYLY) , and they exist in both generic forms (e.g., subscription models) and firm-specific forms (e.g., the Netflix business model). Participants explore existing business models to facilitate the design of innovative applications. Innovation often results from replicating and adapting existing business models, such as the "Uber for X" trend and Rocket Internet's redeployment of existing business models to new geographic contexts (Baumann et al., 2018) (https://www.zotero.org/google-docs/?pDiyt1) .
- **Evaluate business opportunities.** What makes an opportunity attractive? In addition to generating new business models and recognizing opportunities, participants evaluate the opportunities they have generated. The debriefing facilitates metacognition by having participants articulate the logic they utilized when evaluating different ideas they have generated, and participants become aware of the implicit evaluation processes that they used. The debriefing can include a discussion of the relative merits of alternative evaluation criteria and processes. For instance, participants can be prompted to consider whether their opportunity evaluation process placed greater emphasis on the novelty of value creation, the feasibility of executing the business model, the total addressable market, the likely competitive advantage, or some other criteria.
- **Creatively apply causal and effectual logics.** Participants should be encouraged to pursue diverse paths towards generating new ideas. They may choose to apply a causal logic whereby they start with a goal (or pain point) and determine what means and processes are required to achieve that goal. Alternatively, they can apply an effectual logic, whereby they look for ways to apply existing means to discover new solutions. Effectual logic especially encourages divergent thinking to discover new goals, or even randomly selecting business models, products/services and markets to imagine new combinations. When we implement this exercise, we generally do not dictate a specific logic in advance; rather, we allow teams to develop their own logic and then become conscious of that logic during the debriefing and discussion.
- **Experiment, improvise and play with seemingly foolish ideas.** Entrepreneurship development and education often emphasize business planning, market research and rigorous evaluation. This exercise encourages participants to also play around with ideas, to co-create ideas, and to entertain potentially foolish ideas following James G. March's "technology of foolishness" (Larsen, 2020; Sarasvathy and Dew, 2005)(https://www.zotero.org/google-docs/?UlbY6U) . Participants can be encouraged to use a random number generator (e.g., www.random.org(http://www.random.org/)) to generate random combinations as part of the ideation process. The debriefing can include a discussion of how introducing some randomness, play and divergent thinking can lead to more creative outcomes, since being "foolish" helps students break out of cognitive straitjackets to envision new possibilities and avoid focusing too much and too quickly on why something won't work. Entertaining the ridiculous may lead to ideas that can be further developed into viable and valuable business models. The exercise demonstrates the merits and challenges of iteratively integrating divergent and convergent thinking. By encouraging students to play with seemingly foolish ideas socially, the exercise works well early in a course to promote open exchange and to break the ice.

Novel Combinations of Resources, Markets and Business Models

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Even the most creative innovations generally result from novel combinations of what already exists. Arthur Koestler long ago referred to the creative process as "bisociation" and explained that even the most path-breaking innovations result from recombining what already exists in novel ways (Koestler, 1964) (https://www.zotero.org/google-docs/?aAXw3N) . For instance, Gutenberg's development of the printing press entailed repurposing pressing technologies widely used in agriculture. Bisociation has been extended to entrepreneurship to explain the cognitive process leading to "actions by which firms move into new markets, seize new customers, introduce new resources, and/or combine markets, customers, and resources in new ways" (Smith and Di Gregorio, 2002, p. 130)(https://www.zotero.org/google-docs/?GisZip) . The market process and economic development depend on entrepreneurial individuals who discover and act upon opportunities that create markets and shape competitive dynamics, moving markets either closer to a common understanding and equilibrium or introducing disequilibrating actions that disrupt existing recipes for competition.

The bisociation process relates to two other processes identified in entrepreneurship: effectuation and bricolage. Effectuation is an alternative to causal logic and draws on readily available means to generate new ends (Read et al., 2013)(https://www.zotero.org/google-docs/?6Yf4Tm) . With effectuation, entrepreneurs draw on their identity ("Who I am"), prior experience and existing expertise ("What I know") and social networks ("Whom I know") to innovate (Sarasvathy, 2001) (https://www.zotero.org/google-docs/?6itudj) . Bricolage, defined as making do with what is at hand (Baker and Nelson, 2005) (https://www.zotero.org/google-docs/?88kDJP) , allows for valuable innovations even in resource-poor environments, provided innovators socially construct new ways to combine and deploy existing resources. Applying effectuation and bricolage can also promote more accessible and inclusive entrepreneurship by helping all participants identify unique and potentially valuable resources that they bring to the table based on their own lived experience.

The Bisociation Exercise

The exercise (see the template in Appendix 2, downloadable above) works best for the ideation and opportunity evaluation phases of an entrepreneurship curriculum, and it can contribute to team formation efforts. If participants are not already familiar with key concepts such as the business model, the instructor can introduce these concepts in the process of introducing the exercise. For instance, the examples of generic and firm-specific business models appearing in the template provide real world examples of business models in action. The exercise can be implemented during a single session, broken into two synchronous sessions, or introduced in an asynchronous session with individual ideation followed by a synchronous session for team ideation and debriefing.

1. **Introducing the exercise and objectives.** Instructors can focus on any of the learning objectives articulated above.
2. **Walking participants through the template.** Depending on the prior knowledge of participants, the instructor can briefly introduce the template and link it to familiar concepts (for more advanced students) or introduce key concepts in the process of introducing the template (for less advanced students). The first three columns include preloaded examples to get ideas flowing; students should be encouraged to add to these columns as they are introduced. The fourth and fifth columns will be completed as individuals and teams generate and evaluate new combinations of items from the first column (a business model), second column (a product or service) and third column (a market). When we implement the exercise, we seek to explain just enough to allow participants to jump into and apply the template, without dictating exactly how they should approach the exercise; this allows for (and requires) a more thorough debriefing and discussion, during which participants become conscious of the logic they have applied.
3. **Business Models.** Preloaded examples include generic business models that can be implemented in new industry or market settings, as well as examples of business models from specific companies. Participants should be encouraged to add examples of other generic models or simply names of companies with admirable business models.
4. **Products/Services, Benefits and Value Proposition.** Participants identify products and services that can be delivered via a business model. In describing the product or service, participants should be prompted to focus on

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value creation in the form of *benefits* generated through delivery of the product or service, rather than *features*, since entrepreneurs and markets can be so immersed in introducing features as to lose sight of the fact that what ultimately matters to consumers are the benefits or value that is delivered. For instance, the benefit of masking gray hair may be generated through permanent color products, temporary color products, or services delivered. Focusing on the underlying benefits results in a clearer value proposition and may lead participants to more unconventional ways to generate and deliver the benefits.

5. **Markets and Segmentation.** The exercise can be a useful way of identifying markets and applying market segmentation concepts. Since students tend to focus on consumer markets at the expense of ignoring business-to-business (B2B) markets, the preloaded examples also include several B2B markets, and participants should be encouraged to identify both consumer markets and B2B markets. Markets can be segmented along demographic, geographic, psychographic or behavioral lines. Students most readily understand demographic and geographic segmentation, so illustrating psychographic and behavioral segmentation can be particularly valuable additions. Accordingly, numerous entries in the preloaded examples illustrate psychographic (e.g., narcissists, introverts) and behavioral (e.g., Tesla owners, Prius owners, pickup owners) segmentation.
6. **Sharing good ideas and foolish ideas.** The fourth and fifth columns are left open for participants to record and share their best ideas and their most foolish ideas.
7. **Individual ideation process.** The exercise can help students appreciate both individual cognitive processes as well as socio-cognitive or co-creation processes leading to business model innovation and opportunity evaluation. Participants should be given some time to individually add to the first three columns (business models, products/services, markets) and then to individually generate ideas for novel combinations. Each combination will involve executing a chosen business model (first column) to deliver and sell a specific product/service (second column) to a particular market (third column). Participants should be encouraged to use both rational, deliberative logic as well as randomness, improvisation and foolishness. For instance, one potential combination from the preloaded columns would result in a startup selling deodorant as a subscription service to narcissists. Another combination from the preloaded columns could be a freemium taco model targeting the type of person who would own a Tesla. These examples contain elements of foolishness, but further iterations and pivots could lead to viable and attractive business models for a new venture.
8. **Social ideation and evaluation process.** Participants form groups (3-5 members per group works well) to share and evaluate individual ideas and to generate additional ideas. This stage can be shortened or lengthened depending on time available, but it is generally important to provide teams at least 10 minutes so that they don't rush into convergent thinking too quickly.
9. **Sharing good ideas and foolish ideas.** The entire class should be brought back together so that each group can share their 'best' ideas as well as their most 'foolish' ideas, which are sometimes the same idea. Depending on time availability and class size, sharing can range from all teams sharing both ideas in the discussion to sharing ideas strictly through the Padlet or shared document.
10. **Debriefing.** The instructor should guide a debriefing session to link back to the learning objectives. The debriefing can trigger metacognition in helping students think about the individual and collective thought processes they used to both generate and evaluate ideas. For instance, during individual ideation, did participants focus more on the upside potential or the challenge (how hard it would be to launch and scale)(https://wheretoplay.co/) ? For team ideation, how and when did the team apply divergent versus convergent thinking? Did the team approach the exercise as a way to play with crazy ideas, or as a task for which they needed to apply rational analysis?
11. **Potential discussion questions.** Potential prompts for discussion include the following:

- Which of the 'best' ideas represents the best business opportunity, and why?

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- Which of the 'foolish' ideas could actually be good ideas (perhaps with an extra pivot), and why?
- Did your best ideas come from the individual ideation phase, team co-creation, or a combination of the two? What are the strengths of individual versus collective ideation and evaluation?
- Did your best ideas come from rationally evaluating business opportunities or from playing around with potentially foolish or ridiculous ideas?
- Did you (individually, and then as a team) apply both divergent and convergent thinking? How did you balance and sequence these?
- What constraints *did you* apply in the individual and team phases? What constraints *should we* apply when trying to generate valuable business opportunities?
- Can we be both rational and foolish/playful? If so, how?
- How did you feel about sharing your ideas, foolish or otherwise?
- What did you observe about the interaction of sharing and reacting to ideas?
- What does this exercise suggest about innovation processes within companies?
- What makes an opportunity valuable?
- What were the criteria that you used (individually and collectively) to evaluate business ideas? Were you explicit in stating the criteria or did you use implicit criteria?

Outcomes

By the end of the debriefing, students generally report having a better understanding of business models, markets and business opportunities, and they are energized to discover new business opportunities. We've found that many of the ideas evolve into semester-long projects and occasionally into actual startups.

References

Baker, T., Nelson, R.E., 2005. Creating Something from Nothing: Resource Construction through Entrepreneurial Bricolage. Administrative Science Quarterly 50, 329–366. https://doi.org/10.2189/asqu.2005.50.3.329 (https://www.zotero.org/google-docs/?z47JHB)

Baumann, O., Bergenholtz, C., Frederiksen, L., Grant, R.M., Köhler, R., Preston, D.L., Shane, S., 2018. Rocket Internet: organizing a startup factory. J Org Design 7, 13. https://doi.org/10.1186/s41469-018-0037-2 (https://www.zotero.org/google-docs/?z47JHB)

Koestler, A., 1964. The Act of Creation. Macmillan, New York.(https://www.zotero.org/google-docs/?z47JHB)

Larsen, B., 2020.Whatever happened to "The Technology of Foolishness"? Does it have any potential today? Scandinavian Journal of Management 36, 101093. https://doi.org/10.1016/j.scaman.2020.101093 (https://www.zotero.org/google-docs/?z47JHB)

Read, S., Sarasvathy, S., Dew, N., Wiltbank, R., Ohlsson, A.-V., 2013. Effectual Entrepreneurship. Routledge.(https://www.zotero.org/google-docs/?z47JHB)

Sarasvathy, S.D., 2001. Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. AMR 26, 243–263. https://doi.org/10.5465/amr.2001.4378020 (https://www.zotero.org/google-docs/?z47JHB)

Sarasvathy, S.D., Dew, N., 2005. Entrepreneurial logics for a technology of foolishness. Scandinavian Journal of Management, Organizations: Past, Present and Future 21, 385–406. https://doi.org/10.1016/j.scaman.2005.09.009 (https://www.zotero.org/google-docs/?z47JHB)

Schumpeter, J., 1928. The Instability of Capitalism. The Economic Journal 38, 361–386. https://doi.org/10.2307/2224315 (https://www.zotero.org/google-docs/?z47JHB)

Smith, K.G., Di Gregorio, D., 2002. Bisociation, discovery and the role of entrepreneurial action, (https://www.zotero.org/google-docs/?z47JHB) in: Hitt, M.A., Ireland, R.D., Camp, S.M., Sexton, D. (Eds.), Strategic Entrepreneurship: Creating a New Mindset. Wiley-Blackwell, pp. 129–150.

Teece, D.J., 2010. Business Models, Business Strategy and Innovation. Long Range Planning, Business Models 43, 172–194. https://doi.org/10.1016/j.lrp.2009.07.003 (https://www.zotero.org/google-docs/?z47JHB)

Where to Play - Market Opportunity Navigator [WWW Document], n.d. . Where to Play. URL

EIX.org (2023)
DOI: 10.32617/858-63dd19464e01d

https://wheretoplay.co/ (accessed 11.15.22).
(https://www.zotero.org/google-docs/?z47JHB)

EIX.org (2023)
DOI:
10.32617/858-63dd19464e01d