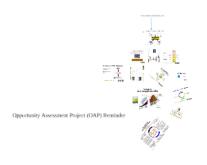


In groups of 4:

15 Best Startup Ideas





Bander Rubbit and Bockey's Boot

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15 Worst Startup Ideas

Create a 3-5 minute ad for your "worst startup idea" turning it into a good idea

Thank you Ann!



What did we learn?

- 1. E-ship is about seeing problems as opportunities The bigger the problem, the bigger the opportunity!
- How to optimize/hack brainstorming (customers/lead users as fertile source of ideas)
- 3. Best combination is a creative visionary + operations/execution (hard to do)

Today's Agenda

- How to Hack Brainstorming and Become More Creative
- 2. Your turn to brainstorm!

How to Hack Brainstorming?



What are characteristics of good brainstorming sessions?

Eativity | Brainstorming Takeaways | talking to customers often a fertile |

Lead users | talking to customers often a fertile |

Creative visionaries | Lead users | talking to customers often a fertile |

Creative visionaries | Lead users | talking to customers often a fertile |

Creative visionaries | Lead users | talking to customers often a fertile |

Creative visionaries | Lead users | talking to customers often a fertile |

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Creative visionaries | Lead users | talking to customers of talking talking to customers of talking to customers of talking to customers of talking talk

TABLE 3 Means and Standard Deviations, Experiment 2

| Dependent Variables | Group Size | | | | |
|---|-----------------------------|--------------------------------|-----------------------------|--------------------------------|--|
| | 6 | | 12 | | |
| | Electronic Brainstorming | Nonelectronic Brainstorming | Electronic Brainstorming | Nonelectronic Brainstorming | |
| Number of nonredundant ideas ^a | | | | | |
| Means | 39.10 | 30.20 | 85.90 | 29.50 | |
| s.d. | 10.32 | 12.04 | 23.43 | 3.62 | |
| Overall quality | | | | | |

Table 2
Average Number and Quality of Ideas Suggested By Real and
Nominal 4-Person Brainstorming Groups Working Under
Personal- Versus Collective-Assessment Instructions

| Condition | Measure | | | | |
|---------------|--------------------|----------------------|---------------------|------------------------|--|
| | Number of ideas | Number of good ideas | Average originality | Average feasibility | |
| Real group | | | | | |
| Personal | 32.33 | 3.00 | 2.52 | 2.90 | |
| Collective | 23.66 | 2.00 | 2.49 | 3.07 | |
| Nominal group | | | | | |
| Personal | 84.33 | 13.33 | 2.46 | 2.60 | |
| Collective | 64.66 | 5.66 | 2.43 | 2.70 | |

Note. Lower numbers indicate higher originality and feasibility.

Table 4
Average Number of Ideas Suggested By Real and Nominal
4-Person Brainstorming Groups Working Under HighVersus Low-Evaluation Apprehension and CollectiveVersus Personal-Assessment Instructions

| | Type of assessment | | |
|------------------------------|-----------------------|---------------------|--|
| Condition | Collective assessment | Personal assessment | |
| Real group | | | |
| Low-evaluation apprehension | 34.50 | 52.50 | |
| High-evaluation apprehension | 36.00 | 40.00 | |
| Nominal group | | | |
| Low-evaluation apprehension | 82.00 | 102.00 | |
| High-evaluation apprehension | 78.00 | 66.00 | |

TABLE 1 Means and Standard Deviations, Experiment 1

| | | | Grou | p Size | | |
|--|-----------------------------|--------------------------------|-----------------------------|--------------------------------|-----------------------------|--------------------------------|
| | | 2 | 4 6 | | i | |
| Dependent Variables | Electronic Brainstorming | Nonelectronic Brainstorming | Electronic Brainstorming | Nonelectronic Brainstorming | Electronic Brainstorming | Nonelectronic Brainstorming |
| Number of nonredundant ideas ^a | | | | | | |
| Means | 24.80 | 26.20 | 42.20 | 31.80 | 69.80 | 35.90 |
| s.d. | 8.22 | 9.68 | 11.77 | 11.87 | 19.10 | 10.11 |
| Overall quality score ^a | | | | | | |
| Means | 70.95 | 67.65 | 125.30 | 81.35 | 205.90 | 109.20 |
| s.d. | 18.84 | 33.14 | 35.15 | 26.52 | 51.58 | 31.74 |
| Number of | | | | | | |
| high-quality ideas ^a | | | | | | |
| Means | 10.00 | 10.10 | 17.30 | 11.10 | 28.10 | 16.10 |
| s.d. | 3.33 | 5.68 | 3.71 | 3.66 | 7.84 | 5.42 |
| Production blocking ^{b,c} | | | | | | |
| Means | 2.13 | 2.03 | 2.23 | 2.74 | 2.31 | 3.27 |
| s.d. | 0.95 | 1.24 | 1.03 | 1.19 | 1.05 | 1.34 |
| Evaluation apprehension ^{b,c} | | | | | | |
| Means | 2.42 | 2.32 | 2.25 | 2.87 | 2.04 | 3.24 |
| s.d. | 1.21 | 1.00 | 0.90 | 1.10 | 0.87 | 1.54 |
| Satisfaction ^{b,c} | | | | | | |
| Means | 5.05 | 5.72 | 5.36 | 5.22 | 5.38 | 4.81 |
| s.d. | 1.29 | 0.83 | 1.30 | 0.88 | 1.15 | 1.35 |

^a Data are for 30 groups, two observations per group.

Electronic Brainstorming and Group Size. R. Brent Gallupe, Alan R. Dennis, William H. Cooper, Joseph S. Valacich, Lana M. Bastianutti, Jay F. Nunamaker, Jr. Source: The Academy of Management Journal, Vol. 35, No. 2 (Jun., 1992), pp. 350-369

^b Data are for 120 subjects, two observations per individual.

^c The higher the value, the stronger the perception or attitude.

TABLE 3
Means and Standard Deviations, Experiment 2

| | Group Size | | | | |
|---|-----------------------------|--------------------------------|-----------------------------|--------------------------------|--|
| Dependent Variables | | 6 | 12 | | |
| | Electronic Brainstorming | Nonelectronic Brainstorming | Electronic Brainstorming | Nonelectronic Brainstorming | |
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| Means | 39.10 | 30.20 | 85.90 | 29.50 | |
| s.d. | 10.32 | 12.04 | 23.43 | 3.62 | |
| Overall quality score ^a | | | | | |
| Means | 146.00 | 99.10 | 340.00 | 111.00 | |
| s.d. | 36.20 | 38.70 | 102.00 | 28.70 | |
| Number of high- quality ideas ^a | | | | | |
| Means | 25.00 | 17.12 | 64.62 | 20.00 | |
| s.d. | 7.56 | 7.81 | 14.94 | 4.60 | |
| Production blocking ^{b,c} | | | | | |
| Means | 2.69 | 3.11 | 2.34 | 3.66 | |
| s.d. | 1.26 | 1.26 | 1.20 | 1.37 | |
| Evaluation apprehension ^{b,c} | | | | | |
| Means | 2.33 | 3.13 | 2.01 | 3.78 | |
| s.d. | 0.95 | 1.23 | 0.96 | 1.38 | |
| Satisfaction ^{b,c} | | | | | |
| Means | 5.07 | 4.73 | 5.64 | 4.35 | |
| s.d. | 1.41 | 1.30 | 1.12 | 1.26 | |

^a Data are for 16 groups, two observations per group.

Diehl and Stroebe. Produc Riddle. Journal of Personal 497-509.

Electronic Brainstorming a R. Brent Gallupe, Alan R. I Bastianutti and Jay F. Nun (Jun., 1992), pp. 350-369

Gary L. Lilien, Pamela D. M Performance Assessment of Development. Managemen

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Diehl and Stroebe. Productivity Loss in Brainstorming Groups: Towards a Solution to the Riddle. Journal of Personality and Social Psychology, Vol. 53, No. 3. (September 1987), pp. 497-509.

Electronic Brainstorming and Group Size

R. Brent Gallupe, Alan R. Dennis, William H. Cooper, Joseph S. Valacich, Lana M. Bastianutti and Jay F. Nunamaker, Jr. Academy of Management Journal, Vol. 35, No. 2 (Jun., 1992), pp. 350-369

Gary L. Lilien, Pamela D. Morrison, Kathleen Searls, Mary Sonnack, Eric von Hippel. Performance Assessment of the Lead User Idea-Generation Process for New Product Development. Management Science, Vol. 48, No. 8 (Aug., 2002), pp. 1042-1059

Personal group Collective 84.33 Note. Lower numbers indicate his

Brainstorming

- 1. Capture Ideas
 - a. Write them down
 - i. Beware of the tyranny of the pen
 - ii. Everyone writes
 - b. Record them Audio
 - c. Video
 - d. Pictures
- 2. Frame the Problem
 - a. A question contributed?
 - b. Neither too broad not too narrow
- 3. Facilitator separate idea creation from idea screening!

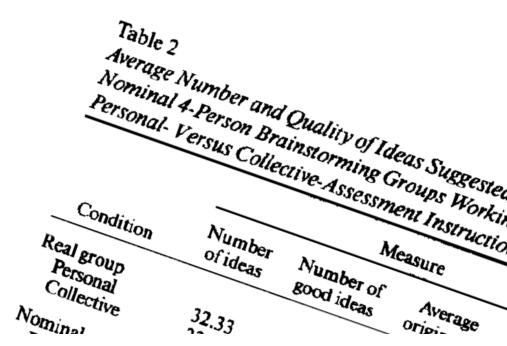
as do you

| Number of | | | | |
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a Data are for 16 groups, two observations per group.

Dield and Stroebe. Productivity Loss in Resinstruming Groups: Towards a Solution to the Biddle. Journal of Personality and Social Psychology, Vol. 75, No. 7. (Suptember 1987), pp. 467-470.

When are you going to use brainstorming in entrepreneurship?



^b Data are for 144 subjects, two observations per individual.

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Electronic Brainstorming and Group Size P. Brent Gallupe, Alan R. Dennis, William H. Cooper, Jose Rastianusti and Jay F. Nunanzaker, Jr. Academy of Manago

Gay L. Lilica, Paraclo D. Moerison, Karlikon Scarla, Mary Srenack, Eric von Hippel. Performance Assonment of the Lead User Idea-Generation Process for New Product

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Opportunity Assessment Project (OAP) Reminder

What did we learn?

- I. E-ship is about seeing problems as opportunities The bigger the problem, the bigger the opportunity!
- 2. How to optimize/hack brainstorming (customers/lead users as fertile source of ideas)
- 3. Best combination is a creative visionary + operations/execution (hard to do)



Creativity / Brainstorming Takeaways

- 1.) Creative visionaries / Lead users / talking to customers often a fertile source of ideas
- 2.) Certain ways of organizing can lead to increased group creativity (plus sales/profits)!

Purpose of creativity in a startup - In how many areas do you want to be doing something new?