I^3: Investing In Innovation©

A Creativity and Risk-Taking Simulation

Instruction Manual

Creatrix
Accelerating Innovative Capacity
In Individuals, Teams, & Organizations
www.creatrix.com

Abstract:

This simulation is designed to combine the elements of risk taking and creativity to foster innovative results. The simulation requires teams of people to bet on their own ability to creatively solve an abstract problem. The game has two rounds. Learnings occur in debriefing the risk-taking culture of the groups and individuals within the groups, as well as debriefing the creativity process (brainstorming, innovative processes, etc.).

Number of participants:

Ideal is 16-20 although the game is easily modified for smaller or larger numbers.

Time:

1½ hour (15 minutes setup, 45-minutes on the tasks – 15 minutes each for betting strategy, round one, and round two; and ½ hour debriefing – 10 minutes each for risk taking, creativity, and innovation.

Rules and Process of the Game:

Each group of players is given 20 chips. The goal of the game is to win and not loose! In the event of a tie—both teams loose. The minimum bet is 1 chip, and the maximum bet is 20 chips. After the first round, each team that did not solve the problem is limited to wagering only what they bet in the first round (avoiding risk until you have experience is not risky and therefore not rewarded), and can only wager what they have left. (For example, if a team only bet 1 chip in the first round. Then it can only bet 1 chip in the second round. If a team bets 10 chips in the first round, it can bet 10 chips in the second round. If a team bets 11 chips in the first round (and doesn't solve the problem), it can only wager 9 chips in the second round). The groups are given time to calculate their wagers and determine their collective risk-taking propensity. Then the individual groups are split into "Home Office" and "Field Reps" (subgroups of the same team). The Field Reps are given the following objects: a watch, a candy bar, a record, an iron, and a football (in that order) and sent out of the room (into the "field"). To win the game, the home office has to get the Field Reps to walk back into the room in the proper sequence. The correct sequence upon return is: football, iron, record, candy bar, and watch. The home office

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is only allowed to communicate with the Field Reps by using "p-mail" (paper plane version of e-mail). A limit of two p-mails may be used each round (up to 4 total p-mails). The p-mails can only contain one word, which is audited by the facilitator. Each word must be an actual dictionary-defined word, must be written in all capital letters, and cannot contain any other markings. The team who enters the room from the field in the proper order and has wagered the most wins!

Solutions:

What initially seems like a challenging problem, in retrospect is quite easily solved with a little creative thinking. First, most groups (even with little creative effort) should be able to sequence the items in the proper order after using four one-word p-mails (simply list the football on the first p-mail, the iron on the second and so on). However, enabling the Field Reps to reenter in the right sequence the first time around requires "reframing the issue" (a popular creativity technique), to arrive at the proper solution. One potential solution is to have the first p-mail contain the word "ACRONYM". The second p-mail then contains the acronym, and by rules requirement, the word: "FIRST" (Football, Iron, Record, Sweets, and Timepiece). Now obviously, the football, iron, and record fall into place quite nicely for the Field Reps; the question remains, with two letters left will they reframe the candy bar to mean "sweets" and the watch to mean "time"? To us, it's really a no-brainer from the Field Reps perspective. The real question is whether the Home Office personnel can reframe the problem towards this type of answer? Another solution is to simply "RECALL" (word on the first p-mail) the items from the field and have them walk back in "REVERSE" (word on the second p-mail). This solution presumes that the items were given to the Field Reps in a particular order. Interestingly, this assumption as well as a host of other assumptions comes into play during the simulation. The list of potential creative solutions is virtually unlimited.

Insights and Learnings:

Risk Taking

There is an "optimum" appropriate risk-taking level (and as in life, it is neither total risk aversion (1 chip), nor flagrant (20 chips) risk). Not knowing what the other team is betting is

key to this risk-taking exercise. Similar to business, not knowing what the competition is up to is a major variable. Betting only 1 chip each round (guarantees you 18 chips at the end which may be enough to win), but it is a risk-adverse strategy that speaks volumes about your paradigms and confidence about being able to solve challenging problems! Betting 10 chips in the first round guarantees no less than a tie (which we further define as a loss) with the other team if they bet 10 chips (or less in an equal amount that you wagered) and both teams fail the first time. Therefore, betting 11 chips (risking more than half of your chips in a two-round game) shows true risk taking and is the optimum level as it indicates that your team wants to win, rather than tie (10 chips or less with both teams not winning in the first round). It also gives you the greatest chance of success in the second round (9 chips left if you fail) of winning (18 chips total if you win in the second round and bet the optimum level: 9 chips—the remaining amount, why not?). Betting more than 11 chips may be considered too much risk for some, as it doesn't optimize the second round odds if you fail. Therefore, the optimum level is an 11-chip bet. This learning will be discussed in detail and translated to assessing the appropriate business risk for myriad dynamic environments. The optimum risk level is rarely low or high, but somewhere beyond the safe middle ground and usually not the same as individual risk-taking levels!

Creativity

In the solutions section, we identified three potential ways of solving this abstract problem; all seem rather logical and simple in hindsight. This is true of all creative solutions; in hindsight, they seem rather trivial. However, prior to having the solution, they can seem rather daunting. The first answer is rather linear in its approach. It doesn't enable winning in the first round (and it isn't really a creative solution), but it does work (with usually a tie or second place finish—either way a loss). In the second solution, reframing the problem and careful use of words on the p-mails provides the solution. We needn't articulate too much about creatively "reframing the problem" here to make our point; this is one of the most widely-accepted methods of creative problem solving. In the third answer, had the groups just paused long enough to maintain the original order of items in which they were sent out of the room, they would simply have to renter (as if they were being recalled) to have the correct sequence.

Many times the creative solutions are right under our nose, all we need to do is pause and reflect a moment before we make a mountain out of a molehill.

Innovation

The concept of innovation is function of risk taking and creativity. By definition, innovation is the act of introducing something new. Creative solutions are borne in environments where risk is present. Risk creates pressure and a sense of urgency. Without risk, creativity often remains fodder for the dreamer. On the other hand, risk without creativity (ideas) is simply thrill seeking, and rarely helps move people or teams forward. Creativity and risk taking together equal innovation! Only this combination of risk taking (betting on yourself to win) and creativity (new ideas) creates the right environment and maximum results in order to win (both in the simulation and today's world). Innovation is what many of today's organizations need in terms of staying competitive and resolving difficult business issues.

Additional Comments:

The goal of this simulation is to measure *individual and team* risk-taking and creativity dynamics. By definition, individuals and teams should and will struggle with the basic constructs. That is, they will be required to bet (on themselves and against the competition) on their ability to solve an unknown problem. This means taking a risk and being creative in an intentionally ambiguous environment. Resist attempts to bring clarity (thereby reducing ambiguity) to the situation. Further, resist attempts to moderate betting strategies. Simply allow the teams the opportunity to struggle with their varying tolerances for risk and creativity.

Initial communication regarding the constructs of the game should be made to the whole group at large before disbanding into teams. Make every attempt to limit clarifying questions at the team level (thereby giving some teams an unintentional advantage). Do not allow teams to witness or observe the other teams' betting or problem-solving strategies. Having observers simply watch the simulation (when group size permits) provides insights to the individuals and teams from an outsider's perspective, which is often quite different.

Debriefing the Simulation:

Debrief the simulation first on the risk-taking construct (betting strategies), then on the creativity construct (solving the problem); and finally on innovation in general. The following table provides a list of example discussion questions to help you start and sustain your debriefing session.

Topic:	Questions:
Risk Taking	• How did you arrive at the amount of chips your team wagered? • Was everybody on the team comfortable with this strategy? • Who went along with the team even though may have wanted to wager a different strategy?
Creativity	• What idea-generating strategies did your group employ? • How did the team treat various ideas (for example, encouragement, dismissal, etc.)? • What assumptions did the team make?
Innovation	• What, if anything, prevented you from being fully creative or taking risks? • How does "group think" affect individual creativity and risk taking? • How is this simulation similar with innovation in organizations today?

Participant Handouts

The following pages are handouts used to guide the participants through the simulation. It is important to distribute these materials only to the intended recipients, otherwise the simulation is compromised. The following table indicates to whom the materials should be distributed.

Title	Distribution
Overview	All participants
Instructions for Home Office	Home Office only
Instructions for Field Reps	Field Reps only

Instructions for Observers	Observers only
Observer's Notepad	Observers only
Items to be sequenced	Home Office only
P-mail	Home Office only
Debriefing Notepad	All participants

Overview

Objective:

To win the game! In the event of a tie, both teams lose. The first team to correctly solve the problem wins the game. If no teams solve the problem or both teams solve the problem in the same round, the team with the most money wins the game! The object is to get the field reps to sequence a group of unrelated items with very limited communication from the home office.

Teams:

Teams will be sub-divided into two smaller groups as the game progresses. Several team members will stay in the room and be referred to as the "home office." And several people will leave the room and be referred to as "field reps."

Betting:

This simulation potentially involves two rounds. The second round is necessary if neither team wins in the first round. Betting occurs before the beginning of each round. Each team begins with 20 chips. The minimum bet is 1 chip. The maximum bet is 20 chips. After the first round, each team that did not solve the problem is limited to wagering only what they bet in the first round. Each team is limited to wagering only the amount of money it has available. For example, if a team only bets 1 chip in the first round, then it can only bet 1 chip in the second round. If a team bets 10 chips in the first round, then it can bet 10 chips in the second round. If a team bets 11 chips in the first round, it can only wager 9 chips in the second round. Each team will be given time to calculate betting strategies.

Instructions for Home Office

Home Office:

Your job is getting the field reps to sequence the group of items in the order that you instruct them to. You will be able to communicate with your field reps via p-mail (plane-mail: paper plane version of e-mail). You will be able to send up to two one-word p-mails (per round) to help guide your field reps in sequencing the objects.

A Word or Two About P-mail:

- Only one word can be written on the P-mail.
- The word must be written in all CAPITAL letters.
- The word must be a dictionary-defined word (no acronyms allowed!).
- To insure compliance, the facilitators will audit each P-mail.
- No other type of communication is allowed (symbols, gestures, pictures, etc.).

Instructions for Field Reps

Field Reps:

Your job is simply to sequence the group of items in the order that the home office desires. The home office will communicate with you via p-mail (plane-mail: paper plane version of e-mail). You will get up to two one-word p-mails (per round) to help you sequence the object.

A Word or Two About P-mail:

- Only one word can be written on the P-mail.
- The word must be written in all CAPITAL letters.
- The word must be a dictionary-defined word (no acronyms allowed!).
- To insure compliance, the facilitators will audit each P-mail.
- No other type of communication is allowed (symbols, gestures, pictures, etc.).

Instructions for Observers

Observers:

Your job is to observe the teams in action. Some may be assigned to observe just the "home office" people and others may be assigned to observe just the "field reps." In either case, your goal is to document your observations (paying particular attention to risk-taking and creativity actions). Document words, phrases, and behaviors that either support or discourage risk taking and creativity.

Helpful Hints:

- Observe all behaviors (verbal: intonation, tone, pitch, stress, etc.; and nonverbal: posture, facial expressions, etc.).

- Look for as many risk-taking and creativity behaviors as possible.

Gentle Reminders:

- Document as many observations as possible to support your views.

- Do not identify specific individuals in your observations.

Observer's Notepad

Risk-Taking Observations:

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Creativity Observations:

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Objects to be sequenced

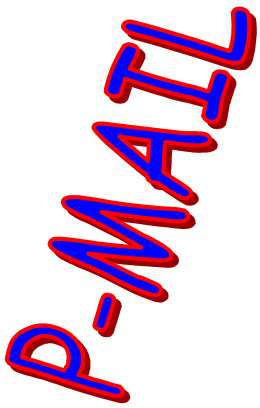
The objects:

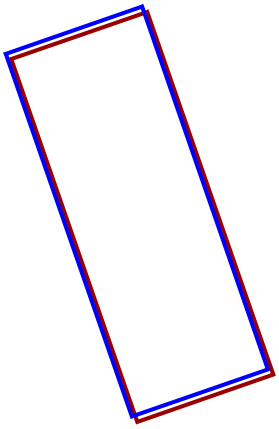
The Proper Sequence:

1. Football
2. Iron
3. Record
4. Candy Bar
5. Watch

P-Mail: Paper Plane Version of E-mail

(Fold into paper airplane)





Debriefing Notepad

Insights on Risk Taking:

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Insights on Creativity:

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Lessons in Innovation:

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