

Case Study: Creative Risk Identification Techniques

Marisa Hotchkiss and Terrina Long

Disclaimer: This paper represents the authors' personal experience with project management challenges. The views expressed are those of the authors and not necessarily those of the U.S. Census Bureau.

ABSTRACT

As risk identification should occur early in a project life cycle, it is an ideal opportunity for an activity designed to push a forming project team into storming. When the project team has little project management experience and/or low risk tolerance, it is even more important to gather risks in a facilitated group environment.

In the last year, we have piloted risk gathering sessions that encourage creativity, get team members collaborating in small diverse teams, help novices understand risk management, and produce very robust risk registers. Below are examples of some of our sessions:

- **Understand Risk Statements.** In an example session, teams review and compose risk statements in different categories using pop culture references (i.e., "If recruiting materials are not translated into Klingon, then the Star Trek Enterprise...").
- **Identifying Risks with Creative Brainstorming.** In an example session, participants used an Etch-a-Sketch to illustrate risks, assuming teams need to brainstorm several risks before identifying one that can be effectively drawn.
- **Risk Identification Challenge.** In an example session, teams competed to be the first team to create a risk for every category in the risk breakdown structure, and a prize was awarded for the best risk.

Creativity is not highlighted as an essential skill for risk identification, despite the necessity for the team to imagine myriad potential obstacles and outcomes. In this paper we describe the techniques we have attempted and discuss lessons learned, to encourage more project managers to attempt fun and creative risk identification activities in their organizations.

Keywords: risk identification, creativity, brainstorming, risk management.

Problem

In the 1986 John Hughes film, "*Ferris Bueller*," a teacher taking roll call is met with total silence when asking whether the title character is present in class. This cinematic moment gave birth to the classic line, "Bueller? Bueller?" (Hughes, 1986) which has since become indelibly synonymous to hearing no response from a full room. It is also often the experience of a project manager asking a new project team to identify risks. This is unfortunate as the engaged involvement of all members of a diverse project team is essential to identifying risks that could either derail or provide opportunities for the project.

When we were selected as co-project managers for a large project in the summer of 2016, we recruited project team members with the skillsets necessary for successful completion of the project. While these team members were experts in communications, web design, contracting, operations, translation, etc., many had little to no project management experience. When we attempted to discuss and baseline the project schedule, we quickly realized that a primer on work breakdown structures, predecessors, successors, and other schedule components was necessary for some team members to interpret the schedule we were proposing. Eventually, the project team was able to understand the straightforward importance of our artifacts and processes, such as a detailed project schedule and comprehensive plan, and the process of explaining each artifact and process, though slow, was effective, until we reached risk identification.

Risk identification presents an additional challenge in that team members can find it difficult to think about all of the things that might go wrong, or to identify a risk no one else has mentioned (much like the child who points out that the emperor is not wearing any clothes). As such, when we began our risk management processes, we were met with silence and the proverbial blank stare. There was some acknowledgement that risk management was important, but identifying risks and constructing informative risk statements was beyond the team's current abilities.

Analysis of Alternatives

Recent research explains the "Bueller?" level science we were encountering, and gave us an idea to combat it. (We are making the assertion that risk identification, creativity and innovation are similar, as all require thinking outside of the box.) An October 2016 *Harvard Business Review* article summarized a 2014 review of analyses by Silvia da Costa, from the University of the Basque Country, which found that "People's innovation output doesn't simply increase as the challenge increases. Instead, the relationship looks like an inverted U shape. Just as the Yerkes-Dodson law indicates that both very low and very high levels of stress decrease performance on complex tasks, when people are faced with a challenge so big that they feel they don't have the skills or resources to tackle it, innovation performance also declines." (Imber, 2016). Perhaps our team members were so overwhelmed by the task of identifying risks that their ability to think of risks also declined. Could breaking the task into more manageable pieces engage the team?

There is also an emerging management philosophy that focuses less on teaching creative staff a discipline and asking them to refine the process, and more on encouraging creative staff to redefine the process. An article in the October 2008 issue of *Harvard Business Review* cited research that focus on processes can ultimately hinder important innovation in each industry (Amabile, 2008). Furthermore, the article quoted Franz Johansson's finding, from interviews with people doing highly creative work in many fields, "that innovation is more likely when people of different disciplines, backgrounds, and areas of expertise share their thinking. Sometimes the complexity of a problem demands diversity." We needed everyone on the team to participate in risk identification, and we needed to find a technique that fit their style rather than training them to do it our way.

Creativity is not highlighted as an essential skill for risk identification, despite the necessity for the team to imagine myriad potential obstacles and outcomes, and when and how to use creativity in project management is an evolving concept. A conference paper from Paul Warner advises, "If you go overboard with creativity, the result is no longer recognizable as project management. This is my blanket warning that there can be too much of a good thing when it comes to applying creativity to the field of project management" (Warner, 2012). However, Warner later clarifies that project issues and risks are "an area where creativity can really set a project manager apart from others and lead to greater project success" (Ibid.).

This led us to look for an accepted risk identification technique that would enable us to break the task into smaller pieces, be appropriate for our diverse group and encourage creativity. The fifth edition of the PMBOK guide lists many different techniques for identifying and refining risks, including brainstorming, Delphi Technique, interviewing, root cause analysis, checklists, assumptions analysis, SWOT analysis, expert judgment and various diagramming techniques (PMI, 2013). Each of these techniques is not enough on its own, but employing each of them does not guarantee an exhaustive risk register either. For example, in the PMBOK's discussion of checklists, it explains, "While a checklist may be quick and simple, it is impossible to build an exhaustive one, and care should be taken to ensure the checklist is not used to avoid the effort of proper risk identification" (PMI, 2013). Most techniques also require an extended period of time, with several cycles of review that may not always be available.

An additional wrinkle in our situation was the newness of the team. Our team was a collection of individuals and needed a team-building activity to push them into collaborating on project work. We focused primarily on those risk identification techniques that required group cooperation, challenging the team to enter the storming phase.

Recommended Approach

Returning to the basics, as Srinivasan noted, "The main goal of risk management is to avoid unpleasant surprises" (2010, p. 10). We could accomplish risk identification for this particular group in their stage of group development, by focusing on designing a facilitated brainstorming session that taught classic risk identification concepts, in small short sessions, while also providing an opportunity to engage our team members' creative side.

Implementation

Attempt One: May the Risks Be with You

"Help me, Obi Wan. You're my only hope!" ("Star Wars Episode IV: A New Hope," Lucas, 1977).

Obi Wan Kenobi, a popular character from the original Star Wars film, was obviously not on hand to assist. However, our first challenge was to make "the process of determining which risks may affect the project," easier for our team members to approach (PMI, 2013). Our challenge was to help the team feel less overwhelmed by presenting the identification of risk in a manner that would not only be more comfortable, but also fun.

We chose examples from film and other popular culture references, especially examples from fantasy and science fiction, and inserted them into the standard "If _____, Then, _____," risk format to introduce the risk statement concept to the team. For example, "IF Princess Leia is unable to use R2D2 to save and transmit the Death Star design plans to Obi Wan Kenobi, THEN the flaw within the design of the Death Star would remain unknown and the Rebellion would be crushed." When the risks were imaginary, they struck a creative nerve within the team, allowing them to more openly share their thoughts on the real-life projects. And when the subject matter involved situations and conflicts that most people recognized, identifying the causes and effects was easier.

Results

While our project was definitely not important to the safety of the galaxy, using these types of pop culture references made it easier for the project team to understand the format, concept, and process, and then transfer that understanding to identifying real risks that might affect their subject areas. After reviewing eight examples of pop culture risks, the project team was able to identify over forty actual project risks ranging from budgetary constraints to language barriers (no C3PO to translate!) that were then incorporated into our project risk register.

Attempt Two: Smells like Team Spirit

"But I get nowhere unless the team wins." ("The Untouchables," De Palma, 1987).

We also worried that the forming project team was engaged with us but not engaging with each other. Risk identification presents a crucial opportunity for collaboration, as an event in one sub-team will have effects in other sub-teams that may only be known by those team members. To force communication, and encourage a bit of storming, we split the project team into four smaller groups, where they could brainstorm potential risks. They were then challenged to select one of their identified risks and draw it in twenty minutes. However, there was a twist; they must use an Etch-A-Sketch, a popular childhood toy that sketches by turning knobs associated with vertical and horizontal planes, to illustrate the depiction of the risk.

Results

Team spirit kicked in immediately as each group huddled together to share their thoughts and select an artist. Positive competition has long been identified as a motivator for employees. A 2013 article from Bright Hub Project Management asserts, "positive competition promotes an 'everybody wins' attitude where team members work collectively toward a common goal" (Plowman, 2013). When the challenge was to identify many risks in the hopes that one could be depicted, and ultimately win the selection as the best drawn risk, the stigma of suggesting risks disappeared.

There was laughter, good-natured ribbing of the artists, and real collaboration. At the conclusion of the event, teams felt empowered by their increased knowledge of risk identification, the number of risks that had been identified, and the fun they had experienced with their team members.

Attempt Three: And Your Little Risks Too

"And my head, I'd be scratchin' while my thoughts were busy hatchin', if I only had a brain." (E.Y. Harburg).

After the team had some experience with risk identification, most members joined a new project team for a follow-on project. Though members were now familiar and comfortable with the risk identification process, an expectation had been set for a fun risk identification session. Pleased with the team's energy and excitement, we developed a fun challenge to introduce the risk breakdown structure and identify as many risks as possible during one hour-long team meeting. We transformed our meeting room into the 1939 film, *"The Wizard of Oz"* (Fleming, 1939). We taped images of characters from the film around the perimeter of the meeting room, with each character representing a risk category we wanted to develop in our risk breakdown structure. For example, Glinda the Good Witch represented opportunities, The Wicked Witch of the East represented weather and environmental risks, and the Wicked Witch of the West represented reputation risks. To illustrate each risk area, we again developed an example risk statement for each area. Notional examples are as follows:

- IF Glinda creates a viral social media campaign THEN public engagement might be better than expected.
- IF the cowardly lion is unprepared to pitch interviews to the media THEN opportunities to increase awareness may be missed.
- IF Dorothy drops a house on her sister THEN the witch may organize a campaign to boycott Munchkin Land.

Team members were challenged to venture through our version of the land of Oz, and identify one real risk in each risk area displayed. The first team to identify at least one risk in each risk area within the risk breakdown structure won a prize.

Results

Project team members divided into small sub-teams and travelled around the room. We also moved around the room facilitating conversation and answering questions. For example, many team members had become proficient at identifying negative risks, but were stumped when asked to identify a potential opportunity. We explained the concept of opportunities in the risk context, and ended up compiling a very interesting list of opportunities within the risk register.

It was also entertaining to see the norming project team react to each other's risks. Choruses of "Ooh yeah, that's a good one!" could be heard when each sub-team read what they had identified as their best risks, and teams devoted real energy to constructing through risk statements. Following the session, we read all of the risks aloud, and the team awarded a small prize (a "Wizard of Oz" inspired Scarecrow bobble head) to the best risk.

Recommendations

We would field each of these techniques and strategies again, as we have developed a good routine and facilitation technique. Though the risk registers produced by these activities have been robust, causing heart palpitations for some risk averse PMs, we have been able to avoid a large proportion of the risks identified by ensuring that we were aware of their potential during the planning process.

There are small enhancements that could be made to perfect these techniques in the future.

- In several activities we collected the handwritten risks on colorful post-it notes. Due to the space limitations of a post-it note, we had challenges reading compressed handwriting, and experienced some ill-advised ink and post-it color combinations (i.e., silver Sharpie on dark blue post-it was very difficult to read).
- Some team members provided a well-developed risk, and then provided several additional risks that were slight variations on the original. Ideally, team members could focus on identifying many different risks during the session and then continue to further develop each risk after the session.
- We recognized that these sessions were not as conducive to those attending the session remotely (phone, etc.). With that in mind, we attempted to create an online brainstorming room for those participating virtually. This initial prototype was met with mixed results from a collaborative perspective and relatively low participation overall.

Summary

Though it may have looked like we were taking a Bueller-esque day off from project management, we did construct a robust risk register that prepared us to respond to the risks that ultimately became issues. We introduced the members of our project team to risk management in a positive and engaging way that may have positive effects for future projects, and we don't have nightmares about Ben Stein anymore. Though customized risk identification sessions may be very different in other organizations, the concept of designing a risk identification process to meet the needs, strengths, and comfort level of the group is one that can ultimately transfer across the project management discipline.

References

- Amabile, T. and Khaire M. (2008, October). "Creativity and the Role of the Leader" *Harvard Business Review*. Accessed March 18, 2017 at <https://hbr.org/2008/10/creativity-and-the-role-of-the-leader>
- Freed, A. & LeRoy, M. (Producers), Fleming, V. (Director). *The Untouchables*. USA. Metro-Goldwyn-Mayer.
- Hughes, J. & Jacobson, T. (Producers), Hughes, J. (Director). *Ferris Bueller's Day Off*. USA. Paramount Pictures.
- Imber, A. (2016, October). "Help Employees Innovate by Giving Them the Right Challenge." *Harvard Business Review*. Accessed March 18, 2017 at <https://hbr.org/2016/10/help-employees-innovate-by-giving-them-the-right-challenge>
- Linson, A. (Producer), De Palma, B. (Director). *The Untouchables*. USA. Paramount Pictures.
- Plowman, N. (2013). The Differences Between Positive and Negative Competition. [Blog]. Retrieved from <http://www.brighthubpm.com/resource-management/59735-the-differences-between-positive-and-negative-competition/>
- PMI (2013). A Guide to Project Management Body of Knowledge. (5th ed.) Newtown Square, PA: Global Standard.
- Srinivasan, B. (2010). Little Booklet of Risk Management [Digital Publication]. Retrieved from <https://leadershipchamps.files.wordpress.com/2010/02/little-booklet-of-risk-management-terminologies.pdf>
- Warner, P. (2012). "Creativity and innovation in project management." Conference Paper 2012 PMI Global Congress Proceedings—Vancouver BC, Canada. Retrieved from <http://www.pmi.org/learning/library/creativity-innovation-project-management-6037>