Solving a Whale of a Problem: Introducing the Four Functions of Management in a Management Principles Course

Rachel Dolechek, Thomas Lippert, Dr. Robert Lloyd

Fort Hays State University, Kansas, USA

Edward Vengrouskie

Jack Welch Management Institute, Herndon, VA, USA

[Abstract] This paper introduces an experiential exercise that exposes students in a management principles course to the four managerial functions of planning, organizing, leading and controlling. The exercise combines the powerful benefits of visual media and humor in a situational scenario designed to enhance the learning opportunities for students to grasp the fundamentals of management education. By connecting experiential learning with the four functions of management in a humorous situational case, students will be better able to develop a grasp of the management functions and understand how they are related. Learning applications allow students to develop a deeper conceptual understanding of these functions of management, as well as how each function is essential and related.

[Keywords] four functions of management, experiential learning, visual media, humor

Introduction

Management is a universal phenomenon. It has been described as a social process involving responsibility for economical and effective planning and regulation of operation for an enterprise in the fulfillment of given purposes (Junega, 2018). Management, according to Terry and Franklin (1977) is a dynamic process consisting of a series of inter-related functions. It is this process by which management creates, operates, and directs purposive organization through systematic, coordinated, and co-operated human efforts. The functions of management were put forth in the early 1900s by Henri Fayol, a management theorist from France (Business Zeal, 2018). Originally, he had proposed five management functions: planning, organizing, commanding, coordinating, and controlling. Modern texts have reduced the functions from five to four. They include planning, organizing, leading, and controlling. Managers who can perform these functions well are extremely valuable to an organization because they create order from what could become chaos (Pride, Hughes, & Kapoor, 2016). Establishing a mastery of these functions of management prepares business students for the higher-level courses as they progress through their business curriculum. As such, the four functions of management are the foundation for management education. The purpose of this paper is to describe an exercise that introduces the four functions of management to students in a management principles undergraduate course. The experiential exercise introduces the students to a fictional problem of a dead whale washing up on a community beach. The students’ role is to solve the problem using the four functions of management. The exercise introduces the concepts of planning, organizing, leading, and controlling and achieves a high level of engagement via two strategies. The commentary provided in the video of the whale washing up on the beach involves humor. In this exercise, the use of humor is essential in engaging students and developing a
connection to the four functions of management. The benefits of humor have been part of a multitude of studies on the positive impacts for group or organizational performance, including development and learning outcomes. Humor has an inexorable connection to learning, as individuals “pay more attention when learning humorous material and also recall it better” (Romero & Pescosolido, 2008, p. 407). Humor creates an environment of open communication, which significantly improves upon and positively influences group effectiveness, by developing group cohesion and motivation (Romero & Pescosolido, 2008).

Theoretical Foundation

The theoretical foundation of this exercise is experiential learning theory (ELT). Experiential exercises based on this approach vary in complexity and impact, and researchers have described their effectiveness in the classroom vis-à-vis a variety of delivery mechanisms including role-playing, simulations, case studies, work-based learning, real-world problem solving, field trips, board games, flipped classroom, action-research projects, and civic engagement (Gibson, Ward, Comer, & Rossi, 2015; Lovelace, Eggers, & Dyck, 2016; Dean & Fornaciari, 2002; Nottingham, 2017; Lloyd, Martin, Hyatt, & Tritt, 2019; Arling, Deeter, & Eggers, 2010; Djonko-Moore & Joseph, 2016; Lloyd, 2014; Zhai, Gu, Liu, Liang, & Tsai, 2017; Johannessen, 2015; Gibson & Tavlaridis, 2018; Stovall, 2009; Wright & Gilmore, 2012; Furutan, 2014). Despite this variety and scope, each of these experiential learning exercises focuses on a common outcome, which is to allow the learner to develop a more comprehensive understanding of the material and the context in which they are integrating new knowledge (Kayes, 2002).

In meeting the objectives of this experiential exercise, students will develop an understanding of the four functions of management. Their task is to create a solution to address a common issue in their role as city manager. After completing this exercise, students should be able to establish a game plan (planning), determine what resources they will need to execute their game plan (organizing), decide which stakeholders need to be included or motivated to buy in to the plan (leading), and finally, create mechanisms to ensure the plan will stay on track or be successful (controlling). Students share their solutions, and the instructor provides feedback and conducts a debrief.

Given the importance of the four functions of management as a foundation for the students’ managerial education, this exercise provides a necessary first step to establishing their understanding of the four functions of management. The combination of humor, video media, and the nature of experiential pedagogy should contribute to more effective learning results. The following learning outcomes drive the design of the exercise.

1) Develop an understanding of the four functions of management and the activities that each entail
2) Articulate how the four functions of management are interrelated

Instructions for Running the Exercise

The exercise is run in three parts, which includes an introduction to the scenario, development of strategies in response to the scenario, and a debriefing session. Students are placed into groups of four before or immediately after the introduction of the scenario. The scenario puts the students in the role of a city manager who has to deal with the problem of a dead whale on the community beach. They are asked a series of questions on how they will respond, and the debrief session
serves as a means to connect the students to their use of the four functions of management.

**Logistics**

This exercise should take place in the context of a classroom where the instructor has access to video media display and a whiteboard. Before the class beginning, the instructor should pre-load the video entitled “Oregon’s Exploding Whale,” which can be found at https://www.youtube.com/watch?v=xBgThvB_IDQ. The video should be minimized from the screen at this time, but ready to play at a later point in the exercise. Additionally, the instructor should bring an image on the screen of a dead whale on the beach. As the students enter the classroom, this image should be the first visual they will see. Next, the students should be placed in groups of four. Maximum classroom size for this project is about thirty to forty students. This size allows for a good discussion and encourages everyone to articulate their strategy and feedback on the exercise. The exercise takes approximately 50 minutes.

**Step-by-Step Instructions**

The instructor begins by communicating the scenario to the students. This can be done via either handout or storytelling. This should be left to the instructor’s discretion, given their strengths and pedagogical preference. The scenario is as follows:

“You are the city manager of a seaside town on the Oregon coast. You have just been notified that a dead whale has washed up on your municipal, public access beach. Citizens are complaining about the smell and are demanding you do something. To deal with this issue, you need to answer four questions:

1) What is your game plan to address this whale?
2) What resources and people do you need to execute your plan?
3) What style of leadership would be best to help you execute your plan, ensuring motivation and cohesiveness?
4) How will you make sure that your plan is going to work, or that it will stay on track?”

The students should then be given twenty minutes to formulate answers to the questions of the scenario. This step is followed by allowing students to share their strategies and the instructor should facilitate a discussion regarding the effectiveness and legitimacy of their chosen strategies. The instructor should divide the whiteboard into four sections for planning, organization, leading, and controlling, being sure to not yet label these sections. As the students share their answers in each of the areas, the instructor should write a brief summary of their answers in the appropriate section of the whiteboard. After the students have shared their strategies and answers to the questions, the instructor should go to each of the sections on the whiteboard and write the word “plan” over the section where the students strategies are written, “organize” over the section where they describe their resources, “lead” over the section where they describe the people needed to execute their strategy, and “control” over the section where they describe how they will stay on track.

Once respective groups share strategies, the instructor should briefly preface the video. It is important to note that some students may be sensitive to the situation of a dead whale washing up on a beach. It is possible some may feel sorrow or pity for the whale, and the instructor should provide commentary on the sensitivity of the situation. After any discussion on this matter, the instructor should play the video of the exploding whale, which takes about three minutes. This
video serves as a transition to the debrief period. The news reporter commentary includes use of humor to describe how the plan to blow up the whale backfires. The video and its use of humor create a new energy in the exercise that the instructor can leverage to lead an effective debrief session.

**The Debrief**

The most critical component to the exercise is the debriefing section. The instructor should lead a discussion about the strategies chosen by the students as they relate to the four functions of management. The discussion should also include a focus on how the concepts are interrelated. What would happen if the students skipped one of the steps? How do each of the questions complement each other? The debrief should go beyond merely connecting their strategies to the four functions. The instructor should challenge the students in their assumptions, to make sure they think through the implications of their decisions. For example, many students decide that they are going to remove the whale (the planning function) using a crane (the organizing function) and involve a tugboat company (the leading function) to have the whale towed out into the ocean. In this scenario, they will answer the fourth question by stating they are going to confirm when the tow company will show up, coordinate the timing of the crane to show up, which would be a controlling function. The instructor should challenge these assumptions by asking questions. Table 1 contains some of the more common strategies and related probing or challenging questions for the instructor to pose, should students need some direction.

<table>
<thead>
<tr>
<th>Student Solution</th>
<th>Probing Questions</th>
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| Use a tugboat to pull out to sea:       | *What is the towing capacity of the tugboat? What is the lifting capacity of the crane?*  
*What is the best approach to take to coordinate people and resources?* |
| Use a crane to load onto truck:         | *How long will the crane be on the beach?*  
*How is the positioning of the crane on the beach impacted by the sand and the tides?*  
*How much does a dead, bloated whale weigh? What are all possible approaches to this situation?* |
| Make available to university for research: | *Would the collection of any type of data be of benefit to this scenario?*  
*Are there any documented examples, both domestic and international, of similar situations?* |
| Remove whale by cutting it into pieces: | *What would be the most effective approach be to motivate and inspire teams in this situation?* |
| Remove whale by blowing it up:          | *How much explosives would be too much, too little?* |
| Do nothing, let nature take care of it: | *What impact does the dead whale have on the toxicity of the local area in water and air pollution?* |
The purpose of the challenge session is to provide students with a more in-depth understanding and a higher level of critical thinking of how each of the functions of management are necessary and interrelated. During the debrief, students should be able to respond to the challenges posed by the instructor. In addition, the class collectively discusses a more robust solution to include health officials to deal with toxicity issues, Army Corps of Engineers or mining companies if they had decided to blow up the whale, local universities for research, and engineering consultants to ensure the equipment they chose has the capacity for their given solution. Summation may also include analysis of logic applied and how data was used, or ignored, during the planning process.

Expanding the Exercise

The instructor may choose to expand the exercise in several ways, adding additional class time for completion of the exercise. For instance, the video is especially helpful in showing how a plan can go wrong and the importance of control. For each of the students’ solutions to the problem, the instructor should identify a contingency or emergency that the students have to address. For example, if the solution is to use a crane to load onto a truck, create a contingency by indicating that either the crane or the truck becomes stuck in the sand. If the solution is hauling the whale into the ocean using a tugboat, indicate that there are unusual tides that might affect this strategy. Expanding the exercise requires the instructor to introduce these idiosyncrasies to the plans the students formulate.

Conclusion

The four functions of management are integral for every Management Principles undergraduate student to understand. This exercise provides students experience in developing strategies to respond to a scenario. Bolstered by the empirically tested benefits of video media and humor, this exercise creates an engaged and energized classroom and likely increases the ability to recall the four functions of management in further course activities. The exercise provides an impactful learning experience for students and should lead to a more comprehensive understanding of future Management Principles coursework, such as organizational learning.

References


Biography

Rachel Dolechek is an instructor of Business Education in the Department of Applied Business Studies in the Robbins College of Business and Entrepreneurship at Fort Hays State University. Her research interests include pedagogy, business communication, and classroom innovation.

Thomas Lippert is an instructor of Management in the Department of Management in the Robbins College of Business and Entrepreneurship at Fort Hays State University. He previously served as postmaster general for the US Postal Service and infuses practitioner perspectives into the classroom activities. Research interests include pedagogy and management practice.

Edward Vengrouskie serves as a full professor at the Jack Welch Management Institute. As an academic-practitioner, he brings 40 years of leading others, including senior-level management and leadership careers within the Department of Defense, Fortune 50 corporations, and small entrepreneurial start-ups. His employers include; the U.S. Army, McDonnell Douglas Aerospace, The Boeing Company, Raytheon, Falcon Logical Support Services LLC, and HDT Global. Research interests include entrepreneurship and small business intrapreneurship practices.

Dr. Robert Lloyd teaches Management courses at Fort Hays State University in Hays, KS, USA. In addition to teaching management courses, he has also led students on travel courses to Europe, the Caribbean and Latin America. His research focus is on human resource management and big data. Dr. Lloyd brings eleven years of industry experience to higher education. In addition to private-industry consulting, he also managed his own fertilizer merchandising firm and real estate investments. He worked for six years as a commodities marketer for Koch Industries in Wichita, KS, spent several summers on the Kenai Peninsula in Alaska as an outdoor adventure guide and manager, and served one season as auxiliary staff at McMurdo Station in Antarctica.