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Implementation Strategies for Change Initiatives

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This is to certify that the doctoral study by

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2019

Abstract

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MS, Embry Riddle Aeronautical University, 2016

BS, Clemson University, 2013

Doctoral Study Submitted in Partial Fulfillment

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Abstract

Many change initiatives fail because business leaders often lack the strategies for successful implementation. The inability of business leaders to successfully implement change initiatives can result in missing deadlines, increasing costs, and reduced employee productivity and morale. Grounded by Lewin's change management model and Kotter's 8-step change model, the purpose of this multiple case study was to explore strategies aerospace manufacturing managers in the Midwest Region of the United States used to implement successful change initiatives. Data were collected through face-to-face semistructured interviews with 3 aerospace manufacturing managers and a review of company documents. Data were analyzed using methodological triangulation, coding, and thematic analysis to identify patterns and themes. Three main themes emerged from the data analysis: well-defined and measurable goals improved the ability to track and measure the change implementation, teamwork improved employee involvement and collaboration, and communication improved transparency and employee support. The implications for positive social change include the potential to improve aircraft safety by reducing aviation accidents and keeping communities safe from loss of life.

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Table of Contents

iii

List of Tables

Section 1: Foundation of the Study

Change is essential to create or maintain a competitive advantage and long-term success (Van den Heuvel, Demerouti, Bakker, & Schaufeli, 2016). Regardless of size, age, or industry, change can affect all organizations of a company. How a company manages change can directly correlate with whether or not it will be successful (Christensen, 2014). This section included the background of the problem, problem statement, purpose of studying change in the aerospace manufacturing sector, research and the interview questions for the study, significance of the study, its social impact, qualitative nature of the study, and a review of professional academic literature related to the research problem.

Background of the Problem

Change is a necessity for leaders who want to compete in today's global market (Umble & Umble, 2014). High change initiative failure rates indicate which further research is required to provide business leaders a deeper understanding of successful change management strategies (Kilkelly, 2014). Several factors affect change implementation success including behavior, communication, culture, leadership styles, and the effects of change on the employee (Christensen, 2014; Phillips & Phillips 2014; Shadraconis, 2015). It is important for leaders to consider, manage, and work through all these factors, which affect change when implementing a change initiative (Dumeresque, 2014). The findings of this study may provide aerospace manufacturing managers a deeper understanding of change management strategies, which they can use to successfully change initiatives within their organization.

Problem Statement

Successful organizational change initiatives are critical to a company to maintain its competitive advantage (Ayhan, Aydin, & Öztemel, 2015). Organizational change initiatives fail at a rate of 70% (Varney, 2017). The general business problem is some business leaders embark on strategic modification without adequate preparation often resulting in a failed change initiative. The specific business problem is some aerospace manufacturing managers often lack strategies for the successful implementation of change initiatives.

Purpose Statement

The purpose of this qualitative multiple case study was to explore aerospace manufacturing managers' implementation strategies for successful change initiatives. The target population for my study were managers in three organizations that were part of an aerospace manufacturing company located in the Midwest region of the United States who have successfully implemented change initiatives within the last 5 years. The results of this study may contribute to positive social change by providing aerospace manufacturing managers strategies to successfully implement change initiatives that might improve aircraft safety and reduce fatal aviation accidents.

Nature of the Study

The three main research methods are qualitative, quantitative, and mixed methods. For the qualitative method, researchers explore the patterns and meanings in terms of participants' perceptions, behaviors, and emotional responses toward the phenomenon being studied (Fassinger & Morrow, 2013). In this study, I used the qualitative method because using interviews allowed me to delve deeply into the experiences of aerospace manufacturing

managers to understand how they successfully implement change initiatives within their organizations. In quantitative research, the researcher tests hypotheses and numerically examines relationships among variables (Fassinger & Morrow, 2013). A quantitative method was not chosen for this study because I was not testing any hypotheses, nor did I plan on numerically analyzing the significance of variables' relationships or differences. A mixed methods approach is a combination of the quantitative and qualitative approach. For the same reason a quantitative research method was not appropriate for my study, neither was a mixed methods approach.

The five qualitative research designs I considered for my study were (a) case study, (b) narrative, (c) phenomenological, (d) grounded theory, and (e) ethnography. For my qualitative study, I used a multiple case study research design. Researchers use this design to get a deeper understanding of a real-world event which has multiple types of data sources (Yin, 2014). The reason a multiple case study was the most appropriate research design for my study is because it allowed me to get a holistic in-depth understanding of successful implementation strategies for change initiatives which were being used by aerospace manufacturing managers. The goal of phenomenological research is to describe an experience of a lived phenomenon (Quay, 2016). I did not use a phenomenological research design because I was not trying to describe what aerospace manufacturing managers have in common as they experience a phenomenon. In a grounded theory research design, research data is broken down into categories used to construct an integrated framework, which expresses the core concepts of the data, and can be used to explain or predict phenomena (Sutcliffe, 2016). I did not use a grounded theory research design because I was not trying to develop a theory for an action or process which is grounded in the viewpoints of the participants.

Research Question

The research question for this study was as follows: What strategies do aerospace manufacturing managers use to successfully implement change initiatives?

Interview Questions

I asked the following open-ended questions through semistructured interviews with aerospace manufacturing managers to explore the implementation strategies for successful change initiatives in aerospace manufacturing organizations:

1. How do you prepare and plan for implementing a change initiative and who do you include during this planning process?

2. How do you implement a change initiative within your organization?

3. How do you communicate a change initiative throughout your organization?

4. What steps do you take to manage and remove obstacles that you or your employees may face when implementing a change initiative, including resistance to change?

5. How do you determine if an implemented change initiative is successful?

6. Once a change initiative has been implemented successfully, what steps do you take to make sure the change is sustainable?

7. What more would you like to add as it pertains to implementation strategies for change initiatives?

Conceptual Framework

The conceptual framework models used for this study were Lewin's (1947) change management model and Kotter's (1995) eight-step change model. It is important for leaders to understand the change process, so they can manage it effectively throughout implementation

(Pollack & Pollack, 2015). Lewin's (1947) change management model is based on the analogy of how one must unfreeze, change, and refreeze a block of ice to change its shape. Kotter's (1995) eight-step change model was also designed as a guide to help manage and implement change. The steps are as follows: (a) create urgency to overcome complacency, (b) build a team of leaders and managers to drive the change, (c) create an effective vision and strategy, (d) tell everyone about the change vision, (e) empower employees to apply the vision to work, (f) present short-term benchmarks and wins, (g) keep the momentum of change with more changes, and (h) cultivate a culture of change. These models were selected as the conceptual frameworks for my study because they both apply to understand change management and implementing change initiatives. These models also supported my study because each provide a framework for how leaders can prepare for change thoroughly so they can implement it successfully. I analyzed the interviews of the managers to explore the similarities between their change initiative implementation strategies and Kotters and Lewin's change models.

Operational Definitions

Change initiative: A change initiative is a project designed to improve operational performance within a company or organization (Buono & Subbiah, 2014).

Change management: Change management is a systematic approach to managing change and those affected by it within a business or similar organization (Bassey, Solomon, & Omono, 2014).

Resistance to change: Resistance to change is the refusal of a person or group to fully support or adopt change (Umble & Umble, 2014).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are not within the researcher's control but are important to the study (Silverman, 2013). An assumption is something the researcher assumes to be factual but is unable to validate (Babbie, 2015). My first assumption was that the aerospace manufacturing managers in my study would have a positive view towards implementing change initiatives. My second assumption was that all participants in my study would be open and honest when answering questions.

Limitations

Limitations are the potential weaknesses in a study which are out of the researcher's control (Bernard, 2013). One limitation of my study was accessibility of aerospace manufacturing managers and interview availability for a time frame most convenient for them. Since qualitative research is not generalizable, a second limitation was that the findings from my study may not be transferable to other trades. Another limitation could have been the sample size of the organizations I researched, which could have had an impact on obtaining the needed data saturation.

Delimitations

Delimitations set the boundaries of the study and define the scope (Babbie, 2015). The purpose of this study was to explore implementation strategies which aerospace manufacturing managers located in the Midwest region of the United States have used to successfully implement change initiatives within the last 5 years. The questions only addressed strategies for change initiatives and did not address other aerospace manufacturing issues. Personnel selected

for the study varied between organizations and management levels to gain perspectives from different views and job titles. In addition, personnel other than aerospace manufacturing managers were not included.

Significance of Study

Contribution to Business Practice

The findings of this study may help businesses in the aerospace manufacturing sector to successfully implement change initiatives which improve aircraft safety. Unsuccessful change management strategies result in more failed change initiatives which waste time and cost businesses more money (Militaru & Zanfir, 2016). Providing aerospace manufacturing managers a deeper understanding of change management strategies may have a positive impact on business practice by improving change initiative implementation success, reducing costs, and promoting innovation for growing revenues and increasing profits.

Implications for Social Change

The findings of this study may help businesses, in the aerospace manufacturing sector, to successfully implement change initiatives which improve aircraft safety. Although fatal commercial airliner accidents are on the decline, 325 commercial airliner fatalities occurred in 2016 (Ioannou, Harris, & Dahlstrom, 2017). Improvements in aircraft safety may contribute to positive social change by reducing aviation accidents and keeping communities safe from loss of life.

Review of the Professional and Academic Literature

The purpose of this qualitative multiple case study was to explore aerospace manufacturing managers' implementation strategies for successful change initiatives. The target

population for my study were managers in multiple organizations part of an aerospace

manufacturing company located in the Midwest region of the United States who had successfully

implemented change initiatives within the last 5 years. The study's findings may contribute to

positive social change by providing aerospace manufacturing managers strategies to successfully

implement change initiatives which might improve aircraft safety and keep communities safe

from loss of life. In order to gather academic and professional literature for this section, I

performed several queries in the Walden University Library database as well as Google Scholar.

The two databases I used were ProQuest and SAGE. I only reviewed peer-reviewed sources.

Table 1 shows a breakdown of the peer-reviewed versus nonpeer-reviewed journals and books

which were used for my academic and literature review.

Table 1

Sources in Academic and Professional Literature Review Section

	Total	Total more than 5 years old at graduation date	Percentage of references within 5 years of 2019 graduation (2014-2019)
Peer-reviewed journals	97	12	88%
Books	0	0	0%
Journals that are not peer-reviewed	0	0	0%
Total	97	12	88%

Table 2

Sources in Doctoral Study

	Total	Total more than 5 years old at graduation date	Percentage of references within 5 years of graduation date
Doctoral Study References	164	25	85%

The literature review consists of four main subsections: (a) conceptual framework, (b) factors which affect change, (c) effects of change on the employee, and (d) additional tools for identifying and implementing change initiatives. The primary conceptual framework for this study are Lewin (1947) and Kotter's (1995) change models. These two models describe the phases through which change can occur and the steps required to implement change initiatives. The second subsection is a summary of factors, such as manager attributes, employee behavior, communication, culture, and leadership styles which can affect change. The third subsection on the effects of change on employees includes a summary of research on resistance to change and the emotions employees face when going through change. The last subsection of the literature review identifies additional tools used for identifying and implementing change initiatives, such as lean and six sigma methodologies.

Conceptual Framework

The primary models supporting this study were Lewin's (1947) three-stage model of change: unfreezing, changing and refreezing and Kotter's (1995) eight-step model of change. Another change model that was considered in this study was Bertalanffy's (1972) general systems theory but ended up not being selected. In this subsection, I described these two models in detail and synthesized recent studies based on these models.

Lewin's model. Lewin's (1947) three-stage model of change: unfreezing, changing and refreezing was developed in 1947. This model is based on the analogy of a block of ice and how you must unfreeze a block of ice, change its shape and then refreeze it to change its shape. People often resist change, which can make it difficult to successfully implement change and sustain it (Lewin, 1947). Managers first need to understand the change process before they can manage it effectively and get their employees' support. Lewin's change management model consists of three phases to successfully implement change initiatives. Researchers continue to investigate, explain, and expand upon the three phases made in Lewin's original research because time can dilute the true meaning (Swanson & Creed, 2014). Lewin's methodology is based on an organizational level, not an individual one. Individuals are less likely to resist when group values are changed, while if group values remain the same, then individuals are more likely to resist (Lewin, 1947).

Unfreeze. Unfreezing is identified as disrupting the norm (Lewin, 1947). Not all changes are the same and different changes may face different obstacles during the unfreezing phase. Leaders should influence individuals to believe change is necessary (Burnes & Cooke, 2013). At this stage, it is critical for individuals to believe in the new change for the implementation of the change initiative to be successful (Burnes & Cooke, 2013). Leaders need to ensure everyone who will be affected by the change knows about it while also dealing with everyone's doubts and concerns (Lewin, 1947). During the unfreezing stage, leaders should do the following:

1. Prepare for the change

2. Determine what needs to change

3. Ensure support from management

4. Create a need for change

5. Manage and understand doubts and concerns

Change. The second stage is when the new change initiative is introduced (Lewin, 1947).

Individuals during this stage start to feel guilt and survival anxiety which can cause them to be

resistant to the change (Lewin, 1947). Leaders should create an implementation strategy by

identifying what needs to be changed and how the change initiative will be implemented (Burnes

& Cooke, 2013). Leaders should explore all possible options when implementing a change and

understand who and what will be affected (Burnes & Cooke, 2013). It is also important for

leaders to keep communicating the benefits of the change involved so employees will continue to

support it (Lewin, 1947). Most changes are not instant, so leaders should also ensure those

affected by the change will have adequate time to adjust to it. During the change stage, leaders

should do the following:

1. Implement the change

2. Communicate often

3. Dispel rumors

4. Empower action

5. Involve people in the process

Refreeze. Refreezing occurs after the change has been implemented and becomes part of

the organization's culture. Refreezing is necessary to reinforce the new change and ensure

individuals do not revert back to the old process (Lewin, 1947). The new change must align with

organizational goals and culture or else it could create discomfort within the group (Burnes &

Cooke, 2013). Leaders should also ensure those affected by the change have the right training

and support to stay on the right track. In order for norms and routines to accommodate new individual behavior, change must be a group activity (Lewin, 1947). The refreezing phase is necessary so individuals do not go back to previous processes (Burnes & Cooke, 2013). It is important for leaders to celebrate the success of the change and everyone's hard work which will help reduce resistance to change for future initiatives. During the refreezing stage, leaders should do the following:

1. Solidify the new mindset and change

2. Anchor the changes into the culture

3. Develop ways to sustain the change

4. Provide support and training

5. Celebrate success

Lewin's model also serves as a guideline which can help to predict and resolve individual resistance to change (Burnes & Cooke, 2013). Lewin's model also serves as a guideline which can help to predict and resolve individual resistance to change (Van den Heuvel et al., 2016). Leaders who are aware of the three stages, as identified by Kurt Lewin, can better manage change and improve their own success when implementing change initiatives (Lewin, 1947).

Kotter's model. Kotter, a professor at Harvard Business School and a change subject matter expert, introduced his change model in 1995 (Kotter, 1995). Kotter's eight-step process for implementing change initiatives are as follows:

1. Establish a sense of urgency

2. Form a powerful guiding coalition

3. Create a vision

4. Communicate the vision

5. Empower others to act on the vision

6. Plan for and create short-term wins

7. Consolidate improvements and produce more change

8. Institutionalize new approaches

It is important for leaders to prepare their employees for change and help guide them through it (Kotter, 1995). In this section, I summarize academic literature to further explain and define each of Kotter's eight steps.

Establish a sense of urgency. Leaders should first create a sense of urgency within the organization around the need for change (Kotter, 1995). Top management is responsible for creating this sense of urgency and motivating their constituents (Van den Heuvel et al., 2016). A greater sense of urgency may lead to more successful change implementation. A majority of companies were unable to successfully implement change because the leaders were unable to create a sense of urgency (Kotter, 1995). When a company has too many managers and not enough leaders, they are often unable to create a sense of urgency (Van den Heuvel et al., 2016). There must be at least 75% buy-in from management for a change to be implemented successfully (Kotter, 1995). It is recommended leaders also discuss the threat of not changing and the opportunities successful change will create (Tvedt & Saksvik, 2015). This may give employees the chance to ask questions and get involved. Communication, creating short and long-term goals, teamwork, and measuring success are all required to promote urgency (Van den Heuvel et al., 2016).

Form a powerful guiding coalition. Leadership must create a strong coalition of people who are willing to support the initiative in order to help guide and implement the change (Kotter, 1995). The coalition should consist of respected leaders, experts, and stakeholders throughout the organization (Tvedt & Saksvik, 2015). The coalition must continue to grow or else the change effort will stagnate, and the implementation will be unsuccessful (Kotter, 1995). The coalition should include senior management but may also include those not currently in management roles. Coalitions should be a mixed group and not just upper management (Van den Heuvel et al., 2016).

Create a vision. Leaders should create a vision that the organization can align and identify with to guide the change (Kotter, 1995). Leaders should also create realistic attainable goals which turn vision into reality (Van den Heuvel et al., 2016). It is important for leaders to create a well-defined strategy and vision which will identify with what everyone is ultimately working toward (Kotter, 1995). Managers should influence the coalition team to be focused, imaginative, and communicative (Kotter, 1995). It is important for managers not to overcomplicate the vision but rather to keep it simple enough so it is easily communicated and understood (Tvedt & Saksvik, 2015).

Communicate the vision. When implementing a change, it is important there is communication between all levels of the organization (Tvedt & Saksvik, 2015). The vision and strategy gain value once they have been communicated throughout the rest of the organization (Kotter, 1995). Leaders should avoid under-communicating the message and ensure the message is consistent to gain support from individuals at all levels of the company (Van den Heuvel et al., 2016). Leaders should use any and every form of communication which they have available,

such as emails, meetings, or newsletters. It is important for leaders to lead by example to demonstrate the behaviors and attitudes which they are looking for from others (Tvedt & Saksvik, 2015). Leaders must believe in what they are communicating to gain their employees' trust (Kotter, 1995).

Empower others to act on the vision. Leaders should empower their employees at all levels of management to implement change (Kotter, 1995). During this step, it is important for leaders to remove or mitigate any obstacles which will prevent change, including employee resistance to change (Tvedt & Saksvik, 2015). Leaders should encourage innovation and change (Kotter, 1995). Employees should be allowed complaints and recommendations which can be heard by management (Van den Heuvel et al., 2016). It is important, in this step, for leaders to also recognize and reward people for making change happen (Tvedt & Saksvik, 2015). This will not only empower the employees but also allow management to identify and remove any obstacles which employees are facing as they relate to the change implementation (Kotter, 1995). Employees are also encouraged to promote any ideas they have which may lead to improvements.

Plan for and create short-term wins. During this step, leaders should define all short-term and long-term goals, document and market success to promote buy-in and change, and reward success (Kotter, 1995). By creating short-term wins, leaders and individuals are able to build on their success and avoid any loss of momentum (Van den Heuvel et al., 2016). Short-term goals help motivate employees because they are able to see the progress as well as grow their support (Tvedt & Saksvik, 2015). Short-term wins also ensure a sense of urgency that strategy and vision are not lost (Kotter, 1995).

Consolidate improvements and produce more change. Leaders should build on success, improve morale, and remove obstacles (Tvedt & Saksvik, 2015). Vision and strategy should be ingrained in the company's culture (Kotter, 1995). It is important for leaders not to declare a change successful too early, because this often results in initiatives failing (Van den Heuvel et al., 2016). Every success during change implementation provides an opportunity to build on the moment and what went right (Tvedt & Saksvik, 2015). This step is necessary so people do not revert back to ways prior to the change (Kotter, 1995).

Institutionalize new approaches. During this final step, it is crucial for leaders to create a positive culture for implementing change initiatives (Kotter, 1995). Leaders should also communicate the benefits of the change and the supporting evidence (Van den Heuvel et al., 2016). Leaders should ensure individuals are committed to the new change initiative and ensure it is rooted in the culture so the changes will be sustained (Kotter, 1995). Managers are the leaders of the company and must lead by example when implementing change initiatives by showing faith, removing obstacles, helping others, and promoting communication (Tvedt & Saksvik, 2015). Kotter's (1995) model is driven by strong leadership and identifies the eight most important steps which leaders must take when implementing change initiatives.

General systems theory. The general systems theory (GST) was considered for this study but was not selected as a conceptual framework. The general systems theory was created in 1925 (Bertalanffy, 1972). GST is a holistic view of an entity where the systems which make it up are all affected by one another (Bertalanffy, 1972). Pouvreau (2015) went on to show GST applies to any entity composed of elements referred to as systems, including businesses. General systems theory, defined by Aristotle, is based upon the idea in which the whole is more than the

sum of its parts (Bertalanffy, 1972). GST is a change model where leaders view change

initiatives as small parts within a greater system. A systems-based approach is one which breaks

down the whole into various parts, such as business units, which all work together to create a

successful result (Peters, 2014). A business is a multifaceted organization created to make a

profit, made of employees who make up communities (Tarride, 2016). This complexity creates

difficulties for businesses when creating and implementing change initiatives. Through the use of

GST, business leaders can develop new skills such as pattern recognition which may lead to

more productive and efficient decision making (Skaržauskienė, 2010). GST is not an easily

understood theory for every manager. GST has proven when managers engage and communicate

with their employees, it benefits the both the manager and employee (Zdenka & Valentina,

2014). The two main reasons that GST was not selected as a supporting theoretical frame work

are because it often does not provide a practical approach, to change management (Tarride,

2016) and it may not be applicable to smaller organizations (Skaržauskienė, 2010).

Factors Affecting Change

      Attributes. Individuals do not often distinguish the attributes of management from the

company (Parker, Abdul-Ghaffar, Campbell, & Vickers-Johnson, 2012). Many successful

change implementations result from when leaders can create a common goal amongst their

employees (Pritchard & Bloomfield, 2014). Leaders must create a sense of urgency and shared

belief in the reasoning for the change and its importance (Dumeresque, 2014). For a leader to

instill a common purpose amongst their team, they must demonstrate confidence and humility

(Latham, 2016). Not all managers are confident in change initiatives, regardless of experience

(Vakola, 2014). Integrity is also an important attribute of a successful leader. It takes time for

leaders to build trust with their employees and for them to acknowledge as a manager as having integrity (Mayfield, 2014). Change implementation success is directly affected by the manager's belief and influence on their team (Kilkelly, 2014). Integrity and trust in management can sometimes be the only driving factor for why an employee may be acceptable to change (Vakola, 2014). In order for an employee to reach their maximum potential, it is the manager's job to guide, educate, and motivate them (Mayfield, 2014). Managers often set the tone for the organization and their attitudes will almost always be directly reflected by their employee (Pfeffer, 2015). The leaders must be acceptable to change (Vlăsceanu, 2015).

Behavior. Business managers should be expected to act as role models to their constituents (Lawrence & White, 2015). Leaders can more easily influence the culture of their organization. Employees have the initial belief to trust their manager but the main trait which determines this is their manager's behavior (Shadraconis, 2015). When business managers are able to leverage the diversity, in their workforce, it helps develop positive change and build unity (Hujala & Viitala, 2014). Accountability is critical when change initiatives are being implemented (Dhar, 2015). Employees are more likely to be loyal to their managers when they respect them (Shadraconis, 2015). Loyalty grows when employees feel valued and supported by leadership (Gillies, Gillies, & Gillies, 2014). When managers take the time to educate their employees on the background and direction of the company it can create a sense of loyalty between them and their employees (Phillips & Phillips, 2014).

Communication & culture. Communication and culture are two of the most important factors when implementing change initiatives. Christensen (2014) explored different communication factors which affect organizational changes. During Christensen's (2014)

research he surveyed employees whom have and have yet to experience change. The results of Christensen's (2014) study showed how the influence, contact, leadership, and availability of information can affect communication and success rates of change initiatives. Awareness is another important factor when implementing change initiatives because it is important for leaders to understand employee's needs and implications of the change (Simoes & Esposito, 2014). The goal of leaders is to gain acceptance of the proposed changes and promote an encouraging attitude toward change (Georgalis, Samaratunge, Kimberley, & Lu, 2015). It is important for leaders to understand all of the implications of the change from both the employee and organizational points of view (Georgalis et al., 2015). This step may also help improve communication between management and their employees as well as build trust. It is important to communicate and educate employees about the change implications in order to help prevent resistance (Shah, 2014). Employee acceptance rates have been showed to be directly related to leadership support (Hwang, Al-Arabiat, & Shin, 2015).

Employees should be educated on the new change initiative. While knowledge alone is important, in regard to an impending change, it is also critical employees know the processes required to implement the change (Van den Heuvel et al., 2016). Van den Heuvel et al. (2016) stated educating the employees of the process to make the change happen created a positive impact on company culture which employees were more accepted towards the change.

Leaders must also factor in organizational culture when trying to implement change initiatives (Bassey et al., 2014). Organizational culture directly affects how people and processes interact with a company. For this reason, culture must be taken into consideration from planning to implementation (By, Armenakis, & Burnes, 2015).

By factoring in these key aspects of change management, leaders can vastly improve the success rate of changes being implemented successfully (Hornstein, 2015). When all dimensions are not taken into consideration when implementing change initiatives, it can have a negative effect on the employees and organization (Smollan, 2015). Individuals tend to become stressed when faced with major changes such as reorganizations, new jobs, new bosses, or new processes (Smollan, 2015).

In order for change initiatives to be implemented successfully, experienced managers must be involved (Holten & Brenner, 2015). It is important to delegate responsibilities throughout the company when implementing change (Holten & Brenner). This will also ensure organizational participation, rather than only a select few individuals.

Employee recognition is another important role in change management. When employees are recognized for their contributions it can decrease morale and create a resistance to change (Kuster et al., 2015). It is important to understand the needs of the individuals which make up the company and will be affected by the change. The change process must include representation from all organizations affected by the change in order to understand their needs and minimize resistance (Kuster et al., 2015).

Communication. Communication is one of the most vital components to any change initiative (Lewis, Laster, & Kulkarni, 2015). Lack of communication is the root cause of all failed interactions between management and their employees (Kearns, 2014). The most critical success factor of change management is communication (Umble & Umble, 2014). Business leaders must possess or develop communication skills to effectively implement change (Johansson, Miller, & Hamrin, 2014). Talking, listening, and body language, between at least

two individuals, are all prime examples of communication (Meier, Ben, & Schuppan, 2015).

Communication techniques, as well as communication frequency, in the business environment,

are both issues which have been studied for decades (Medvedovsky, 2014). Business leaders

implementing a change initiative which may allow them to perform or compete more efficiently

will most likely fail if the leaders delivering the change lack communication skills (Kuehn,

2016).

Managers implementing change initiatives must be aware of the employee perceptions of

the change (Brønn, 2014). An employee's reaction to change is critical to the chance of whether

it will be successful, which increase the need for managers' decision-making abilities (Brønn,

2014). Leaders are able to notice possible unacceptance to change are able to modify their

delivery prevent negative emotional responses but instead increase their team's buy-in and

change their perception towards it (Smollan, 2014).

Communication is difficult because everyone has their own different perspective.

Perceptions have been proven to have the ability to alter the meaning of someone's delivery as

compared to the original intent (Budd & Velasquez, 2014). An individual's upbringing,

education, and experience play a critical role in how they receive their manager's communication

(Medvedovsky, 2014). No matter the way a manager delivers a message, the employee's

perspective, and emotional reactions must also be considered (Lewis et al., 2015).

Leaders must also create specific strategies on how they intend to communicate change

throughout their organization (Falkheimer, 2014). When employees do not trust their managers,

they will most likely refuse the entire change initiative (Carroll, Huang-Horowitz, McKeever, &

Williams, 2014). Leaders with the education and experience of different communication techniques may find it easier to relay change throughout their organization (Mazzei, 2014). Business leaders can protect themselves against negatively perceived announcements of change by understanding the different communication methods which they can use to deliver the message (Simoes & Esposito, 2014). Other features of communication include strategies and techniques for educating leaders on how to expand their communication skills (Simoes & Esposito, 2014).

     Resistance to change is almost unavoidable when implementing change initiatives (Umble & Umble, 2014). Before a company decides to announce their change initiative they should create an internal communication strategy to ensure the change will be well received by their organization (Burying bad news, 2014). It is also recommended for organizations do their own internal research, such as interviewing employees who are resistant to change in order to further understand why these individuals are pessimistic and what they can do, as a company, to help change and alleviate the opposition (Baruah & Ward, 2015). Another purpose of an internal communications strategy is to get employees engaged earlier before the actual change takes place (Heide & Simonsson, 2014). Employees are the company's most valuable resource, which is also the most commonly overlooked. When employees are involved in the implementation of change initiatives it is more likely to succeed and less likely to face resistance (Molenaar, Javernick-Will, Bastias, Wardwell, & Saller, 2015). Leaders can determine satisfaction by constantly communicating with their employees, so they can fully understand the impact and implications of the change (Jones & Harris, 2014).

Uncertainty can exist when there is not a shared belief in the need to change or the reason behind doing so. Uncertainty, during change initiatives, is created when leaders are unable to express the need and reason behind the change to their employees (Simoes & Esposito, 2014). Business leaders should be transparent and allow their employees to be a part of the development of the change initiatives or have them involved during the earliest stages, in order to increase trust and confidence (Lewis et al., 2015). Confidence is a driving factor in employee's decision to accept change (Lewis et al., 2015). Change initiatives may fail if they lack the confidence of the affected employees. Business leaders who create and implement the change initiatives should remove all barriers between themselves and their employees via communication (Buono & Subbiah, 2014). Leaders should use any and every form of communication available to them when introducing a change to their organization, such as staff meeting, email, teleconference, and etc. (Falkheimer, 2014). Staff meetings and emails are the most common forms of communication can also be used to measure acceptance rates of change initiatives throughout the implementation process (Eisenberg, Johnson, & Pieterson, 2015).

Leadership styles for communicating change can vary greatly amongst managers (Mazzei, 2014). Leaders may demand change to be implemented whereas some may not even implement it at all. The distributive leadership style is the most effective it encourages the employees' involvement in the change initiative (Klarner & Raisch, 2016). Leaders accepting to change significantly increase the percentage their employees will be receptive to change (Vlăsceanu, 2015). Businesses can best leverage leadership through education and training (Shaked & Schechter, 2014). When trying to solve a problem, managers should encourage their employee's creativity (Kroeger & Weber, 2014). Creative solutions to complex problems have

been proven to increase productivity while simultaneously creating trust and bonds between

employees and managers (Mayur & Ronald, 2013).

     Culture. Employees and Managers create the culture within their organization. Company

culture is the main driver of company values. When implementing change initiatives, it is the

manager's role to integrate employee's values (Pardo-del-Val, Martínez-Fuentes, & Roig-Dobón,

2015). A company's culture may conflict with society's culture (Carlstrom & Olsson, 2014).

Leaders empowering employees is one of the main drivers of what creates trust between the

employee and their manager (Jones Christensen, Mackey, & Whetten, 2014). By providing

experience and training opportunities, leaders are able to build the confidence of their

employees, a key contributor to being able to successfully implement change initiatives (Gordon,

Gilley, Avery, Gilley, & Barber, 2014). An entrepreneurial attitude, for both managers and their

employees, can promote a culture which is open and accepting to change (Umble & Umble,

2014). Opposition to change is often the biggest battle leaders face when trying to implement

change initiatives (Jansson, 2014). Overcoming employee resistance is the most common

challenge managers face when trying to implement change initiatives (Luke & Chu, 2016).

When employees are resistant to change is may be beneficial for leadership to investigate and

engage with the employees to understand the driving factors, so they can remove those obstacles

and get better employee involvement next time (Bareil, 2016).

     It is critical for leaders to mitigate resistance to change and increase communication

between themselves and their employees (Johansson et al., 2014). Managers must also have good

communication skills in order to successfully implement change initiatives (Simoes & Esposito,

2014). Training employees and leaders in change management processes have shown to improve individual confidence and trust (Gordon et al., 2014).

Leadership. Leaders are often the trailblazers in every organization (Lawrence & White, 2015). The leadership role is always changing in order to keep up with the time's social demands (Kilkelly, 2014). Leadership styles can also define how a company operates (Phillips & Phillips, 2014). Leadership styles must also be adaptive to their environment. Although an authoritarian leadership style may have been the most effective in the past, it may not be as effective in today's environment (Lawrence & White, 2015). As employee needs change, both social and cultural, leadership styles may also variate (Eken, Özturgut, & Craven, 2014). Leaders must achieve their goals in order for the business to be successful (Vlăsceanu, 2015). Different leadership styles can have different effects on employees which may affect whether or not a change initiative is implemented successfully. The different leadership styles reviewed in this study are anosognosic, authoritarianism, distributive, participative, transformational, and servant.

Anosognosic. Employees need to trust their manager's competency in order to be successful, not just while trying to implement a change initiative. When a manager reaches the point where they no longer have the desire to learn, this can lead to ineptitude. Anosognosic managers are those who are ignorant of their own ineptitude (Parker et al., 2012). Anosognosic managers may go easily unnoticed before change because they can operate without much leadership input. Anosognosic leaders can be their own barrier to change because employees notice their incompetence which can lead to resistance and distrust (Saj, Vocat, & Vuilleumier, 2013). Without trust in leadership, employees may also not trust the change which leadership is trying to implement. Managers who show ineptitude often fail to encourage the acceptance of

change within the organization (Kotter, 1995). Many companies use performance reviews to enhance individual's knowledge and skills to continue developing the leaders (Kilkelly, 2014).

Authoritarianism. Authoritarianism is a leadership style where managers demand and strictly enforce compliance (Pettigrew, 2016). The authoritarian leadership style was the most commonly accepted method until the recent century (Eken et al., 2014). Power and influence are often the most common drivers of business leaders' want to climb up the hierarchical ladder (Lawrence & White, 2015). With all of the global change businesses are facing, leadership styles must also change (Pfeffer, 2015). Globalization has created a new marketplace in which mutually beneficial relationships amongst businesses where less rigid management methods have become more productive than authoritarianism during change (Kempster, Higgs, & Wuerz, 2014). With the advancements in technology and the changes in social climate, business has created a need for a different style of leadership (Alsaeedi & Male, 2014).

Distributive. Distributive leadership is a leadership style whereby management uses their network of relationships to evenly distribute responsibility, so their organization can work together to accomplish a goal (Kempster et al., 2014). Managers who have a distributive leadership style have the same responsibility as others except they distribute the workload out amongst their team. Individuals who take a stake in implementing change initiatives assist management in diffusing resistance. The distributive leadership style also builds relationships between management and their constituents. This open a line of communication between the management and their constituents, allows feedback between the two (Kempster et al., 2014). Disruptive leadership has been proven to be very effective during the implementation of change initiatives (Mayfield, 2014).

Participative. Participative leadership style promotes a culture of personal responsibility. The most common analogy for a participative leader is one of a coach (Sharif & Scandura, 2014). Managers encourage involvement and help direct decision of their employees (Duff, 2016). Everyone in the company is responsible for thinking strategically to accomplish a goal (Pardo-del-Val et al., 2015). One of the most common downfalls to this type of leadership style is managers can cause delays when trying to implement change because they spend too much time trying to build up their employees (Salih & Doll, 2014). One of the benefits of a participative leadership style is it promotes employee independence and innovation (Phillips & Phillips, 2014). Managers with a participative leadership style can give their organization an edge by empowering, encouraging, and developing their employees (Lam, Huang, & Chan, 2015).

Transformational. A transformational leadership style acknowledges the necessity for change and inspires others to believe in it as well (Phaneuf, Boudrias, Rousseau, & Brunelle, 2016). Employees prefer a leader who is trustworthy (Shadraconis, 2015). Employees' first reaction to change is usually fear (Umble & Umble, 2014). Transformational leaders are able to convey the importance and necessity of the change to the employee. The product of a transformational leadership style is one where it creates a desire within the employee to please management, especially during the implementation of a change initiative (Phaneuf et al., 2016). Transformational leaders often use their charisma, as a tool, to encourage peers and employees to accomplish a goal or task (Shadraconis, 2015).

Servant. Servant and transformational leadership styles are similar in which they both inspire their peers and employees (Duff, 2016). Unlike the transformational style, a servant

leadership style puts the needs of the employees before their own in order to lead the way

(Hunter et al., 2013). While transformational leaders lead with a hierarchical process, servant

style leaders empower their employees to accomplish a goal (Goh & Zhen-Jie, 2014). Leadership

style efficiency can vary greatly across cultures and social groups which may help or harm

change implementation efforts (Medvedovsky, 2014). Although leadership style can play an

important role in change management there is no consensus on the best leadership style for

implementing change initiatives. Change is the only constant in business (Jansson, 2014). There

is no perfect interchangeable style for any organization implementing change initiatives

(Eisenberg et al., 2015). Whenever there is an announcement of the change, the view of the

leadership by employees can affect the employees' resistance to change considerably (Jansson,

2014). Not everyone who has the desire for management possess a personality suitable for

successful leadership (Parker et al., 2012). The way someone reacts to a challenge can well

indeed be the defining measure of whether they will or will not be a successful leader

(Vlăsceanu, 2015).

Effects of Change on the Employee

Unsuccessful change initiatives can have long-lasting negative effects on the employee

(Umble & Umble, 2014). Change initiatives often fail when employees do not accept their

organization's vision. Lack of faith in the company doing the right things to be competitive

(Jansson, 2014). Management transparency and communication is critical during the beginning

of change initiatives, even prior to implementation (Baruah & Ward, 2015). Employees are more

likely to enjoy the benefits to change when they played a contributing role. There is a better

chance of change implementation success rates when the company has a culture is more

accepting to change (Umble & Umble, 2014). This culture can be created via communication and employee involvement. Early employee involvement, during change initiatives, can serve as a learning experience and allow the employee an opportunity to see the bigger picture in which the change plays in the company as a whole to see how it all works together (Heide & Simonsson, 2014). The culture of the company also plays a critical role in employee productivity (Umble & Umble, 2014). A workplace which is constantly changing can also create a lack of trust in the company, especially when change initiatives are implemented unsuccessfully (Baruah & Ward, 2015). Employees may also have a hard time letting go of a previous change they helped create and or implement (Jansson, 2014). It is important for managers to get feedback and help answer as many questions as possible (Baruah & Ward, 2015). People may have a natural tendency to resist or be hesitant to change but when workers respect their leaders, it can create a nurturing environment and create a culture of success (Heide & Simonsson, 2014).

Craine – managing the cycle of change. Craine's (2007) cycle of change explains the emotions employees face when going through change. Little can be done to avoid these reactions since they are natural, and emotions are inevitable (Kilkelly, 2014). The more leaders understand about resistance to change and the emotional thought process of their employees, when facing change, the better they can manage it (Dumeresque, 2014). Craine (2007) compares the emotions of employees facing change to someone dealing with the death of a loved one and claims by understanding the grieving process, the better prepared you are to lessen some of the negative emotional consequences.

The comfort zone. The comfort zone is the state prior to the change initiative where employees are comfortable with the way things currently are (Craine, 2007). Employees feel in

control and stable with current work environment (Dumeresque, 2014). Once a change is introduced, it then disrupts the status quo and employee's comfort (Crain, 2007). When employees face change, such as new processes or to take on a new statement of work, they may lose trust and feel as if they have no control within their workplace (Kilkelly, 2014). It is important for leaders to understand resistance to change is a natural reaction and most people would rather be complacent and bored than face change and the possibility of losing their comfort zone (Craine, 2007).

The "no" zone. The most common reaction to people who face change is "no" (Craine, 2007). During the "no" zone, employees commonly react through the following stages:

1. Shock: Employees are psychologically paralyzed by the news of change which immediately affects their performance (Craine, 2007). During this time, it is best to listen to the voice and concerns of the employees affected by the change to better understand how and why they feel this way (Dumeresque, 2014).

2. Denial: Employees are usually unaccepting of the change or do not believe the change will affect them (Hwang et al., 2015). Employees who do not have faith in the change may result in them also losing faith in the company. Craine (2007) also compares the employee's reaction to one of a patient unhappy with a physician's diagnosis and may want to seek another opinion of the diagnosis, or change.

3. Anger: Often when an employee is still resistant to change and can no longer deny or avoid the change, they may become angry (Craine, 2007). Anger is very difficult to manage due to the unpredictability of most people. Unlike denial, angry employees can negatively affect others they work with (Dumeresque, 2014). The best way to cope with

an angry employee is to show sympathy and try to help understand where the anger is

coming from so the leaders can better manage it (Craine, 2007).

4. Resentment, frustration, and sabotage: Although uncommon, some employees may end

up resenting those who disrupted their comfort zone (Hwang et al., 2015). They may feel

frustrated with their managers for allowing the change to happen (Craine, 2007). These

employees may sabotage the company by shutting down, hoarding information, or

refusing to abide by the new change (Craine, 2007).

The "no" zone is a very emotional phase and often difficult for leaders to manage (Craine, 2007).

It is important, during this phase, to communicate the reason for the change throughout the

organization, help answer employee's questions and concerns, and to gain buy-in from other

employees (Hwang et al., 2015).

  The chasm. How can I make the most of this? – is the most common response from a

confused employee (Craine, 2007). During this phase employees often struggle trying to

understand how they fit in and how their new role fits into the big picture (Gillies et al., 2014).

Leaders can manage this process by communicating how the new roles or processes will benefit

the organization (Craine, 2007). It is important for the employees to understand how the new

change aligns with the company's overall vision and strategy because employees during this

stage have still not fully committed to the new change (Kilkelly, 2014). If an employee is

accepting to the change then they have an opportunity to grow and learn but if they are not then

it can also lead to depression thinking they may lose their job (Craine, 2007).

  The "go" zone. The "go" zone is when management and employees have accepted and

agree with the new change initiative (Craine, 2007). Everyone one throughout the organization

has shown acceptance towards the change and supportive of the direction of the company

(Gillies et al., 2014). When employees believe in their management they are more likely to have

a positive attitude towards their job and organization, less likely to leave the company, and are

more productive employees (Dumeresque, 2014). Managers and employees should encourage

positive behavior toward change (Craine, 2007). Employee's positive behavior, towards change,

can contribute to long-term company success and company goals (Craine, 2007). Leaders should

continue to give employees a voice and empower them (Dumeresque, 2014). Leaders should also

encourage the acceptance of change and how will make the company more successful (Craine,

2007).

   Resistance to change. Resistance to change can be the biggest obstacle management

faces when trying to implement change initiatives. Resistance to change could signify employees

are passionate about the company and what they do (Klonek, Lehmann-Willenbrock, &

Kauffeld, 2014). Resisting change is a natural response for employees and should not be viewed

as an obstruction but rather be understood and managed (Jansson, 2014). Employees do not like

being forced into the unknown (Klonek et al., 2014). Resistance to change is more common

during unsuccessful change efforts as compared to successful ones.

Additional Tools for Identifying and Implementing Change Initiatives

   Lean, Six Sigma, and Lean Six Sigma can all be used to help identify and/or implement

change initiatives. Leaders utilizing these tools are also able to identify opportunities for future

change initiatives by either improving quality or reducing inefficiencies (Herzog & Tonchia,

2014). Each of these methodologies may affect whether or not a change initiative is implemented

successfully and are explained in greater detail within this section.

Lean. Lean is a business methodology designed to reduce inefficiencies and improve operational performance (Drohomeretski, Gouvea da Costa, Pinheiro de Lima, & Garbuio, 2014). The Lean methodology originated from the Toyota Production System in the 1990s (Drohomeretski et al., 2014). Lean improves efficiency and customer satisfaction (Pande, Neuman, & Cavanaugh, 2014). Although the Lean methodology was created in a manufacturing company it is effective in all industries (Drohomeretski et al., 2014). Organizations seeking continuous improvement often use Lean and Six Sigma together as part of their quality management system (Stanton et al., 2014). By using both methods together, organizations can maximize output (Mason, Nicolay, & Darzi, 2015). Six Sigma utilizes statistical methods to reduce variability in processes (Mason et al., 2015). While Lean may not be specifically used to improve quality, it is intended to reduce waste and improve operational performance and efficiency (Mason et al., 2015). Both Lean and Six Sigma complement each other in which they enable companies to become more competitive (Mason et al., 2015).

Six sigma. Six Sigma is a quality management tool used to improve efficiencies (Conger, 2015). Six Sigma was first introduced by Bill Smith, an engineer who worked at Motorola in 1986 (Drohomeretski et al., 2014). Five phase process referred to as DMAIC (a) define requirements, (b) measure performance, (c) analyze the process, (d) improve the process, and (e) control the new process (Singh & Malhotra, 2014). Several fortune 500 companies, both small and large, utilize Six Sigma to improve quality and efficiency (Chiarini, 2014). Six Sigma is a form of root cause analyses in which individuals can use to identify areas needing to be fixed in order to improve performance; therefore, this tool is beneficial for any size company, both for

and non-profit (Drohomeretski et al., 2014). The goal of Six Sigma is to reduce the probability of

unsatisfactory results to 3.4 per million (Evans & Lindsay, 2014).

Lean six sigma. Although Lean and Six Sigma are different by definition, leaders often

use them together or substitute one for the other (Naslund, 2013). Organizations have benefited

by utilizing Lean Six Sigma by reducing waste and improving quality (Assarlind, Gremyr, &

Backman, 2013). Although Lean Six Sigma was originally developed for manufacturing

companies, it has been proven effective in the company seeking continuous improvement

(Herzog & Tonchia, 2014). Utilizing Lean Six Sigma leaders are able to identify opportunities

for future change initiatives by either improving quality or reducing inefficiencies (Herzog &

Tonchia, 2014). Several employees will require education on Lean Six Sigma in order to work

most successfully (Jacobs, Swink, & Linderman, 2015). Aerospace manufacturing managers who

utilize Lean Six Sigma may not only reduce their cost but improve the overall safety of the

aircraft.

Transition

In Section 1 of this study, I presented the background of the problem, the problem

statement, the purpose of studying change in the aerospace manufacturing sector, the research

question for the study, the interview questions for the study, the significance of the study, and its

social impact, the qualitative nature of the study, and a review of professional academic literature

related to the research problem.

In Section 2 of this study, I will present the description of the project, including the role

of the researcher, participants, the research method, the research design, population and

sampling, ethical research, data collection instruments, data collection technique, data organization techniques, data analysis, and the reliability and validity.

In Section 3, I will present the findings of the study, the application to professional practice, the implications for social change, recommendations for action, recommendations for further research, a reflection on my experience within the DBA doctoral study process, and a conclusion of the study.

Section 2: The Project

Purpose Statement

The purpose of this qualitative multiple case study was to explore aerospace manufacturing managers' implementation strategies for successful change initiatives. The target population for my study were managers in three organizations that were part of an aerospace manufacturing company located in the Midwest region of the United States who have successfully implemented change initiatives within the last 5 years. The results of this study may contribute to positive social change by providing aerospace manufacturing managers strategies to successfully implement change initiatives which might improve aircraft safety and reduce fatal aviation accidents.

Role of the Researcher

The researcher is the main research instrument in qualitative research (Haahr, Norlyk, & Hall, 2014). During this study, I served as the primary research instrument by conducting semistructured interviews, gathering and analyzing company documents, and presenting the findings of the study. I was actively engaged with the test subjects by listening to how they described their experiences, guiding the interviews with open-ended questions, and probing, as recommended by Rossetto (2014), to help me answer my research question. During this study, I performed research and analyzed data through the lens of Kotter and Lewin's change management models.

I was open and honest with the subjects of my study about my experience with the topic and research. I have worked in the aerospace manufacturing sector for over 5 years, both commercial and defensive. I have also managed and participated in several change initiatives.

These change initiatives include both successful and unsuccessful implementations. I did not

include any participants, in this study, whom I have had a prior working or platonic relationship

with.

My primary concern as the researcher was to conduct an ethical study which aligns with

the Belmont Report. The Belmont Report created unifying ethical principles with the purpose of

protecting human subjects during research. The fundamental principles of the Belmont Report

are to protect the person's anonymity, be truthful, (c) voluntary participation, and (d) beneficence

and justice (U.S. Department of Health & Human Services, 2015). During my study, I followed

the Belmont Report's protocols. These guidelines helped ensure I protected the rights of all the

test subjects. Before I began performing research, I received formal approval from the Walden

University Institutional Review Board (IRB). My Walden IRB approval number was 08-17-18-

0725665. I also received IRB approval from the company under study.

In qualitative research, the researcher must remove, or mitigate, bias (Marshall &

Rossman, 2011). Yin (2014) stated conducting research and analyzing data from a personal

perspective can impact the results of the study. I took the necessary steps to mitigate my bias

through member checking and bracketing. As the researcher, I acknowledged and documented

my bias because, according to Marshall and Rossman (2011), a researcher is not able to mitigate

their biases until they are aware of them. During my research, I remained neutral and did not

allow my experience or knowledge to interfere with this study.

An interview protocol will help guide the participants and researcher through the

semistructured interview process (Gould, Klain, Ardoin, Satterfield, Woodside, Hannahs, &

Chan, 2015). As recommended by Jacob and Furgerson (2012), my interview protocol included a

heading, instructions for the interview participant, the research question, interview questions, and probing questions. Interview protocols help ensure reliability and improve data collection for a qualitative case study (Bailey, 2014). I used an interview protocol for my study to help guide the semistructured interview process and ensure I gathered all the information, which was required to answer my research question.

Participants

Identifying and selecting participants is one of the most important requirements for a successful study because they must possess the knowledge and experience to answer the research question (Englander, 2012). I interviewed three participants for this study. Eligibility criteria for my study were that participants were age 18 or older, currently employed as a manager at an aerospace manufacturing company located in the Midwest region of the United States, and had successfully implemented change initiatives within the last 5 years.

I used purposive sampling to ensure participants meet the eligibility criteria for my study (Robinson, 2014). I conducted multiple searches through online search engines such as Google and LinkedIn to help identify aerospace manufacturing managers located in the Midwest region of the United States. After the three aerospace manufacturing managers were identified, I contacted them through my school email to inform them of my study, ensure they met the eligibility requirements, and ask them if they would like to participate. This led to a participant pool which I began to establish a working relationship with which required researcher commitment and involvement (Singh, 2014). Working relationships with participants can be established through communication, building rapport with participants, and informing them of

the importance of the study (Dilshad & Latif, 2013; Nurjannah, Mills, Park, & Usher, 2014). I followed these recommendations and built a relationship with the participants.

Research Method and Design

Research Method

The three main research methods are qualitative, quantitative, and mixed methods. For the qualitative method, researchers explore patterns and meanings in participants' perceptions, behavior, and emotional responses toward the phenomenon being studied (Fassinger & Morrow, 2013). In this study, I used the qualitative method because using interviews allowed me to delve deeply into experiences of aerospace manufacturing managers to understand how they successfully implement change initiatives within their organizations. Qualitative research is framed broadly within socially constructed theories and researchers use it to interpret meaning (Parylo, 2012). In quantitative research, the researcher tests hypotheses and numerically examines relationships among variables (Fassinger & Morrow, 2013). Unlike qualitative research, quantitative research is based on statistics rather than the participants' perspective (Frels & Onwuegbuzie, 2013). A quantitative method was not chosen for this study because I was not testing any hypotheses, nor did I plan on numerically analyzing the significance of variables' relationships or differences. A mixed methods approach is a combination of the quantitative and qualitative approach. For the same reason a quantitative research method was not appropriate for my study, neither was a mixed methods approach.

Research Design

The five qualitative research designs I considered for my study were (a) case study, (b) narrative, (c) phenomenological, (d) grounded theory, and (e) ethnography. For my qualitative study, I used a multiple case study research design. Researchers use this design to get a deeper understanding of a real world event which has multiple types of data sources (Yin, 2014). Case study research is grounded in a philosophical foundation used to obtain detail regarding a stated phenomenon (Dasgupta, 2015). The reason a multiple case study was the most appropriate research design for my study was because it allowed me to gain a holistic in-depth understanding of the successful implementation strategies for change initiatives which were being used by aerospace manufacturing managers. The goal of phenomenological research is to describe experiences of a lived phenomenon (Quay, 2016). I did not use a phenomenological research design because I was not trying to describe what aerospace manufacturing managers have in common as they experience a phenomenon. In a grounded theory research design, research data is broken down before the relationships between categories are used to construct an integrated framework which expresses the core concepts of the data, and can be used to explain or predict phenomena (Sutcliffe, 2016). I did not use a grounded theory research design because I was not trying to develop a theory for an action or process which is grounded in the viewpoints of the participants. Researchers are unable to generate an accurate conclusion if they have not reached data saturation (O'Reilly & Parker, 2012). To ensure data saturation, I gathered my data via interviews, documents, and notes. Member checking is a way to enhance the accuracy, reliability, and validity of the data collection (Winter & Collins, 2015). Member checking is a process of having the participant review and validate their responses (Babbie, 2015). I performed member checking, for this study, and had all participants review and validate their responses.

Data saturation is when all data has been analyzed until no new information or themes emerge and is recommended by Elo et al. (2014). All data were analyzed until no new information or themes emerged.

Population and Sampling

I used criterion sampling, a form of purposeful sampling, for my study. Criterion sampling allowed me, the researcher, to select participants based on predetermined criteria for a study (Robinson, 2014). The eligibility criteria and criterion sampling helped ensure the population aligned with the overarching research question (Dipeolu, Storlie, Hargrave, & Cook, 2015). Criterion sampling allowed me to select aerospace manufacturing managers who met the criteria for this study.

Determining the number of participants for a qualitative multiple case study is difficult because it depends on the depth and breadth of information rather than the number of participants (Patton, 2015). The goal of qualitative research is to reach data saturation or the point where no new information is revealed (Winter & Collins, 2015). According to Farquhar (2012), at least two participants are required for a multiple case study but recommends three to five to reach data saturation. I interviewed three participants for this study and was able to reach data saturation because by the third interview I no longer received any new answers to my interview questions. I was able to reach data saturation by the process of member checking. Member checking is when the researcher summarizes the participant's interview responses and then has the participant review and verify their responses (Winter & Collins, 2015). Once I began to see similar answers over and over again I, the researcher, became empirically confident that I saturated my research question.

The population for this study consisted of aerospace manufacturing managers from different organizations of an aerospace manufacturing company located in the Midwest region of the United States, who had successfully implemented a change imitative within the last 5 years. Establishing eligibility requirements will ensure participants have the required knowledge and experience which will align with the overarching research question (Englander, 2012). Eligibility criteria for my study included (a) age 18 or older, (b) currently employed, as a manager, at an aerospace manufacturing company located in the Midwest region of the United States, and (c) had successfully implemented change initiatives within the last 5 years.

Selecting an interview setting will vary based on an agreement between each participant and myself. As recommended by Yin (2014), the research location will not be loud or public. Royce (2018) also recommend interviewing participants in a private and convenient location. I identified a location which was also convenient for the participant because this has been proven to help reduce the stress and anxiety of the participant (Cachia & Millward, 2011). For these reasons, I conducted face-to-face interviews in private locations which were convenient for each participant.

Ethical Research

I did not begin any data collection or reach out to participants until I received approval from Walden University's IRB. My Walden IRB approval number was 08-17-18-0725665. I also received IRB approval from the company I did my research at. The fundamental principles of the Belmont Report are (a) to protect the person's anonymity, (b) the researcher must be truthful, (c) voluntary participation, and (d) beneficence and justice (U.S. Department of Health & Human Services, 2015). During my study, I followed the Belmont Report's guidelines to ensure I

protected the rights of all participants. Prior to beginning my study, I obtained the participant's consent by having them agree to and signing the informed consent form. The informed consent form explained the purpose of the study, the expectations of their participation, as well as the participant's rights to anonymity, voluntary participation, beneficence, and justice.

The participants voluntarily participated and could decide, at any point in the study, to be dismissed without facing any repercussions. Participants could have requested to be dismissed from the study by email, phone, or in person. Although incentives may attract and increase participation (London, Borasky, & Bhan, 2012), there were not any incentives for participating in this study.

I saved all the research data on a private password-protected server which only I have access to. All physical data, from my research, was kept locked in my personal filing cabinet which only I will have access to. To protect the confidentiality of participants, and as a requirement of Walden University, I will store all of the data securely for 5 years.

As recommended by Babbie (2015), I protected the names of individuals and organizations, to keep the participants and organizations confidential, by using pseudonyms. Each participant was coded as M plus a numeral. The first participant was coded as M1, the second M2, and the third M3. I followed a similar protocol to code the data I gathered from each organization. Documents were coded as O and a numeral. The use of codes and labeling also helps the researcher to keep their data organized (White, Oelke, & Friesen, 2012) and protect the participants' identities (Shavers & Moore, 2014). The reason I used codes to identify each participant and data was, so I could keep the anonymity of the participants and organizations. This unique code was only known by me to link the code to the identity of the participant.

Data Collection Instruments

In qualitative research, the researcher is usually the primary data collection instrument (Cronin, 2014). I was the primary research instrument in this study and was responsible for collecting, organizing, and analyzing the data. Primary and secondary data sources can increase the reliability and validity of the study (Haahr et al., 2014). For my study, I conducted face-to-face semistructured interviews. I also be collected and analyzing company documents, and other secondary sources, to aid in triangulating the data, as well as increasing validity and reliability.

After down selecting my participant pool, via criterion sampling, I contacted the potential participants to inform them of my study and invite them to participate. I provided the participants with the informed consent form, to sign, in order to participate in my study. Next, I coordinated with the participant to set up a time and location for the interview. Face-to-face interviews is the preferred technique because they tend to produce better results than a virtual or telephone interview (Englander, 2012). I scheduled the interview for an hour, as recommended by Shavers and Moore (2014). I recorded the interview using an audio recording device. I began the interview with introductions then proceeded with the open-ended interview questions. To ensure I had enough detail to answer my overarching research question I asked probing questions, as recommended by Moll (2012).

Member checking is a way to enhance the accuracy, reliability, and validity of the data collection (Winter & Collins, 2015). Member checking is a process of having the participant review and validate their responses (Babbie, 2015). This allowed me to add or edit any changes which the participant wanted to make. Expert review has also been proven to enhance the reliability and validity of a study (Shavers & Moore, 2014). I conducted an expert review prior to

interviewing the participants to ensure the interview questions would allow me to gather enough data to answer my overarching research question.

Data Collection Technique

I conducted an expert review, semistructured interviews, member checking, and analyzed documents. The advantages of semistructured interviews allow the researcher to build themes as well as increase validity (Wolgemuth et al., 2014). Semistructured interviews may also be disadvantageous because they may cause the participant to become overly emotional and nervous, to where they are unable to provide the necessary information (Rossetto, 2014). To help ensure I asked the appropriate questions to answer my overarching research question, I conducted an expert review, as recommended by Haahr et al. (2014), prior to the interviews. According to Benn, Edwards, and Angus-Leppan (2013), although a pilot study may be beneficial to the researcher, it would require a significant time commitment. Due to the time requirement, I did not conduct a pilot test. Document analysis allows the researcher to find and use information which may support the findings from the interviews (Street & Ward, 2012). Document analysis may also provide additional information which relates to the qualitative study (Houghton, Casey, Shaw, & Murphy, 2013). Since document analysis is done by the researcher, one of the drawbacks is they may misinterpret the data (Shavers & Moore, 2014). As the researcher for this study, I conducted document analysis because the benefits outweighed the risk.

I also used member checking since it may improve the reliability, and validity of the research data (Houghton et al., 2013). After the interview was transcribed, I validated the synthesized answers with the participants which is a way to ensure accuracy (Shavers & Moore,

2014) and add any additional information (Harper & Cole, 2012). I did this by emailing a copy of the participant's synthesized responses to each participant for them to review and let myself, the researcher, know if they would like to add any additional information. All three participants emailed me back to confirm their synthesized answers were accurate and did not need to add any additional information.

Data Organization Techniques

Reflective journals are often used by researchers as a way to document their thoughts and observations throughout the study (Walker, Read, & Priest, 2013). Reflective journals can also be used to record the steps taken, by the researcher, to make decisions about the study (Teusner, 2015). Reflective journals also help to provide transparency to the data collection method, document potential challenges, and keep track of everything the researcher does throughout the study (Houghton et al., 2013). I used a reflective journal during my study to document as many of my thoughts and experiences I faced when collecting and analyzing data.

According to Gläser and Laudel (2013), there is always a privacy concern when storing data in the cloud because some providers may be dishonest, and they can be hacked. White et al. (2012) recommend researchers to store all electronic data on a personal password-protected computer/server which only they have access to. I saved all of the research data on a private password-protected server which only I had access to. All physical data, from my research, was be kept locked in my personal filing cabinet which only I had access to. To protect the confidentiality of participants, and as a requirement of Walden University, I will store all the data securely for 5 years.

As recommended by Babbie (2015), I protected the names of individuals and organizations, to keep the participants and organizations confidential, by using pseudonyms. Each participant was coded as M plus a numeral. The first participant was coded as M1, the second M2, and the third M3. I followed a similar protocol to code the data I gathered from each organization. Documents were coded as O and a numeral. The use of codes and labeling also helps the researcher to keep their data organized (White et al., 2012) and protect the participants' identities (Shavers & Moore, 2014). The reason I used codes to identify each participant and data was, so I could keep the anonymity of the participants and organizations. This unique code was only known by me to link the code to the identity of the participant. Protecting the participant's identity is an important part of the research (White et al., 2012). I used this same process for all data related to the participant such as recording transcripts, informed consent forms, and company documents.

Data Analysis

The four types of triangulation methods are a data source, theory, method, and investigator triangulation (Flick, 2015). Data source triangulation is primarily used in mix-method studies when the researcher is integrating qualitative and quantitative data (Kao & Salerno, 2014). Investigator triangulation is when the research is analyzed by additional authors to review and validate the researcher's findings (Coy, Lambert, & Miller, 2016). Theoretical triangulation is where the author analyzes the study's data from the perspective of two or more theories (Beltramo, 2014). In methodological triangulation, the researcher gathers data from multiple methods (Archbold, Dahle, & Jordan, 2014). For this study I performed methodological

triangulation because I gathered my data via interviews, documents, and notes, all of which

increased the validity of my study (Bjurulf, Vedung, & Larsson, 2012).

The three steps of how I conducted my data analysis were by (a) analyzing and coding

the interview transcripts, (b) using NVivo 11 to organize and present data, and (c) analyzing

company documents. Interview transcriptions document the participant's responses which can be

coded (Nordstrom, 2015) and later analyzed by the researcher to answer the over-arching

research question (Gibbs, Eisenberg, Rozaidi, & Gryaznova, 2015). After the interviews, I

transcribed each participant's responses onto a file which I later analyzed and coded for patterns.

Graphical query visualization programs help the researcher to code their data (Folta,

Seguin, Ackerman, & Nelson, 2012) and categorize emerging themes (Gläser & Laudel, 2013). I

used NVivo 11 to prepare, code, cluster, and organize the transcript data. In the final step, I

gathered and analyzed business documents. Company documents can be used to validate claims

made, during the interviews, by the participants (Storlie, Moreno, & Portman, 2014) and provide

additional information used to help answer the over-arching research question (Farquhar, 2012).

I analyzed emails and metrics to validate claims made, during the interviews, by the participants.

Marshall and Rossman (2011) recommended researchers use a reflective journal throughout their

research.

Reflective journals can be used, by the researcher, to document their thoughts,

experiences, and additional information throughout their research (Yin, 2014). I used and kept a

reflective journal during my study to record my thoughts, reflections, and any additional

information I found relevant during my research. I was able to use all this data to answer my

over-arching research question by summarizing and interpreting these themes, identified during the coding process, based on those identified in the literature.

The reason it is important to support the identified themes from the coding process with the themes from the literature is to link and support the findings with the literature (Storlie et al., 2014). As the researcher, I focused on supporting the themes identified from the coding process and supporting those findings with the literature, including new studies published since writing the proposal and the conceptual framework.

Reliability and Validity

Reliability

To achieve reliable results, the researcher must use reliable instruments and measures (Marshall & Rossman, 2011). As recommended by Cope (2014), I included various sources of evidence in my case studies such as company documents, personal notes, and interviews. Multiple sources of evidence will increase reliability (Yin, 2014).

Dependability refers to the stability or consistency of the research results (Cope, 2014). To improve the dependability of my interview answers, I asked each participant the same list of the interview and follow up questions (Bryman, 2012). By asking each participant the same list of the interview and follow up questions I was able to ensure other researchers would be able to replicate my procedure (Al-Yateem, 2012). Houghton et al. (2013) recommended researchers perform member checking as a way to ensure dependability in case study research. I performed member checking during my study to increase dependability and data accuracy. I did this by emailing a copy of the participant's synthesized responses to each participant for them to review and let myself, the researcher, know if they would like to add any additional information. All

three participants emailed me back to confirm their synthesized answers were accurate and did

not need to add any additional information. Member checking also helps exclude researcher bias

from the results (Winter & Collins, 2015).

Validity

Validity is the accuracy of the results of the study (Teusner, 2015). Credibility,

transferability, and confirmability support a study's validity (Robinson, 2014). Credibility refers

to the trustworthiness of the study (Teusner, 2015). Transferability refers to whether the findings

from the study are generalizable and could be transferable to other contexts (Boesch,

Schwaninger, Weber, & Scholz, 2012). Confirmability refers to how well the study findings are

supported by the research data (Cope, 2014).

To enhance credibility, researchers recommend member checking as a way to ensure the

participants' interview responses are interpreted accurately and honestly (Lincoln & Guba,

1985). Prior to the interview, credibility begins with the selection and recruitment of participants

(Cope, 2014). Participants should have the background and knowledge required to answer the

overarching research question (Boesch et al., 2012). According to Marshall and Rossman (2011),

the research questions should be aligned to the overarching research question and recommend

expert review as a way to increase credibility. I followed all of these recommendations during

my study to ensure credibility.

Transferability refers to whether or not the findings from the study could be transferable

to another field or setting (Moretti et al., 2011). It is recommended for researchers to provide as

much information as possible about the nature of their study so other researchers could replicate

it if they wanted to (Yin, 2014). Bryman (2012) also recommend for researchers to use various

sources of data such as interviews, personal notes, and company documents triangulate and support the findings of the study. In order to address the transferability, I performed all of these researchers' recommendations throughout my study.

Researchers can address confirmability by providing deep descriptions of the data and analyzing it until they reach data saturation (Bryman, 2012). Confirmability should represent the participants' views without the researcher's biases (Cope, 2014). Cope (2014) recommended researchers perform member checking as a way to enhance confirmability and remove bias. Reflection journals can also aid in establishing confirmability and dependability (Boesch et al., 2012). I informed the participants of my experience with change management and the aerospace manufacturing field. I also provided rich descriptions of the data analysis, keep a reflection journal, and perform member checking.

All data were analyzed until no new information or themes emerged. This is referred to as data saturation (Elo et al., 2014). Researchers are unable to generate an accurate conclusion if they have not reached data saturation (O'Reilly & Parker, 2012). For this study I performed methodological triangulation because I gathered my data via interviews, emails and metrics, and notes, all of which increased the validity of my study (Bjurulf et al., 2012). It is recommended for researchers to perform a minimum of three interviews, during a case study, in order to confirm data saturation but more may be required (Emmel, 2013). For this study, I interviewed three manufacturing managers who meet the requirements for this study and was able to reach data saturation because by the third interview I no longer received any new answers or information to my interview questions. After the interview I performed member checking, by transcribing the data from the interviews, synthesizing the data from each participant interview,

and then forwarded the summaries to the appropriate participants for their review. Once the participants confirmed their responses and I, the researcher, was able to analyze their answers, I became empirically confident that I saturated my overarching research question.

Transition and Summary

In Section 2 of this study, I presented the description of the project, including the role of the researcher, participants, the research method, the research design, population and sampling, ethical research, data collection instruments, data collection technique, data organization techniques, data analysis, and the reliability and validity. In Section 3, I will present the findings of the study, the application to professional practice, the implications for social change, recommendations for action, recommendations for further research, a reflection on my experience within the DBA Doctoral Study process, and a conclusion of the study.

Section 3: The Results

Introduction

The purpose of this qualitative multiple case study was to explore aerospace manufacturing managers' implementation strategies for successful change initiatives. I conducted face-to-face semistructured interviews to gather data with three aerospace manufacturing managers from three different organizations of an aerospace manufacturing located in the Midwest region of the United States. Three main themes emerged from the data analysis were: well-defined and measurable goals improved the ability to track and measure the implementation, teamwork improved employee involvement and collaboration, and communication improved transparency and employee support. All participant emphasized the importance of having a well-defined and measurable goal to ensure the change has been identified and can be measured or tracked to show whether it has been implemented successfully or not. The managers also emphasized the importance of teamwork and communication, which improved employee involvement and increased transparency during the implementation. These three themes may help other aerospace manufacturing leaders develop or improve their strategies for implementing change initiatives, which may improve aircraft safety.

Presentation of Findings

The overarching research question for this study was: What strategies do aerospace manufacturing managers use to successfully implement change initiatives? After the data were collected and analyzed, using NVivo 11 software, the three themes which emerged from the data analysis were: well-defined and measurable goals improved the ability to track and measure the implementation, teamwork improved employee involvement and collaboration, and

communication improved transparency and employee support. The findings from this study aligned with the conceptual framework of Lewin's (1947) and Kotter's (1995) change management models and supported some of the peer-reviewed studies, from the literature review section. As shown in Table 3, each theme can be seen throughout the unfreezing, changing, and refreezing stages of Lewin's change model and different sections throughout Kotter's eight-step change model.

Table 3

Emerged Themes Compared to the Conceptual Framework

Kotter's Change Model (1995)	**Lewin's Change Model (1947)**		
	Unfreezing	**Changing**	**Refreezing**
Create sense of urgency	X	X	
Form guiding coalition	X		
Create a vision	X	X	
Communicate the vision	X	X	X
Empower others	X	X	X
Short-term wins	X	X	
Consolidate improvements		X	X
Institutionalize change			X

X = Overlap between themes identified, from the study, and the theoretical frameworks

(Measurable Goal, Teamwork, Communication)

Theme 1: Well-Defined and Measurable Goal

       A well-defined and measurable goal was the first theme which emerged when analyzing the data gathered during this study. All participants mentioned creating goals and metrics during their interviews, and the analysis revealed this to be a key aspect to successfully implementing a change initiative because it ensures the change identified can be measured or tracked to show whether it has been implemented successfully or not. The frequency this theme was mentioned in the interviews is displayed in Table 4. Van den Heuvel et al. (2016) noted that leaders should create realistic and attainable goals which turn vision into reality. P1 stated, "You have to make sure that you have a well-defined goal that is also measurable to know if you were successful at reaching the goal and that you're not changing just for the sake of change." P2 stated, "As a manager you have to be careful because people will sometimes tell you what you want to hear, which is why it's good to have quantifiable metrics." P3 stated,

       The first step is to identify what the end goal of the change initiative will be and to understand why the change is necessary. Use or create metrics that will need to be used to determine if it is successful. If it's a new change and you don't have metrics yet that is part of the preparation stage to make sure that you have measurable goal and a way to measure it to know if you were successful. Must ensure that you have workable metrics that actually mean something. Following up with the metrics to make sure that everything just stays successful. That is the whole point of metrics, to make sure that you have workable metrics that actually mean something to you to help you reach your goal. Some metrics are just out there to be out there, they may mean something to somebody but may not be applicable to you/your team. You must be able to explain those metrics to your

team so that they are all into this and a part of this and show them the data and what it's showing to get input on how to fix. Sometimes those metrics are defined at the beginning stage, whenever you're creating the objectives and goals of this change initiative and what you're going to measure them by. Sometimes those can be tweaked and modified throughout the implementation phase based on feedback that you are receiving or metrics that you realize you haven't been capturing that you think are applicable to that overarching objective.

Having a measurable goal is important throughout the Lewin's (1947) unfreezing, changing, and refreezing sections and Kotter's (1995) eight-steps. P3 stated,

Sometimes those metrics are defined at the beginning stage. Whenever you're creating your objectives of this change initiatives and what you're going to measure them by, sometimes those can be tweaked and modified throughout the implementation phase based on a feedback that you're receiving or metrics that you're realizing you haven't been capturing and should be that are applicable to that overarching objective.

After the change has been implemented, the metrics should still be used to ensure that the change is sustained (Buono & Subbiah, 2014). P1 stated, "once you meet your goal, it is important that you still track those metrics to ensure that the change is sustainable." P2 stated that you need to "follow up with the metrics to make sure that everything still stays successful." Analyzed company documents from all three participants also supported this theme because there were clear well-defined goals established prior to implementing the change and metrics were tracked throughout the implementation.

Van den Heuvel et al. (2016), examined the process of how employees adapt to change over time, and asserted that a measureable goal is required to measure the success of an implementation. Results of the study further indicated that business leaders could improve change initiative implementation success by identifying a well-defined and measureable goal for the change initiative. In alignment with Kotter's (1995) and Lewin's (1947) model, leaders must create a vision and that vision must be measureable to ensure implementation success and sustainability.

The findings that well-defined and measurable goals improved the ability to track and measure the implementation were similar to the research findings from Royce (2018). Royce found that having a well-defined and measurable goal can positively impact change implementation success. These findings are consistent with prior literature that also shows measureable goals as being directly related to change implementation success (Umble & Umble, 2014).

Table 4

Frequency of Well-Defined and Measureable Goals

Question where participants' response metioned well-defined measureable goals	Times Discussed	% of
Participant 1, Interview question 1, 2, 3, 5, 6, 7	13	68%
Participant 2, Interview question 1, 2, 5, 6, 7	12	65%
Participant 3, Interview question 1, 3, 5, 6	10	62%

Theme 2: Teamwork

Teamwork includes employee participation and involvement to accomplish a common goal (Baruah & Ward, 2015). All organizations and participants used some form of teamwork throughout the change initiative implementation. Teamwork was mentioned by all participants

throughout the entire change implementation process, helping to identify the change initiative, implementing it, and sustaining it. The frequency this theme was mentioned in the interviews is displayed in Table 5. Teamwork is used to help identify the change initiative and create the goals and metrics that are going to be used to track them. Everyone in the company is responsible for working together to accomplish a goal (Pardo-del-Val et al., 2015). It is important for leaders to understand all implications of the change from both the employee and organizational points of view (Georgalis et al., 2015). P3 stated that:

> We first started with bringing in the experts from all around the company. We brought in the people, the experts at our own organization, the experts from other organizations, and we brought in the customers to go over and tell us what it is that they needed. Then we made a full detailed plan of how we were going to go about implementing this and what we expected to achieve by doing that. And that detailed plan went into what resources were needed, what systems resources were needed, what teaching, how we would be to teach it, how we would be able to use it, what personnel from other parts of the company we would need to go and implement this. We did all that and created all of these processes around doing this and implementing this and bringing all these experts in, we were able to go about changing that over pretty smoothly.

Teams can involve managers, leads, non-managers, subject matter experts, and stakeholders, and anyone else affected by the change (Heide & Simonsson, 2014). Teams can be identified to help lead and implement the change initiatives (Georgalis et al., 2015). P1 stated,

> Think whatever approach somebody takes to managing a change, whether again, it's very process oriented, whether it's a, "Let's just go full steam ahead", you've got to be working

with your team because at the end of the day the employees are the ones who are going to

help you make it a success or not.

Teamwork is important throughout each of Lewin's three stages of his change model and

supports several of Kotter's 8 steps. The second step in Kotter's (1995) change model is to form

a powerful coalition which directly aligns with the teamwork theme which includes a team of

key stakeholders and leaders to help implement the change as well as providing leadership

support to help remove obstacles that may arise when implementing a change. Teamwork also

plays a role in creating a sense of urgency (step 1), forming a guiding coalition (step 2), creating

a vision (step 3), communicating the vision (step 4), and all the others. P2 stated, "when there is

a stressful situation and change is obviously very stressful for most people, which I tend to want

to collaborate more." It is also important for teamwork after the change has been implemented to

ensure that the changes are sustained and employees do not revert back to their old ways (Heide

& Simonsson, 2014).

Tvedt and Saksvik (2015) stated that teamwork is one of the most important factors in

determining the success when implementing a change initiative. Results of their study further

indicate that teamwork improves employee involvement and collaboration. In alignment with

Lewin's (1947) and Kotter's (1995) models, teamwork is required throughout the entire change

management process and that teamwork stimulate and inspire the employees to a higher level of

performance and commitment to the organization.

The findings that teamwork improve change implementation success rates were similar to

the research findings from Vos and Rupert (2018). This quantitative study found that not only

did teamwork have a direct impact on implementation success but also showed to reduce

employee resistance. These finding are consistent with prior literature that also showed increase

in teamwork improving the success rate, when implementing a change initiative, (Jansson, 2014)

and that teamwork can reduce employee resistance to change (Johansson et al., 2014).

Table 5

Frequency of Teamwork

Question where participants' response metioned communication	Times Discussed	% of
Participant 1, Interview question 1, 3, 4, 6	11	63%
Participant 2, Interview question 2, 3, 4, 6	7	45%
Participant 3, Interview question 1, 3, 4, 5, 7	10	65%

Theme 3: Communication

The third theme which emerged from my analysis was communication. All of the

participants expressed the significance of communication during a change implementation. The

frequency that communication was mentioned during the interviews is shown in Table 6. P1

stated that "It is important to communicate often, in different ways, and in different forms."

Communication is one of the most vital components to any change initiative (Lewis et al., 2015).

Lack of communication is the root cause of all failed interactions between management and their

employees (Kearns, 2014). The most critical success factor of change management is

communication (Umble & Umble, 2014). Business leaders must possess or develop

communication skills in order to effectively implement change (Johansson et al., 2014). P2 stated

the following:

> I try to make every effort to participate in certain events with them versus having the
>
> first-line managers do things, which I would do in the past. I tried to be part of it, I try to
>
> build that trust a little bit more than maybe I have in the past, communicate one-on-one,

communicate in groups, communicate via email. Just different ways to be transparent as we're going through the change. So if there are any concerns, the team knows they can come talk to me, which they can bring those up. It goes back to the beginning, right? If I'm not getting feedback on the changes that are happening, then I'm in a vacuum. I can't gauge, are we transitioning to the whys and the whats appropriately.

Communication can flow either vertically or horizontally, according to Shah (2014). Horizontal communication would be communication between two or more individuals at the same level while vertical communication would be between employees at different levels. An example of vertical communication would be between a senior manager and their reporting managers. If the communication is coming from someone in a higher position to one in a lower position then this is referred to as downward communication (Shah, 2014) and, by contrast, upward communication would be coming from someone with a lower position to a higher position. Based on the interviews and supporting company documents all three participants and organization showed vertical, both upward and downward, and horizontal communication. Based on the size of the change initiative, can depend on how many people are involved and whether vertical or horizontal communication is necessary.

Communication was used throughout each step of Lewin's (1947) change model. In the beginning, communication was shown to be an important tool during the planning, implementation, and sustainment phases of a change initiative. Communication was shown to help create the goal and metrics associated with the change initiatives by helping to understand what change will be implemented, how it will be implemented, what are systems, tools and

people will be affected. It is important to communicate and educate employees about the change implications in order to help prevent resistance (Shah, 2014).

Communication is also very prominent throughout the implementation stage by communicating the what, why and how of the change initiative to everyone else in the organization that will be affected by the change or that needs to know. Downward and horizontal communication were the primary methods during the process but some upward communication was also used, primarily to inform leadership of feedback, issues, and concerns that other employees may be having during the implementation phase. Two of the three managers mentioned that their forms of communication can vary based on who their target audience is. P3 stated the following:

> Age and experience are the number one factors that I noticed resistance in and involve the leads to get their input and to get past resistance to change involves answering the questions that they may have and they help get the message through to the rest of the employees.

Communication also played a significant role in the sustainment phase of a change initiative. P2 stated that "it is important for employees to see their success and to not only communicate the progress of the change, during its initiative but also to follow up, post-implementation, with the outcomes of the implementation." P1 stated that "communicating this back to the overarching goal of the implementation is important and when employees are able to see the change they will build faith and trust in their leadership and will be more open to future changes and less resistance."

Burnes and Cooke (2013), who extended Lewin's (1947) change model, stated that communication is required for every change implementation. Results of the study further indicated that leaders could improve transparency and employee support by communicating with their teams throughout the implementation. In alignment with Lewin's and Kotter's (1995) models, it is also important for leaders to keep communicating the vision and benefits of the change to remove roadblocks and gain support.

The findings that communication improved transparency and employee support were similar to research findings form Fuioaga and Rusu (2018) who found that communication improved employee support and success rates, for companies implementing change initiatives. These findings are consistent with prior literature which found communication as the most critical success factor of change management (Umble & Umble, 2014) and have been showed to directly improve change implementation success (Johansson et al., 2014).

Table 6

Frequency of Communication

Question where participants' response metioned teamwork	Times Discussed	% of
Participant 1, Interview question 1, 2, 3, 4, 6	12	50%
Participant 2, Interview question 1, 2, 3, 4, 6	10	50%
Participant 3, Interview question 1, 2, 3, 4, 7	9	66%

Theme Summary

Each of the aerospace manufacturing managers were from different backgrounds, including education, experience, and hierarchy. Data was collected via semistructured interviews, and analyzed, using NVivo 11 software. The findings from this study partially aligned with the conceptual framework of Lewin's (1947) and Kotter's (1995) change

management models and supported some of the peer-reviewed studies, from the literature review section. As shown in Table 3, each theme can be seen throughout the unfreezing, changing, and refreezing stages of Lewin's change model and different sections throughout Kotter's eight-step change model. These three themes identified also show to confirm findings with other peer-reviewed studies from the literature, including new studies since the proposal was written. Communication, creating short and long-term goals, teamwork, and measuring success are all required when implementing a change initiative (Van den Heuvel et al., 2016). All three participants expressed the significance of all three themes that emerged from this study.

Application to Professional Practice

The findings from this study identified what managers believe are critical to successfully implementing a change initiative within the aerospace manufacturing industry. This study may be beneficial to other business leaders who seek to successfully implement a change initiative within their organization. Babbie (2015) stated, by identifying what makes some managers' strategies successful, it may help other business leaders to create their own strategies. The literature from this study also supports the findings from this study on how aerospace manufacturing managers successfully implement change initiatives. It was revealed through the interviews and company documents that having a measurable goal, teamwork, and communication were all critical in order to successfully implement a change initiative. This study may help business leaders reduce cost and improve their effectiveness when implementing change initiatives. Managing and implementing change is becoming more important in today's business environment than ever before and has a direct impact on the bottom-line as well as company culture (Pardo-del-Val et al., 2015). Aerospace manufacturing managers must

understand how to successfully implement change initiatives in order to remain competitive and for the business to operate successfully. The significance of this study helps to identify best practice change strategies for leaders to develop and implement change initiatives successfully.

Lewin's (1947) and Kotter's (1995) change models provided the conceptual frameworks for this study. Although none of the participants mentioned either of the change models as a framework or reference point for how they implement change initiatives, the analysis of the data showed that aerospace manufacturing managers achieve success when implementing a change initiative, through teamwork, communication, and a measurable goal. These three themes were found to partially align to both Lewin's and Kotter's change models.

Implications for Social Change

The findings of this study may help businesses in the aerospace manufacturing sector successfully implement change initiatives which improve aircraft safety. Although fatal commercial airliner accidents are on the decline, 325 commercial airliner fatalities occurred in 2016 (Ioannou et al., 2017). Improvements in aircraft safety may contribute to positive social change by reducing aviation accidents and keeping communities safe from loss of life.

Successful management and implement change initiatives help companies to create more innovative products with enhanced features and capabilities (Simoes & Esposito, 2014). With several aerospace companies who provide aircraft products to our U.S. military, these enhanced features and capabilities may help our soldiers fighting overseas. A more technologically advanced military aircraft may also contribute positive social change by helping the troops to defend the people and freedom of this nation.

Business leaders who successfully implement change initiatives are able to reduce costs and become more competitive in the market place (Van den Heuvel et al., 2016). This may allow business leaders to invest more money into their communities. Several aerospace companies such as Boeing and Lockheed Martin have committed to investing millions into science, technology, engineering, and math (STEM) education in their communities (Gonzalez & Zalewski, 2016). Investments similar to these examples could beneficially affect social change and help to educate the community.

Recommendations for Action

Aerospace manufacturing managers may consider using the findings from this study to aid them when implementing a change initiative within their organizations. My recommendation for aerospace manufacturing managers, unsure of an implementation strategy, is to ensure they have a well-defined and measurable end goal, communicate often, in different ways and in different forms, and finally, utilize teamwork throughout the entire implementation process.

The first recommendation from this study is to ensure leaders have a well-defined, and measurable, goal. Leaders need to identify what the end goal, of the change initiative, will be and need to understand why the change is necessary. This goal must be measurable so leaders must use or create metrics that will be used to track the progress and success of the implementation. Managers need to make sure that they have workable metrics that add value to the organization and help leaders reach organizational goals.

The second recommendation is to communicate with team members and stakeholders throughout the implementation. It is important to communicate often, in different ways, and in different forms. Leaders and managers should both vertically, upward and downward, and

horizontally. The study participants found the greatest success when they utilized both of these communication types throughout the planning, implementation, and sustainment phases of a change initiative.

The third recommendation is to create and utilize a team to work together when implementing a change initiative. This teamwork allows employees, some at different levels, to work together efficiently and effectively to reach the common goal. Participants believed teamwork to be very important when implementing a change because it helped to reduce the risk and increase the effectiveness of implementing a change initiative.

Aerospace manufacturing managers may be able to use these recommendations in order to successfully implement change initiatives. I plan on sharing and disseminating this study through a variety of distribution outlets such as academic, aerospace, and business journals. I also plan on publishing this study, via ProQuest, to allow access for fellow students and researchers. The findings from this study may be presented to aerospace manufacturing managers, as well as leaders from other business-related industries, through literature, conferences, and training to provide them with a deeper understanding of change management strategies.

Recommendations for Further Research

Aerospace manufacturing managers may be able to use these recommendations in order to successfully implement change initiatives. I plan on sharing and disseminating this study through a variety of distribution outlets such as academic, aerospace, and business journals. I also plan on publishing this study, via ProQuest, to allow access for fellow students and researchers. The findings from this study may be presented to aerospace manufacturing

managers, as well as leaders from other business-related industries, through literature, conferences, and training to provide them with a deeper understanding of change management strategies.

Reflections

Walden University's doctoral program has provided me with the necessary tools and education to become an independent scholar and conduct this research on aerospace manufacturing managers' implementation strategies for successful change initiatives. This entire was very challenging but also very rewarding. Being sure to incorporate my committee members' feedback has been one of the most beneficial and helpful pieces throughout my journey. This is my study and I am responsible for doing everything but their guidance and expertise was extremely valuable in helping me to achieve this goal.

In today's business world it is almost inevitable to avoid change. My original perception was that many managers struggled with implementing change initiatives or had no strategy for implementing them at all. This was based on my own personal experience of several failed change initiatives throughout my career. My perception changed drastically throughout my research because I was able to learn how to successfully implement change initiatives from aerospace manufacturers, who have been very successful. I believe that the findings from this study may be able to educate other business leaders, the way it has educated me, and provide them with strategies that they can use to be successful at implementing change initiatives.

Conclusion

The purpose of this qualitative multiple case study was to explore aerospace manufacturing managers' implementation strategies for successful change initiatives. Although a

majority of change initiatives fail, the findings from this study may provide leaders with strategies to implement change successfully. Change is a necessity for leaders who want to compete in today's global market (Umble & Umble, 2014). The analysis of this study found that leaders are able to implement change initiatives successfully because of having a well-defined and measurable goal, communication, and teamwork. The findings of this study may be of value to aerospace manufacturing managers by providing a deeper understanding of change management strategies which they may use when implementing a change initiative.

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Appendix: Interview Protocol

Change Management: Implementation Strategies for Change Initiatives

The purpose of this qualitative multiple case study is to explore aerospace manufacturing managers' implementation strategies for successful change initiatives. The target population for my study were managers in three organizations that were part of an aerospace manufacturing company located in the Midwest region of the United States who have successfully implemented change initiatives within the last 5 years. The results of this study may contribute to positive social change by providing aerospace manufacturing managers strategies to successfully implement change initiatives that might improve aircraft safety and reduce fatal aviation accidents.

Interviewee: _____ Location: _____

Date: _____ Time: _____

Notes:

1. I will greet the interviewee and introduce myself.

2. I will provide a brief overview of the study and thank the participant for agreeing to participate in the study.

3. I will present the informed consent form and request that the participant signs the form.

4. I will explain to the participant that their participation is voluntary.

5. I will inform the participant that the interview will be recorded.

6. I will begin each interview by recording the participant's pre-assigned coded name, date, time and location.

7. I will begin asking the participant the interview questions and follow-up questions if needed.

8. At the end of the interview, I will thank the participant for their participation and time.

9. I will remind the participant that I will provide them with a summary of the interview and my interpretation of their responses for review and validation.

10. I will end the interview and provide the participant my contact information if they have any questions.

<div align="center">Interview Questions</div>

I asked the following open-ended questions through semistructured interviews with aerospace manufacturing managers to explore the implementation strategies for successful change initiatives in aerospace manufacturing organizations:

1. How do you prepare and plan for implementing a change initiative and who do you include during this planning process?

2. How do you implement a change initiative within your organization?

3. How do you communicate a change initiative throughout your organization?

4. What steps do you take to manage and remove obstacles that you, or your employees, may face when implementing a change initiative, including resistance to change?

5. How do you determine if an implemented change initiative is successful?

6. Once a change initiative has been implemented successfully, what steps do you take to make sure the change is sustainable?

7. What more would you like to add as it pertains to implementation strategies for

    change initiatives?