The effect of Web 2.0 communication on employee resistance to change

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Abstract
Web 2.0 combines various electronic mediums, websites, blogs and applications across a wide range of devices and provides opportunity to communicate bespoke change messages to employees. The purpose of this study is to establish whether the use of Web 2.0 has an impact on employees' resistance to change during the change communication process and whether employees show a preference for a communication medium in the context of organisational change. The failure of most change efforts are often ascribed to insufficient communication, but employee perspectives on the preferred communication medium and whether Web 2.0 communication impacts on employee’s resistance to change has been largely overlooked in academic literature. A descriptive research design approach was followed. Inferential statistics was used to apply parametric and non-parametric tests to analyse the data. A self-administered electronic survey was sent to 1337 employees across four sectors that have been affected by any type of organisational change between January 2012 and June 2014 in South Africa. The response rate was 19.8% (266 responses). The paper finds that there is a preference towards face-to-face communication and that participation increases willingness to accept the change. There were no differences found in the manner in which females and males responded to the questions on willingness to accept the change. This research enables communication and change management professionals to assess the suitability of WEB 2.0 mediums during various stages of organisational change. The Blended Media Communication (BMC) Model to Reduce Resistance to Change is proposed based on the findings of the study. The research will add to the theory concerning an employee perspective on Web 2.0 change communication.
Keywords

Web 2.0; Change Management; Employee Resistance, Social Media; Employee Preference
Declaration

I declare that this research is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Student Name: Zelna Alida Oberholster

Student Signature:

Date: 10 November 2014
Acknowledgement

My husband Guilliam, your unwavering support and belief in me throughout my MBA journey deserves an MBA by association.

My beautiful daughter Ivana, you had to fit teenage dilemmas into my busy time schedule and yet you were my greatest cheerleader - I hope the example I set will provide you with the confidence knowing that every woman can succeed in both business and academics.

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- Last, but not least, all the participants in the surveys and those who granted permission to conduct the surveys- without you this research would not be possible

Nelson Mandela said, “It always seems impossible, until it is done” (Nelson Mandela Speech, Harvard, 1998)
Dedication

To all women and children who have been raped and/or abused and/or who originate from underprivileged backgrounds - do not allow your past or statistics to define you. The submission of this research report and completion of my MBA degree is proof that everyone can rise above his or her circumstances. Everything is possible!
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CHAPTER 1 INTRODUCTION TO THE RESEARCH PROBLEM

1.1 Purpose of the Study
This chapter introduces the research topic, the research objectives and provides a background to current organisational change communication, antecedents of employee resistance to change and the potential use of Web 2.0 in organisations.

The purpose of this study is to establish whether the use of Web 2.0 has an impact on employees’ resistance to change during the change communication process and whether employees show a preference for communication mediums in the context of organisational change.

1.2 Introduction
It is claimed that up to 70% of change efforts fail (Blanchard, 2010; Soumyaja, Kamalanabhan, & Bhattacharyya, 2011) which could have detrimental consequences to the company and the economy in which it operates.

Change is a continuous process which helps an organisation to remain competitive in terms of being more productive, efficient and effective (Briody, Pester & Trotter, 2012; Porras & Silvers, 1991). Although change is usually implemented to encourage growth and sustainability of the firm, it is often resisted by employees, due to the negative impact it has on the individual in terms of uncertainty (Boohene & Williams, 2012).

Two often cited reasons for failed change efforts are ineffective communication and employee resistance to change (Armenakis & Harris, 2002; Cummings & Worley, 2008; McKay, Kuntz, & Näswall, 2013; Kotter, 1995). Communication plays a vital role in reducing employee resistance to change (Armenakis & Harris, 2002; Frahm & Brown, 2007; Kotter, 1995) and hence the connection between failed communications and employee resistance to change seem apparent and requires further investigation.

Msweli-Mbanga & Potwana (2006) consider that lack of participation and trust are two key reasons for employee resistance to change while McKay et al. (2013) argue that lack of effective communication is responsible for failed change interventions.

One of the exciting developments in communication is the advent of Web 2.0 communication mediums which offers the opportunity to reach a large number users with the same message instantly and simultaneously (Bughin, Chui, & Miller, 2009).
The increased use of Web 2.0 media has increased participation (Msweli-Mbanga & Potwana, 2006) and collaboration which could be applied to build trust and the current research aims to prove that there is a correlation between use of Web 2.0 media during organisational change and employee resistance to chance.

1.3 Research Problem

As early as 1969, Paul Lawrence wrote that employee resistance to change can be one of the “most baffling and recalcitrant problems facing executives” (Lawrence, 1969). Today this statement is as relevant as it was in 1969. Some of the costs associated with the resistance of change are (Prosci, 2008)

- “Project delays
- Missed objectives
- Productivity declines
- Absenteeism
- Loss of valued employees”

Employee resistance to change often lead to failed change efforts (Cummings & Worley, 2008) and thus reducing resistance could lead to more successful change implementations. Communication plays an important role in reducing employees’ resistance to change and participation and trust has been proven to be important factors in reducing resistance (Msweli-Mbanga & Potwana, 2006). The participative nature of Web 2.0 communication was considered in the context of organisational change for this study.

Web 2.0 communication creates opportunity for participation and building of trust (Msweli-Mbanga & Potwana, 2006) and could reduce employee resistance to change. While ample research exist on employee resistance to change and change communication, the field of Web 2.0 is relatively new and understudied in the context of organisational communication, specifically regarding resistance to change.

1.3.1 Change Communication

Change communication is organisational communication that takes place in the context of organisational change. McKay et al. (2013) and Wanberg and Banas (2000) found that further study is needed in the elements of communication such as “timeliness, media and sources” (McKay et al., p. 38) as it affect employees’ attitudes toward organisational change. As Web 2.0 offers an opportunity for timeliness and rich messaging, it cannot be ignored as a change communication medium.
Research on employees's perspective on internal communication (Welch, 2012) and employees's resistance to change in terms of Web 2.0 mediums during organisational change has been largely understudied and will be the focus of this research. Specific emphasis has been placed on the role of communication in reducing resistance to change and enabling employee engagement by Armenakis and Harris (2002). An employee perspective as stakeholder is lacking in academic literature on change communication (Bochenek & Blili, 2013; Welch, 2012). In a study on employee resistance to change found in the South African context, Msweli-Mbanga and Potwana (2006) concluded that willingness to participate and access to participation, which Web 2.0 could contribute to, plays a significant role in reducing resistance to change.

Jimenez-Castillo and Sanchez-Perez (2013), asserted that academic literature fail to provide for the evolved integrated communication (more complex processes and activities) in current work related communication with the focus still being on use and frequency of information sharing activities such as meetings and circulation of documents. Are these methods of communication the preferred mediums of employees? There seems to be a lack of understanding in terms of what employees expect from communication during organisational change and the focus in existing literature is on the organisation and management level rather than on the employee perspective (Lies, 2012).

There exists a gap in research on the impact of informal communication during change according to McKay et al. (2013). According to Goodman and Truss (2004), the academic literature has often overlooked how organisations employ communication strategies during times of major change. In contrast a review on literature for this research found that while communication in the context of organisational change has been studied extensively, the literature on employee perspectives of communication is sparse. The time lapsed between the Goodman and Truss (2004) study and the current research, could account for the prolific literature found on change communication since their research was conducted.

1.3.2 How Can Web 2.0 Contribute to Reducing Employee Resistance to Change?

The main benefits of Web 2.0 to companies are speed of sharing information and participation according to a study conducted by Bughin et al. (2009). But there is confusion about the definitions of Web 2.0 and Enterprise 2.0. According to Tim O’Reilly, credited as the person who coined the phrase Web 2.0 (O’Reilly, 2005), Web 2.0 combines various mediums, websites, blogs, applications across a wide range of devices.
Various studies confirm the need for further research on computer mediated communication (CMC) and Web 2.0 for organisational change (Bochenek & Blili, 2013; Reiss & Steffens, 2010). Frahm and Brown (2007) informs of the need for academic literature on emergent communication implementation in terms of organisational communication. In a study on change management experts, it was found that although the use of hybrid media (a mixture of new media and traditional media) is common, the full potential is not utilised (Reiss & Steffens, 2010). This has consequences for businesses as large sums of money are allocated to Enterprise 2.0 communication mediums in the belief that they will aid effective communication and be used optimally (Bughin, et al., 2009).

At Deutsche Bank the MyDB Jive platform has 76 000 employees who accepted the conditions and attempted to use the platform, yet only 36 000 or 47 per cent of employees engage with it regularly (Lombardi, Working out loud at Deutsche Bank, 2014). This research will investigate whether employees at South African institutions have a propensity to use Web 2.0 media.

The prolific use of Web 2.0 communications indicate a new way of communicating with separate languages being developed for instant communication such as Whatsapp, and BBM (Salem, 2013). Employee communication systems such as Yammer, MangoAPPS, Sharepoint etcetera are increasingly used to take advantage of the instant reach of both push and pull communications (Lombardi, Einstein brings knowledge to Lafarge, 2013) in developed countries. Is it possible that South Africa as a developing country could also leverage off this success? There was no research found on South African companies’ use of Web 2.0 for organisational change communication by this researcher, but it is hoped to use research from developed countries to support the findings of the current research.

The use of Web 2.0 technologies as a communication tool for more effective, appropriate and relevant communication in the context of organisational change has been widely overlooked in academic literature, in spite of business articles in and on the new technologies supporting the business case. Internationally Yammer, MangoApps ESN, SharePoint (Lombardi, Einstein brings knowledge to Lafarge, 2013) has been embraced by technology workers, HR departments and communication staff to communicate directly with employees. Employee engagement has been encouraged by complimentary use of social media mediums supported by in-house applications (Lombardi, UNIFYing employees around the brand promise, 2013, but Brown (2012), warns that using mediums such as e-mails in isolation could be detrimental to the message.
Unify (previously Siemens Enterprise Communications) invited staff to revisit and rewrite the company’s history and to share their vision for the future by highlighting points such as “where we come from, what we have done over the last years; where we are and where we are going”, using mediums such as Xing, Twitter, LinkedIn and Facebook (Lombardi, UNIFYing employees around the brand promise, 2013). This resulted in a jump from 56% to 92% in a period of four months in employees understanding the ‘why’ of the company rebrand and a 27% rise in creating excitement about the new brand (Lombardi, UNIFYing employees around the brand promise, 2013). As employees need to adapt to new methods of communications, social media mediums can only aid the change process if employees’ attitude and acceptance of the media is favourable. If employees prefer to be informed about changes through modern technologies as opposed to traditional means, it is possible to reduce resistance to change by providing content in preferred and most appropriate way to convey messages. The propensity of employees to use Web 2.0 media will determine how successful Web 2.0 change communication will be.

Employees are likely to be more ready for the change if messages are conveyed that show why the change is necessary and how it will effect their job (PWC, 2012; Armenakis & Harris, 2002). As video and storytelling can be incorporated onto social collaborative mediums, employees are likely to become more engaged in the process as comments and discussions take place (Lombardi, UNIFYing employees around the brand promise, 2013). This is also a good measure to obtain honest feedback of the state of employees’ feelings and attitude towards change and rumours can be addressed openly. The culture of participation and being part of the process can aid in creating excitement about the change, and experts sharing information can enable workers to be assured of being able to do the job of the future state (Lombardi, UNIFYing employees around the brand promise, 2013). However, the attitudes and beliefs about the technology they engage with plays an important role in acceptance of the technology with which employees engage (Bhattacherjee, 2004).

The importance of communication during the change process cannot be emphasised enough. It will be beneficial to business to communicate more effectively and adequately. To date, insufficient academic research has been found to establish employee perspectives on the use of Web 2.0 based communication during the change process. From the limited studies (Agichtein, Castillo, Donato, Gionis, & Mishne, 2008; Mamic & Almaraz, 2013; Zhao & Rosson, 2014) conducted on Web 2.0 media for use in organisational communication, it appears that Web 2.0 media may hold benefits such as interactivity, inclusion and instant accessibility to vital information and key
Accessibility to Web 2.0 mediums has increased potential to reach target audiences with appropriately designed messages; especially since 20 million South African citizens has access to smartphones (Staff Writer, 2014). According to data in a research report conducted on 4956 desktop users' use of mobile phones, it was found 92 per cent of internet users own a smart phone, and social media is the third most popular activity on smart phones (IAB, 2014). These statistics cannot be ignored.

As the business case for hybrid communication is proven in companies adapting Web 2.0 mediums for internal communication in developed countries, the use of these media for change specific messages need to be academically researched as studies in the context of a developing country such as South Africa on this medium are scarce. The business case for use of Enterprise 2.0 technologies for change communication internationally is confirmed through many large companies successfully using various mediums to communicate and build employee engagement with the use of these mediums as indicated above. However, in South Africa, there is not much evidence found in support of companies using Web 2.0 media to the same extent. An employee perspective on the use of Web 2.0 media in the South African context will be investigated to establish whether South African employees intention to resist change is affected if change communication is conducted using Web 2.0 media.

1.4 Research Objectives
The questions whether employees’ show a preference towards specific communication media and whether the use of Web 2.0 media will affect their resistance to change will be investigated by this research. The literature on employees’ preferences on Web 2.0 during organisational change appears to be scarce. Most studies on organisational change processes had been carried out in developed countries with very few research on developing countries such as South Africa (Boohene & Williams, 2012). This research aims to fill these gaps and marry theories from organisational transformation and communication by researching South African employee perspectives on influence of Web 2.0 media on resistance to change resulting in less project delays, more objectives being met, increase in productivity, reduced absenteeism and lower attrition (Prosci, 2008).

The popularity of Web 2.0 mediums such as social media and internal mediums by users worldwide offers an opportunity to investigate whether employees would perhaps be more susceptible to communication messages, which could lead to reduced resistance of change, if Web 2.0 media is used. Web 2.0 communication,
ESN, has the technical capability to fill the gaps (Lombardi, UNIFYing employees around the brand promise, 2013) previously identified in change communication due to the benefit of participation in decision making (Bordia, Hobman, Jones, Gallois, & Callan, 2004) and collaboration. The theme of this research will be to determine whether employees’s intention to resist change is influenced by communication on Web 2.0 media.

1.4.1 Practical Implications for Organisations
The practical relevance of this research is that new insights into what the preferred mediums are of effective change communication and how organisations could use Web 2.0 to reduce employee resistance to change could be found. The financial investment in mediums used can also be more specifically linked to return on investment when employees are communicated to on preferred mediums with messages containing information required by them. The biggest implication for companies is that resistance to change will be reduced if platform and content and participation are shown to have an effect on resistance to change.

1.4.2 Academic Contribution
This research aimed to find what the preferences were of South African employees for two reasons: Firstly the organisational change communication literature in South Africa was very sparse and it was believed that this research could contribute to the existing discussions. Secondly, the country specific culture of South Africans was believed to impact on the way that South Africans interacted with Web 2.0 in a different way than the rest of the world. This study is unique in that it used Web 2.0 as medium as one of the predictor variables for explaining resistance to change.

This research is expected to contribute to the discussion on Change Communication and add to the sparse literature on employee preference in terms of Web 2.0 communication. It is expected that the use of Web 2.0 technologies will reduce resistance to change through enabling participative interaction, provide timely messages and through rich media. By investigating employee’s preference of the change medium and effect of Web 2.0 on employee willingness to accept the change, it is hoped that a new model of communication for Web 2.0 change communication will emerge.
CHAPTER 2 LITERATURE REVIEW

2.1 Introduction
The structure of this chapter captures relevant theories of organisational change, change communication and finally an exploration of Web 2.0 media in order to establish the dimension and impact that the use of Web 2.0 media could potentially have on employee resistance to change.

Literature on the importance of effective communication to reduce resistance to change and encourage adoption of the change process will be discussed before paying attention to Web 2.0 in the academic literature. Finally, a blended media future for change communication will be made.

2.2 Organisational Change
The management of organisational change is the process of planning and implementing the change in such a way as to minimise employee resistance and costs, while maximising the effectiveness of the change effort (Kumar, 2012). Failing of change efforts are mainly attributed to employee resistance (Frahm & Brown, 2007) and failed communication efforts (Kotter, 1995; Soumyaja et al., 2011) and thus it is imperative to use appropriate communication to reduce this resistance.

In a fast moving business environment, companies often compete in the global arena, and need to adapt strategies, systems and structures in order to remain relevant. Change is assumed to be a recurring feature of organisational life (Bordia et al., 2004), which often take the form of strategic direction change, structure and staffing (Armenakis & Harris, 2002), mergers and acquisitions (Bordia et al., 2004) and managerial innovation (Kim, Song, & Lee, 2013). As people have always had an inherent need for order, predictability and stability (Bernerth, Walker, & Harris, 2011), organisational change often result in great uncertainty as job security, the continued existence of the company and possible lay offs impact negatively on employees (Bordia et al., 2004).

The change process requires unlearning, defined as a process of “organisational memory eliminating” where there was significant change in beliefs and routines (Akgun, Byrne, Lynn, & Keskin, 2007). Organisational change is sometimes considered as an end state, defined as unlearning of the old way of doing things (Akgun et al., 2007), which involves the process of unfreezing, transition and refreezing, a model proposed
as early as 1951 by Lewin (Boohene & Williams, 2012). Figure 1 shows the process. The first step is the unfreezing stage during which people are required to acknowledge that the change is necessary. The transition happens when people move towards accepting the changes and the new practices and behaviours of the changed state is implemented. The refreezing state is making the changed state permanent and is the ultimate end state for the organisation.

Figure 1 Lewin (1951) Unfreeze-Move-refreeze model as adapted from (Boohene & Williams, 2012)

Graetz and Smith (2010), p. 800 attempted to contradict the assumption that change involves a series of predictable steps resulting in a once off phenomenon which challenged the unfreeze-move-refreeze model and hence organisations required systems supporting “ambiguity, ambivalence and contradiction”. Whilst the steps might not always be as predictable, there is indeed an unlearning that takes place before employees can undergo transition. It is during this step where employee resistance to change is most likely to occur (Kotter, 1995). The supporting systems that Graetz and Smith (2010) supposes can be used in support of the unfreeze-move-refreeze model and should not be considered in isolation of the suggested structure.

### 2.3 Resistance to Change

As organisational change is necessary to keep organisations relevant in a very competitive global market, is it is necessary that employees accept the change effort (Briody, et al., 2012; Cornelissen, 2014; Porras & Silvers, 1991). Acceptance and readiness for change is the opposite of resistance to change (Drzensky, Egold, & Van Dick, 2012) and thus companies who are able to reduce resistance to change will create a workforce with a change ready-culture. Factors which influence employees’ propensity to resist change, such as the type of change and previous exposure to
change (Van der Smissen, Schalk, & Freese, 2013) and participation and trust (Msweli-Mbanga & Potwana, 2006) will be discussed in more details below.

Other factors contributing to resistance to change include traditions, habits, inertia and nature of the corporate culture, vested interests, insecurity, homeotastis, selective perception and the super-ego (Kumar, 2012) and will not be discussed for purposes of this research due to the nature of the study.

In a study used to investigate the reactions of change recipients, (Oreg, Vakola, & Armenakis, 2011) the researchers analysed 79 quantitative studies between 1948-2007. They compiled the antecedents, explicit reactions and consequences of organisational change in the diagram in Figure 2.

Figure 2 The Antecedents, Explicit Reactions and Consequences of Change on the Change Recipient as Adapted from (Oreg et al., 2011)

From their studies it is evident that the context for change plays an important role (Oreg et al., 2011). In order to improve employees’ attitude towards change, special attention needs to be payed to the antecedents of change. Trust and employee involvement in the change process has been proven to reduce resistance to change (Oreg et al., 2011). They further suggest that communication messages about change should address concerns early on in the process about how the change will affect the individual (Oreg et al., 2011).
Kumar (2012) ties in with studies conducted by Armenakis and Harris (2002); Boudrias et al. (2010); Drzensky et al. (2012); Stanley, Meyer, & Topolnytsky, 2005; Van Dam, Oreg, and Schyns (2008) discussed below. Table 2 contains a summary of the antecedents that contribute to employee resistance to change. Elements of the proposed model of Oreg et al. (2011) in Figure 2 can be seen in the antecedents of employee resistance to change found in recent literature as indicated in Table 1. Trust as indicated by Van Dam et al. (2008), reliability (Ford, Ford, & McNamara, 2002), supportive climate (Boudrias, et al., 2010) together with the psychological contract (Van der Smissen et al., 2013) would be significant pre-change antecedents within the internal context and could lead to cognitive reactions such as change in beliefs. The change process antecedents (Oreg et al., 2011) of communication needs being met (Bordia, et al., 2004; Wanberg & Banas, 2000) could lead to behavioral reactions such as employee involvement and change in beliefs (Oreg et al., 2011).

Table 1

<table>
<thead>
<tr>
<th>Research</th>
<th>Antecedents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boohene (2012)</td>
<td>Participation and trust reduces employee resistance to change</td>
</tr>
<tr>
<td>Bordia et al. (2004)</td>
<td>Individual’s need for relevant communication was met</td>
</tr>
<tr>
<td>Boudrias, et al. (2010)</td>
<td>Perceptions of the organisation’s supportive climate and justice</td>
</tr>
<tr>
<td>Drzensky et al. (2012)</td>
<td>Organisational identification</td>
</tr>
<tr>
<td>(Ford, Ford, &amp; McNamara, 2002)</td>
<td>Personal experiences with regards to the reliability of others and the assessment thereof have traditionally resulted in resistance to change. three background realities to consider: Complacent; resigned and cynical</td>
</tr>
<tr>
<td>Kumar (2012)</td>
<td>Traditions, habits and inertia and nature of the corporate culture; vested interests, insecurity, homeostasis; selective perception and the super-ego</td>
</tr>
<tr>
<td>Msweli-Mbanga and Potwana (2006)</td>
<td>Willingness to participate and access to participation in change reduces employee resistance to change</td>
</tr>
</tbody>
</table>
Cynicism was a potential predictor for change specific resistance to change, relating to employee’s perception to the motivation of management for the change, questioning that reasons provided for change were not the real reason for change.

Van Dam et al. (2008); Daily work contexts and the leader-member exchange
Van der Smissen et al. (2013) Psychological contract
Wanberg and Banas (2000) Relevant information, opportunities for participation and trust in leadership who were responsible for managing the change

### 2.3.1 Participation and Trust

The importance that individual participation in the change process plays has been extensively studied and refined on employee resistance to change in early theories and models as discussed in Msweli-Mbanga and Potwana (2006). As Web 2.0 offers participative communication, it is believed that it could assist in reducing the resistance experienced by employees.

According to Jimenez-Castillo and Sanchez-Perez (2013) communication should inspire employee involvement and commitment to the company. Anifowose, Genty and Atiku, (2011) p. 67, claimed that clear communication and employee participation about changes should take place to ensure that employees are prepared and engaged in the change process. Communication during pre-in-and postmerger was found to have had a profound effect on the success of the transition and acceptance, thus assisting with alleviating fears of staff (Gomes, Angwin, Peter, & Mellahi, 2012). It is expected to be true for other change interventions. Organisational change often result in a number of challenges such as job insecurity, lack of merging of cultures and low morale due to the laying off of staff (Anifowose et al., 2011) and communication plays a vital role to inform employees of the different aspects and consequences of change.

Other factors that could impact the employees resistance to change were perceptions of the organisation’s supportive climate and justice (Boudrias et al., 2010); daily work contexts and the leader-member exchange (LMX) relations (Bordia et al., 2004; Stanley et al., 2005; Van Dam et al., 2008). The findings of Van Dam et al.’s research suggested that high quality LMX relationship paired with a strong development climate where opportunities for participation was created, was positively related to trust in management and reduced resistance to change. It also confirmed findings by Wanberg
and Banas (2000) that relevant information, opportunities for participation and trust in leadership who were responsible for managing the change were required to reduce resistance to change.

Situational theory and problem solving (STOPS) together with communicative action in problem solving (CAPS) of Kim and Grunig, (2011) explain that communicative action increases as motivation for problem solving increases. These researchers suggested that pro-active communication included information seeking, forwarding and forefending while reactive or passive communication referred to information attending, sharing and permitting. If employees could participate in finding the solutions and are part of the process, they would be more engaged and more ready for change (Oreg et al., 2011; Msweli-Mbanga & Potwana, 2006). Web 2.0 offers great participative advantages and could facilitate in collaborative solution finding. In addition information will be available to all employees when needed (Engelstätter & Sarbu, 2013).

2.3.2 Tenure and Organisational Identification
Long tenure had a negative impact on resistance to change in various studies conducted (Drzensky et al., 2012; Hargie & Tourish, 2009; Van Dam et al., 2008; Van der Smissen et al., 2013). This suggested that employees with longer tenure required specific content regarding acquisition of new skills, safety of retirement investment and training on new job procedures (Van Dam, et al.)

One of the reasons that long tenure might impact negatively on resistance to change is organisational identification (OI). OI is “the perception of oneness or belongingness to an organisation” Kim et al. (2013, p. 1021); Drzensky et al. (2012) built on previous research that OI would increase readiness and the employee’s acceptance of change, as long as the change is perceived to benefit the organisation. However, their findings indicate that readiness for change was context related. There could also be negative outcomes such as increased resistance to change if employees identify too strongly with the current state of the organisation as it offered an identity-related threat to the employee. This complex relationship could be adequately managed if focus was on benefits of change for the company and the individual and a strong case for reasons and necessity for the proposed change being created (Drzensky, et al., 2012).

2.3.3 Previous Exposure and Type of Change
Van der Smissen et al., (2013) assessed the influence that the type of change, impact of previous exposure and -experience to change perception of success of previous
change had on the employee’s attitude towards change. Their findings indicate that the type of change and the former impact of organisational change impacts the employees’ attitude to current change the most. The context of the change would have to inform the type of communication required (Drzensky et al., 2012).

Stanley et al. (2005) proposed that cynicism was a potential predictor for change specific resistance to change, relating to employee’s perception to the motivation of management for the change, questioning that reasons provided for change were not the real reason for change. Another moderator that could affect employees’ resistance to change was whether the individual’s need for relevant communication was met (Bordia et al., 2004).

Vrooms expectancy theory on motivation implied that employees would only attempt to change if they were reasonably sure of success (Armenakis & Harris, 2002) and ties in with previous experience of change.

2.3.4 Background Conversations
According to Ford et al. (2002) personal experiences with regards to the reliability of others and the assessment thereof have traditionally resulted in resistance to change. They saw it rather as a social constructed reality where employees responded to the background conversations. Ford et al. (2002) provides three background realities to consider: Complacent; resigned and cynical. Where the complacent background was based on past successes and failures, in other words considering the future in terms of the past. Conversations that justified and reinforced to not accept change created resigned resistance which impacted on employees as a sense of despair, apathy and hopelessness took hold of the employees, who blamed themselves or their group for failures.

The different realities of employees result in different frameworks, vocabularies in which people converse and interact in the backdrop of organisational culture (Ford et al., 2002). This creates opportunity for social media and other Web 2.0 mediums as the media richness lends itself to explore organisational culture and tapping in to the background conversations (Ford et al, 2002; Lo & Lie, 2008), although Denyer, Parry and Flowers (2011) questions to what degree Web 2.0 creates participation. The cynical background resulted in a perceived real reality where the individual had no power to influence the change as they perceive it as the way things are. The shifting of the focus of background conversations could influence the employee’s resistance to change by changing what is said in the background conversations (Ford et al., 2002).
In the field of psychology recent research had been focused on positive emotions which lead to individuals being more open to embrace change and attempted problems more creatively (Bono, Glomb, Shen, Kim, & Koch, 2013). This supports the theory of Appreciative Inquiry (AI) (Finegold, Bea & Lingham, 2002), in which words create worlds and a detachment from traditional systems inspired shifts in attitude and language which could lead to acceptance of organisational change (Finegold, Bea, & Lingham, 2002). This notion is supported by the three steps framing model by Goffman (Cornelissen, 2014).

The study by Oreg et al. (2011) supports the notion that some change recipients hold positive reactions to the change process and these employees could be assigned to areas in the organisation where change is vital. This could lead to informal influencing of other team members who are less positive.

2.3.5 Employee Voice and Language
Employee voice has become an important aspect in recent literature (Whiting, Maynes, Podsakoff, & Podsakoff, 2012). In terms of organisational change, recommendations and solutions provided by employees could influence observers and relationships with managers and contribute to the background conversations of change. Solutions and recommendations to problems that are provided by experts carried more weight and would have a positive effect for the organisation. This could increase trust in leaders (Whiting et al., 2012) which was an important aspect contributing to the reduction of employee resistance to change.

2.4 Importance of Communication in Reducing Employee Resistance and Encouraging Adoption of Change Process
2.4.1 Change Communication
Change communication may be defined as the “single part of change management which focuses on the soft factors that is influenced by a change in the hard factors” (Lies, 2012, p. 255), or as Armenakis and Harris (2002) concludes that change messages should convey the nature of the change and influence the perception of the alternative or changed state. Neither of these definitions consider participation or interactivity. The research conducted by Mswe-Mbang and Potwana (2006) considers participation as one of the three most important factors that can reduce resistance to change.
There seem to be disconnectedness between what managers consider as having communicated and what employees consider as being communicated to (Armenakis and Harris, 2002). McKay et al. (2013) suggested than an understanding of message framing was needed. While the framing models could be applied successfully to change communication, other models offer more depth to the understanding of communication within the change context.

Cornelissen (2014) considered various models that are applicable to the persuasion of employees in corporate communication. He agreed with scholars such as Mendelsohn and Mcquire that traditional linear communication models lack an emphasis on the receiver (for purposes of organisational communication receiver is equated to employee) and concluded that the following three models seemed to be the most relevant to persuasion via new media, namely the McGuire hierarchy-of-effects (HOE) model (McGuire, 1976); the elaboration likelihood model (ELM) of Petty and Cacioppo (1986) as applied by Zhao, Lu and Wang (2014) and the three steps (framing) model originating from anthropologist Gregory Bateson and sociologist Erving Goffman during the 1940’s.

It is important to note that the HOE model (McGuire, 1976) was developed for mass media persuasive advertising messages. The application of it to the use of Web 2.0 media for purposes of persuasive change communication messages need further investigagation and does not fall within the scope of the current study. In additon, the ELM (Petty & Cacioppo, 1986) focuses on processes underlying changes in the judgments of objects, the variables that induce the processes, and the strength of the judgements resulting from the processes, in short the motivation and the ability of the user of electronic messaging. The ELM could be particularly valuable in the use and adoption of electronic media used for change communication. The frame analysis model of Goffman may not offer a complete solution to persuasion during change. For purposes of this research the three steps framing model will be considered as a structure for expectation.

2.4.2 Role of Communication to Reduce Employee’s Resistance to Change
Communication plays a vital role in reducing the resistance to change and preparing employees to be more change ready (Anifowose et al., 2011). More than 40 per cent of agencies surveyed confirmed the importance that communication plays in leading change management (Lies, 2012). However, this perspective is based on communication practitioners’ experiences and may not reflect the importance that employees attach to communication. Jimmieson and White (2011) found that employees showed stronger intention to be supportive of the change process where
they have received information about the change. This is supported by Bordia et al. (2004) who established that where management communication lacked, strategic uncertainty increased.

2.4.3 Antecedents of Effective Web 2.0 Change Communication Messages

It is expected that employee communication preferences play a role in resistance to change and will be studied in the context of Web 2.0 and antecedents of effective change communication. In order to arrive at antecedents of effective Web 2.0 change communication messages, research from different disciplines was applied as a comprehensive view of effective communication was lacking in the organisational change and communication fields of study.

According to Gomes et al. (2012) communication should be timely, appropriate and continuous while using multiple media to be considered effective. Although their research was aimed at HRM practices during Mergers and Acquisitions in Africa, specifically Nigeria, it has relevance to the current research for two reasons: 1) the context of communication has been largely understudied in dynamic markets, especially Africa and 2) other research was focused on post-change contexts, whereas the study by Gomes et al. (2012) studied the pre- and most merger context. However, as communication management was just one of the required HRM practice and not the sole purpose of the research, it has limitation in terms of the depth that it offers to the current study. The preferred medium or communication method and content of change communication appears to be specific to change context.

2.4.4 Medium

Ruck and Welch (2012) researched 12 change communication studies with different research results in the various samples. Their research lacked evidence into preferred mediums, medium or mediums of communication. Table 2 is a representation of the current research in terms of preferred mediums. Based on the various studies, it is clear that the preferred communication mediums are based on context.
### Table 2

**Preferred Communication Mediums**

<table>
<thead>
<tr>
<th>Study</th>
<th>Qualitative/quantitative research</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Ghamdi, Roy, &amp; Ahmed, 2007</td>
<td>Empirical questionnaire; Context: Saudi Arabian companies</td>
<td>Preferred communication platform: 1) Plant Manager meetings; (2) Group meetings conducted by employee’s immediate supervisor; (3) Employees’ immediate supervisor; (4) Information placed on bulletin boards, posters, and signs in the plant; (5) E-mail</td>
</tr>
<tr>
<td>Marques (2010)</td>
<td>A qualitative study of 20 subjects in US with at least five years of work experience in lower and middle management positions</td>
<td>Communication content should be considered in deciding on a format. E-mail and face-to-face settings are preferred in specific settings</td>
</tr>
<tr>
<td>Welch (2012)</td>
<td>Qualitative study of 64 respondent in a single case study</td>
<td>Employee preferences for communication 1) electronic methods 2) blended methods (electronic and print) 3) printed internal communication</td>
</tr>
<tr>
<td>Zhao and Rosson (2014)</td>
<td>exploratory; qualitative semi-structured interview</td>
<td>Frequent updates assisted employees to keep up to date with people they do not interact with daily. Because microblogging happened in real time Twitter posts were considered more valuable than other media for connecting information and for prompting opportunistic conversations</td>
</tr>
</tbody>
</table>

Lo and Lie (2008) investigated the underlying factors that influence communicators’ selection of appropriate communication tools and found that trust and message richness only play a role only in long distance communication.

In a qualitative study conducted by Welch (2012) on employee perspectives on appropriateness and acceptability of internal communication formats, 47% of respondents preferred electronic formats, while 16% preferred dual formats (electronic and print) and 3% preferred newsletters. The high cost and wastage of printed...
materials in terms of financial sustainability of the company and environmental responsibility were key motivators for the use of electronic formats (Welch, 2012). From Table 2 employee preference for change communication mediums according to Al-Ghamdi, Roy and Ahmed, (2007) appear to be in order of preference:

1. Meetings by managers;
2. Group meetings by supervisors;
3. Direct conversation with immediate supervisor;
4. Bulletin boards, posters and signs;
5. Email.

The study by Reiss and Steffens (2010) support the use of hybrid media for change communication while Zhao and Rosson (2014) considered the real time benefits of Twitter as the preferred platform. Lo and Lie (2008) concur with Al-Ghamdi et al. (2007) but only as far as trust and long distance would impact the message richness. The change communication wheel proposed by Goodman and Truss (2004) in Figure 2, considers the organisation context, change program characteristics, the purpose of the communication and the employee response. As such it is a very relevant model to change communication. In Chapter 7, a new model will be proposed based on the Change Communication Wheel.

Figure 3 The Change Communication Wheel Proposed by Goodman and Truss (2004)
From this communication wheel there are similarities with the Oreg et al., (2011) model in Figure 1 of antecedents of resistance to change and the findings of Al-Ghamdi et al., (2007); Reiss and Steffens (2010); Zhao and Rosson (2014). Web 2.0 media offers the ideal platform to integrate the antecedents of change into a supply of useful and timely information, as individual employees may access the information they require when they require it. This wheel is important as it implies the organisational context, the purpose of the communication with employee response and change program characteristics.

A comparative study to establish both senders and receivers of old and new media mediums in a marketing context, it was found that even the younger generation preferred traditional mediums such as television and radio to e-mail and SMS (Danaher & Rossiter, 2011). Despite the strong case for use of CMC for organisational communication, the findings of Al-Ghamdi et al. (2007) shows e-mail to be at the bottom of the preferred mediums to receive information about the strategy or change communication. Would this be true for organisational change communication on Web 2.0 mediums?

2.4.5 Frequency and Noise
Communication is usually misunderstood during step 4 – communicating the vision of Kotter’s eight step process (Kotter, 1995). Often there is a complete lack of communication or employees are bombarded with confusing messages as noise impacts on the communicator, the message, the medium used, and the receiver (Steinberg, 2002; Barker & Gaut, 1996). The noise could take place at any point of the process. By establishing how frequently employees want to be communicated to, being honest and addressing concerns in communications and using the correct media to communicate, organisations could go far in successfully implementing change strategies. Noise in Web 2.0 communication could include the skill to use new media, using a new language and information overload and fear of spam. Noise in terms of traditional media could include the expense of glossy brochures (Welch, 2012), and the identified antecedents of resistance to change as identified in Table 1 and in Figure 1. No literature was found on the preferred frequency of change communication on Web 2.0 and is a possible topic for further study.

2.4.6 Content
Armenakis and Harris (2002) asserted that no matter what change intervention model is used, answers to discrepancy, efficacy, appropriateness, principal support and personal valence about the proposed changes should be provided in change
communication. As long as attention was payed to both the process and the content of the change communication effort (Goodman & Truss, 2004) and the employee’s need for relevant, timely information is met, the change communication has a chance of being successful (Refer to Figure 2).

In a study aimed at determining government employees’ receptivity to change it was found that change communication is important to manage change, yet managers fail to align the employees’ expectation of change communication to the change goal (Armenakis & Harris, 2002; Frahm & Brown, 2007). Communication plays an important role in aligning changed goals with employee’s expectations.

Caution should be exercised in selecting the communication format as choosing formats and media that employees find unacceptable or inappropriate may lead to them ignoring the communication message (Welch, 2012). Furthermore, enthusiasm and vigour are needed in framing the message (Frahm & Brown, 2007; Torppa & Smith, 2011). Korzynski (2013) investigated how new technologies impact on employee motivation during organisational change and found that the social aspect of new technologies had an impact on employee motivation.

2.5 Web 2.0 and Enterprise 2.0

Computer based technologies are mostly used to “store, transmit and transform information” (Leonardi & Barley, 2010). Academic literature (Agichtein, et al., 2008; Cammaerts, 2008; Denyer et al., 2011; Mills, 2012; Millard, van Leusen, & Whiting, 2013) all agree with Khalil (2008) in that ESN is an extension of Web 2.0.

The key differences between Web 2.0 and ESN are that ESN has a finite number of users, usually internal to an organisation and aimed at organisations whereas Web 2.0 is on the public domain and aim to get an infinite number of users. Web 2.0 is for commercial use, although they are often interrelated (Mullens, 2008). Millard et al. (2013) identified ESN tools such as Social Cast, Yammer and Jive which are information and collaboration mediums used for internal communication.

Web 2.0 includes both Enterprise 2.0 and Social Media and all electronic means of communication. Cornelissen (2014) p. 260 concurs with the definition of social media provided by Kaplan and Haenlein (2010) p. 61- in that it is “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow for the creation of user-generated content”. Enterprise 2.0 is a phrase used for the combination of computer mediated communication (Web 2.0) technologies such as social networking sites, web-based communities, blogs etcetera (Denyer et al.,
2011). For purposes of this research, ESN will constitute internal mediums whereas Web 2.0 will encompass social media such as Facebook, Twitter and other mediums on the public domain.

2.5.1 Social Media
Twitter profiles of Fortune 500 companies analysed, showed that 41.2 per cent communicated at least two tweets per day and 35 per cent of social media marketers update more than once daily (Mamic & Almaraz, 2013). In their study of 5 352 tweets, they found that 42.86 per cent of companies sent out at least two tweets per day, using Twitter as a one way communication tool, overlooking the interactivity potential. It is the interactivity potential of Social Media that can contribute to the success of change management communication.

In addition, storytelling, informal communication and coaching have been found to have increased employee engagement (Mishra, Boynton, & Mishra, 2014), and can easily be incorporated in various multimedia on social networks, accessible on computers and mobile phones. Research by Bochenek and Blili (2013) suggested that social media is most often used for public perception building, and that there is a potential for use of social media as an internal communication platform. The operational implications for integrating social media mediums into change communications are community building, community interaction and 24/7 responsiveness (Bochenek & Blili, 2013). Training on the use of these new technologies proved vital and contribute to employee satisfaction and acceptance as the absence of training could lead to employee unrest and dissatisfaction according to Long and Spurlock, (2008).

2.5.1.1 Participation, Interactivity and Trust
Cammaerts (2008) and Heinonen (2011), considered social media’s participatory element and the benefits of the interactive nature thereof which included association with the brand. Mamic and Almaraz (2013) found that the interactivity of social media sites is not exploited by organisations and that it could be used to build mutually beneficial relationships with stakeholders. As such, interactivity may be regarded as a key characteristic of Web 2.0 media. Some of the research conducted on employees, suggest that they do not consider communication to be received timely (Gomes et al., 2012; Jimenez-Castillo & Sanchez-Perez, 2013), and complaints about the high cost of glossy brochures and negative attitude towards traditional communication methods calls for alternative methods of communicating (Welch, 2012).
According to Heinonen (2011), organisations could benefit from direct contact with employees on social media which could lead to the establishment of a trust relationship which is vital for the success of organisational change efforts.

Earlier research on CMC focused on the ability of technology to integrate hierarchies in democratic communications (Hastings & Payne, 2013). Message richness in horizontal communications could improve morale about changes (Frahm & Brown, 2007). Cammaerts (2008) and Heinonen (2011) considered social media’s participatory element and the benefits of the interactive nature thereof which included association with the brand.

The question that arises is whether organisations are optimising the participatory elements of social media? Mamic and Almaraz (2013) found that the interactivity of social media sites was not exploited and that it could be used to build mutually beneficial relationships with stakeholders. Liang and Scammon (2011) and Mills (2012) found that international businesses are increasingly making use of social media for human resource management and communication. Social media sites such as Twitter and Facebook are widely used for corporate communications (Bochenek & Bili, 2013). According to Heinonen (2011), organisations could benefit from direct contact with employees on social media, and increase the establishment of a trust relationship which is enabled by openly sharing of honest and transparent information (Mishra et al., 2014).

Denyer et al. (2011) challenged whether these technologies and mediums are used in a manner which contributed to it being as social, open and participative as was often claimed in business press and a motivator for organisation to have it applied to the business context. Their study was conducted in an organisation which fully embraced latest technology and aligned IT with business strategy, and still it was found that using technology does not necessarily make communication social, open and participative. Would the current research contradict their findings?

2.5.1.2 Employee Preference for Specific Media Platforms

Bochenek and Bili (2013); Liang and Scammon (2011) and Mills (2012) found in contrast to Mamic and Almaraz (2013) that social media sites such as Twitter and Facebook are increasingly being used for corporate human resource management and communication, but fail to offer an employee perspective.

According to Bochenek and Bili (2013), Facebook, Twitter, LinkedIn, Pinterest and Google Plus are where the new communication scene is being built. Existing studies on
new communication technologies are very limited, but include the interaction between customers, participatory potential of social media and social media as word of mouth (WOM) (Bochenek & Bili, 2013).

2.5.1.3 Content

Agichtein et al. (2008), referred to user generated content becoming very popular at the turn of the century. Domains such as blogs, mini-blogs, web forums, social bookmarking, photo and video sharing communities as well as social networking mediums such as Facebook, MySpace emphasise relationship development within the community (Agichtein et al., 2008).

The access to smart phones and social media sites create a golden opportunity for organisations to communicate differently. In a study done by Beneke, Cumming, Stevens and Versfeld (2010, p. 77), messages with “helpful, informative, creative and entertaining” content which were personalised were highly valued by consumers who received mobile advertising. This information could be useful to employers when formulating mobile messages about change to employees.

Many organisations are global organisations and even where companies operate in only one country, there may be varied cultures. Lauring (2011) asserted that the successful international organisations of the future would be able to manage cultural and linguistic context. It is imperative that communication is understood in the way it was intended to be understood, especially during times of change. Bordia, et al., (2004) stated that uncertainty is the individual’s inability to predict accurately and create doubt about the future and could be due to a lack of information, contradictory information or ambiguous messages. This uncertainty impacts on resistance to change communication messages should address issues that creates certainty.

If content is outdated and uninteresting, employees tend to not use them (Frahm & Brown, 2007). This implies that content should be recent and relevant to be considered useful. Community- user generated content has an increasingly large audience. Information and answers to questions are provided by other users which results in high variance of quality, requiring moderation (Agichtein et al., 2008). But social media offers a richer structure than traditional media and more data was available than in other Web 2.0 domains, supported user- to- document and user-to-user interactions (Agichtein et al., 2008).

2.5.2 Mobile Communications

The mobile explosion provides new and exciting means to create audiences (Beneke et al., 2010). Traditional media offered limited ways to reach audiences, while mobile
phones offers smarter ways, such as Web browsing, SMS, MMS and downloads with the added advantage of customised content at relatively low cost to the communicator and almost no cost to the receiver (Beneke et al.). Message content is of the utmost importance in mobile communications and content for internal communication use can focus on teasers, requests, competitions and polls (Beneke et al.).

In 2008 academics considered e-mail communication as the most important change in organisational communication (Hastings & Payne, 2013), yet the accessibility of mobile telephones and access to all Computer Mediated Communication (CMC) mediums such as social media mediums on cell phones, have far exceeded the use of e-mails. E-mail and instant messaging (IM) enjoyed prominence in business communication irrespective of message content sensitivity (Hastings & Payne, 2013) in recent studies. (Zhao & Rosson, 2014) asserts that face-to-face communication has shifted toward CMC as new technologies have emerged and is constantly improved. An added advantage is that non-office workers can also enjoy communication in real time wherever they are.

2.5.2.1 New Language
Mohapatra & Bose (2010) warn that a new language has evolved rapidly with electronic communications which is not always considered acceptable by all parties. Abbreviations, shortened words, inappropriate use of capitalisation and the use of $, &, and @, usually found in instant messaging (IM) lingo were found in Indian schools, contributing to miscommunication. If the receiver of the new language does not have a clear understanding of these alternative meanings, the communication process could be compromised. This suggests that training in new media and its language were vital to the success of new media.

Message richness could be achieved by adding multimedia message such as pictures, videos and music. Beneke et al. (2010) recommend the use of eye catching and concise messages that would be understandable in the user’s language. One of the greatest benefits of mobile communication was the interactivity as it encourages two way communication.

2.5.2.2 Effectiveness of Mobile Messages
According to Beneke et al., a mobile message is at its most memorable and effective when it is received and the call to action can be rewarded at that exact point. In their study on South African youth their findings supported the diffusion theory which indicated a negative relation between perceived complexity of an innovation and its acceptance. No literature could be found on the acceptance of mobile communications.
in light of communications to employees, but if the audience of Beneke et al. is assumed to include employees, and the advertisement is assumed to be internal marketing communication with a call to action, then the antecedents of employee attitude to mobile communication can be adapted to be the following: content, personalisation, attitude towards calls to action, level of employee’s innovativeness, employee’s level of control and fear of SPAM with privacy issues being the biggest issue. Some of these are tested in the Questionnaire (see Appendix 2).

Reiss and Steffens (2010) conducted a survey among change management experts which demonstrated that hybrid media is widely used in change communication which confirms that it has a huge role to play in the future of organisations, as long as it is well integrated with face-to-face communication.

### 2.6 Conclusion

The use of CMC interventions, specifically Web 2.0 has huge advantages in terms of monitoring and managing expectations in terms of organisational change. Jimenez-Castillo and Sanchez-Perez (2013) mentioned the importance of accurate and timely information to employees, which CMC and mobile communications can accommodate. Frustration of employees due to a lack of involvement in the change process (Frahm & Brown, 2007) can be reduced by the interactivity of social media mediums. Interactivity is defined as “a process involving users, media and messages with emphasis on how messages relate to one another” (Mamic & Almaraz, 2013, p. 855).

However, organisational culture should value information exchange and participation in order for managers to accept new ways of communicating (Frahm & Brown, 2007) thereby increasing employee engagement and participation and complementing push-with pull communication.

Two emerging themes emanated from the literature reviewed above: the importance of effective communication to reduce employee resistance to change and the opportunity that Web 2.0 as a communication platform offered to reduce resistance to change, thereby contributing to the success of the change effort.

In light of the relevance and understudied value that Web 2.0 mediums offer towards effective change communication, employees’ preference and attitude towards these media will be studied in the context of change processes to establish to what extent employees believed the use of Web 2.0 communication will reduce their resistance to change.
CHAPTER 3 RESEARCH HYPOTHESES

3.1 Research Hypothesis

The literature reviewed in Chapter 2 suggests that Web 2.0 offers advantages such as participation and timeliness but fails to show whether it can be applied to change communication. The hypotheses stated below are related to employees undergoing change in South African companies across four industries.

Al-Ghamdi et al. (2007); Marques (2010); Welch (2012) suggested that employees have preferences in terms of mediums in which they prefer to receive organisational communication. Formal-face-to-face, printed media and lastly e-mail were the preferred communication mediums in the context of a Saudi Arabian company (Al-Ghamdi et al. (2007). The specific setting influenced the findings that e-mail and face-to-face meetings were preferred in the US based research by Marques, (2010). Welch (2012) found that the order of preference for communication was electronic methods, blended (electronic and print) and lastly printed media. As Web 2.0 media is progressively being used by individuals and companies alike (Denyer et al., 2011; Mamic & Almaraz, 2013; Reiss & Steffens, 2010, Zhao & Rosson, 2014) the difference in findings by Al-Ghamdi et al. (2007); Marques (2010); Welch (2012) could be accounted for by the time lapsed between the studies. The success of technology adoption depends on employees’ attitude towards technology. Welch (2012, p. 248) contends that internal communication is heavily reliant on appropriate message in “formats useful and acceptable to them”.

None of the studies found was specific to change communication on Web 2.0 and thus the following hypothesis is suggested:

Hypothesis 1:
H0: The distributions of Each Media Category (taken over all employees) are identical

Ha: The distributions of at least one pair of Media categories differ significantly

More effective change communication will have an impact on an employee’s resistance to change and change readiness (Goodman & Truss, 2004). Soumyaja, et al., (2011) considers the quality of communication as the strongest predictor employee readiness to change. Recent developments in technology have proven its worth to some extent in academic literature for purposes of enabling employee engagement and participation (Armenakis & Harris. 2002; Mishra, et al., 2014; Zhao & Rosson, 2014). Both these attributes can influence employee resistance and readiness. Web.2.0 enables change managers and communication practitioners to provide methods for participation in real
time as can be seen from the limited academic literature and extensive business reporting and case studies discussed above.

The following research hypotheses eminate from the literature reviewed:

**Hypothesis 2:**
H0: The use of Web 2.0 has no impact on employee’s resistance to change

Ha: The use of Web 2.0 has an impact on employee’s resistance to change

**Hypothesis 2 a:**
H0: Female and Male employees have identical responses concerning attitude towards change

Ha: Female and Male employees do not have identical responses concerning attitude towards change.

Table 3
Summary of Research Hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Independent variable</th>
<th>Expected Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Method of Communication</td>
<td>Preference for method of communication (Reject null hypothesis)</td>
</tr>
<tr>
<td>2</td>
<td>Increased use of Web 2.0</td>
<td>Effect on resistance to change (Reject the null hypothesis)</td>
</tr>
<tr>
<td>2a</td>
<td>Gender; Increased use of Web 2.0</td>
<td>No difference (Do not reject the null hypothesis)</td>
</tr>
</tbody>
</table>
CHAPTER 4 RESEARCH METHODOLOGY

4.1 Introduction
Descriptive statistics was used to describe demographical data such as sex and tenure. Inferential statistics were used to make inferences from the sample for the population of employees who has been affected by organisational change (Salkind, 2013).

The method, population, sample, unit of analysis and response, pre-testing of the instrument, questionnaire design, assumptions and limitations of the chosen research design are discussed in detail below.

4.2 Research Design

4.2.1 Method
The quantitative survey method was followed that resembled that of other key researchers in the communication and change organisation fields such as Armenakis abd Harris (2002); Msweli-Mbanga and Potwana (2006) and Welch (2012). Welch (2012) has recommended that future studies of a quantitative nature should further explore on the research conducted on employee’s perspectives on internal communication. Primary data was collected from a representative sample by making use of an electronic survey. A logical and formal procedure (Wiid & Diggines, 2009) was followed in collecting the data. Since data needed to be collected within a short time from a large sample base, the survey method proved to be the most appropriate for this research (Wiid & Diggines, 2009). The downside to this data collection method was that follow-up to responses were not possible and due to the short time available to administer the survey, survey data might have appeared artificial (Wiid & Diggines, 2009).

The research took the form of a descriptive study as the field of Web 2.0 (Jimmieson & White, 2011; McKay et al., 2013; Oreg et al., 2011) is relatively new and the descriptive statistics is the best method to use (Saunders & Lewis, 2012). Inferential statitistics using a combination of parametric and non-parametric tests was used to analyse the data to infer characteristics of a population based on a sample (Salkind, 2013). Quantitative research was deemed more appropriate due to the size of the population and the available time frames (Pallant, 2013).
4.3 Population
The population identified were employees who had undergone various forms of organisational change in South Africa. Refer to section 4.4 for an explanation of how the companies were selected.

Previous research on organisational change (Anifowose et al., 2011; Bernerth et al., 2011; Bordia et al., 2004; Drzensky et al., 2012; Graetz & Smith, 2010; Kumar, 2012) focused on mergers and acquisitions, system changes or change of locations. Although the context in which each change took place has shown to be extremely relevant in past studies, the researcher considered that other factors, such as organisational culture, language, country culture may play a larger role in the use of Web 2.0 in the South African context. It is believed that gaining insight into employee preferences across a range of industries and type of change will generalise employee preferences better. Visser, Krosnick and Lavrakas (2014) have indicated that studying organisation or industry specific phenomena has limitations of representative samples. Msweli-Mbanga and Potwana (2006); Boohene and Williams (2012) recommended that a cross sectional study should be conducted to increase STATISTICAL validity. To avoid this limitation, the research was conducted across different industries.

4.4. Sample, Sampling Method and Size
McKay, et al. (2013) identified 21 government departments who underwent change like restructuring or change in leadership from media reports. A similar approach was followed. The selected company sample frame was chosen from articles in generally accepted South African business press and websites such as Financial Mail, Finweek, Moneyweb, Sunday Times and Business Day.

A sample frame of 30 companies operating in South Africa was compiled from media reports about companies who have undergone change between January 2012 and June 2014. The type of change at these companies included 18 companies currently undergoing mergers and acquisitions which resulted in retrenchments ranging from banks, agricultural businesses and mines, an insurer and a construction company divesting some of its business units from the South African market and nine restructuring companies, including an asset management company and two mobiles service providers.

The selection of these companies depended in part on judgement up to the point of saturation as there were many more media articles to choose from. A representative sample of employees from the population was selected from the banking, mining, agricultural and publishing sectors in South Africa and were included in the
identification of a sample to ensure heterogeneity as previous researchers Drzensky et al., (2012); Frahm and Brown, (2007); Jimmieson and White (2011); Mamic and Almaraz (2013) and Welch (2012) has shown that research limitations occurred due to single sectors being studied. This should have contributed to variance in data.

Employees from participating organisations were invited via e-mail to participate in the online survey. The Publisher’s participation window was three weeks, during which two reminders were sent to all participants- one on the fourth day of the survey and again on the last day of the survey. This method has proven successful in increasing participation rate (Torppa & Smith, 2011) as will be discussed in the result section. In addition the Publisher was settling into new premises and some of the selected respondents were on leave during the first two weeks of the survey.

Due to imposed time constraints with the Bank, the survey window was reduced to one week, and the reminder was sent after four days and again on the last day. For consistency the same time frame was used for the Mobile Provider and the Insurer.

Out of the 30 companies approached, four agreed to participate: a divesting insurance company; a mobile provider restructuring and a bank and a publishing house busy with a merger and acquisitions that lead to retrenchments.

Permission was sought from the identified companies to conduct research on their employees and it was envisaged to compile a combined directory. Due to new legislation (POPI) in South Africa where the research was conducted only one company (the Publisher) provided a directory with employees' names and e-mail addresses.

A simple random sample using the RAND formula in Excel (Saunders & Lewis, 2012) was used to select n=1337 employees with active e-mail accounts from the database to participate. In the case of the Publisher the e-mail addresses were provided and the random sample was selected by the researcher. In the case of the Mobile provider and Bank A, the sample was selected randomly by the employer and the standardised letter with link to the survey, was sent out by the employer.

This method ensured unbiased sampling and provided the organisations employees an equal chance of being selected. The responses were voluntary, and a response rate of 30 per cent or at least 212 responses was expected as Torppa and Smith (2011) and Frahm and Brown (2007) achieved this response rate in similar studies. Access was obtained to employees from entrance to senior management level in all local regions of the organisation across business units. Permission to conduct research for employees
up to senior management was easier to obtain than permission to survey executives and thus executives were excluded. The sampling size across industries should provide variance in data with a higher degree of confidence in the results.

4.5 Unit of Analysis

Employees’ communication preferences during organisational change were the unit of analysis.

Employees who had undergone at least one change intervention in their career with an active e-mail address, who were in the current employ of one of the companies that was undergoing change like restructuring, mergers and acquisitions and divestiture as reported in popular, made up the unit of response.

4.6 The Research Instrument

Organisational communication had usually been measured using two main quantitative instruments: the Communication Satisfaction Questionnaire (CSQ) and the International Communication Association Survey (ICA) (Ruck & Welch, 2012), but as these instruments were organisation specific, bulky and not 100% aligned to the questions that emanated from the literature review, some questions of this research were based on questions from CSQ, ICA and other instruments developed by other researchers such as Torppa and Smith (2011); Hargie and Tourish (2009); Jimmieson and White (2011); Soumyaja et al. (2011) and McKay et al. (2013).

The research has followed on the literature review by conducting electronic surveys to employees of sectors as previous literature by Mamic and Almaraz (2013); Welch (2012) Drzensky et al. (2012); Jimmieson and White (2011) and Frahm and Brown, (2007) indicated limitation of usefulness of results in specific sectors such as the banking, universities etc. The quantitative method was applied to conduct descriptive research. The electronic survey questionnaire has been proven to be easy to complete and have enabled the researchers of previous studies to reach and obtain instantaneous responses. According to Zikmund (2003), surveys provide quick, efficient and accurate means of assessing information and are flexible.

A combination of the internet based survey platform, Survey Monkey and an internal survey platform (DigiSurvey®) were used. Access to data from participants from the Bank was dependent on using the approved internal platform that closely resembles Survey Monkey. Refer to Appendix 4 for the Non-Disclosure Agreement signed for
use of DigiSurvey®. Survey Monkey proved successful in similar research with a response rate of 31 per cent (Torppa & Smith, 2011).

With 100% anonymity, it was hoped that employees would have answered more truthfully. The benefit of the electronic survey was that multiple participants could complete the survey online and responses were available immediately after completion to the researcher. It was expected to yield at least a 30 per cent response rate (Torppa & Smith, 2011). Data was provided in Excel format and exported to STATISTICA for further use and analysis.

A structured self-administered questionnaire was developed to measure the required constructs as it offered a relatively efficient solution of choosing between open-and-closed-ended question types (Fink, 2009).

The questionnaire was designed in such a way to meet the research objectives as well as being well understood and interpreted by the respondents (Saunders & Lewis, 2012). Where ambiguity could exist, an explanation or examples were provided.

The questionnaire was based on effective communication as an antecedent for reducing employee resistance, employee preference towards communication mediums and Web 2.0 media during change communication. Measurements used in past studies on employees and change managers such as Torppa and Smith (2011) and Reiss and Steffens (2010) were used in the development of the questions for this survey.

The questionnaire consisted of three parts with a total of 21 questions. The first part (part A) positioned the research to the respondents and included instructions for completing the questionnaire (See Appendix 2). A statement that participation was voluntary and that participants could withdraw at any time without penalty was included. Assurance was given that data would be kept confidential and respondents’ details would be anonymous.

The second part (part B) comprised a series of questions to obtain the demographic profile for each respondent. These included questions such as how many change interventions that respondents has been subjected to, sex and tenure at current organisation. These questions have been used in questionnaires that formed part of previous communication studies and could have a bearing on the results (Hargie & Tourish, 2009).
The final part (part C) accommodated hypotheses by categorising the questions as follows:

- Employee perspectives on use of Web 2.0 technologies/CMC (Mobile/computer/Social Media)
- Factors that will increase employee’s participation Web 2.0 media such as frequency and training
- Type of content preferred by employee
- Employer’s current and past offering of Web 2.0 mediums
- Employee’s likelihood to resist change if communicated through preferred medium.

The question statement in part C1 investigated employee preferences and opinions regarding change communication media, frequency and trust was measured using multiple choice questions, ranking questions, open ended and simple true and false questions. A combination of alternative choice, multiple choice, rating scale, open ended and Likert scale questions were used (Tredoux & Durrheim, 2008).

**4.6.1 SurveyMonkey**
The survey link was sent directly to the selected sample of the Publisher. All other requests were sent by the employer using the template in Appendix 1.

**4.6.2 DigiSurvey®**
The in-house DigiSurvey® (Appendix 2) was used as permission to conduct surveys was dependent on an agreement to use this platform with the Bank. The questionnaire was adapted from the Survey Monkey instrument and closely resembled the original questionnaire. One question had to be deleted and another adapted to accommodate options available on this platform, but it should not affect the overall results of the survey (refer to Table 4 for sample sizes and method). The raw data will be combined before analysing the data, making provision for the combined question in Chapter 5.

An e-mail request to complete the link was sent by the bank’s marketing research department and a reminder was sent again after four days and again on the final day.

**4.6.3 Data Collection**
Where permission was obtained to conduct the survey via Survey Monkey, a random sample was selected (see Table 4 for sample sizes and method). An e-mail was sent to the selected employees with a link to the questionnaire with a unique collector label for each employer in order to compare number of responses. The initial request was followed up with a reminder after four days and again on the last day of the survey.
survey window was seven days, except in the case of the Publisher, where the window was 21 days as this was part of the initial agreement.

Where permission was denied by the identified companies, no further action was taken. Where no reply was obtained, a follow-up e-mail was sent and other key staff approached. In the case of Insurer A, an employee in a senior position volunteered to send the e-mail request to their immediate list of 25 contacts fitting the requirements as described above that have been affected by change in the entrance to senior management level. Table 4 summarises the sample. The sampling method for the Insurer was purposive whereas the rest of the sample was selected randomly.

Table 4
Summary of Sample

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry</th>
<th>Instrument platform</th>
<th>Selection of sample and distribution of survey link</th>
<th>Sample Frame</th>
<th>Sampling Method</th>
<th>Sample size</th>
<th>Number of initial responses</th>
<th>Number of qualifying responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publisher</td>
<td>Publication and Media</td>
<td>Survey Monkey</td>
<td>Researcher</td>
<td>103</td>
<td>Random</td>
<td>83</td>
<td>39</td>
<td>35</td>
</tr>
<tr>
<td>Bank A</td>
<td>Financial</td>
<td>DigiSurvey®</td>
<td>Employer</td>
<td>15000</td>
<td>Random</td>
<td>929</td>
<td>136</td>
<td>106</td>
</tr>
<tr>
<td>Mobile provider</td>
<td>Telecommunications</td>
<td>Survey Monkey</td>
<td>Employer</td>
<td>752</td>
<td>Random</td>
<td>300</td>
<td>156</td>
<td>120</td>
</tr>
<tr>
<td>Insurer</td>
<td>Financial</td>
<td>Survey Monkey</td>
<td>Individual employee</td>
<td>14253</td>
<td>Purposive</td>
<td>25</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>4 Industries</td>
<td>2 Platforms</td>
<td>Combined</td>
<td>708</td>
<td>Combined</td>
<td>336</td>
<td>266</td>
<td></td>
</tr>
</tbody>
</table>

4.6.4 Pre-Test
A pilot study was conducted by sending the survey questionnaire by e-mail link to thirty individuals who represented a subset within the main sample. According to Pallant, (2013); Saunders and Lewis (2012) the pilot study is an important step to ensure that understand-ability, suitability and professionalism of the survey, the time taken to complete as well as difficulty experienced with responding to particular questions or technical difficulty experienced in assessing questionnaire or link were considered and corrected. The questionnaire was reviewed where the pre-test found any ambiguity in the questions and a total of thirteen changes were made. All technical concerns have been rectified. Some of the errors found, such as challenge with open ended questions were rectified by including some of the answers provided in text boxes in the pre-test and offering an “other” option. Open-ended questions were limited as the pre-test has found that respondents typed in any combination of letters, or skipped the question asked. The responses received in open-ended questions during the pre-test were
provided as options with the option of completing an “other” text box to provide an alternative answer.

Although every effort was made to ensure validity of the instrument, some grammatical errors were still present during the survey time period. As the information contained in responses already received would be lost if changes were made at this late stage of the Survey Monkey survey, it was decided to allow the errors in the interest of obtaining the required number of responses. It is believed that allowing these errors, resulted in fewer responses, especially in the case of the Publisher.

4.7 Data Analysis
Descriptive and inferential statistics were used to analyse the data. It was originally envisaged that simple parametric statistics would be performed, but due to the nature of the data and hypothesis, non-parametrical statistics (Salkind, 2013) such as the Friedman's test and Chi Square had to be performed due to limitations originating from the instrument design. The data collected through the Survey Monkey and DigiSurvey® instruments, were merged, validated, coded and cleaned.

4.7.1 Hypothesis 1: Friedman Rank Analysis
The Friedman rank test was used to assess the preferences of employee choice of method to receive change communication. This test is used for the differences between three or more related samples and is a distribution free test similar to the ANOVA (Tredoux & Durrheim, 2008) that can be performed on ranked data (Statisticslectures.com). It compares groups, but the groups do not have to be independent nor do they have to belong to any particular distribution (Tredoux & Durrheim, 2008).

4.7.2 Hypothesis 2: The Student's One-sample Test
The Student's one-sample test (see Zar, 2010, pp. 95 – 105) was deemed the most appropriate test for this hypothesis. T-tests are used to find out whether there are statistical differences among groups (Pallant, 2013). The one sample t-test is used when the population standard deviation is unknown or the sample size is reasonably small (Statisticslectures.com).

4.7.3 Hypothesis 2a: Pearson's One-sample Chi-squared Test (\(X^2\)) and Cross Tabulation
A one sample chi-squared test (\(X^2\)) and cross tabulation was used to test whether there is a difference in the attitudes of willingness to accept change between males and females when communicated to on electronic and interactive media (elements of Web
This test is appropriate for testing large samples with unpaired data (Zar, 2010) and uses only one dimension to determine how well a set of data fits an existing set (Salkind, 2013).

A cross tabulation Table (or r x c Table) pertains to classification of two or more qualitative variables (Tredoux & Durrheim, 2008). The values in the cells of a contingency Table represent frequencies, such as the frequencies (Tredoux & Durrheim, 2008) by which options were selected on a Likert scale (refer to Table in Chapter 5. Chi-square test (goodness-of-fit test) was performed as it was deemed the most appropriate test to establish whether the frequency across categories are random. Table 5 contains a summary of the hypotheses and the tests conducted.

Table 5

Summary of Statistical Tests Performed

<table>
<thead>
<tr>
<th>Proposed type of test</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friedman's Rank Analysis</td>
<td>1. H0: Employees show no preference to method of communication</td>
</tr>
<tr>
<td>Student's one-sample test</td>
<td>2. H0: The use of Web 2.0 has no impact on employee's resistance to change</td>
</tr>
<tr>
<td>Cross tabulating Gender x Attitude; Pearson's Chi-square test</td>
<td>2a. Female and Male employees have identical responses concerning attitude towards change.</td>
</tr>
</tbody>
</table>

4.8 Assumptions

4.8.1 Friedman Rank Analysis

There are several assumptions to use the Friedman's test according to Prenhall (n.d):

- The r blocks should be independent in order for the values in one block not to have any influence in any other block;
- The underlying value should be continuous
- The data constitute at least an ordinal scale of measurement within each of the r blocks
- There should be no interaction between the r blocks and the c treatment levels
- The c populations have the same variability
- The c populations have the same shape
4.8.2 Student’s t-test
There are three assumptions about data that need to be satisfied in order to analyse data with a t-test namely the assumption of normality; the assumption of homogeneity of variance and the assumptions of independence (Tredoux & Durrheim, 2008). As is evident in the histograms in Figure 7, the sample has been drawn from a population that is normally distributed. It is difficult to prove homogeneity of variance. The samples that the means were calculated from are independent.

4.8.3 Pearson’s Chi Square Test
There are two assumptions of the chi-square test: the expected frequencies should be greater than 5 in at least 80% of the cells in the Table and the summarised observations of frequency counts must be independent (Tredoux & Durrheim, 2008). Both these assumptions were satisfied.

4.8.4 Other Assumptions
It was assumed that the employees sampled has used Web 2.0 media. It was further assumed that the organisations where the employees worked during the change process have made use of at least one Web 2.0 platform.

For the purpose of the scope of this study, it was however assumed that employees’ intention to act in a certain way is equal to the way that they will indeed act.

4.9 Limitations of the Study
Potential weaknesses that may affect the outcome and generalisation of the research in terms of the methodology, sampling and data collection are limitations that should be anticipated and identified (Salkind, 2013).

Some employers preferred to distribute the e-mail link which might lead to suspicion that employers may have access to their responses by employees and influence accuracy of answers.

There was a risk of subject error as measurement might take place at different times and the various organisations approached are at different levels of the change process. The industrial strike season in South Africa and the large scale restructuring of some of the organisations who has refused participation could explain non-participation but as the sample is cross-industry it is believed to offer a representative audience and thereof non-participation of these companies should not affect the results drastically.

The biggest limitation of using a quantitative method for this type of research was that one cannot with 100% accuracy predict that employees would act in the manner they
claimed they did and for this reason a qualitative approach would be better. However as employees are expected to be less truthful in a face-to-face interview (Saunders & Lewis, 2012) and observational and experimental research was not possible, it is believed that the electronic survey was the best method to follow under these circumstances.

The potential limitations applicable to this research have been identified below:

4.9.1 Sampling Limitations
The entire universe was almost impossible to measure and identify. A further limitation was that after the initial sample had been identified, the sample would rely on convenience sampling as only the firms that agreed to participate could be used, and only data of those who had responded would be available. The validity could be influenced by subject selection as the final sample obtained might not be representative of the research population. Further research should focus on random sampling.

The limitation of using an online link was that employees without an e-mail address could not be reached and thus the results might be affected as the sample is already au fait with the use of electronic media. The sample used was the identified firms’ employees with active e-mail addresses, which excludes a large portion of employees such as blue collar workers, which could impact on the accuracy of the data obtained from a transformational society perspective.

However, as the literature reviewed showed that employees were more likely to complete a short survey online, and due to the critical mass required the method selected was considered the correct choice.

The sample size depended on the co-operation of the companies identified and approached and thus has not been consistent, leading to a non-response error (Zikmund, 2003). The requirement for qualifying companies that has been affected by large scale organisational change in the past 30 months proved problematic as many employer companies denied permission as they are currently undergoing large scale retrenchments and downscaling and the organisational climate is sensitive.

4.9.2 Instrument Limitations
As no suitable questionnaire was found in the literature to research Web 2.0 in the context of organisational change, the researcher combined questions from previous questionnaires and added questions to create a new questionnaire. The employee preference in change communication message content was tested using similar
questions to Torppa and Smith (2011) in their adaption of Armenakis and Harris, (2007) Organizational Change Recipients’ Belief Scale (OCRBS) which tests the appropriateness of and attention to the message (Goodman & Truss, 2004). Information on organisational activities and changes are sought by employees (Truss et al., 2006). These questions indicate the respondent’s receptivity to change and how open or resistant to change they are. The new questionnaire may lack reliability due to the inexperience of the researcher.

Despite reviewers of research reports often criticizing the use of ordinal Likert scales, which supposedly prevents the use of parametric statistics (Norman, 2010), the Likert scale was used in most questions. This allowed the researcher to quantify responses, in order to answer the Hypothesis and test the degree of opinion or attitude of the respondent (Tredoux & Durrheim, 2008). According to DeVellis (2003) a requirement of this type of scale was a midpoint in the response option, indicated by “Neutral” in the proposed design. Torppa and Smith’s (2011) design included a seven point Likert scale, but for purposes of this study a 5 point scale was sufficient.

4.9.3 Budget Limitation
Limitations on the researcher’s budget prevented the use of professional services in the design and analysis of the questionnaire and data. The researcher’s experience in research design was limited and could affect the effectiveness of the questionnaire. To compensate for this shortcoming, the researcher relied on questions from previous instruments used research where possible. The number of hypotheses tested was reduced due to the budget constraints.

4.10 Validity and Reliability
“The validity of a scale refers to the degree to which it measures what it is supposed to measure” consistently (Pallant, 2013, p. 7; Salkind, 2013). Content validity is used to determine whether items in the survey instrument represent the entire universe of items on the topic. To this extent the research instrument was piloted to a small group representative of the sample (refer to section 4.6. above). Validity was ensured by using existing questions from previous researchers (Salkind, 2013).

Factors impacting on the reliability of the research findings include the internal consistency of the scale (Pallant, 2013). To increase reliability a cross-industry survey was conducted and a large sample size was selected using mainly Likert-type scale question to improve the reliability from respondents (Saunders & Lewis, 2012).
As a quantitative research method was followed across various industries, the study should be generalisable across other research settings (Saunders & Lewis, 2012).

4.11 Conclusion
This chapter defended the methods used for data gathering and analysis such as the Friedman Rank Analysis, Student's one sample t-test; cross tabulation and the Pearson’s one sample chi-squared test ($X^2$) was applied to the different hypotheses as discussed in Chapter 3. A quantitative research design was chosen and an electronic survey was used. The chapter also emphasised potential research limitations. The following chapter will present the results of the study.
CHAPTER 5 RESULTS

5.1 The Realised Sample Groups
The total number of 336 responses was obtained, of which 266 were valid, as 70 responses were excluded due to not meeting the qualifying criteria of having been affected by organisational change. The data sample shows that the largest portion of responses came from the Mobile Provider (120), followed by the Bank (106), the Publisher (35) and the Insurer (5). Table 4 in Chapter 4 contains a summary of total responses as shown in Figure 4.

Figure 4 Number of Responses per Participating Company

The gender split was 38.3 % female (102) and 61.7% (164) males. No difference was found in the responses between women and men as per Figure 5.
The tenure ranged from less than one year (lowest) 6 to ten years and longer than 10 years (highest) as per Table 6

Table 6

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than one year</td>
<td>12</td>
<td>4,5</td>
<td>4,5</td>
<td>4,5</td>
</tr>
<tr>
<td>One to two years</td>
<td>45</td>
<td>16,9</td>
<td>16,9</td>
<td>21,4</td>
</tr>
<tr>
<td>Three to five years</td>
<td>57</td>
<td>21,4</td>
<td>21,4</td>
<td>42,9</td>
</tr>
<tr>
<td>Six to ten years</td>
<td>76</td>
<td>28,6</td>
<td>28,6</td>
<td>71,4</td>
</tr>
<tr>
<td>Longer than 10 years</td>
<td>76</td>
<td>28,6</td>
<td>28,6</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>266</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

The number of more than two exposures to organisational change is 102 (38.3%). For a full account on number of changes experienced.
Table 7

Exposure to Previous Change

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once</td>
<td>94</td>
<td>35,3</td>
<td>35,3</td>
<td>35,3</td>
</tr>
<tr>
<td>Twice</td>
<td>70</td>
<td>26,3</td>
<td>26,3</td>
<td>61,7</td>
</tr>
<tr>
<td>More than Twice</td>
<td>102</td>
<td>38,3</td>
<td>38,3</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>266</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

The remainder of the chapter will follow that of chapter 3 discussing the research results per research hypothesis.

5.2 Hypothesis 1: Preference of Method of Communication

5.2.1 Friedman Rank Analysis

Using the coding described in the heading of Table 9, viz. Choice 1 = 1, Choice 2 = 2 and Choice 3 = 3, a repeated measures analysis of variance could be done in principle. However, the assumptions for such an analysis are not valid. Thus a nonparametric test, the Friedman Rank Analysis, (Zar, 2010, pp. 277-279) is applied to rank the preferred methods of communication (refer to Chapter 5.3.2).

5.2.2 Results

The result of the Friedman Test indicated that there were significant differences. The small p-value of 0.0000 in Table 10 indicates that the null-hypothesis of equal distributions is rejected with great certainty. The category with lowest rank is the most frequently selected category, i.e. “Face to face”. The confidence intervals listed in Table 9 (based on all available data) show that these intervals are completely separated from each other. This is an indication that all three choices are significantly different. 95% Confidence intervals indicated are for the three categories based on scores of 1, 2 or 3 according to the choice of each employee in the sample. The sample sizes on which these are based are listed in Table 9 (as “Valid N”).

Figure 4 Preferred method of communication
5.2.3 Detailed Analysis

The analysis was imported into the STATISTICA software system (StatSoft, 2013) which has been used for all data organisation and statistical analyses. In the original Excel workbook, the data was organised by employee (rows) and (for the purpose of this analysis) by three variables: “Media Pref 1st Name”, “Media Pref 2nd Name” and “Media Pref 3rd Name”. Each of these variables could take ten possible values: “Brochure”, “Company Website” and “Other”.

To be able to obtain descriptive statistics and a hypothesis test the data had to be reorganised with 10 variables (for each employee), viz. “Brochure”, “Company Website”, “Other”. For each employee the outcomes for each of the 10 variables were either “Choice 1”, “Choice 2”, “Choice 3” or “Missing”. [Choice is used here for “Media Pref”]. The last option, “Missing”, is due to only three choices that were retained after compressing to the top three choices to facilitate data analysis.

The hypothesis under discussion is:

H0: Employees show no preference to method of communication.

Before a hypothesis test is attempted, some counting and other basic statistics were computed. These are presented in Table 8. These are the counts and percentages by which each medium was selected by 266 employees.
The 14 cases of employees whose choices were “No Response” were deleted from the data in further analyses as ties in the choices provide a problem in the analysis. The Score (last column in Table 6) was computed by selecting arbitrary weights for each Choice, as follows: If an employee rated a medium as Choice 1, that was awarded 100 points, Choice 2 was awarded 50 points and Choice 3 was awarded 20 points. Thus,
by way of example, the score for “Face to Face” was computed as $100 \times 150 + 50 \times 42 + 20 \times 15 = 17400$. The medium with highest score is considered to be the most popular.

Additional basic statistics are computed and presented in Table 9. Statistics are based on scores of 1, 2 and 3 for Choice 1, Choice 2 and Choice 3. Hence the smallest average is the media category of choice. The 95% lower (LCL) and upper (UCL) confidence limits for the average choice are listed in the last two columns.

Table 9

Basic Statistics

<table>
<thead>
<tr>
<th>Media category</th>
<th>Valid N</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>95% LCL</th>
<th>95% UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face to face</td>
<td>207</td>
<td>1.35</td>
<td>0.61</td>
<td>1.26</td>
<td>1.43</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>1.67</td>
<td>0.82</td>
<td>0.81</td>
<td>2.52</td>
</tr>
<tr>
<td>Email</td>
<td>213</td>
<td>1.74</td>
<td>0.60</td>
<td>1.66</td>
<td>1.82</td>
</tr>
<tr>
<td>Internal media mediums such as Yammer, SharePoint etc.</td>
<td>13</td>
<td>2.31</td>
<td>0.75</td>
<td>1.85</td>
<td>2.76</td>
</tr>
<tr>
<td>Brochure</td>
<td>36</td>
<td>2.47</td>
<td>0.74</td>
<td>2.22</td>
<td>2.72</td>
</tr>
<tr>
<td>Intranet</td>
<td>68</td>
<td>2.59</td>
<td>0.65</td>
<td>2.43</td>
<td>2.75</td>
</tr>
<tr>
<td>Newsletter</td>
<td>117</td>
<td>2.60</td>
<td>0.60</td>
<td>2.49</td>
<td>2.71</td>
</tr>
<tr>
<td>Company Website</td>
<td>48</td>
<td>2.63</td>
<td>0.64</td>
<td>2.44</td>
<td>2.81</td>
</tr>
<tr>
<td>Electronic Link</td>
<td>48</td>
<td>2.67</td>
<td>0.52</td>
<td>2.52</td>
<td>2.82</td>
</tr>
</tbody>
</table>
Using the coding described in the heading of Table 9, viz. Choice 1 = 1, Choice 2 = 2 and Choice 3 = 3, a repeated measures analysis of variance could be done in principle. However, the assumptions for such an analysis are likely not valid. Thus a nonparametric test, Friedman Rank Analysis, (Zar, 2010, pp. 277-279) is applied.

The null-hypothesis may be restated as:

H0: The distributions of each media category (taken over all employees) are identical

Ha: The distributions of at least one pair of media categories differ significantly.

To illustrate this, each of the employees in the sample allocates a 1, 2 or 3 to each of the media categories. The distributions under discussion are the frequencies of 1’s, 2’s and 3’s for each of the media categories. The null-hypothesis assumes that these distributions are identical. Friedman’s statistical test will use the evidence from the data to deny or confirm that assumption.

Some of the media categories were not used frequently. For example, only six employees identified “Other” as a media category of consequence. To include the distributions of such sparsely populated media categories for comparison will lead to unacceptable results. Thus, only the categories E-mail, Face to Face and Newsletter were compared. If more are included there are too many cells with missing data in the file created for this purpose and hence the test cannot be conducted. Even in this case of the mentioned choice, only N = 73 employees had data for each of the three categories. The results are given in Table 10. Friedman’s analysis of variance is based on the ranks allocated by each employee who “ranked” the media categories as 1, 2 or 3.
Friedman’s Analysis of Variance

Friedman ANOVA Chi Square = 93.45;
p = 0.0000; N = 73.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sum Ranks</th>
<th>Mean Rank</th>
<th>Std.Dev of Ranks.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face to face</td>
<td>101</td>
<td>1.38</td>
<td>0.57</td>
</tr>
<tr>
<td>Email</td>
<td>125</td>
<td>1.71</td>
<td>0.54</td>
</tr>
<tr>
<td>Newsletter</td>
<td>212</td>
<td>2.90</td>
<td>0.34</td>
</tr>
</tbody>
</table>

5.2.4 Conclusion

The hypothesis is restated as

H0: The distributions of each media category (taken over all employees) are identical

Ha: The distributions of at least one pair of media categories differ significantly

The null hypothesis is rejected as employees show a preference for face-to-face communication (56.4%), followed by newsletters (28.9%) and then e-mail (27.8%).
5.3.2 Hypothesis 2: Impact of Web 2.0 on Resistance to Change

5.3.1 Student’s One-sample Test
As the population from which the sample was drawn is unknown it was not possible to analyse the data using a Z-score as it is a requirement that the standard deviation is known (Statisticslectures.com). The one-sample t-test estimates the sample standard deviation from the standard error (Tredoux & Durrheim, 2008) as discussed in Chapter 4.

5.3.2 Results
A Student’s t-test was conducted to establish whether employee willingness to accept change was affected by 1) use of interactive media to conduct organisational change communication and 2) receiving of electronic change communication. The null-hypothesis is rejected at the 5% level of significance with a p-value of 0.0000 for Student’s one sample test. In Table 11 it is evident that the sample mean values of 2.89 and 2.77 are significantly larger than the expected median value of 2 and the 95% confidence intervals confirm that the true mean values are significantly higher than the middle value and thus the null hypothesis is rejected.

5.3.3 Detailed Analysis
If this hypothesis were true, the average Likert score is likely to be the middle Likert value, viz. $\sigma = 2$. This hypothesis may be tested by using a one-sample t-test (see Zar, 2010, pp. 95 – 105) against a reference constant of 2.0. In the one sample t-test, the standard error is estimated from the sample standard deviation (Tredoux & Durrheim, 2008). A confidence interval may also be computed for the true mean value and the decision may be based on both the test and the confidence interval.

The graphs in Figure 7 show visually that there is a shift to the right of the Neutral value for both Electronic Access and for Interactive Media Access. The t-tests in Table 10 both have p-values of 0.0000 and this indicates, even with a one-sided alternative, that the shift is highly significant. The histograms showing the two distributions are presented in Figure 7.
### Table 10

**Student's t-test of Mean Values Against the Reference Constant 2.0**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dv.</th>
<th>Reference Constant</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-Electronic Access</td>
<td>266</td>
<td>2.89</td>
<td>0.96</td>
<td>2.0</td>
<td>15.15</td>
<td>0.0000</td>
</tr>
<tr>
<td>X-Interactive Media Access</td>
<td>266</td>
<td>2.77</td>
<td>0.99</td>
<td>2.0</td>
<td>12.64</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

### Table 11

**Basic Statistics with Sample Mean Values [and 95% Lower (Lcl) and Upper (Ucl) Confidence Intervals] for the Mean**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dv.</th>
<th>95% LCL</th>
<th>95% UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-Electronic Access</td>
<td>266</td>
<td>2.89</td>
<td>0.96</td>
<td>2.78</td>
<td>3.01</td>
</tr>
<tr>
<td>X-Interactive Media Access</td>
<td>266</td>
<td>2.77</td>
<td>0.99</td>
<td>2.65</td>
<td>2.89</td>
</tr>
</tbody>
</table>
5.3.4 Conclusion
The null hypothesis that stated that Web 2.0 has no impact on resistance to change was rejected. This was because the sample mean values were significantly larger than the expected median value of 2.

Web 2.0 was measured using the variables electronic media and interactive media as they are representative of Web 2.0, and the response to willingness to accept change if these two variables were present.

5.4 Hypothesis 2a: Female and Male Employees Have Identical Responses Concerning Attitude Toward Change

5.4.1 Pearson’s Chi-square Test and Cross-tabulation
This analysis followed on the analysis described in 5.3.3 above. A comparison of possible differences for Gender may be obtained by cross tabulating Gender and Electronic Access as well as Gender and Interactive Media Access. Table 12 shows the results.

5.4.2 Results
A chi-square test indicated that there was no real difference in the responses of female and male employees in assessing their willingness to accept change if communicated to electronically and having interactive media communication about the change. With a p-value of $p = 0.8521$ the null-hypothesis cannot be rejected at the 5% level of significance.
5.4.3 Detailed Analysis

Table 12

Frequency Counts: Gender for the Five Electronic Access Categories

<table>
<thead>
<tr>
<th>Gender</th>
<th>Str Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Str Agree</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>4</td>
<td>13</td>
<td>23</td>
<td>89</td>
<td>35</td>
<td>164</td>
</tr>
<tr>
<td>Row %</td>
<td>2.44%</td>
<td>7.93%</td>
<td>14.02%</td>
<td>54.27%</td>
<td>21.34%</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>9</td>
<td>13</td>
<td>44</td>
<td>34</td>
<td>102</td>
</tr>
<tr>
<td>Row %</td>
<td>1.96%</td>
<td>8.82%</td>
<td>12.75%</td>
<td>43.14%</td>
<td>33.33%</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>6</td>
<td>22</td>
<td>36</td>
<td>133</td>
<td>69</td>
<td>266</td>
</tr>
</tbody>
</table>

When Pearson’s Chi-square test is applied to this 2 x 5 contingency Table to test equality of the profiles of Male and Female, it results in $X^2 = 5.25$. With 4 degrees of freedom the associated p-value for the test is $p = 0.2630$. This means that the null-hypothesis of no differences between Male and Female cannot be rejected, not even at a 10% level of significance.

The data in Table 12 may be visualised in Figure 8 with a comparison of the histograms for females and males.

Figure 8 Frequency Counts for Male and Female Employees Concerning Electronic Access
Table 13

Frequency Counts: Gender for the Five Interactive Media Access Categories

\[ X^2 = 1.35 \text{ df: 4 degrees } p = 0.8521 \]

<table>
<thead>
<tr>
<th>Gender</th>
<th>Str Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Str Agree</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>3</td>
<td>20</td>
<td>32</td>
<td>70</td>
<td>39</td>
<td>164</td>
</tr>
<tr>
<td>Row %</td>
<td>1.83%</td>
<td>12.20%</td>
<td>19.51%</td>
<td>42.68%</td>
<td>23.78%</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>8</td>
<td>22</td>
<td>46</td>
<td>24</td>
<td>102</td>
</tr>
<tr>
<td>Row %</td>
<td>1.96%</td>
<td>7.84%</td>
<td>21.57%</td>
<td>45.10%</td>
<td>23.53%</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>5</td>
<td>28</td>
<td>54</td>
<td>116</td>
<td>63</td>
<td>266</td>
</tr>
</tbody>
</table>

In the case of Table 13 the Pearson chi-square test is: \( X^2 = 1.35 \) and with 4 degrees of freedom its \( p \)-value is \( p = 0.8521 \). This shows that the Male and Female profiles follow one another closely and no significant difference is found. The counts in Table 13 are presented graphically in Figure 9.

Figure 9 Frequency counts for Male and Female employees concerning Interactive Media Access
5.4.4 Conclusion
As the null hypothesis could not be rejected, the responses of male and female did not differ for this study.

5.5 Summary of Results
The null hypothesis was rejected for hypothesis 1 which indicates that there are preferences for specific media. The null hypotheses was rejected for hypothesis 2 which indicates that Web 2.0 does impact on employee resistance to change. The null hypothesis for hypothesis 2a failed to be rejected as there were no differences found in the frequencies that females and males responded to interactive media or electronic communication's impact on their willingness to accept the change. Table 14 summarises the Findings.

Table 14 Research Findings

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Independent variable</th>
<th>Statistical test used</th>
<th>Expected Result</th>
<th>Research Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Method of Communication</td>
<td>Friedman’s rank test</td>
<td>Null accepted</td>
<td>Reject Null</td>
</tr>
<tr>
<td>2</td>
<td>Increased use of Web 2.0</td>
<td>Student’s one-sample test</td>
<td>Null accepted</td>
<td>Reject Null</td>
</tr>
<tr>
<td>2a</td>
<td>Gender; Increased use of Web 2.0</td>
<td>Cross tabulating Gender x Attitude; Pearson’s Chi-square test</td>
<td>Null accepted</td>
<td>Fail to reject null</td>
</tr>
</tbody>
</table>
CHAPTER 6 DISCUSSION OF RESULTS

6.1 Overview of the Results

6.1.1 Sample
The combined number of invited participants was 1337 with a response rate of 25% (336 respondents) in total. However, as a qualifying question was whether the respondent had been affected by organisational change 70 responses had to be removed and the final number of respondents amounted to 19.8% response rate (266 responses). The high non-response rate can be mainly attributed to weaknesses in the questionnaire design and lack of experience of the researcher.

The gender split was 38.3 % female (102) and 61.7% (164) males as can be seen in Figure 4, section 5.1.

As shown in Table 6 in section 5.1, the highest frequency of tenure of respondents was six to ten years and longer than 10 years.

The remainder of the discussion of the results will follow the structure for Chapter 5.

6.2 Hypothesis 1: Preference of method of communication
This analysis is based on data in MS Excel workbook: “Combined Data File with coding v9.xlsx”. Hypotheses to be tested were specified in the worksheet “Columns related to hypotheses” and the data in worksheet: “Step 6 Final coded dataset”.

The analysis was imported into the STATISTICA software system (Statsoft, 2013) which has been used for all data organisation and statistical analyses. In the original Excel workbook, the data was organised by employee (rows) and (for the purpose of this analysis) by three variables: “Media Pref 1st Name”, “Media Pref 2nd Name” and “Media Pref 3rd Name”. Each of these variables could take ten possible values: “Brochure”, “Company Website”, “Other”.

The findings relating to this hypothesis are tabulated in section 5.2, tables 8-10. To be able to obtain descriptive statistics and a hypothesis test the data had to be reorganised with 10 variables (for each employee), viz. “Brochure”, “Company Website”, “Other”. For each employee the outcomes for each of the 10 variables were either “Choice 1”, “Choice 2”, “Choice 3” or “Missing”. [Choice is used here for “Media pref”]. The last option, “Missing”, is due to only three choices that were retained in the original Excel workbook for this purpose.
The respondent’s preference for specific media mediums during change was tested based on research by Friedl and Verčič (2011); Goodman and Truss (2004); Ruck and Welch (2012).

The rejection of the null hypothesis was expected as literature reviewed in section 2.4.4 had similar findings. Welch (2012) found in her study that 47% of respondents preferred electronic formats, while 16% preferred dual formats (electronic and print) and 3% preferred newsletters. Table 6 in section 5.2.2, the current study’s results are somewhat similar, yet different: face-to Face 56.4%; Newsletter 28.9% and e-mail 27.8%. Rejecting of the null hypothesis is subject to a Type I error as it is possible that there is no difference (Salkind, 2013). However, as great care was taken to apply the correct test, and with a small p-value of 0.0000, the null-hypothesis of equal distributions is rejected with great certainty.

According to Anifowose et al. (2011) communication plays a vital role in reducing the resistance to change and preparing employees to be more change ready. Employers need to know that the communication medium used to communicate organisational change messages are well received by employees as the medium contributes to the employee’s perception of the quality of communication (Soumyaja et al., 2011). Selecting communication media that employees find unacceptable or inappropriate may lead to them ignoring the communication message (Welch, 2012), and thus it is imperative that choice of communication is informed by employee preference. Furthermore, enthusiasm and vigour are needed in framing the message (Frahm & Brown, 2007; Torppa & Smith, 2011). Korzynski (2013) investigated how new technologies impact on employees' motivation during organisational change and found that the social aspect of new technologies had an impact on employee motivation. The findings support literature by Al-Ghamdi et al (2007); Marques (2010) regarding preferred mediums to receive information about organisational change. Face-to-face communication is the preferred medium of communication, followed by e-mail communication in the studies conducted by (Al-Ghamdi et al, 2010). Welch (2012) found that electronic communication is the preferred medium followed by blended methods of print and electronic mediums and herein is opportunity for companies based on the results of this hypothesis and hypothesis 2. The blending of face-to – face (physical presence) with Web 2.0 media is possible which will enable employers to reach critical masses with change communication messages. This can be done via video links on social media Newsletters can be sent via e-mail, saving cost on printing as discussed in Chapter 2, 2.5.
The three preferred mediums imply that there is room for the use of hybrid or blended media for change communication, as was found in the Reiss and Steffens (2010) in addition to the study by Welch (2012). It is possible that organisation context, change program characteristics, the purpose of the communication and employee response (Goodman & Truss, 2004) could impact on the preferred medium, but as the study was conducted across four industries, it is likely to be representative of the population.

Despite options such as Intranet, Internal media mediums such as Yammer, SharePoint etc.; and company websites which have the potential to influence employees’ resistance to change (see Chapter 2, 2.5 for a full discussion on the attributes of ESN), none of these options were selected as the top 3 choices for organisational change communication by employees. This finding is interesting as employers spend large sums of money on internal communication mediums (Brown, 2012) based on the perception that employees are more inclined towards the new way of communicating. It also raises the question whether employees know the difference between mediums and how to access it and use it optimally. It is also possible that questions posed about mediums could have been misunderstood by respondents although was taken to explain what was meant by concepts. It is also possible that the attitudes and beliefs about the technology employees engage with affects their acceptance of the technology and mediums they choose to engage with (Bhattacherjee, 2004). Employers could benefit by educating employees when new mediums are introduced in order to maximize the benefits of Web 2.0 platforms (Bochenek & Blili, 2013; Long & Spurlock, 2008; Mohapatra & Bose 2010; Van Dam et al., 2008).

Smart phones offering extensive access to Web 2.0 mediums can make messages about the change more effective. Calls to action could be made at the point of impact (Beneke et al., 2010) especially if there is a face-to-face interaction- offering opportunity for the employee to respond and ask questions. Claims of the benefits of social media such as Twitter (Zhao & Rosson, 2014), makes social media an attractive medium for future inclusion as an option to use for change communication.

In section 2.4.4, the literature reviewed showed that choice of medium is context related (Ruck & Welch, 2012). The specific context was also shown to be important in the Goodman and Truss Communication wheel in figure 3, section 2.4.4 (Goodman & Truss, 2004) and the current findings support that the media should be verbal, written and electronic, in that order. The approaches to the communication could then range
between directive/coercive “why the change is necessary and why the this type of change is the right one for the company” (Armenakis & Harris, 2002); and should be done face to face, followed up with a written version and reinforced with electronic media which could be more visual. The “can I make this work” (Armenakis & Harris, 2002) could be on electronic media where participation (Armenakis & Harris, 2002; Boohene & Williams, 2012; Jimmieson & White, 2011; Lo & Lie, 2008; Msweli-Mbanga & Potwana, 2006; Torppa & Smith, 2011; Zhao, et al., 2014;) of all employees are encouraged and employee voice (Whiting et al., 2012) as discussed in Chapter 2, 2.3.6, could add to willingness to accept the change.

Leaders could contribute to the background conversation on Web 2.0 as their expertise would carry more weight (Whiting et al., 2012). The story that wants to be told as demonstrated by Siemens Unify in Chapter 1 can be told (Lombardi, UNIFYing employees around the brand promise, 2013).

The high cost and wastage of printed materials in terms of financial sustainability of the company and environmental responsibility (Welch, 2012), as discussed in Chapters 1 and 2, may lead to newsletters becoming more electronic in the near future. The rejection of the null hypothesis for hypothesis 1 shows a clear preference for media category as the distributions of at least one pair of media categories differed significantly.

Hypothesis 1:

H0: The distributions of Each Media Category (taken over all employees) are identical

Ha: The distributions of at least one pair of Media categories differ significantly

6.3 Hypothesis 2: Impact of Web 2.0 on resistance to change

This analysis was based on data in MS Excel workbook: “Combined Data File with coding v9.xlsx”. The hypothesis to be tested was specified in the worksheet “Columns related to hypotheses” and the data in worksheet: “Step 6 Final coded dataset”.

In the original Excel workbook, the data was organised by employee (rows) and (for the purpose of this analysis) by two variables: “Electronic Access” (column W) and “Interactive Media Access” (column X in the Excel worksheet). Each of these variables could take values on a 5-point Likert scale, viz., 0 = Strongly Disagree, 1 = Disagree, 2 = Neutral, 3 = Agree and 4 = Strongly Agree. Web 2 consist of various electronic media
and one of the characteristics described in section 2.5.1.1 is that it offers interactive communication. The items in the research questionnaire (see Appendix 1 18 b- I will be likely to accept the change if I can access about it electronically (Column W) and 18d- I will be more likely to accept the change if I can access communication about it electronically (Column X).

The rejection of the null hypothesis indicates that employees are more willing to accept change if they are communicated to electronically and have opportunity for interactivity (two elements of Web 2.0) can probably be best supported by looking at the participation and trust elements (discussed in section 2.3.1) which are considered two of the strongest factors influencing employee resistance to change (Armenakis & Harris, 2002; Boohene & Williams, 2012; Jimmieson & White, 2011; Lo & Lie, 2008; Msweli-Mbanga & Potwana, 2006; Torppa & Smith, 2011; Zhao, et al., 2014:). Willingness to accept change is encouraged by participation and input in decision making. This is supported by Msweli-Mbanga and Potwana (2006); Bordia et al., (2004); Jimmieson and White (2011) who concluded that willingness to participate and access to participation in the change process plays a significant role in reducing resistance to change.

There is the risk of rejecting the null hypothesis, even if it is true. This is known as a Type I error (Salkind, 2013). The graphs in Figure 7 as illustrated in section 5.3.3, show a shift to the right of the Neutral value for both Electronic Access and for Interactive Media Access. In the case of willingness to accept change if electronic communication was received, 50% of respondents agreed and 26% strongly agreed with the statement. In the case of willingness to accept the change if respondent can play an active role such as interacting with management on social media, 44% of respondents agreed and 24% strongly agreed with this statement. The shift (t-tests in Table 10, section 5.3.3, both have p-values of 0.0000) is highly significant and therefore the researcher is confident that the null hypothesis should be rejected.

It is not surprising that employees feel a willingness to accept change more if communicated to on Web 2.0, as it offers opportunity to collaborate (Millard et al. 2013). The participatory element and the benefits of the interactive nature of social media (Cammaerts, 2008; Heinonen, 2011; Mamic & Almaraz, 2013) should be exploited and used to build mutually beneficial relationship. The timeliness of messages could be greatly improved on social media and satisfy the employees need for timely communication (Gomes et al., 2012; Jimenez-Cañasto & Sanchez-Perez, 2013). The direct contact with employees on social media by leaders could establish a
trust relationship according to Heinonen (2011). Chapter 2, 2.5.1 discusses the benefits of social media in more details).

The long tenure evident in Table 6 chapter 5.1 contradicts existing literature where it was found that long tenure had a negative impact on resistance to change (Drzensky, Egold, & Van Dick, 2012; Hargie & Tourish, 2009; Van Dam et al., 2008; Van der Smissen et al., 2013). Following on the discussion in section 2.3.2 employees with longer tenure required specific content regarding acquisition of new skills, safety of retirement investment and training on new job procedures (Van Dam, et al.). The OI (section 2.3.2) that employees with a longer tenure experience, could impact negatively on employee resistance to change, but it could also increase readiness for change (Drzensky et al., 2012). The findings could also be due to employees not identifying strongly with the current state of the organisation (Drzensky et al., 2012). Given the findings of the analysis, this result is surprising for a group with mostly service of six years to ten and 10 years and longer.

In addition, the number and impact of previous exposure to change discussed in 2.3.2, should have had a negative on employee’s resistance to change according to Van der Smissen et al., (2013). With 38.3% of respondents as per Table 7 in section 5.1 being affected more than twice by organisational change it was expected that attitude towards change would be to resist, instead of accept change. As discussed in section 2.3.3 employees would only attempt to change if they were reasonably sure of success (Armenakis & Harris, 2002) and perhaps previous experience with change of the sample was experienced positively. In light of Bordia et al. (2004) research as discussed in Chapter 2.3.3 which shows that employees attitude towards resistance to change could be moderated by the individual’s need for relevant communication was being met. This could indicate that Web 2.0 satisfy the individual need for communication.

The opportunity for background conversations (section 2.3.4) on Web 2.0 media to within a larger group could also contribute to the attitude of willingness to accept change if communicated to electronically. Employee voice (section 2.3.5) Social media and other Web 2.0 mediums (see discussion in section 2.51) lends itself to explore organisational culture and tapping in to the background conversations (Ford et al., 2002; Lo & Lie, 2008).

Employees also have an opportunity to have their voice heard (see section, 2.3.6) by making recommendations providing solutions on social media and e-mail and be
interactive with employees of all ranks (Whiting, et al., 2012). Leaders could offer solutions and recommendations to problems as solutions offered by experts carry more weight (Whiting et al., 2012) thereby demonstrating principal support (Armenakis & Harris, 2002).

In section 2.5.1.3, Web 2.0 technologies are discussed in more detail and offers support for user generated content, which is becoming very popular on domains such as blogs, mini-blogs, web forums, social bookmarking, photo and video sharing communities as well as social networking mediums such as Facebook, MySpace emphasise relationship development within the community (Agichtein et al., 2008).

Beneke, et al. (2010) found that communication via smart phones should contain personalised message and this is also possible on for Web 2.0 Content on Web 2.0 should be recent and relevant and interesting (Frahm & Brown, 2007). Smart phones offer the opportunity to employers to reach employees 24/7 and offer employers smarter ways of communicating.

E-mail communication was once considered the most important change in organisational communication (Hastings & Payne, 2013), but with mobile telephones becoming more accessible it might be a great opportunity for companies to adapt change communication messages to be interactive and timely. The new face-to-face communication is now on social media Zhao & Rosson, 2014) and opportunity to use blended methods of communication that include both traditional media and Web 2.0 exist. The benefits of speed of sharing information and participation (Bughin et al., 2009) are perhaps the greatest reasons employees’ attitude towards accepting change is evident as it meets their requirement of being timely, appropriate and continuous (Gomes et al., 2012) as discussed in section 2.4.3.

Hypothesis 2:

H0: The use of Web 2.0 has no impact on employee’s resistance to change

Ha: The use of Web 2.0 has an impact on employee’s resistance to change

As the null hypothesis was rejected for hypothesis 2, it indicated that the use of Web 2.0 has an impact on employee’s resistance to change.
6.4 Hypothesis 2a: Female and Male employees have identical responses concerning attitude towards change.

In the original Excel workbook, the data was organised by employee (rows) and (for the purpose of this analysis) by two variables: “Electronic Access” (column W) and “Interactive Media Access” (column X in the Excel worksheet). Each of these variables could take values on a 5-point Likert scale, viz., 0 = Strongly Disagree, 1 = Disagree, 2 = Neutral, 3 = Agree and 4 = Strongly Agree. The variable viz., Gender, with values 0 = Male and 1 = Female as discussed 6.6.

The data was imported into the STATISTICA software system (Statsoft, 2013) which has been used for all data organisation and statistical analyses.

The null hypothesis was not rejected as there was no difference found in the responses of men and women which contradicts research done by Hargie and Tourish (2009) which indicated that men and women interact differently with Web 2.0 media. Failing to reject a null hypothesis when it the null hypothesis is false could lead to a Type II error.

When the Chi Square test was applied, it resulted in $X^2 = 5.25$ with 4 degrees of freedom. The associated p-value for the test is $p = 0.2630$. This means that the null-hypothesis of no differences between Male and Female cannot be rejected, not even at a 10% level of significance.

Table 13 in section 5.4.3 shows a Pearson chi-square test is: $X^2 = 1.35$ with $p = 0.8521$ at 4 degrees of freedom. This indicates that there are no significant differences as Female and Male profiles follow one another closely. The frequencies with which the gender groups responded are as follows: Agree: Females 43% and Males 45%, Strongly Agree: Females 24% and males 24% and thus it can be seen that there are no significant differences between the responses of females and males. For a graphic presentation of these results, see Figure 9 in section 5.4.3.

This finding is not meaningful beyond assisting managers to understand that Web 2.0 levels the playing field for change communicators in as far as gender goes. It is focuses the value in the interactiveness and electronic qualities that electronic or Web 2.0 media offers.

The third hypothesis tested in this study sought to find whether there is a difference in the responses of the two gender groups. As the null hypothesis could not be rejected, it is apparent that female and male employees have identical responses concerning attitudes to change.
H0: Female and Male employees have identical responses concerning attitude towards change

Ha: Female and Male employees do not have identical responses concerning attitude towards change
CHAPTER 7 CONCLUSION

7.1 Major Findings and Specific Recommendations
This research suggests that employee willingness to accept change is influenced by the use of organisational change communication on Web 2.0. Specifically, interactive and electronic communications impacted on their willingness to accept the change. The research further suggested that there is no difference between men and women in their propensity to accept change if communicated to by Web 2.0 media. Another finding of this research is that employees prefer face-to-face communication, followed by newsletters and e-mail for organisational communication.

Companies wishing to communicate more effectively during organisational change should not rely solely on the use of one method of communication. The contradiction lies in the employee’s preferred method of communication (face-to-face) and their willingness to accept the change if communicated through Web 2.0 media. This offers an opportunity for companies to make use of blended methods when communicating change messages. There is certainly room for the interactivity that Web 2.0 offers, probably as it facilitates participation and builds trust (Msweli-Mbanga & Potwana, 2006) as employees are unlikely to access information on these mediums, but whether it should be considered more “social”, “open” or “participative” than more traditional methods of communication requires further investigation (Denyer et al., 2011).

Another reason for this contradiction in results could be ascribed to lack of knowledge of the users of Web 2. This could be remedied by training and encouraging regular use.

Both the process and the content of the communication strategy are significant. The timing of change messages, matching communication strategies to the employee profile, the use of appropriate media, flexibility and the minimisation of uncertainty are key (Goodman & Truss, 2004) in good quality communications (Soumyaja, Kamalanabhan, & Bhattacharyya, 2011).

Participation and trust could be facilitated by the use of Web 2.0 communication as the interactivity (as evident in the findings of hypothesis 2) plays a role in employees’ willingness to accept the change. Corporations who leverage the potential for mutually beneficial relationships with internal stakeholders (Mamic and Almaraz, 2013) could have the competitive advantage. It is however, important that organisations consider the organisational context as well as the change context before deciding on the medium to use as Marques (2010) has found that face-to-face settings are preferred in
specific settings while e-mail is best in others. The quality of the communication should lend itself to reinforce trust (Soumyaja et al., 2011) as was found to be significantly related to change.

The finding that employees still prefer face-to-face communication is somewhat surprising as Facebook, Twitter, LinkedIn, Pinterest and Google Plus are where the new communication scene is being built (Bochenek & Bili, 2013). Web 2.0 media offers the opportunity to meet the “adequate communication” requirement of employees that McKay et al. (2013) found to reduce employee resistance to change. Communication content on Web 2.0 media enables messages to address the “what’s in it for me” reduces intent to resist change; readiness for change mediate the relationship between contextual antecedents and intent to resist change Evaluation and selection of appropriate ESN tools are important in context of organisation; companies have an opportunity to raise the productivity through collaboration- Millard et al. (2013)

Frequent updates assist employees to keep up to date with people they do not interact with daily because microblogging happened in real time Twitter posts were considered more valuable than other media for connecting information and for prompting opportunistic conversations Zhao and Rosson (2014) which will encourage participation. As trust plays a vital role in the success of the communication of change (Truss, et al., 2006), participation and showing of principal support (Armenakis & Harris, 2002) could encourage this trust.

7.2 Recommendations to Managers

Employer organisations would do well to integrate social media mediums into change communications alongside face-to-face interaction as the benefits of community building, community interaction and 24/7 responsiveness (Bochenek & Bili, 2013) could make this platform a more attractive, cost effective alternative in the future.

The medium as much as the content that is important as the uncertainty that organisational change brings about is often due to lack of information, contradictory information or ambiguous messages Bordia, et al., (2004).

Based on the five antecedents of successful change communication messages of Armenakis and Harris (2002) and the Communication Wheel of Goodman and Truss (2004) together with the current research findings, the following model in Figure is proposed for communication to reduce employee resistance to change:
The Blended Media Communication (BMC) Model to Reduce Resistance to Change in Figure 10 combines findings of previous research with the findings of this study in an attempt to arrive at a blended communication model that can be applied to reduce resistance to change. The construction and possible uses are discussed below.

### 7.2.1 Construction of the BCM Model

The antecedents of successful change communication messages according to Armenakas and Harris (2002) are:

- **Discrepancy** - is change really necessary?
- ** Appropriateness** - is the proposed change reaction for the need?
- ** Efficacy** - can I implement the change successfully?
- **Principal support** - does the leadership show commitment?
• Personal valence- what’s in it for me?

As the Goodman and Truss (2004) communication wheel address the media, approach, mediums and message it was used to build on the antecedents of successful change communication and include the findings of this study that employee willingness to accept change and change readiness (as the opposite of resistance to change as per section 2.3) and Lewins unfreeze-move-refreeze model discussed by Boohene and Williams, (2012); Msweli-Mbanga and Potwana (2006) in section 2.2 and in Figure 1.

During the unfreeze stage discrepancy should be created through an initial face-to-face (hypothesis 1) meeting with staff by the CEO with a directive and coercive approach. This initial meeting could be followed up with a Social Media campaign whereby video recordings of the initial announcement by the CEO could be revisited (hypotheses 2).

The unfreeze stage the appropriateness of the message should also be established in order to help employees understand that the type of change is the best one for the current context of the organisation. A coercive approach, although seemingly threatening could be adapted to show the threat to the organisation and employee’s job security if the change does not happen. Face-to-face (hypothesis 1) meetings with supervisors can be supported with blended print (hypothesis 1) and online (hypothesis 2) campaigns. News stories of other companies choosing not to make necessary changes, historical stubborness of the current organisation and the undesired consequences of inaction could be shared in regular updates. The appropriateness of the message also lends itself to a consultative process which could be simultaneous with the coercive approach in face-to-face meetings. Participation can be encouraged by employees with long tenure telling their stories in interactive media (hypothesis 2) such either in personal updates or in official videos that can be shared on closed social media or internal mediums or as anecdotes in printed newsletters.

During the move stage, the communication messages can become more participative and consultative. In addressing issues of efficacy employees need to be motivated and inspired to make the change possible. Face-to-face meeting (hypothesis 1) with direct supervisors and workshops about the importance of every employee, the process to be followed and the role that the employee is expected to play can be followed up with an online storytelling campaign. Storytelling and informal communication and coaching have been found to have increased
employee engagement (Mishra, Boynton, & Mishra, 2014). The storytelling campaign could once again share the stories of employees, but also of inspirational role models who have overcome difficult circumstances and rose above to an improved next phase.

The move stage should also focus on establishing trust in the leadership’s commitment to make the change and therefore the company succeed (principal support). This could be done in face-to-face (hypothesis 1) meetings (e.g. direct appointments or breakfast with the CEO-meetings) and between supervisor. The nature of this communication should be participative and the power of the background conversations (Ford et al., 2002) as this could create could contribute to trust in leaders.

Leading up to the final stage, the refreezing phase, employees need to learn how they will be personally affected (personal valence) by the change. Change messages should be participative and directive as this is the most personal, and therefore the most emotional part that the communication needs to address.

Blended methods, using a combination of the mediums preferred by employees such as face-to-face, newsletters and e-mails (hypothesis 1) together with other Web 2.0 platforms that encourages interactivity (hypothesis 2) should be used for this purpose, but as the message is highly personal to each individual, face-to-face-meetings (hypothesis 1) with their supervisor should be the first step. This can be supported with images of the altered organisation, new organisational structure and the benefits that this holds for the company and possibly the remaining employees. These messages should contain positive messages in order for the changed organisation to get full commitment from employees.

Throughout the process, communicators should consider the organisational context, employee responses, the change program characteristics and the purpose of the communication (Goodman & Truss, 2004) in order to adapt the message content and medium as required.

7.1.2 Uses of the BMC

The proposed model hopes to address the need for a change communication model that is useable in reducing employees’ resistance to change. Employee resistance can lead to failed organisational change (Kotter, 1995). Communication has been proven to play a very important role in reducing resistance to change, but research and practice thus far has largely failed to get the communication mix right to reduce resistance through communication. By offering a blended method model,
it is hoped that companies will save costs on internal marketing campaign as they have now been provided with a framework for reducing employee resistance to change through communication.

The BMC developed in this study provides a good starting point, but should be use to develop bespoke frameworks specific to the company’s need.

7.3 Future Research Recommendations
This study sought to establish whether the use of Web 2.0 has an impact on employee resistance to change. It established that employees prefer face-to-face communication above all other communication mediums, and employees are more willing to accept change if the communications are interactive and received electronically.

Future research will benefit from an improved instrument. The quantitative study offered limitations and as research into Web 2.0 in the context of organisational change is limited, it is recommended that future studies include qualitative studies across industries. The frequency in which communication should take place is another area where organisational change communication may benefit. The field of organisational change communication may also benefit from observation studies to determine how employee users interact with Web 2.0.

Further study is needed on the impact that participation and building of trust in leadership through the use of Web 2.0 mediums such as ESN and Social Media has on reducing change resistance could add value as these are the two major contributors in reducing change. The area of smart phone communication has also been largely understudied and can add value in terms of specific mediums used for Web 2.0 communication as well as the preferred frequency with which employees want to receive Web 2.0 communication about change.

Specific Social Media platforms, such as Twitter and Facebook should be included in further studies on change communication’s role in reducing resistance to change. The ELM discussed in section 2.4.1 could be model that can be adapted and used for the application on Web 2.0 communication. Another opportunity for further studies, would be to consider the preferred frequency that employees want to receive Web 2.0 organisational messages.

The applicability of the ELM (section 2.4.1) for organisational Web 2.0 communication could contribute greatly in understanding the processes underlying changes in the judgments of objects, the variables that induce the processes, and the strength of the judgements resulting from the processes on Web 2.0.
7.4 Concluding Remarks
A change communication program focused on reducing resistance to change is likely to contribute greatly to the successful implementation of change initiatives and future of the company.

Preferred mediums of communication of employees have been found to be face-to-face, newsletters and e-mail. In contradiction the interactive- and electronic communication has been found to impact on employee's willingness to accept change, irrespective of gender.

This point to the opportunity for a blended method approach in communicating to reduce resistance. The BCM has aimed to create a model for use of blended methods by using the results from the hypotheses, together with findings of previous research. Companies who choose to have a sustainable future will need to attempt successful implementation of change initiatives. Without employees accepting rather than resist the change, these change efforts will fail.
REFERENCES


http://technicalmgmr.wordpress.com/2008/06/10/web-2-0-is-not-enterprise-2-0/


APPENDIX 1- SURVEY MONKEY QUESTIONNAIRE

Enterprise 2.0: Employee preferences during organisational change –

Part A

This questionnaire is part of an MBA research project conducted by Zelna A. Oberholster, a Master of Business Administration student at the Gordon Institute of Business Science, University of Pretoria.

This questionnaire is focused primarily on the way in which employees prefer to be communicated to in the context of organisational change, specifically what channels employees prefer, how frequently they wish to receive information and what content they expect to be in the messages about the change. There are 16 questions in this survey and it should take no longer than 10 minutes to complete the questionnaire.

Your participation is voluntary and you can withdraw at any time without penalty. Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. The information will be coded and will remain confidential. By completing the survey, you indicate that you voluntarily participate in this research. You may withdraw at any point. If you have any concerns, please contact me or my supervisor. Our details are provided below.

Researcher name: Zelna Oberholster
Email: zelna.oberholster@gmail.com
Phone: 0828395371

Research Supervisor Name: Dr. Michael Goldman
Email: mmgoldman@usfca.edu
Phone: +1.510.809.6200
Part B

Please indicate your selected response

* 1. Are you
   - Female
   - Male

* 2. How long have you been at your current employer?
   - Less than one year
   - 1-2 years
   - 3-5 years
   - 6-10 years
   - Longer than 10 years

* 3. Have you ever been affected by organisational change/ transformation (e.g. restructuring, downsizing, management change, change of location, change of systems, mergers and acquisitions, change of ownership etc.) during your working career?

   - Yes
   - No

* 4. If yes, please indicate how many times?
   - Once
   - Twice
   - More than twice

* 5. Have you ever been retrenched?

   - Yes
   - No
Enterprise 2.0: Employee preferences during organisational change – Part C1

The next section deals with social media such as Twitter, Facebook, My Space and enterprise social networking (ESN) forums such as Yammer, SharePoint, Jive, Social Cast etc. We would like to understand your preference, intention to use or opinion regarding the use of social media and ESN. Please indicate the answer that best describes your current situation.

**6. I use social media such as Facebook and Twitter**

<table>
<thead>
<tr>
<th>Social Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
</tr>
<tr>
<td>Twitter</td>
</tr>
<tr>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

**7. I use the following internal media platforms or Enterprise Social Networking (ESN) tools such as Sharepoint, Yammer, Internal blogs, electronic notice boards, Jive, Social Cast etc.**

- [ ] SharePoint
- [ ] Yammer
- [ ] Jive
- [ ] Social Cast

Other (please specify) |

**8. I would use internal media platforms (Sharepoint, Yammer, Jive, Social Cast etc.) and social media platforms (e.g. Facebook, Twitter and My Space) more regularly if I were more familiar with it**

Yes [ ]  No [ ]

**9. If you do not currently use any of the above platforms, why are you not using social media or internal media platforms?**

**10. I access my messages on**

<table>
<thead>
<tr>
<th>Platform</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td></td>
</tr>
<tr>
<td>Tablet</td>
<td></td>
</tr>
<tr>
<td>Laptop</td>
<td></td>
</tr>
<tr>
<td>Mobile/Smart phone</td>
<td></td>
</tr>
</tbody>
</table>
11. What information about the proposed organisational changes would you like to receive electronically? 

12. What information do you consider necessary to receive about change? 

13. Indicate in order of preference, the media through which you prefer to receive communication regarding change (number 1 first choice, number 2 second etc.)

- Face-to-face
- Newsletter
- Brochure
- Company Website
- Intranet
- Internal media platforms such as Yammer, Sharepoint etc.
- Electronic Link
- E-mail
- Other
**Part C2**

Please select how applicable each of these statements are in describing your preference regarding communication about change on electronic platforms, by selecting the statement that best describes your preference.

*14. I want my concerns about the proposed change to be addressed in the communication*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral/Prefer not to say</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I want my concerns to be addressed in the communication</td>
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<td></td>
<td></td>
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<tr>
<td>b. Communications about the change must be visual e.g. video, graphics, cartoons</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>c. I want to share my thoughts with other colleagues on e-message boards and see what they think about the change.</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>d. I want an opportunity to interact with management about my concerns</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>e. I want my feedback to me anonymous</td>
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<td></td>
<td></td>
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<tr>
<td>f. My employer expects me to self-search intranet for information about change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>g. I prefer an electronic link to relevant information, rather than self-search</td>
<td></td>
<td></td>
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<tr>
<td>h. I want communication about the change to focus on the positive impact of the proposed change</td>
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</tr>
<tr>
<td>i. I prefer more written communication (newsletters, e-mails, presentations and brochures) to explain the process</td>
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</tr>
<tr>
<td>j. I trust my manager/supervisor</td>
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<tr>
<td>k. I trust the company's leadership</td>
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</tbody>
</table>
**15. Please rank in order of preference how you want to receive electronic messages about the change**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Via cell phone (SMS, MMS)</td>
</tr>
<tr>
<td></td>
<td>By e-mail</td>
</tr>
<tr>
<td></td>
<td>On the intranet</td>
</tr>
<tr>
<td></td>
<td>By external link (a link to a website)</td>
</tr>
<tr>
<td></td>
<td>On Social Media</td>
</tr>
<tr>
<td></td>
<td>None of the above</td>
</tr>
</tbody>
</table>

**16. I want to receive electronic (link, e-mail, intranet, social media, mobile) messages about the change**

- [ ] More than once a day
- [ ] Once a day
- [ ] Once a week
- [ ] Once a month
- [ ] Never
This is the end of the survey. Thank you for your participation, time and support.
APPENDIX 2- DigiSurvey® QUESTIONNAIRE

Survey: Employee preferences during organisational change

Your participation in this study is completely voluntary. Should you not feel comfortable answering any of the questions or wish to withdraw from the survey, you are able to exit the survey at any point.

This survey is completely anonymous and therefore no personal data will be gathered at any stage.

Thank you for your time and support. Please start the survey now, by clicking on the continue button below.

Are you *
- Female
- Male

How long have you been at your current employer? *
- Less than one year
- 1 - 2 years
- 3 - 5 years
- 6 - 10 years
- Longer than 10 years

Have you ever been affected by organisational change/transformation (e.g. restructuring, downsizing, management change, change of location, change of systems, mergers and acquisitions, change of ownership etc.) during your working career (current and past employers)? *
- Yes
- No

Please indicate how many times? *
- Once
- Twice
- More than twice

Have you ever been retrenched? *
- Yes
- No

The next section deals with social media such as Twitter, Facebook, My Space and enterprise social networking (ESN) forums such as Yammer, SharePoint, Jive, Social Cast etc. We would like to understand your preference, intention to use or opinion regarding the use of social media and ESN. Please indicate the answer that best describes your current situation.
How often would you say you use social media (e.g. Facebook, Twitter and other Social Media platforms)

<table>
<thead>
<tr>
<th></th>
<th>More than once a day</th>
<th>Once a day</th>
<th>More than once per week</th>
<th>Once per week</th>
<th>Less than once a month</th>
<th>Once a month</th>
<th>More than once a month</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook *</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Twitter *</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other *</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Please indicate the other social media platforms that you use besides Facebook and Twitter. *

---

I use internal media platforms or Enterprise Social Networking (ESN) tools such as Sharepoint, Yammer, Internal blogs, electronic notice boards, Jive, Social Cast etc. (Select all that apply)? *

- None
- SharePoint
- Yammer
- Jive
- Social Cast
- Other

---

I use internal media platforms or Enterprise Social Networking (ESN) tools such as Sharepoint, Yammer, Internal blogs, electronic notice boards, Jive, Social Cast etc.: *

- More than once a day
- Once a day
- More than once per week
- Once per week
- Less than once a month
- Once a month
- More than once a month
- Never

---

I would use internal media platforms (Sharepoint, Yammer, Jive, Social Cast etc.) and social media platforms (e.g. Facebook, Twitter, My Space) more regularly if I were more familiar with it *

- Yes
- No

---

If you do not currently use any of the above platforms, why are you not using social media or internal media platforms? *

- I do not know how to use these platforms
- I have never heard of them
I do not have time
Other

I usually access my electronic messages on the following devices:
- Personal Computer (PC)
- Smart/Mobile Phone
- Tablet

I access my electronic messages on the following platforms:
- Blogs
- Email
- Internal platforms
- Social Media
- Other

Please choose the option that best described the frequency that you access your electronic messages:
- More than once a day
- Once a day
- More than once per week
- Once per week
- More than once a month
- Once a month
- Less than once a month
- Never

What information about the proposed organisational changes would you like to receive electronically?
- Information about new policies
- Information about new structures
- The reasons for the proposed change
- I do not want to receive information about organisational change electronically
- Other

What information do you consider necessary to receive about change in any format?
- New policies
- New structures
- The reasons for change
- The type of change
- How the change will affect me
- The proposed timeline of the change process
- Other
Indicate in order of preference, the media through which you prefer to receive communication regarding change (number 1 first choice, number 2 second etc.)

- Face to face
- Newsletter
- Brochure
- Company Website
- Intranet
- Internal media platforms such as Yammer, SharePoint etc.
- Electronic Link
- Email
- Other

Rank values must be between 1 and 9

This section focuses on how using social media and internal platforms to communicate the change message to you affects your attitude towards the change process. Consider your attitude for past, present and future employers in answering the questions below.

Please select how applicable each of these statements are in describing your attitude and willingness to accept change. Each question should be answered by selecting the statement that best describes how your attitude will be, has been or is affected.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral/Prefer not to say</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will be more willing to accept the change process if I receive messages addressing the reasons for change electronically.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I will accept change if I can play an active role in the process, such as interacting with management on social media.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I will accept the change if I receive messages about the change at an appropriate frequency</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I will be more likely to accept the change if I can access communication about it electronically.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I will be more likely to accept the change if I can access communication when I want to.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

This section focuses on your preference regarding communication about organisational change on electronic platforms.

Please select how applicable each of these statements are in describing your preference regarding communication about change on electronic platforms. Your choice should reflect your preference at past, present and future employers. Each question should be answered by selecting the statement that best describes your preference.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral/Prefer not to say</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I want my concerns to be addressed in the communication.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Question</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Communications about the change must be visual e.g. video, graphics, cartoons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to share my thoughts with other colleagues on e-message boards and see what they think about the change.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want an opportunity to interact with management about my concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to provide anonymous feedback about the organisational change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My employer expects me to selfsearch intranet for information about change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer an electronic link to relevant information, rather than selfsearch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want communication about the change to focus on the positive impact of the proposed change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer more written communication (newsletters, emails, presentations and brochures) to explain the process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I trust my manager/supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Please rank in order of preference how you want to receive electronic messages about the change**

<table>
<thead>
<tr>
<th>Method</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Via cell phone (SMS, MMS)</td>
<td></td>
</tr>
<tr>
<td>By email</td>
<td></td>
</tr>
<tr>
<td>On the intranet</td>
<td></td>
</tr>
<tr>
<td>By external link (a link to a website)</td>
<td></td>
</tr>
<tr>
<td>On Social Media</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>None of the above</td>
<td></td>
</tr>
</tbody>
</table>

Rank values must be between 1 and 7

**I want to receive electronic (link, email, intranet, social media, mobile) messages about the change**

- More than once a day
- Once a day
- Once a week
- Once a month
- Less than once a month
- Never