

Preparing employees for technological change: An investigation into what communication content employees want and how they want to receive it in the face of technological upheaval ¹

Charlotte Wallis

1. Introduction

Technological change is one of the biggest challenges faced by organisations as new technologies present new ways for companies to serve their clients. It is understood as the introduction of new software or processes that transform how employees work to increase efficiency and productivity in order to meet increasingly high customer expectations (Nordveng et al., 2008). Technological change involves transformation at the organisational and individual level and requires individuals to make changes to their behaviour (Law, 2009). Organisation X, a financial advisory firm, is considering introducing a new customer relationship management system (CRM) to achieve greater efficiency and productivity, despite perceived widespread scepticism among staff. This reluctance towards the proposed programme could be interpreted as a lack of readiness, and understanding of, the need for change. As readiness is 'arguably one of the most important factors involved in employees' initial support for change initiatives' (Holt et al., 2007, p. 234), it is interesting to consider how internal communication could contribute towards preparing staff for technological change.

Welch and Jackson (2007) argue that research into employee preferences for channel and content of internal corporate communication is required to ensure it meets employees' needs. While considerable literature assesses change implementation from a management perspective, very little research considers what information employees' want during times of change (Harrison, 2015, p. 63). According to Ruck and Welch (2012), internal communication assessment currently focuses on the channels used, or the volume of information generated, rather than assessing the content of the communication itself.

This paper seeks to evaluate the literature that does exist on content in order to identify subject areas that employees want to hear about when preparing for technological change. It will also critically discuss the use of channels for delivering key messages. Before addressing these topics, the paper will consider the relevance of internal communication to change management. Specifically, how change management models can be applied to communication strategies to prepare employees for change.

¹ This paper was the result of a research project for a Chartered Institute of Public Relations Internal Communication Diploma, course taught by Dr. Kevin Ruck, PR Academy, Kent, United Kingdom. www.pracademy.co.uk

2. Literature review

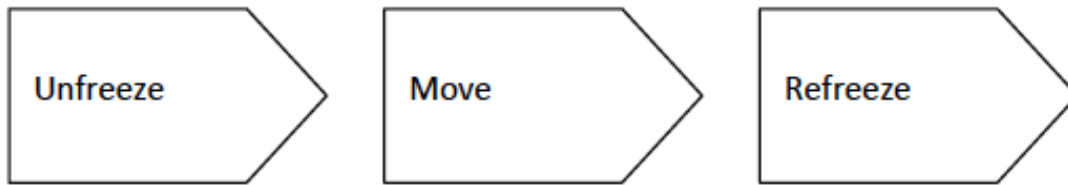
2.1 Change management

When considering change management within an organisation, the role of internal communication is important. The literature on change management acknowledges the link between successful change projects and effective internal communication (Harrison, 2015). Change projects present a huge undertaking for those involved, as the likelihood of succeeding is low. For example, research into the success rate of change initiatives reveals that around 70% fail (Salem, 2008, p. 334). The reasons for this vary but the literature cites poor internal communication as a contributing factor (Quirke 2008, Johansson and Heide, 2008). Conversely, a study by Barrett (2006) revealed that strategic employee communication is essential to the success of any organisation. Following Barrett's research into high-performing companies and success in employee communication Barrett concludes that when internal communication is used effectively, it can act as the glue that binds the change process together (2006, p. 231). Evidently, internal communication plays a key role in the successful implementation of change, but how can it be used to prepare employees who may be resistant towards a proposed technological change?

The introduction of new technology is not necessarily always viewed negatively. However, due to its constant evolution, employees could resist the introduction of certain new technological processes due to a fear of the unknown. Proctor and Doukakis (2003, p. 274) argue that a fear of the unknown could develop if awareness and understanding for the change are not achieved during the early stages of the project. Similarly, Quirke (2008) estimates that when employees resist change implementation, it is often a symptom of a lack of understanding about the 'why'. In his research Salem (2008) identifies seven communication behaviours that accompany change failure, including not communicating enough information. In support of this, Nordvang et al., explain that employee support for change initiatives 'increases as they become more familiar with what the proposed changes involve and as they develop a better understanding of how they will be personally affected' (Nordvang et al., 2008, p. 222). From examining these publications, it is reasonable to assume that internal communication can help prepare employees successfully for technological change is by increasing awareness and understanding about the need for change, thereby overcoming potential resistance. Arguably, effective internal communication will significantly influence employees' support for the proposed change if they understand the reasons behind it (Welch and Jackson, 2007).

To explore further how internal communication can be used to prepare employees for technological change, the discipline needs to be examined within the context of two established change management models. Harrison (2015) proposes that the most well-known change management model is Lewin's three-step model (Lewin, 1951, cited by Johansson and Heide, 2008, p. 290), as shown in Figure 1. Lewin suggests that change happens in three distinct, linear steps; unfreezing the current state, moving to the desired new state then refreezing to stabilise and embed change (Harrison, 2015, p. 59).

Figure 1: Lewin's model of change



To prepare employees for change, the first step, 'Unfreeze', should be considered. To unfreeze the state of a company, Lewin advocates 'emotional stir up' in order to 'break open the shell of complacency and self-righteousness' (Lewin, 1951, p. 229 cited in Smith, 2005 p. 409). However, unfreezing is not necessarily straightforward as all employees may not readily accept that a problem exists, even if it is obvious (Proctor and Doukakis, 2003). Lewin introduced force field analysis, which addresses the difficulties of moving companies through each stage. Its underlying principle is that driving forces need to outweigh resistant ones if change is to happen (Cameron and Green, 2009, p. 110). Arguably, a driving force for change is motivation.

When considering how to motivate employees to adapt to technological change, it is interesting to consider the differences between intrinsic motivation and extrinsic motivation, as highlighted by Sathe (2000). People are extrinsically motivated by rewards or punishments whereas intrinsic motivation occurs when people are genuinely convinced of the need for change. It is intrinsic motivation that changes attitudes, and creating it has three stages. First, people must understand what the problem is and why change is needed. Second, they must accept that the change being proposed is viable and is the best way to solve the problem. Third, they must believe that they personally need to change.

The following steps presented by Proctor and Doukakis (2003, p. 275) could be taken to generate intrinsic motivation:

- Create an awareness of problems that exist so people recognise the need for change
- Point out the potential hazards of not accepting the need for change
- Stress the benefits to the individuals to encourage acceptance

These steps presented by Proctor and Doukakis could be viewed as the 'sell' approach to change. Contrastingly, Bordia et al. (2004, cited by Johansson and Heide, 2008, p. 293) conclude that if employees have been involved in the change process they will feel more in control of the result, which could have a positive impact on their adoption of the proposed change.

In addition to Lewin's model, Kotter (1995) identified eight common errors made by organisations when attempting to implement transformative projects and developed an eight-step plan for successful change, shown in table 1.

Table 1: Kotter's eight steps for successful large-scale change (Kotter 1995)

Step	Action
1	Increase urgency
2	Build the guiding team
3	Get the vision right
4	Communicate for buy-in
5	Empower action
6	Create short-term wins
7	Don't let up
8	Make change stick

According to Kotter, increasing the sense of urgency is fundamental for preparing employees for change as they need to believe that staying as they are is more undesirable than moving to a new state (Harrison, 2015, p. 59). Similarly to Lewin's model, Kotter clearly advocates disrupting accepted routines early in the change process in order to prepare employees for change. Arguably, employees may be less resistant to the proposed change once they are aware of, and understand the undesirable and unacceptable present.

However, whilst the first step in Kotter's plan is crucial to succeed, he fails to address the fine balance between convincing staff that business as usual is totally unacceptable and putting the organisation's employees under more stress than that with which they can cope (Smith, 2005, p. 409). Instead, he stresses that if the urgency rate is not high enough, the transformation process cannot succeed (Kotter, 1995). Yet, by increasing a sense of urgency change leaders risk creating a perception of an extreme and sudden departure from traditional values and, 'employees who view change as violating their values will resist change and cling to existing work patterns' (Quirke, 2008). Smith suggests, 'deliberate unsettlement needs to be sufficient to provoke change while not being so extreme as to tip organisations into disfunctionality' (Smith, 2005, p. 409). Therefore, while Kotter's first step is undoubtedly necessary, perhaps it is important to approach this step cautiously in order to sustain equilibrium between unsettling and maintaining a sense of order. If these balances are found then motivation and readiness for change will likely be generated (Smith, 2005; Quirke, 2008).

A review of Lewin and Kotter's models highlights that creating awareness and understanding for change is critical in order for change projects to progress. Crucially, the literature recognises the importance of internal communication to achieve this. First, Elving (2005) argues that one of the main purposes of internal communication about change is to raise awareness and understanding among organisational members, as this will positively impact on their readiness for change. Second, Armenakis and Harris (2002) consider internal communication as a tool for informing, explaining and changing attitudes. Third, Proctor and Doukakis (2003) conclude that the role of internal communication within the change process should be to encourage motivation and commitment through understanding. The lesson from the above publications is pertinent when considering preparing employees for technological change; internal communication is critical for motivating employees about the need for change and awareness and understanding are prerequisites for achieving this.

After establishing that this discipline is key for generating support for change projects it is necessary to consider how communicators share information about change to increase employees' awareness and understanding.

2.2 Channels

When preparing employees for change, communication can inadvertently cause resistance and even failure if the channels are not appropriate (Harrison, 2015, Larkin and Larkin, 2004). Therefore the application of medium theory to choosing the suitable channel appears most logical. Medium theory was first developed by Marshall McLuhan and extended by Donald Ellis (Littlejohn and Foss, 2008, p. 290 cited by Ruck and Welch, 2012). It focuses on the fixed features of media and how the characteristics of one medium are physically, psychologically and socially different from other media (Meyrowitz, 1994, cited by Welch, 2012 p. 248). The appropriate use of media is important as it will limit the probability of communications failing (Qvortrup, 2006, p. 351 cited by Welch, 2012). Evidently, medium theory is relevant for internal communicators looking to prepare employees for change as it guides them on which channel to use to increase the likelihood of their communication strategies succeeding.

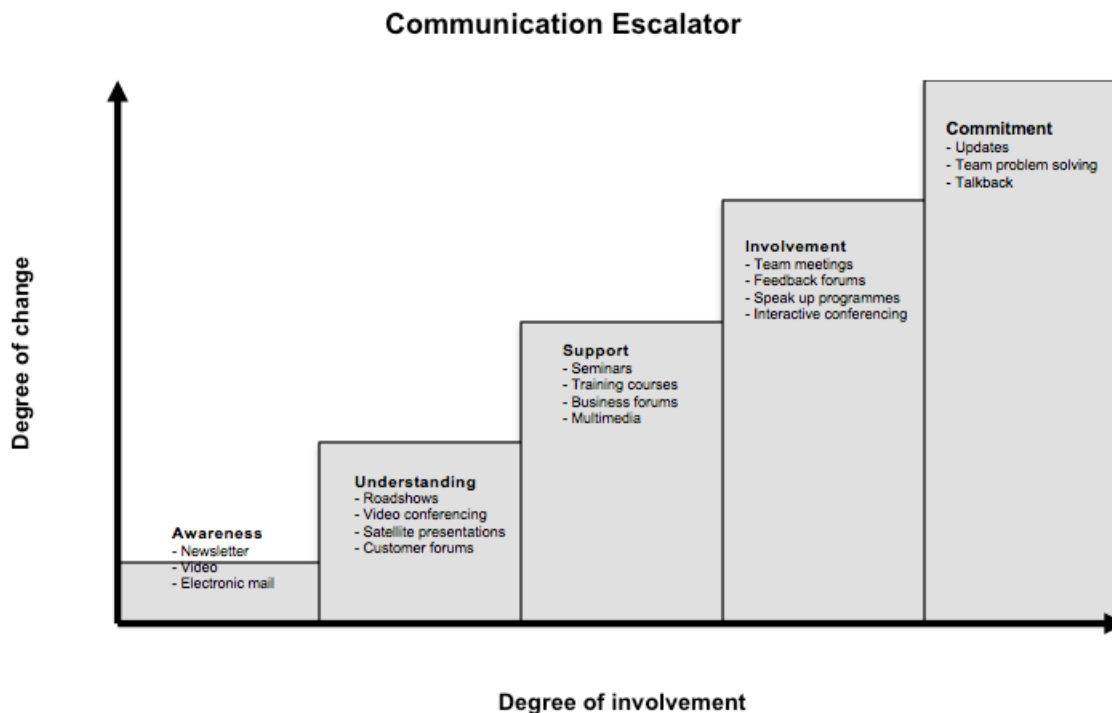
In order to 'limit the improbability of communication success' (idem) Qvortrup suggests three basic dimensions of any communication medium need to be considered: dissemination, understanding, and effect. Welch (2012) argues that a fourth dimension should be added to medium theory, which is the psychological affect of internal media on employees. Welch questions whether media can produce positive and negative affects in employees. This is arguably the case. Jessup (2002) points out that different Myers-Briggs Type Indicator® (MBTI) profiles have different needs for communication, which apply more than ever in change situations. For example, extroverts typically prefer to listen and talk about forthcoming changes, while introverts prefer written communications that can be studied in privacy. In order for change leaders to build awareness and understanding among employees effectively, they need to send out appropriate messages in formats that are useful and acceptable to the recipients (Welch, 2012, p. 248). If they do not consider employees' internal media preferences the impact could be significant. The receipt of internal media could provoke negative affects in employees, which may impact on their awareness and understanding of the change, especially if they choose to ignore future messages in the same format as a result of previous negative experiences. Thus, the psychological affects of different channels need to be considered alongside the dimensions originally set out by Qvortrup when considering how to prepare employees for technological change effectively.

The psychological affects a media has on employees could be attributed to whether it is rich or lean. Quirke suggests that understanding the principle of media 'richness' is key to choosing the most appropriate channel (Quirke, 2008, p. 158). According to Quirke, whether a media is rich or lean depends on how much it allows for interactivity, language variety and social and emotional cues (Quirke, 2008, p. 158-9). For example, a face-to-face meeting is 'rich' as it facilitates interaction and allows the recipient to read non-verbal cues in addition to the words, such as body language and tone. Conversely, an email could be considered 'lean', as there is very little additional information to interpret beyond the written message. Choosing the right media for the intended purpose should be considered carefully as communicating a complex message via lean media could result in negative affects such as misunderstanding and

confusion. Likewise, communicating a simple message via rich media could result in information overload and excess 'noise' (Quirke, 2008, p. 159). In the critical stages of creating a sense of urgency to prepare employees for change, the risk of misunderstanding needs to be mitigated.

While medium theory offers an explanation why specific mediums deliver different results, Quirke's Communication Escalator (figure 2) illustrates how the use of richer media relates to the degree of involvement with the change (Quirke, 2008, p. 159). As already established, using internal communication to create awareness and understanding for a planned change is a key first step to change success. According to Quirke's model, building awareness requires the use of lean media whereas increasing understanding about the change demands the use of richer media that facilitates feedback and discussion.

Figure 2: Quirke's Communication Escalator (Quirke, 2008, p. 159)



However, Quirke's emphasis on the use of one-way channels to create awareness could be problematic for a change project. One-way channels do not encourage feedback nor invite dialogue, thus they are easy to ignore which could impact on employees' knowledge of the change. To counter this, Proctor and Doukakis recommend the use of open communication channels to create awareness of the change, which encourage interaction. The authors suggest that, 'through open communication channels people can [...] understand the necessity for new ideas' (Proctor and Doukakis, 2003, p. 275). Similarly, Hargie and Tourish (2009, cited by Ruck and Welch, 2012) argue that face-to-face communication is the preferred primary method of information transmission, such as a face-to-face meeting with senior management. The use of rich media in this instance is appropriate for creating a sense of urgency that Kotter states is

necessary for change to succeed; it is difficult to ignore and the use of social and emotional cues illustrate the importance of the necessary change. Therefore, while Quirke's assessment of the necessity of lean media to build awareness is valid, this sort of media could be problematic with regards to preparing employees for change, as it does not require any interaction by those who will be affected. Arguably, change leaders should consider integrating lean and rich media when preparing employees for change, regardless of the latter group's degree of involvement with the transformation as this will help to clarify their understanding of the need for change.

2.3 Content

Thus far this literature review has considered how internal communication can be used to prepare employees for technological change by creating awareness and understanding. Specifically, it has considered how internal communication can be applied to change management models and medium theory to achieve these outcomes. However, while a lot of literature exists on the use of channels and change management, 'there is very little direct research into what information staff expect during times of change' (Harrison, 2015, p. 63). Ruck and Welch (2012) found that studies tend to examine change implementation from a management perspective, without considering employees' needs for content. Fundamentally, internal communication assessment currently focuses on channels used, or volume of information generated: 'essentially process explanations, rather than the content of the communication itself' (Ruck and Welch, 2012, p. 301). Well-established tools for assessing internal communication developed in the 1970s are still used, including the Communication Satisfaction Questionnaire and the International Communication Association (ICA) Audit, among others (Clampitt, 2009). The ICA Audit includes 122 questions. Five of the eight sections consider the amount of information, while timeliness, organisational relationships and satisfaction have one section each. Hargie and Tourish (2009, cited by Ruck and Welch, 2012) developed an adapted version. In this version, one section explores content. However, Ruck and Welch (2012) observe that the survey does not explore whether content provided is relevant or appropriate from an employee perspective, much less so during times of change.

Ruck and Welch reviewed 12 academic and consultancy studies representing almost 11,000 respondents and found that minimal attention had been given to what employees would like their organisations to communicate (Ruck and Welch, 2012, p. 295). They found just one study that asked people what they wanted internal communications to be about. Table 2 shows the six topics that were cited:

Table 2: Six topics for internal communication

	Topic
1	How problems that I report in my job are dealt with
2	How my job contributes to the organisation
3	How decisions that affect my job are reached
4	Things that go wrong in my organisation
5	Staff development opportunities
6	My performance in my job

Overall it appears that employees want to hear about information relating to the individual. If these topics are important to employees under normal circumstances presumably they would be important during change too. Despite the lack of research into content requirements during change, Harrison (2015) found that an analysis of the literature on change and change communication revealed recurring themes, shown in table 3.

Table 3: Communication themes (Harrison, 2015)

Theme	References
1. The vision for the change	Gill (2003) Johansson and Heide (2008) Kotter (1995 and 1996) Kotter and Cohen (2002) Moss Kanter (2000)
2. Why the change is needed	Armenakis (1993) Johansson and Heide (2008) Kotter (1995 and 1996) Kotter and Cohen (2002) Proctor and Doukakis (2003) Sathe (2000)
3. Why individuals need to change	Lawson and Price (2003) Sathe (2000)
4. The organisation's ability to make the change	Armenakis (1993) Sathe (2000)
5. Individuals' ability to make the change	Armenakis (1993) Sathe (2000)
6. How individual roles will change	Salem (2008) Strebel (1996)
7. Benefits to the organisation	Kotter (1995 and 1996) Kotter and Cohen (2002) Proctor and Doukakis (2003)
8. Benefits to individuals	Kotter (1995 and 1996) Kotter and Cohen (2002) Proctor and Doukakis (2003)
9. Schedule for change	Proctor and Doukakis (2003) Quirke (2008)

To prepare employees for technological change, themes 1 – 3 in table 4 are significant. These themes align with Kotter and Lewin's first steps for managing change through raising awareness and creating understanding as they provide the evidence employees need to reject the status quo. Proctor and Doukakis (2003) found that stressing the benefits to individuals encourages

buy-in, thus reducing potential resistance to change. Consequently, theme 8 is clearly relevant to change projects too.

A comparison of the topics in table 3 with those in table 4 reveals that information about additional themes relating to the organisation become necessary during change. Perhaps they become more relevant to employees because an understanding of what impact the change will have on the company could provide deeper insight into how individual roles may be affected. Conversely, during periods of stability employees are possibly less concerned about the status of the organisation and more so with their individual performance.

These topics were used to structure the following research into what content employees at Organisation X want to hear about when faced with technological change.

3. Methodology

3.1 Research objectives

The literature review explored how internal communication can prepare employees for technological change by choosing the appropriate channels to communicate prospective change in order to create awareness and understanding. However, the literature review revealed that little research has been done into what content employees want to hear about in the early stages of a change programme. Thus, the following research questions were developed:

1. What content do employees want to hear about when faced with technological change?
2. What information about technological change is most interesting and relevant to them?
3. Do employees favour an integrated use of rich and lean media when learning about technological change?

3.2 Methodology

This study carried out quantitative rather than qualitative research in the form of a questionnaire. This method was considered preferable, as quantitative research reveals what people think within an organisation and how many people think it (Quirke, 2008, p. 347). Recently, there has been growing support for using both quantitative and qualitative methods as using both could increase result's validity and generalisability (Easterby-Smith et al., 2012, p. 61). However, Easterby-Smith et al., (2012) advise exercising caution towards a wholesale approach. One of their arguments against the use of mixed methods is that it requires substantially more resources. Due to the project's various limitations, the necessary resources to carry out both methods were unavailable.

There are limitations to questionnaires that need to be considered too. This project used an Internet-based tool for which Saunders et al., (2009) sets the benchmark for online responses at 30% in order to accurately indicate general views within an organisation. However, Organisation

X employs less than 90 staff in its UK offices so a large proportion of the workforce needed to respond in order to achieve a 30% response rate. Therefore, it was possible that the 30% target would not be met. Thus, the questionnaire was carefully designed so that a high response rate would be achieved.

3.3 Design

Key factors for increasing response rates to a survey include design and layout. As Quirke emphasises, the survey needs to be easy-to-use and questions should be logically ordered and consistently laid out (Quirke, 2008, p. 352). Therefore, this project used an Internet-based survey tool as these tools present information in a digestible way. Additionally, the use of close-ended questions and an attitudinal summated rating scale (Likert) facilitates ease of participation, thus improving the likelihood of high response rates. Additionally, Easterby-Smith et al., (2012, p. 224) recommend the following in order to ensure a high response rate:

- Make the survey short and easy
- Explain the purpose of the survey clearly
- Give assurances of confidentiality and anonymity
- Send out reminders
- Provide incentives

In light of these recommendations, considerable care was taken when designing and distributing the questionnaire. For example, the questionnaire was piloted among a small group of staff to ensure the survey did not take longer than ten minutes to fill in. This also helped to ensure the language was appropriate and that any misunderstandings or ambiguities within the questions were corrected before the survey was distributed to the wider organisation. A covering email also highlighted that the data would be used to inform communication planning for future technological implementation. This was an attempt to address the what's in it for me factor and increase the response rate (Clampitt, 2009). Reminders were also sent out a week before the deadline to prompt any non-responders to participate. However, it was not possible to provide incentives, as this would involve revealing who had taken part, thus contradicting the promise of confidentiality and anonymity.

3.4 Sampling

A non-random, self-selecting or volunteer approach was used (Blaxter et al, 2006). The survey was sent out across all staff groups via email. This increased the probability of a high response rate by providing everyone with the same opportunity to participate in the survey. According to Quirke (2008), selecting a representative sample may yield lower response rates and therefore not supply that much information. Furthermore, sampling is recommended if the organisation frequently runs research projects to avoid burdening participants. However, Organisation X does not frequently circulate questionnaires, therefore the risk of employees suffering from 'questionnaire fatigue' (Quirke, 2008, p. 348) was not likely.

4. Results

4.1 Responses

The survey was sent out to all teams and had 44 responses, the equivalent of a 51% response rate. This was satisfactory as Saunders et al., (2009) sets the benchmark for responses to online surveys at 30%.

4.2 Communication content needs

Respondents were shown a list of 11 themes and asked to rank the importance of each theme for helping them prepare for technological change. The results are shown in table 4.

Table 4: The importance of receiving communication on 11 themes prior to technological change

Answer Options	Not important at all	Slightly important	Moderately important	Important	Very important
Why the change is necessary (Theme 1)	1	3	13	21	6
If you may need to change the way you work (Theme 2)	1	0	2	18	23
In what ways your role might be affected (Theme 3)	1	0	4	18	21
How the change will benefit the organisation (Theme 4)	1	2	14	20	7
How the change will benefit you (Theme 5)	2	1	9	18	14
How the change will be implemented (Theme 6)	3	6	7	22	6
The timescale for the proposed change (Theme 7)	3	6	16	16	3
The expected outcomes (Theme 8)	1	1	11	24	7
The objective of the proposed change (Theme 9)	1	2	15	13	13
Opportunities for training on the new system (Theme 10)	2	5	10	18	9
Where you can access further information/details about the proposed change (Theme 11)	6	11	12	13	2

The free text option of 'Other' was included at the end of the list so that employees had the opportunity to add a theme if they felt it had not been captured elsewhere. The survey received no responses to this.

Table 4 shows that the modal response – the response most frequently selected (Easterby-Smith et al., 2002) was 'Important'.

Table 5 ranks the themes in order of importance based on how many respondents felt they were 'very important' and 'important'.

Table 5: Themes ranked by importance

Answer Options	Number of respondents	Percentage of respondents
If you may need to change the way you work (Theme 2)	41	93%
In what ways your role might be affected (Theme 3)	39	89%
How the change will benefit you (Theme 5)	32	73%
The expected outcomes (Theme 8)	31	70%
How the change will be implemented (Theme 6)	28	64%
Why the change is necessary (Theme 1)	27	61%
How the change will benefit the organisation (Theme 4)	27	61%
Opportunities for training on the new system (Theme 10)	27	61%
The objective of the proposed change (Theme 9)	26	59%
The timescale for the proposed change (Theme 7)	19	43%
Where you can access further information/details about the proposed change (Theme 11)	15	34%

The themes that scored most highly in importance were:

- If you may need to change the way you work
- In what ways your role might be affected
- How the change will benefit you

The themes that scored the lowest in importance (less than half of respondents) were:

- The timescale for the proposed change
- Where you can access further information/details about the proposed change

Respondents were then asked to what extent they are currently formally told about these topics before technological change implementation.

Table 6: How often these themes are formally communicated to employees

Answer Options	Never	Seldom	Sometimes	Often	Almost always
Why the change is necessary (Theme 1)	0	6	20	10	8
If you may need to change the way you work (Theme 2)	1	10	13	11	9
In what ways your will role be affected (Theme 3)	5	10	15	6	8
How the change will benefit the organisation (Theme 4)	0	8	16	10	10
How the change will benefit you (Theme 5)	2	10	14	13	5
How the change will be implemented (Theme 6)	1	7	15	13	8
The timescale for the proposed change (Theme 7)	2	7	11	14	10
The expected outcomes (Theme 8)	2	4	19	11	8
The objective of the change (Theme 9)	1	3	20	7	13
The opportunities for training on the new system (Theme 10)	1	5	15	11	12
Where you can access further information/details about the proposed change (Theme 11)	2	12	16	8	6

The modal response was ‘Sometimes’.

Table 7 ranks the eleven themes against the total number of respondents who selected ‘never’ and ‘seldom’.

Table 7: Themes ranked by whether employees ‘seldom’/‘never’ receive communication about them

Answer Options	Number of respondents	Percentage of respondents
In what ways your will role be affected (Theme 3)	15	34%
Where you can access further information/details about the proposed change (Theme 11)	14	32%
How the change will benefit you (Theme 5)	12	27%
If you may need to change the way you work (Theme 2)	11	25%
The timescale for the proposed change (Theme 7)	9	20%
How the change will benefit the organisation (Theme 4)	8	18%
How the change will be implemented (Theme 6)	8	18%
Why the change is necessary (Theme 1)	6	14%

The expected outcomes (Theme 8)	6	14%
The opportunities for training on the new system (Theme 10)	6	14%
The objective of the change (Theme 9)	4	9%

The themes employees felt they heard least about generally relate to the impact of the change on the individual, including:

- How their role will be affected
- Where they can access further information about the proposed change
- How the change will benefit them
- If they may need to change the way they work

The themes at the bottom of the table, which therefore indicate higher levels of communication about the topics include:

- Why the change is necessary
- The expected outcomes
- The opportunities for training on the new system
- The objective of the change

Table 8 compares the percentage of respondents who felt that communication on these themes was important or very important for preparing for technological change to those who indicated they were often or almost always told about each theme.

Table 8: Agreement with need and frequency of communication

Theme	Percentage of respondents	
	Important or very important to receive information	Often or almost always receive information
If you may need to change the way you work (Theme 2)	93%	45%
In what ways your will role be affected (Theme 3)	89%	41%
How the change will benefit you (Theme 5)	73%	32%
The expected outcomes (Theme 8)	70%	45%
How the change will be implemented (Theme 6)	64%	55%
How the change will benefit the organisation (Theme 4)	61%	48%
Why the change is necessary (Theme 1)	61%	43%
The opportunities for training on the new system (Theme 10)	61%	52%
The objective of the change (Theme 9)	59%	32%

The timescale for the proposed change (Theme 7)	43%	41%
Where you can access further information/details about the proposed change (Theme 11)	34%	45%

While themes 2, 3 and 5 scored highest in importance, less than half the respondents felt they often or almost always received information about them.

Theme 11 scored the lowest in terms of importance yet relatively highly in relation to how often employees receive communication about it.

4.3 Channels

Employees were asked to identify through which channels they prefer to hear about technological change. Of the nine channels suggested, including the option for 'other' the three preferred channels were:

- Email briefings (89%)
- Quarterly staff meetings (69%)
- Internal newsletter (38%)

Employees were asked which channels were the most useful to hear about technological change through. The top three channels were:

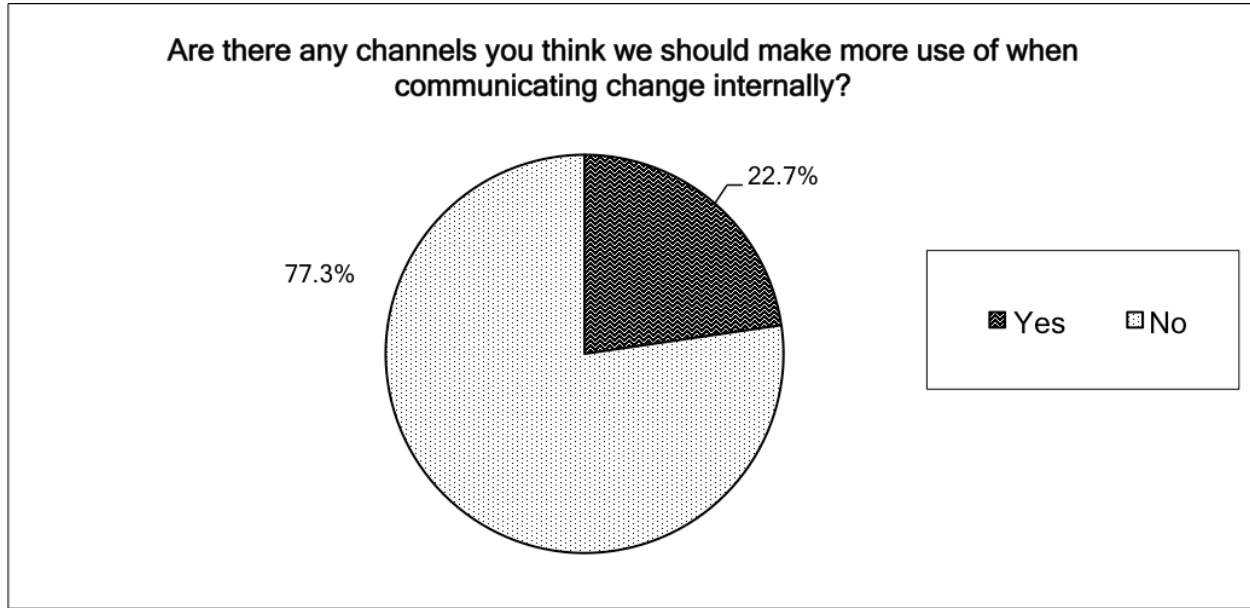
- Email briefings (86%)
- Quarterly staff meetings (73%)
- Line managers (41%)

When asked about how employees prefer to give feedback about proposed technological change, the three preferred channels were:

- Line managers (66%)
- Email briefings (52%)
- Sector meetings (27%)

Employees were asked whether there were other channels that change leaders should use when communicating about new technology projects.

Graph 1: A pie chart showing the responses to the question, 'Are there any channels you think we should make more use of when communicating technological change internally?'



While 77.3% answered 'no', 22.7% answered 'yes'. The answers are presented in table 9:

Table 9: Channels employees want change leaders to use more

Respondent	Response
Respondent A	Internal meetings, presented by senior leaders
Respondent B	Bespoke email announcements
Respondent C	Quarterly staff meetings
Respondent D	Email and face-to-face
Respondent E	Extranet
Respondent F	Line managers
Respondent G	Developing internal sponsors for projects giving in depth explanations for the change
Respondent H	Line managers
Respondent I	Individually

An analysis of the responses shows a common theme among 7 out of the 9 responses: a request for more face-to-face communication.

5. Discussion

5.1 Content

The research aimed to answer the following questions:

- What content do employees want to hear about when faced with technological change?
- What information about technological change is most interesting and relevant to them?

Out of the 11 themes suggested, the three most important themes employees want to hear about relate to the individual:

- If they may need to change the way they work (Theme 2)
- In what ways their role might be affected (Theme 3)
- How the change will benefit them (Theme 5)

However, between 25 – 34% of employees feel that they seldom or never receive communication about these themes. Proctor and Doukakis (2003, p. 268) explain that resistance to change emanates from many sources, including a lack of perceived benefits. In light of Proctor and Doukakis's assertion, more emphasis needs to be placed on communicating the above themes to ensure employees are well informed about how the change will positively affect individuals. Only then will they be motivated to accept ideas if they believe they are in their interests (Proctor and Doukakis, 2003). Respondents were less preoccupied with receiving communication about how the change would affect the company. While Harrison's research (2015) suggests that communication about the impact of change on the organisation is necessary, perhaps respondents felt that this theme was not highly important because the type of technological change was not specified. Therefore, change was possibly not perceived as a threat to individual roles when presented like this. In order to investigate this hypothesis, further qualitative research should be carried out to investigate why respondents feel the way they do. It would also be interesting to see if this theme gained in importance once the type of technological change was specified.

The themes that scored the lowest in importance included:

- The opportunities for training on the new system
- The timescale for the proposed change
- Where employees can access further information/details about the proposed change

The stage a change programme is at will likely affect the needs for communication on different subjects. In the early stages of preparing employees for proposed technological change, employees may be less concerned about opportunities for training on the new system as it has yet to be implemented. Worryingly, employees did not rate receiving information about further details about the proposed change highly. This could indicate a lack of engagement with the change. However, as the change was not specified perhaps respondents could not identify a change about which they would want to find out more information.

5.2 Channels

Regarding the use of channels, the research set out to answer the question:

- Do employees favour an integrated use of rich and lean media when learning about technological change?

As discussed in the literature review, academics have questioned whether different mediums can cause different positive and negative reactions in employees. Welch (2012) suggests one way to establish this is to consider employees' media preferences. According to this primary research, email briefings are the preferred primary method of communication for hearing about technological change. This supports Quirke's theory that lean media is required to build awareness around change. However, nearly 70% of respondents favour quarterly staff meetings with the CEO, which indicates employees' need for richer, more interactive channels of communication in order to prepare for technological change. The last question of the survey asked respondents if there were any channels that the company should make more use of when communicating change internally. While 77.3% of respondents said no, a common theme developed among the answers of the remaining 22.7%: more face-to-face communication. Thus, the results confirm that an integrated use of rich and lean media is required when communicating about technological change.

These findings illustrate that employees want to hear about change through channels that allow for two-way, interactive engagement from an authoritative source in addition to the less interactive, one-way email communications. Proctor and Doukakis (2003) emphasise the use of open communication channels for effecting change as this allows people to share their ideas and express any doubts. They also allow change leaders to assess opinions and attitudes and identify potential sources of resistance so that they are informed about possible challenges that lie ahead (Proctor and Doukakis, 2003, p. 275). An integrated approach to the use of rich and lean media is recommended as these channels invite dialogue and encourage grassroots participation. According to Proctor and Doukakis this is the only way to ensure that new processes become firmly embedded whereas relying on an attempt to implement change from just the top is likely to be problematic (Proctor and Doukakis, 2003, p. 275). Additionally, an integrated approach accounts for the different personality types described by Jessup (2002). By using both rich and lean media to create awareness and understanding, change leaders increase the likelihood of their communication strategies succeeding as both extrovert and introverted personalities have the chance to make sense of the changes in a format that suits them.

6. Conclusion

This paper investigated what communication content employees want and how they want to receive it in order to prepare for technological change. The literature review suggested 11 themes for communication and the primary research confirmed the need for these, especially themes relating to the individual. The paper also suggested an integrated use of rich and lean media is necessary when preparing employees for technological change, which the research confirmed.

However, preparing employees for change is only the first step towards success and effective internal communication needs to be applied throughout the whole life cycle of the transformation in order for it to succeed. A pertinent further study would be to apply the findings of this investigation to the start of a technological change project then measure employees' acceptance of the new technology throughout the project's life cycle. At the end of the project, it would be useful to use qualitative research to map employees' attitudes back to how well they felt they had been prepared for the project initially. The success of this could be quantified in the adoption and acceptance rates of the new technology.

In conclusion, preparing employees for technological change by creating awareness and understanding for the need for change is vital and internal communication plays a key role in achieving this. However, care needs to be taken with how and what messages are communicated in the early stages of change. This will contribute towards determining levels of engagement and buy-in and ultimately the success of new technological implementation.

References

- Armenakis, A.A. and Harris, S.G. (2002) Crafting a change message for organisational readiness. *Journal of Organizational Change Management*, 15(2), 170 – 182
- Barret, D.J. (2002) Change communication: using strategic employee communication to facilitate major change. *Corporate Communications: An International Journal*, 7(4) 219-231
- Blaxter, L., Hughes, C., and Tight, M., (2006) *How to Research*. 3rd ed. New York: McGraw-Hill Education.
- Cameron, E. and Green, M. (2009) *Making Sense of Change Management*. 2nd ed. UK: Kogan Page.
- Clappitt, P.G. (2009) The questionnaire approach. In Hargie, O. and Tourish, D. (eds). *Auditing Organisational Communication*, London: Routledge, 55–77
- Easterby-Smith M., Thorpe, R., and Jackson, P. (2012) *Management Research*. 4th ed. UK: Sage.
- Elving, W.J.L. (2005) The role of communication in organisational change. *Corporate Communications: An International Journal*, 10(2), 129 – 135
- Hargie, O., Tourish, D. (eds.). (2009) *Auditing organisational communication*. London: Routledge.
- Harrison, P., (2015). Communicating Change. In K. Ruck, (ed). *Exploring Internal Communication*. 3rd ed. UK: Gower. 57 – 64
- Holt, Daniel T., Armenakis, Achilles A., Field, Hubert S., Harris, Stanley G., (2007) Readiness for Organizational Change, The Systematic Development of a Scale. *The Journal of Applied Behavioural Science*, 43 (2), 232-255
- Jessup, C. M. (2002) Applying psychological type and 'gifts differing' to organizational change. *Journal of Organizational Change Management* 15(5), 502 - 511
- Johansson, C. and Heide, M. (2008) Speaking of change: three communication approaches in studies of organisational change. *Corporate Communication: An International Journal*, 13(3), 288 – 305
- Kotter, J.P. (1995) Leading Change. Why Transformation Efforts Fail, *Harvard Business Review*, March – April, 59 – 67
- Larkin, T.J., and Larkin, S. (2006) *Communicating Big Change*, Larkin Communication Consulting, Third Edition.
- Law, S., (2009) Learning from employee communication during technological change. *Journal of Workplace Learning*, 21(5) 384 - 397
- Nordvang A., D., Rolland, D., Simpson K., (2009) Organisational change management through effective internal communication. *International Journal of Information Systems and Change Management*, 3(3), 220 - 245

- Proctor, T. and Doukakis, I. (2003) Change management: The role of internal communication and employee development. *Corporate Communications: An International Journal*, 8(4), 268 – 277
- Quirke, B. (2008) *Making the Connections*. 2nd ed. Surrey: Gower.
- Ruck, K. and Welch, M. (2012) Valuing internal communication: management and employee perspective, *Public Relations Review*, 38, 294-302
- Salem, P (2008) The Seven Reasons Organizations Do Not Change, *Corporate Communications: An International Journal*, 13(3), 333 - 348
- Saunders, M., Lewis, P., and Thornhill, A., (2009) *Research Methods for Business Students*. 5th ed. UK: Pearson Education Group.
- Sathe V. (2000) Creating change in mindset and behaviour, *Ivey Business Journal*, 64(5), 83–89
- Smith, I. (2005) Achieving readiness for organisational change. *Library Management*, 26(6/7), 408 – 411
- Welch, M. (2012) Appropriateness and acceptability: Employee perspectives of internal communication, *Public Relations Review*, 38, 246-254
- Welch, M. and Jackson, P. (2007) Re-thinking internal communication: A stakeholder approach. *Corporate Communications: An International Journal*, 12(2), 177–198

Appendix 1

The questionnaire that respondents completed online

Cover note

[FirstName],

Given the recent and planned technological changes at ORGANISATION X, I'm investigating how planned technological change is communicated to members of staff.

I would greatly appreciate you taking the time to answer the 6 questions in this survey, which should take no longer than 5 minutes to complete. As well as informing my research project, the data will be used to inform communication strategies in the future, however your answers will remain anonymous.

Thank you for your participation.

Questionnaire

1. Before technological change is implemented, what information is important for you to receive?

Not important at all/Slightly important/Moderately important/Important/Very important

- Why the change is necessary
- If you may need to change the way you work
- In what ways your role might be affected
- How the change will benefit the organisation
- How the change will benefit you
- How the change will be implemented
- The timescale for the proposed change
- The expected outcomes
- The objective of the proposed change
- Opportunities for training on the new system
- Where you can access further information/details about the proposed change
- Other

2. To what extent are you currently formally told about the following topics before technological change is implemented?

Never/Seldom/Sometimes/Often/Almost always

- Why the change is necessary
- If you may need to change the way you work
- In what ways your will role be affected
- How the change will benefit the organisation

- How the change will benefit you
- How the change will be implemented
- The timescale for the proposed change
- The expected outcomes
- The objective of the change
- The opportunities for training on the new system
- Where you can access further information/details about the proposed change

3. Through which channels do you prefer to hear information about technological change?

Please tick all that apply.

- Quarterly staff meetings
- Email briefings
- Internal newsletter
- Sector meetings
- Line managers
- The extranet
- In grade meetings
- From the project team
- I'm not interested in receiving information about planned change
- Other (please specify)

4. Of these channels, please identify three that you find most useful when hearing about technological change.

- Quarterly staff meetings
- Email briefings
- Internal newsletter
- Sector meetings
- Line managers
- The extranet
- In grade meetings
- From the project team
- I'm not interested in receiving information about planned change
- Other (please specify)

5. Through which channels do you prefer to give feedback about technological change? Please tick all that apply.

- Quarterly staff meetings
- Email briefings
- Internal newsletter
- Sector meetings
- Line managers
- The extranet
- In grade meetings
- From the project team

- I'm not interested in receiving information about planned change
- Other (please specify)

6. Are there any channels you think we should make more use of when communicating change internally?

- Yes
- No
- If yes, please specify

About the Author



Charlotte Wallis

London, UK



Charlotte Wallis is a London-based Marketing Communications Executive working in the professional services sector. A First Class honours graduate from the University of Manchester she has been working in marketing and communications for over three years. You can find her on Twitter (@WallisCL) or [LinkedIn](#).

Charlotte can also be contacted by email at charlotte.wallis89@hotmail.com.