Identifying training needs in the UK HE sector: The case of e-mail use

Introduction

- For sure, e-mail is one of the pillars of any modern communication in most organizations, be it private or public. The Higher Education (HE) sector is no exception.
- There are certainly advantages of e-mail use, such as speed, you can attach documents to it, and reach many people at once. With web-based interfaces, employees can access iformation everywere, and do not need to work in the same location.
- So, despite the advent of more recent tools such as chat services, e-mail remains a key tool for communication.
- Just because of this, it it important to use e-mail efficiently. And we have to support the management in making a decision on training for e-mail use.
- This becomes even more important as there are well-known problems with e-mail in organizations, as many online experts are saying. For example, people get too many e-mails, and on average, as we will show, the average worker does, in fact, waste more than one hour of time with e-mail. Also, security issues such as data encryption are not always used but should be.
- Therefore, the current study has been undertaken. It it a survey of UK HE companies and gives us data on e-mail use there. Hence, that data can be used to learn about advantages and disadvantages of e-mail and, maybe, could be used to make an educated decision to implement a new training plan, so employees can use e-mail better. In fact, we find that training should be provided.

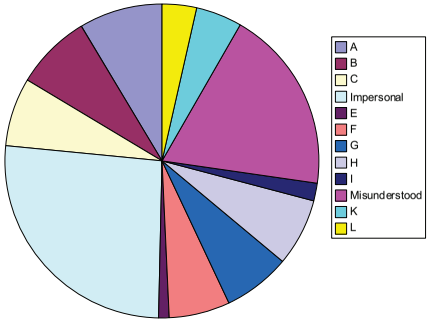
Dataset description

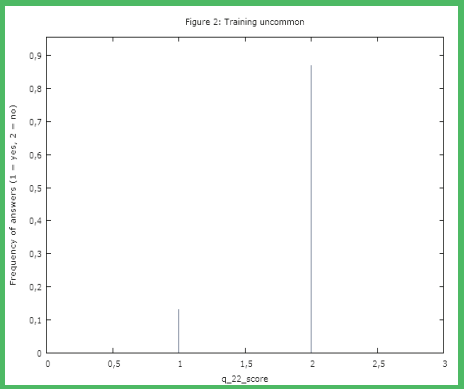
- The data has been obtained from a survey of people working in UK HE. People have been asked various questions, such as "What do you believe are the main benefits of using email?" or "Would you like to change your email usage?", and responded to that by answering in a predefined way.
- We assume the survey is relatively recent, and we got data from 1010 respondents. Technically, the data is structured as a time series, where we have data (in this case answers to questions, so most variables are categorical, some of these are binary) for 1010 observational units at a given point in time.
- Many questions have been asked, and so there is lots of answers and data. As said before, most variables are categorical, and answers are coded on a scale e.g. some response is coded as "2".
- A useful way forward when snooping through the data is to assort the variables into groups. The only possible assortment is 3 groups: Variables capturing in a more or less narrow sense the pros and cons of e-mail usage; then in group 2 we put the covariates that say something about training that has been attended by the people in the sample. Finally, in group 3 we find the variables capturing personal characteristics of respondents like age, their education etc.
- There are missing values in the data, which is not surprising for survey data, and we will deal with it using casewise deletion.

Analysis

- Let us look at the first group of variables, to investigate what problems there may be in regard to e-mail use. When analyzing variable q_17_score, which contains the binary responses to the question whether respondents think they waste time using e-mail, more than half of them (almost 60%) think they are in fact wasting time using e-mail. Some further quantitative investigation (using variable q_11) reveals that on average, for our sample, employees spend an hour or so per day dealing with e-mail. This is quite a lot, whether you are a clerk or a salesperson. The time used for e-mail is not available for other activities in the workplace, so is damaging productivity.
- Moving on, inspecting the answers for the question "What do you believe are the main drawbacks to using email?" we can see that the two most comon answers are in fact impersonality plus misguided mails (i.e. mails not sent to the right people), this is shown in Figure 1. We therefore obtain a consistent picture insofar as we see that the survey participants do perceive problems in e-mail usage.
- One point to note here is, therefore, that the assertions by online experts are borne out by the data at hand: That is, e-mail usage is a problem.
- The data, however, contains some more info, that could be used later on when reporting to the management in regard to their training plan. Specifically, variables q_19a and q_fpxariert0 do contain such info, and reveal that mostly, time wastage seems to derive from mails that are not relevant or duplicated. Interpreting this, some content issue (esp. when gazing at q_fpxariert0) may be around, also because just one per cent of respondents sees technical issues as important.

Figure 1: Main drawbacks





Analysis (continued)

- Having identified problems, what about exploiting the training data? This is the second group of variables, giving information of training (if any) obtained by the respondents in the past. Here, we can clearly see (by inspecting variable q_22_score) that the vast majority of people in the sample (close to 90%) did not attend training on the use of e-mail. See Figure 2 for the dtails. People who obviously got some training say it was appropriate to their role, so this suggests if training takes place, respondents see the benefits of it.
- To sum up so far, on the one hand there are issues with e-mail, on the other hand training seems beneficial and a huge fraction of respondents got it. So the are some suggestions lurking here already, it seems.
- Finally, let us turn to the third group of variables, capturing personal characteristics of respondents. Here, we are presented with e.g. information on the educational background, or age group, or staff category. This shows, for example, that most respondents are academics, and that we do not have very young and very old people in the sample really. So age issues are most likely not crucial here, but they could be in principle, e.g. some age groups being less familiar with technology.
- That is, finally, we have investigated all 3 groups of our variables, thereby exploiting quite well the available information. One could provide a somewhat deeper investigation, e.g. when management requests more detailed support in regard to designing the training plan. Then, aspect like the educational background of respondents could be explored further to really have targeted training plans, if need be. This is important, as such trainings can be quite expensive, as evidence from Scandinavia is showing, and so should be used efficiently.

Conclusions and recommendationz

- The starting point of our investigation was the request by the management, who need some data-based support to decide if and how to set up some training for e-mail use in their company. To that end, we have analyzed survey data from the UK HE sector, giving us informaton on e-mail use and also training.
- The following picture emerges from our analysis: We can say that respondents identify issues with e-mail use, with some more detailed info also emerging. Most participants did not get any training recently. Taking this together, we do suggest the implementation of a training plan. In doing so, the data suggests a focus on content of e-mails; in contrast, no clear guideline emerges as to focusing on a specific age group, for example.
- On the other hand, this is survey data, so that it may not reflect the real e-mail usage, some objective investigation would thus be needed to complement the survey and place the recommmendations on a more solid foundation. Also, while the survey data does not see technical issues as central, these may also be considered in training, such as encryption or data protection which is important in financial industries, for example.

Reference list

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