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Does Gender Matter in the Adoption of Emails in the Namibian Enterprises?

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Abstract

The paper examines if gender matters in the use of emails in the enterprises of Namibia. The paper is based on the usefulness of emails in business organizations, using the Namibia Enterprise Survey data collected from 580 enterprises by the World Bank in 2014/2015 in order to test a null hypothesis that there is no association in the use of emails between women and men top-managed enterprises in Namibia. The paper finds out that there is an association with men in top-managed enterprises using more emails than women's top-managed organizations. This finding signifies the institutionalized gender digital divide in enterprises, signalling the marginal benefit of advantages accruing from emails in the enterprises that are top managed by women. Hence, gender matters.

Keywords*: Emails; Enterprises; Enterprise data; Adoption; World Bank.*

Introduction

The subject of the use of emails among women and men's top-managed enterprises is situated within the context of gender and the adoption of information technologies. The general agreement is that the adoption of information technologies differs by gender and, therefore, that information technologies are not gender-neutral [1-5]. There are various positions in this general agreement of gender un-neutrality in the adoption of information technologies. One position is that males are in a more favorable position of adoption. In the process of a new technology being introduced in school, male teachers gave more consideration to perceived usefulness than female teachers for making decisions regarding the use of new technology. In the same line, using computers, email services, electronic data management systems, e-learning applications, and online stock trading, men are more technologically adept than women, and females face technical challenges and risks in using technology [6]. Another position is that women have tended to be more adoptive of information technologies than men. Women perceived email and instant messaging to be more useful, and they spent more time communicating with others via email and instant messaging than men [7]. Gender differences also happen in social media, mobile or internet banking, and e-commerce, whereby the males and females have different agendas in using social network sites. In contrast, the females mainly use the social network to maintain existing relationships; the males use it to make new friends [8]. From these positions, there is no single position that men or women adopt or not information technologies, but it is the context in which the technologies are used [10]; the support mechanisms, such as government, management, motivation, technology and training, matter in the adoption or not [10].

Emails have become a universal medium for communication within organizations [11]. They are a critical ICT tool in managing information and communication. They allow information flow and sharing in large quantities and simultaneously to multiple recipients, almost instantaneously and at reduced costs [12]. It is one of the most effective business

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communications tools used in virtually all areas of business [13]. It has been shown that reading and answering emails take up to 28% of enterprise workers' time {some other time is for instructions to the specific tasks to employees (39%), searching and gathering information (19%), and communication and collaboration internally (14%) [14]. Email marketing is increasingly recognized as cost-effective for small and medium-sized enterprises (SMEs). The number of companies using email in their everyday communication increases day by day, providing the possibilities for personalized communication, building long-term relations, and willingly giving contact information [15]. Emails, however, have many challenges, among which are email overload, email retention and archiving, email phishing, pharming, virus and spam, multicasting, email addiction, language degradation, and email privacy and security [11].

In a relatively old study trying to find out the different styles of writing emails between men and women [16], it is found out that women and men have different communicative ethics: while the male style of communication is characterized by put-downs, strong contentious assertions, lengthy and frequent postings, self-promotion, and sarcasm, the female style is marked with the expressions of appreciation, thanking, and community-building, as well as apologizing, expressing doubt, asking questions, and contributing ideas in the form of suggestions, on the other hand. Hence, men seem to communicate with more adversity, while women tend to communicate with more supportiveness and attenuation. In the same vein of finding out the differences in email style between female and male students in interaction with their instructor, it is found that the males show a heterogeneous style that depends on the topic. In contrast, females are more consistent in using a structured, traditional written style in correspondence [17]. A study about how gender affects computer-mediated communication in a university setting [18] found that the male faculty overwhelmingly prefer to communicate with students via emails, even though the female faculty receive significantly more emails and respond faster than the male faculty. When a comparison is made on the use of emails between men and women, the results show that women spend more time using emails; that there is no difference between men and women in the use of emails to keep in touch with local friends, but that women used emails more frequently to communicate with people at a distance; that women ranked emails to be more useful than men rated them [19]. Concerning the gender differences in the use and perceived usefulness of email, it was found that women perceive email as more useful than men do when communicating with people who are geographically distant; the men and women use and similarly perceive emails, that there was no statistically significant difference between men's and women's perceptions of email usefulness and frequency of use when communicating with people who were geographically close [7]. In a study to investigate the influence of gender in language utilized in email communication among university lecturers, it was found out that the abbreviations are less standard in female emails, and unlike females, males like to use abbreviations in their emails; about emoticons and onomatopoetic, females like to express their feelings and emotions explicitly, making them more likely to be onomatopoetic and emotional than men [20].

A careful observation of the above empirical studies regarding email use from a gender perspective shows that it cannot be asserted that either women or men use more emails than women or vice versa. The context where the emails are used is likely to determine who uses emails between men and women. However, no study has been done regarding the use of emails, comparing women and men in top-managed enterprises; no study has been carried out on determining whether or not there are gender biases in the enterprises top-managed by women and men. None of the studies has tried to respond to the question of whether or not there is a

significant difference in the use of emails between the women and men's top-managed enterprises.

This study addresses the concern that studies of women and technology are neglected [21]. The study adds theoretical and methodological perspectives on the influence of gender in adopting e-technologies among SMEs; it provides information about how and why gender relates to the likelihood of e-technologies adoption in commercial settings. The findings are essential in order to address the technological gender gaps that gender differences have exacerbated. The results are also bound to inform the public policy goal of a globally equitable information society, with the concern that the e-technologies have become increasingly vital to the many aspects of everyday life globally, hence the need to address the digital divides in gender [22].

More specifically, this study is important because it adds to the literature regarding the gendered dimension of the email used in enterprises among women and men in top-managed enterprises through giving insights to the following questions: Given the background that the digital gender gap is suffered mainly by women [22-26], to what extent is this true regarding the use of emails in enterprises top-managed by women and men? Does the gender gap in digitalization go beyond women's category to even institutions that women manage? Whatever the case, whichever enterprise suffers from the digital gap, whether women or men in top-managed enterprises, recommendations are needed so that the benefits of emails percolate to all the enterprises in Namibia. The small and medium enterprises (SMEs) in Namibia have high business discontinuation of four times higher than the rate of established business activity [27]. Using emails in a gender-balanced manner in enterprises should lead to the benefits of using emails, such as allowing information flow, reducing costs in communication, marketing the enterprises, building long-term relations, and building a database for important contacts.

Methodological Underpinnings

The study uses the Namibia Enterprise Survey data of 2014/2015. The data was collected by the World Bank [28], which used the Manufacturing Module Questionnaires and Services Module Questionnaires to collect data. This standardized survey benefits from a representative stratified sample of firms. Due to such attributes, it is possible to achieve better generalizability of results for Namibia. The sample of this data was selected by the World Bank using stratified random sampling. The target sample size was 600 enterprises, and 469 enterprises were reached. Two levels of stratification were used, namely, the industry and region. In the industry stratification, the universe was stratified into manufacturing industries and two services sectors of retail and other services (see Table 1) for the summary of industry sectors).

The study seeks to determine if there is an association between the use of emails among women and men in top-managed enterprises. The data analysis for this study begins with the description of the profile of the enterprises. This is to understand the key characteristics of the enterprises. The first step towards determining this association is by finding out the extent to which the women's and men's top-managed enterprises use the email facilities. There follows the use of the descriptive statistics by showing the frequencies and percentages of use of emails by women and men in top-managed enterprises. These descriptive statistics help determine where there is more use of emails in case of significant difference in the use. In the third step for data analysis, there is the testing of the null hypothesis that there is no association in the use of emails between women and men top-managed enterprises of Namibia.

The Chi-squared test compares the distribution of the categorical variables of the use of the emails in a sample of women and men's top-managed enterprises. The Chi-squared test tests the following null (H_0) and

alternative hypotheses (H_1), respectively. H_0: Gender has no association with emails, and H_1: Gender has an association with the use of emails. The null hypothesis is rejected if the chi-squared statistic is larger than the critical value from the chi-squared distribution, whose critical values are 3.84, 5.99, 7.82, and 9.49, with corresponding degrees of freedom of 1, 2, 3, and 4, respectively, at an alpha level of 0.5; larger chi-square statistics than these critical values of specific corresponding degrees of freedom lead to the rejection of the null hypothesis of independence and accepting the alternative hypothesis [29].

Findings

Profile of the Establishments

Table 1. Industry Sector

Industry	**Frequency**	**Percent**
Food	29	5.28
Textiles	5	0.91
Garments	11	2
Leather	4	0.73
Wood	10	1.82
Paper	4	0.73
Publishing, printing, and Recorded media	7	1.28
Refined petroleum product	2	0.36
Chemicals	7	1.28
Plastics & rubber	6	1.09
Non metallic mineral products	19	3.46
Basic metals	5	0.91
Fabricated metal products	10	1.82
Machinery and equipment	6	1.09
Electronics	5	0.91
Transport machines	6	1.09
Furniture	34	6.19
Recycling	3	0.55
Construction Section	89	16.21
Services of motor vehicles	40	7.29
Wholesale	10	1.82
Retail	183	33.33
Hotel and restaurants: section H	28	5.1
Transport Section	14	2.55
IT	12	2.19
Total	**549**	**100**

Source: Data analysis from World Bank Namibia Enterprise data 2014/2015

Regional stratification was defined in the three regions of Windhoek/Okahandja, Walvis Bay/Swakopmund and Oshakati/Ongwediva. A sample frame was built using data compiled from local and municipal business registries. Establishments with undefined sizes were included in the sample frame to ensure a representative sample. While in Windhoek/Okahandja region, 196 (42%) establishments were sampled, in Walvis

Bay/Swakopmund region were 144 (31%), and in Oshakati/Ongwediva, 129 (27%). 104 (22%) of the industries were part of larger firms. The legal status of these firms in terms of shareholding is summarized in Table 2.

Table 2. Legal Status of the Firms

Legal status	**Frequency**	**Percent**
Shareholding company with shares traded	7	1.49
Shareholding company with non-traded shares	14	2.99
Sole proprietorship	201	42.86
Partnership	27	5.76
Limited partnership	220	46.91
Total	**469**	-

Source. Data analysis from World Bank Namibia Enterprise data 2014/2015

The ages of the establishments range from less than one year to 121 years by the time of the end of the survey in 2015. The oldest establishment dates as far back as 1894. Table 3 summarizes the number and the periods in which the enterprises in Namibia were established.

Table 3. Periodization of the Enterprise Establishments in Namibia

Establishment dates	**Frequency**	**Percent**
Between 1894 and 1989	30	6.61
Between 1990 and 1999	85	18.72
Between 2000 and 2009	234	51.54
Between 2010 and 2014	105	23.13
Total	**454**	**100**

Source. Data analysis from World Bank Namibia Enterprise data 2014/2015

It is from the 1990s that Namibia witnessed a significant establishment of enterprises. More than half the enterprises that were sampled began in the first decade of 2000, and half of these started in the first five years of the second decade (between 2010 and 2014). By the time when these establishments began, 84% were formally registered. In terms of experience working in the enterprises, the top managers (354, 76%) have experience of more than ten years, 72 (16%) between 5 and 10 years, and 37 (8%) below five years. Among the owners of these establishments, 222 (47%) are women, with 178 (38%) of top managers being female. 364 (78%) of the establishments communicate with clients and suppliers by email, and 205 (44%) have their websites.

Extent of Use of Emails by Women and Men Top-Managed Enterprises

Table 4 presents the results of a Chi-squared test to compare the use of emails between women and men's top-managed enterprises in Namibia.

Table 4: Chi-squared Test Results of the use of Emails between Women and Men Top-Managed Enterprises

Do you currently communicate with clients and suppliers by email?			
Is the Top manager female?	Yes	No	Total
Yes	131 (75.72%)	42 (24.28%)	173 (100%)
No	221 (78.65%)	60 (21.35%)	281 (100%)
Total	352 (77.53%)	102 (22.47%)	454 (100%)
Pearson Chi squared (1) = 0.5260 Pr = 0.468 Cramer's V = -0.0340			

Source. Data analysis from World Bank Namibia Enterprise data 2014/2015

In terms of percentage, it can be inferred from Table 4 that there are more men in top-managed enterprises (78.65%) compared to women in top-managed enterprises (76%) making use of emails.

As shown in Table 5, performing a Chi-squared test on the use of emails between women and men in top-managed enterprises shows a critical value of 0.5260 (which is bigger than 3.84) at the degree freedom of 1 and a precision level of 0.468. Hence, the null hypothesis that gender has no association with emails is rejected, and the alternative hypothesis that gender is associated with the use of emails is upheld. Given that men's top-managed enterprises use more emails (78.65%) than women's top-managed enterprises (75.72%), it can be concluded that the enterprises that men manage use more emails compared to those managed by women.

Discussion

The key finding of this study is that there is more use of emails in men's top-managed enterprises in Namibia. This finding is in syntony with the finding elsewhere that men are more adept in using emails than women [8]. It is also similar to the finding of email in an educational setting, whereby the male faculty overwhelmingly prefer to communicate with students via emails [18]. However, such finding is at odds with findings such as that women find emails to be more useful than men [30, 7], and they use them more frequently than men to communicate at a distance [30].

The contradiction in findings whereby somewhere women use more emails than men, and somewhere else, more men use more emails than women enhances the observation that the context of the use of emails is important to consider. In the case of Namibia, it is crucial to observe the extent to which the support mechanisms from government, management, motivation, technology, and training are critical in the adoption or not of the emails in the enterprises [10]. Even more specifically, in the case of Namibia, to what extent does the gendered triple challenge of inequality, unemployment, and poverty in Namibia [31] influence the adoption of the use of emails by men and women in top-managed enterprises? With the Gender Inequality Index (GII) of position 115 out of 160, gender-based inequality measured through the reproductive health, empowerment, and economic development dimensions is relatively high. Namibia faces an unemployment that has risen from 27.9 to 33.4% between 2014 and 2018. The female unemployment rate was at 24.7% in 2018. In 2018 most Namibians had to live with less than 2 USD per day 2018 and deal with an annual income of less than 100 USD, with female-headed households suffering the most. This triple gendered challenge expresses the inequality gender structure of the Namibian society, which emerges out of culture, religion, and agricultural practices [32]. Does this gender triple challenge impact the use of emails in Namibian enterprises?

In the current way of doing business, there is an unprecedented pressure to become more innovative to stay in business by doing proper self-marketing for the goods and services offered and managing information and business communication. Emails are proving to be viable in marketing [15] and managing information and business communication [12, 13].

Concerning email use in the Namibian enterprises, lack of attention to the promotion of its use risks the increase of the gender digital divide to a digital rapture. Society is getting more digitalized, and the more the enterprises will get into the use of digital technologies, the more they will survive in business and not fall into the typical business discontinuation trap of four times higher than the rate of established business activities [33]. Among the recommendations to support and promote SMEs in the north-eastern regions of Namibia are issues of provision of skills or vocational training, access to market information, a common facility centre, technical advice, and

assistance with the business plan development to obtain loans [33]. Quite a number of these issues can be achieved through the use of email communication.

Conclusion

The study sought to examine the extent to which gender influences the use of emails in the enterprises of Namibia. Gender was reflected in the dynamics of women's and men's top-managed enterprises. The paper results show an association between gender and the use of emails in women's and men's top-managed enterprises: the men's top-managed enterprises use more emails than women's top-managed organizations. This finding indicates the institutionalized gender digital divide in enterprises, signaling the marginal benefit of advantages accruing from the use of emails in the enterprises whose top managers are women. Hence, gender matters in the adoption of emails in Namibian enterprises.

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Declaration of Conflict of Interest

I, the author, Adalbertus Kamanzi, hereby declare that the disclosed information is correct and that no other situation of real, potential or apparent conflict of interest is known to me. I undertake to inform you of any change in these circumstances if any issue arises.

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