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Privacy on Facebook Brand Pages: A Content Analysis Study of New Zealand Organisations

Completed research paper

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Abstract

With a significant number of organisations using a Facebook brand page to connect with users, the privacy issues that arise should not be ignored. In New Zealand, organisations have the obligation to protect the data privacy of their clients. For organisations using Facebook pages, it is essential to make sure users know how personally identifiable data gathered through these pages is being treated. This study develops a content analysis questionnaire that can be used to test privacy on organisational Facebook pages. The questionnaire determines the tools and features organisation brand pages use, as well as testing how the organisation communicates its data handling practices in respect of the data it gathers. The study concludes that the Facebook pages of top New Zealand organisations are making common use of Facebook tools, but are very poor in communicating their data handling practices with only a few pages examined having any form of privacy notification.

Keywords Facebook, Privacy, Facebook Privacy, Facebook Brand Pages, Content Analysis

1 Introduction

With the rapid spread of social networking sites in the era of the Internet, social media companies such as Facebook, Instagram, and YouTube have attracted a huge number of members. As the biggest social network worldwide, Facebook had 2.7 billion monthly active users in the second quarter of 2020, including 2.9 million from New Zealand (Statista, 2020). Surfing on Facebook is considered to be New Zealanders' second-favourite leisure activity (Fyers & Cooke, 2017).

As sharing information on social media has become more common, concerns related to the management of personal information gathered and shared on such platforms have arisen. In response, the definition of privacy has changed from the traditional understanding of privacy as the right to be left alone, to encompass the need to control personal information (Brodie et al. 2005). According to Pelteret and Ophoff (2016), if people can limit or restrict others from access to information about them, they have information privacy. Though information privacy may be defined within different contexts, and varies between different countries generally, privacy is legally protected by human and constitutional rights along with more specific data protection rules (Külcü & Henkoğlu, 2014).

There have always been concerns about information privacy on Facebook, as information exposed on Facebook might cause the disclosure of personal information far beyond the friends and families of users (De Wolf et al., 2014). According to Liu et al. (2011), when users upload content onto Facebook pages under default Facebook privacy settings, at least half of the content will be exposed to anyone who is on Facebook. In recent years, with the increase in data-carrying capacity, individuals have increased the amount of information they share on Facebook. Concurrently, concerns about individual privacy on Facebook have also increased (Beigi & Liu, 2018).

An organisational Facebook page is created when organisations or businesses need a presence on Facebook (Facebook, n.d.-d). With more organisations using Facebook pages to connect with customers, the number of Facebook pages has increased significantly. In 2013, there were 15 million Facebook pages globally (Koetsier, 2013). By the year 2019, according to Facebook marketing statistics, there were over 60 million active business pages globally with more than 2.5 billion comments made on these pages per month (Smith, 2019). According to Facebook (2020) statistics, two thirds of Facebook users across all countries claim they visit the page of a local business at least once a week. However, there is very little information available about how organisations should act and keep information private on their organisational Facebook pages. For organisations, how they manage information can affect their brand trustworthiness and reputation in respect to the consumers, employees, shareholders, partners and other stakeholders. Information privacy issues can lead to a loss of customers and directly impact the organisation's share price (Pelteret & Ophoff, 2016). Thus, privacy concerns on Facebook pages should not be ignored by New Zealand organisations.

In New Zealand, under the Privacy Act 1993 (The Privacy Act), organisations such as government departments, companies, social clubs and small businesses should protect user's privacy and keep personal information disclosure limited (Office of the Privacy Commissioner, 2019). Commonly, online information privacy is protected by the privacy policy of the organisation, or a confidentiality agreement between an organisation and third parties. Ideally, under such privacy policies, user information is kept private and will be secured by the organisations concerned and their trusted or authorised third parties. However, according to Bartsch and Dienlin (2016), most Facebook users do not know or are not willing to understand privacy policies. Furthermore, many people are unlikely to be aware of privacy issues when they are using Facebook, especially in relation to information gathered by the businesses they visit. Due to the public nature of the Facebook page, it is possible that privacy might be compromised by Facebook users through their activities on organisational Facebook pages. In that case, information privacy on an organisational Facebook page should be communicated to Facebook users by organisations. Therefore, this research addresses the research question "how is information privacy on organisational Facebook pages addressed by New Zealand organisations?"

This study investigates the Privacy Act in New Zealand in order to determine privacy principles applicable to New Zealand organisational Facebook pages. Then, the common business tools and community interaction features provided by Facebook are reviewed, and a framework is formed to examine how organisations should address information privacy on their Facebook page. Finally, according to the framework, a content analysis questionnaire was designed to examine Facebook pages and the privacy policies of 200 New Zealand organisations in order to answer the research question.

2 Literature Review

A Facebook page is a specific public profile created for individuals, organisations, businesses or brands. As well as relating basic organisational information, business pages in particular utilise powerful internal networking as well as a variety of free tools and features, aimed at helping organisations with brand building, advertising, promotions and interaction with customers. From these Facebook “brand” pages, users can get information about their favourite businesses, for example, new products or services, promotions and other ongoing events (Wisniewski et al., 2014). The Facebook brand page is valuable as a tool for building brand communities through encouraging clients to post comments, shares, photos and videos. Such communities enhance business performance through increased customer engagement (Gutierrez-Cillan et al., 2017). Visitors to organisational Facebook pages are also encouraged to use features of Facebook such as groups, invitations, bookings, shops, photos and many other applications. These features also gather user’s information, and this information can be revealed publically and to the organisations with which users are interacting (Facebook, n.d.-c).

In its recommendations, Facebook suggests the following sections: About, Events, Picture, Video, Images, Privacy and Milestones. The About section on the Facebook page is used to present basic information about an organisation, for example, organisation name, business type, location and official web page. For information privacy purposes, Facebook advises that any privacy notice is included in the “About” section, as well as including a link to the organisation’s privacy policy in the Privacy section of the Facebook page. Apart from these recommended sections, customised sections can be added to a Facebook page by organisations including Facebook Messenger, appointments, shops and other custom features such as recruitment or complaints. Most of these features also gather information about the individual user interacting with the page.

Doubts have long been raised about the privacy of user information on Facebook. Esteve (2017) described the privacy policy of Facebook itself as being confusing, pointing out that it is difficult for users to provide valid consent as they do not understand the implications of providing their data to the Facebook organisation. Other concerns arise around the provision of private data to third parties, as well as sensitive information being revealed to the public through Facebook (Bartsch & Dienlin, 2016). This concern was highlighted by Facebook releasing the personal information of more than 87 million users to Cambridge Analytica in 2018 (Isaak & Hanna, 2018). However, the issue of privacy on Facebook is an important one, not just from the perspective of the actions of the Facebook organisation. Bitter (2014) found trust and privacy concerns to be important moderators of customer engagement with Facebook brand pages especially in terms of willingness to share information. Similarly in a systematic literature review of customer engagement in social commerce Busalim et al. (2019) found social factors such as trust to be motivators of customer participation in social commerce.

2.1 Facebook Business Tools

Of the business tools which Facebook makes available, Facebook Messenger is used by around 1.3 billion users every month, with 20 billion messages exchanged between individuals and businesses (Facebook, n.d.-b). Being a messaging platform, Facebook Messenger is integrated on all Facebook pages and is used by organisations to build customer relationships through establishing real-time conversations with users. The appointments tool is provided to allow users to book services with an organisation through its Facebook page. Once successfully booked, appointment requests including the user profile, service type, days and time slots will be sent to the page administrator via Facebook (Facebook, n.d.-g). Facebook Shops can be used by organisations to present and sell their products and services. The whole shopping process runs through Facebook (Facebook, n.d.-a). Apart from default tabs, organisations can create custom tabs which provide custom functions. These functions allow individuals to apply for jobs, complain to the organisation, pay bills and top up credits, engage in competitions, and promotions. All of these tools relay information through the Facebook platform to the organisation operating the Facebook page, thus potentially revealing information not only to the public, but to Facebook as well.

2.2 Community Interaction Features

Facebook also assists organisations to create an online brand community of users through the organisation’s Facebook page. Different from the business tools, any use of community interaction features on Facebook is public. There are many features provided by Facebook to help build relationships between organisations and users, for example, visitor posts, top fans, and plugins such as comment, like and share (Facebook, n.d.-e).

Users who “like” an organisation’s Facebook page by pressing the like button on the page will become page fans. Commonly, individuals choose to be a Facebook brand fan because they are interested in the

organisation, or they are already the client of the organisation. Facebook users might visit a Facebook page sharing positive or negative feelings they have towards a brand. Other motivations for joining these brand communities are economic benefits, as users will be able to read news about exclusive deals and discounts offered on the Facebook page (Jayasingh & Venkatesh, 2015). By being a fan, creating visitor posts, commenting, liking or sharing posts on a page, users might disclose their 'interests', along with their personal information publicly on the Facebook brand page. The users that interact the most with the organisational Facebook page become "top fans" of the organisation. The name of a top fan will appear on the Community tab of a Page as one of its top fans, along with a badge (Facebook, n.d.-f). Both the user and the page can choose to turn on or turn off the badge.

All of the business tools and community interaction features enabled on organisational Facebook pages either gather information in respect of the individual who is interacting with the page, and/or can reveal details of the user publicly to other Facebook users. Because this information can be individually identifiable, in New Zealand the New Zealand Privacy Act (1993) applies where organisations can be said to have jurisdiction in New Zealand (Ministry of Business, Innovation and Employment, n.d.).

2.3 The New Zealand Privacy Act

The New Zealand Privacy Act, outlines 12 information privacy principles detailing how personal information should be handled by organisations in New Zealand. The main principles dictate the collecting, holding, using and disclosing of personal individually identifiable information. For the storage and security of personal information, Principle 5 of the Privacy Act states that an agency that holds personal information should ensure that the data is protected and prevent unauthorised use or unauthorised disclosure of the information. Furthermore, according to Ministry of Justice (2019), principle 11 of the Privacy Act claims that personal information should not be disclosed except where individuals authorise the disclosure, disclosure is for the purpose for which the information is obtained, or disclosure is legally necessary or required.

At the time of writing the Privacy Act (1993) was under review. The new Privacy Act which comes into effect on 1 December 2020, promotes risk management by organisations in respect of privacy requirements, as well as extending the role of the Privacy Commissioner. However, the privacy principles on which this research are based, will not be changed (Ministry of Justice, 2020). In the case of information privacy on Facebook pages, organisations in New Zealand are responsible for protecting data communicated on Facebook pages, and making sure client information is not disclosed except to authorised third parties (Ministry of Business, Innovation and Employment, n.d.)

2.4 Privacy Notice

Making decisions about information privacy is challenging for organisations. Data is now considered to be as valuable as traditional organisational assets such as people, technology and products. Appropriate consideration of the privacy of customers reflects the trustworthiness of organisations, and might also decide customer loyalty. Hence, organisations need to reconcile the desire of the organisation to use and monetise data with the privacy requirements of the customer (Greenaway et al., 2015). However, individuals that do not trust an organisation are reluctant to share information with it (Busalim et al., 2019).

On web pages, privacy notices in the form of privacy statements or policies are a common method for informing users about the data handling practices of the site, thus encouraging users to trust the site and transact with it (Pelteret & Ophoff, 2016). The organisational privacy policy is a collection of policies and procedures describing the collection, use, storage and disclosure of the customer's data. On their organisational Facebook pages, organisations also gather data in respect of their customers, separate from the data gathered by Facebook. Thus, Facebook itself also recommends organisations have a privacy notice on their Facebook page, to inform users about potential privacy issues, as well as to state the organisation's privacy policies in respect of information privacy (Facebook, n.d.-a). The next section of this paper outlines the development of an instrument to test the privacy practices of organisations when using an organisational Facebook page.

3 Methodology

The only way Facebook page visitors can know how organisations protect the privacy of data gathered through Facebook is to see what the organisations themselves say they do on their Facebook page. This kind of information could be presented either through a privacy notice, or some other organisational statement. In the study of information privacy on New Zealand web pages, Vos (2007) used quantitative content analysis methodology to develop a questionnaire testing organisational compliance with privacy

principles and best practice in New Zealand organisation website privacy notices. Quantitative content analysis is a research method for identifying patterns by collecting data from a large number of samples, categorising and coding the data collected, and analysing the results (Elo et al., 2014).

3.1 Developing the Questionnaire

The content analysis questionnaire used in this study was designed from the literature review, and on the tools and features available on Facebook which gather and/or display user information. Demographic information was gathered from the organisation, as well as information in respect of the different business tools and community interaction features used by the organisation. Finally, compliance with the requirements of the New Zealand Privacy Act was considered along with any efforts made by the organisation to communicate its privacy practices to the users of its Facebook pages.

3.1.1 Sample Organisations

The analysis was carried out on organisations from the Deloitte 2017 “Top 200 New Zealand Organisations” (Deloitte, 2017). The Deloitte Top 200 indices track the rise and fall of New Zealand’s largest organisations from year to year, and is one of the most respected information sources in the business community in New Zealand (Deloitte, 2017.). This list was chosen following Vos (2007) as it was considered that these organisations would have the resources to implement privacy protection practices, and further, that the New Zealand public would have a reasonable expectation that these organisations were dealing with privacy in an acceptable way.

3.1.2 General and Demographic Information (9 questions).

Questions in this section were designed to collect basic demographic information of the sample organisations, in order to identify and categorise organisations into different groups and assist in understanding the information gathering practices of those organisations. Demographic questions are listed in Appendix A. Firstly, the base country of the organisation was determined from the organisational website. Base country was taken to be the country from which the organisation was managed. Secondly, the Facebook pages of the organisation were found. Some organisations had no Facebook presence, while others had multiple pages. Where there were multiple organisational Facebook pages, the page that was managed from New Zealand marketing New Zealand services was tested. If there was no New Zealand relevant Facebook content, the organisation was not further analysed. For those organisations which had a New Zealand managed Facebook page, those based in New Zealand were analysed separately from those based overseas in order to determine if there were any differences in behaviour between these two groups.

3.1.3 Facebook Features and Services (14 questions)

As introduced in the literature review, applying community interactions features and business tools provided by Facebook might lead to customer privacy disclosure. Questions in this section are designed to determine the presence of a set of common features and tools on Facebook pages, as well as whether the relevant privacy issues are communicated with Facebook users by the organisation (see Appendix A).

3.1.4 Privacy Notice on Organisational Facebook Page and Online (9 questions)

As introduced in the literature review, organisations in New Zealand should follow the Privacy Act to protect customer data. In addition, information privacy should be communicated to Facebook users by organisations on their Facebook pages. Questions in this section are designed to identify how organisations are addressing information privacy on their Facebook pages (see Appendix A).

For the first five questions about privacy notice, data was obtained from the Facebook pages of the sample organisations. In order for an organisation to be considered to have some kind of privacy notice on its Facebook page, the organisation needed to have documentation, or a section, or paragraph communicating privacy practices. A privacy notice could be provided in any default or customised section of the Facebook page, for example, ‘Home’, ‘About’, ‘Notes’ etc. To understand the main privacy practices organisations addressed on their Facebook page, all relevant documentation, sections or paragraphs which could be considered to be a privacy notice was collected and recorded.

In respect of organisational privacy policy, information was extracted from the privacy policy documentation available on the website of each organisation. Other than discussing Facebook specifically, organisational privacy policies may use ‘social media’ to represent all social media platforms. Documentation such as ‘Terms and Conditions’ or ‘Privacy Policy’ with content in respect of privacy on social media were collected and recorded.

3.1.5 Scoring

The questionnaire was designed to enable scoring of individual organisations, as well as for gaining an overall view of how New Zealand organisations are behaving around privacy notification on their Facebook pages. For an answer of “yes” an organisation scores 1; for “no” it scores 0. Organisations score 1 where they *do not* apply a feature or service with potential privacy risk. In general terms, the fewer features and services applied, along with more communication with users about the potential privacy concerns, the higher score an organisation may get, to a maximum of 18.

4 Findings

4.1 Demographic Information

Of the 200 sample organisations, 130 (65%) are New Zealand-based organisations and 70 (35%) are non-New Zealand based enterprises which have branches or subsidiaries in New Zealand. Among these multinational enterprises, 27 (14%) are from Australia and the remainders with minor representation are from America, Canada, China, England, France, Germany, Japan, Netherlands, South Africa, South Korea and Switzerland.

Of the 130 New Zealand organisations, 84 (65%) have a Facebook page, compared with 54 (77%) of the 70 non-New Zealand organisations. All multinational organisations from China, England, Germany, Japan, South Korea and Switzerland are managing a New Zealand market Facebook page separate from a Facebook Page in their base country. Out of 19 Australian based organisations, only 10 (53%) chose to have a separate New Zealand page.

In total, 138 (69%) of the organisations have a Facebook page. Of the 138 organisational Facebook pages, 119 (86%) are managed in New Zealand, and the other 19 (14%) are Facebook pages based in the other countries. In other words, 119 (60%) out of the 200 organisations examined have a Facebook page managed in New Zealand. Only the New Zealand-managed pages were included in the analysis as the questionnaire presumes New Zealand jurisdiction, and therefore adherence to New Zealand privacy laws and practices. This data is summarised in table 1 below:

| | Base Country | Organisation has FB Page | Organisation has NZ FB Page |
|-------------|--------------|-----------------------------|--------------------------------|
| New Zealand | 130 | 84 | 84 |
| Australia | 27 | 19 | 10 |
| Others | 43 | 35 | 25 |
| Total | 200 | 138 | 119 |

Table 1: Summary of Demographic Data, Base Country and Presence of Facebook Page

Among those with a Facebook page managed in NZ, 101 (85%) have the link to their Facebook page posted on their website marked as ‘Our Facebook Page’. By clicking it, users are redirected to the Facebook page of the organisation.

4.1.1 Industry

Of the 200 organisations examined, Manufacturing, and Retail Trade and Accommodation form the two largest groups, with 42 (21%) and 40 (20%) of the total respectively. These are followed by Professional, Scientific, Technical, Administrative and Support Services with 22 (11%) and Agriculture, Forestry and Fishing with 17 (9%). All organisations in Recreation and Other Services, Mining industries have a New Zealand based Facebook page, while organisations of Financial and Insurance Services, Rental, Hiring and Real Estate Services did not.

4.2 Community Interaction Features

For the following questions organisations were scored (and counted) as per the content analysis questionnaire. The results are summarised in Appendix A against the relevant questions. Data was recorded for New Zealand based organisations, and non-New Zealand organisations in order to determine any difference in behaviour between these groups.

4.2.1 Visitor posts

Through examining organisational Facebook pages, all visitor posts were found to be public to Facebook users. However, only two (2%) organisations point that out on their Facebook page. Both of these organisations are based in New Zealand.

4.2.2 Comment like and share

All comments, likes and shares on the 119 New Zealand-managed Facebook pages are publicly open to all Facebook users. Only three (3%) organisations inform users of this; two of these (2%) are from New Zealand and the other one (1%) is not.

4.2.3 Top Fans

Similarly, top fans of 116 (97%) of the Facebook pages can be seen publicly, but none of the 119 organisations has informed the users of this. Three (3%) organisations have this feature blocked; two (2%) are New Zealand based and one (1%) is not.

4.3 Business Tools

This section details the tools used by organisations on their Facebook brand pages. When users interact with Facebook tools personally identifiable information can be gathered by both the Facebook organisation and the organisation owning the Facebook brand page. The results of this analysis are summarised in Appendix A.

4.3.1 Facebook Messenger

All 119 (100%) organisations have activated Facebook messenger to communicate with users. Of these organisations, only two (2%) have informed users not to share personal information while using Facebook messenger, both organisations are from New Zealand.

4.3.2 Shops

Facebook shops are not used by any of the organisations examined. There is nothing about this feature described on any of the Facebook pages.

4.3.3 Custom Functions

In terms of customised functions, 75 (63%) of the organisations have no customised functions on their Facebook page. This includes 52 (44%) New Zealand-based organisations and 23 (15%) non-New Zealand based. Of those organisations using custom functions: 28 (56%) created a sub-page for recruitment purposes; 18 (36%) used their pages to run competitions and promotions; two (4%) used the Facebook shop¹ function; one (2%) organisation created a sub-page for clients to make complaints; and one (2%) organisation supports Facebook page top up.

4.4 Privacy Notification on Facebook

Of the 119 Facebook pages tested, 19 (16%) have a privacy notice on their Facebook page, 16 (19%) are New Zealand organisations, and 3 (9%) are overseas based. Only one (1%) organisation mentions the New Zealand Privacy Act 1993 on their Facebook page stating, "We may hold personal information submitted to us by you through the use of this page and you have the right to access and correct that information under the Privacy Act 1993." This organisation is non-New Zealand based. Among those organisations with a privacy notice, 16 (84%) display the privacy notice in the "About" section as advised by Facebook, and three (16%) displayed the privacy notice in the "Notes" section.

The content of the privacy notices has been summarised in Table 2 below:

¹ The shop function is categorised into a custom function as both organisations created custom tabs which link to the relevant web page. It is different from the business tool called shops.

| Primary Content of Privacy Notice | Count |
|--|-------|
| Suggesting users should not post personal information (e.g. phone number, address, email, account information) on Facebook. | 9 |
| Informs users that everything (e.g. comments, photos, videos) submitted on Facebook page can be seen by everyone else. | 6 |
| Instructs users not to post personal information publicly, but the organisation can be communicated with via Facebook messenger. | 5 |
| Account specific queries need to be communicated through telephone but not on Facebook. | 1 |
| Posts risking personal privacy will be removed. | 1 |

Table 2: Primary Content of Facebook Privacy Notices

4.4.1 House Rules on Facebook

Apart from the privacy notice, it was observed that 55 (46%) organisations have a "House Rules" section to provide user guidelines on their Facebook page. Summarised contents relating to privacy on Facebook are presented in Table 3 below:

| Primary Content of House Rules | Count |
|--|-------|
| Don't post or message anything that could be considered prejudicial, racist, off-topic, inflammatory, repetitive, offensive or otherwise inappropriate or untrue on Facebook page. | 55 |
| Organisations encourage communications with Facebook users, and comments, photos and links on the page are welcomed. | 43 |
| The organisation is responsible for the content on this page and so improper content will be removed. | 39 |
| All users on the Facebook page must comply with Facebook's Terms of Use. | 10 |

Table 3: Primary Content of House Rules on Facebook Pages

4.5 Privacy Policy on the Organisational Website

This research also examined the privacy policy on the website of each organisation. Of the 119 organisations that have a New Zealand Facebook page presence, 37 (31%) organisations have online privacy policies which undertake to protect personal information on social media. Base-country wise, 25 (21%) New Zealand and 12 (10%) non-New Zealand organisations have privacy on social media addressed in the online privacy policy. Overall, 20 (17%) organisations share the organisation privacy policy link on their Facebook page, with 15 (13%) and 5 (4%) for organisations from New Zealand and overseas respectively.

4.6 Score Analysis

As could be expected from the answers to the content analysis questions (Appendix A), the scores derived for individual organisations were low. Overall, the median score for an organisation was 3, scored by 64 (54%) organisations. 24 (20%) organisations scored 4, and 16 (13%) organisations have a score of 2. The maximum score was a 7.

From the base country perspective, 3 is the median score for both New Zealand and non-New Zealand organisations. 43 (39%) New Zealand and 21 (18%) overseas organisations scored 3. Two (2%) New Zealand and one (1%) non-New Zealand organisations are scored 6, one (1%) New Zealand based organisation has the highest score of 7. Details are presented in Figure 1 below:

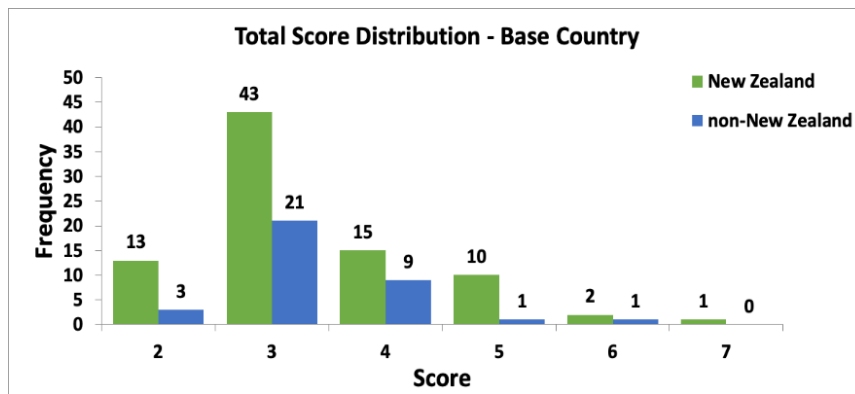


Figure 1: Distribution of Scores by Base Country

5 Discussion and Conclusion

This study sought to answer the research question “how is information privacy on organisational Facebook pages addressed by New Zealand organisations”. Of the top 200 organisations in New Zealand, according to Deloitte (2017), 138 had a Facebook page of which 119 were managed in New Zealand and could be expected to fall within the jurisdiction of New Zealand privacy law. Application of the content analysis questionnaire shows that organisations are making use of Facebook features such as comments and shares, Facebook Messenger, fans, and custom functions such as recruitment, competitions and promotions. All of these features give rise to the possibility of a user’s personally identifiable information being revealed to other Facebook users, or to the Facebook organisation, as well as user information being revealed to the organisation owning the page. Few organisations took any steps on their Facebook pages to inform users of privacy considerations. Only 19 organisations had any form of privacy notice on their organisational page, although some organisations used “House Rules” to inform users of expected behaviour on their pages which could be somewhat privacy protective. New Zealand-based organisations did not perform notably better than overseas organisations with the number of organisations informing users of privacy concerns in each category being too low to allow meaningful comparison. Scoring of individual organisations for their privacy practices gave a median score of 3 out of a possible 18, with the maximum score achieved being 7. This study shows that New Zealand organisations are not performing well in informing their Facebook page users about how their data is being collected, stored or used when it is revealed to them through the various tools and features of Facebook.

The majority of research in respect of privacy on Facebook concentrates on the actions of the Facebook organisation. This research highlights a second area of privacy concern which is the action of organisations themselves on their organisational Facebook pages. It can be seen that little information is available for Facebook users about how the organisation treats data collected through Facebook, or the use of Facebook tools when visiting an organisation’s Facebook pages. This is despite research showing the importance of trust on the Facebook brand page for customers engaging in social commerce (Bitter et al., 2014; Busalim et al., 2019).

In respect of the privacy principles set out in the New Zealand Privacy Act, it is difficult to assess how organisations are acting to comply with their legislative obligations. It is only through what organisations say they are doing that users can assess the organisations compliance with obligations to collect, protect, store and dispose of information. As organisations are largely failing to inform users of their privacy practices little can be said in respect of compliance with the Privacy Act. As public awareness of information privacy on social media grows, organisations will likely come under increasing pressure to respect the privacy of visitors to their Facebook pages. Further, the risk management approach recommended by the new Privacy Act will also encourage organisations to improve their privacy practices. This study and the questionnaire it developed can be used as a baseline for organisations to understand how information is gathered on their Facebook pages, and to improve their notification practices in order to build trust with their visitors.

This research contributes to knowledge by developing a questionnaire that can be used by academics, individuals and organisations to determine how an organisational Facebook page is informing its users of the privacy implications of interacting with Facebook Brand pages. Organisations could also use the questionnaire as a framework for updating their privacy notification and information handling practices in alignment with those identified in the questionnaire. The testing of the questionnaire against a

sample of New Zealand organisations also contributes to understanding how organisations are currently acting in respect of privacy notice on their Facebook brand pages.

Limitations of this research include concentrating on the top 200 organisations in New Zealand. These organisations are not necessarily representative of the majority of New Zealand organisations. Research concentrating on smaller and more transactional Facebook pages may lead to different results. Similarly, a larger sample size may yield different results. Some of the organisations studied are managed and owned outside of New Zealand's jurisdiction and are therefore subject to a mixture of regulatory requirements, as well as New Zealand law. Although Facebook pages managed outside of New Zealand were excluded from this study, the mixture of privacy regulations international organisations are exposed to may lead to differences in privacy responses and notification practices, which were not identified in this research.

Future work could include expanding the sample size of the study, and broadening the scope of organisations being examined. A theoretical perspective could be included in order to enhance understanding of how organisations act around privacy notification and the drivers of individual behaviour when such notification is not present. Further, it is not known how individuals view the privacy actions of organisations on Facebook and research in this area is scant. Research investigating whether individuals understand the difference between the actions of Facebook and the actions of organisations gathering data through Facebook may lead to a more in-depth understanding of this area.

6 References

- Bartsch, M., & Dienlin, T. 2016. "Control your Facebook: An analysis of online privacy literacy." *Computers in Human Behavior*, (56), pp. 147–154. <https://doi.org/10.1016/j.chb.2015.11.022>
- Beigi, G., & Liu, H. 2018. "Privacy in social media: Identification, mitigation and applications." *ArXiv:1808.02191 [Cs]*. <http://arxiv.org/abs/1808.02191>
- Bitter, S., Grabner-Kräuter, S., & Breitenecker, R. J. 2014. "Customer engagement behaviour in online social networks – the Facebook perspective". *International Journal of Networking and Virtual Organisations*, (14:2), pp. 197–220. <https://doi.org/10.1504/IJNVO.2014.065088>
- Brodie, C., Karat, CM., Karat, J., & Feng, J. 2005. "Usable security and privacy: A case study of developing privacy management tools". *Proceedings of the 2005 Symposium on Usable Privacy and Security*, pp. 35-43.
- Busalim, A. H., Hussin, A. R. C., Iahad, N. A., Busalim, A. H., Hussin, A. R. C., & Iahad, N. A. 2019. "Factors Influencing Customer Engagement in Social Commerce Websites: A Systematic Literature Review." *Journal of Theoretical and Applied Electronic Commerce Research*, (14:2), pp. 1–14. <https://doi.org/10.4067/S0718-18762019000200102>
- De Wolf, R., Willaert, K., & Pierson, J. 2014. "Managing privacy boundaries together: Exploring individual and group privacy management strategies in Facebook." *Computers in Human Behavior*, (35), pp. 444–454. <https://doi.org/10.1016/j.chb.2014.03.010>
- Deloitte. 2017. "2017 Top 200 companies". <https://www.top200.co.nz/wp-content/uploads/Top200-Awards-2017-Rankings.pdf>
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. 2014. "Qualitative content analysis: A focus on trustworthiness." *SAGE Open*, 2158244014522633. <https://doi.org/10.1177/2158244014522633>
- Esteve, A. 2017. "The business of personal data: Google, Facebook, and privacy issues in the EU and the USA." *International Data Privacy Law*, (7:1), pp. 36–47.
- Facebook. n.d.-a. "About Facebook page shops. Facebook Business Help Center." Retrieved May 28, 2020, from <https://www.facebook.com/business/help/238403573454149>
- Facebook. n.d.-b. "About messages in the page inbox. Facebook Business Help Center." Retrieved May 28, 2020, from <https://www.facebook.com/business/help/367989093844545>
- Facebook. n.d.-c. "Facebook data policy." Retrieved August 20, 2019, from <https://en-gb.facebook.com/about/privacy/update>
- Facebook. n.d.-d. "Facebook Pages for marketing your business". Facebook for Business. Retrieved January 6, 2020, from <https://en-gb.facebook.com/business/pages>

- Facebook. n.d.-e. "Free tools to grow your business on Facebook. Facebook Business Help Center." Retrieved May 28, 2020, from <https://www.facebook.com/business/help/412634305818063>
- Facebook. n.d.-f. "How do I manage top fan badges for my Facebook Page?" Retrieved May 27, 2020, from <https://www.facebook.com/help/340991076472172>
- Facebook. n.d.-g. "How do I set up appointments on my Facebook Page?" Retrieved May 28, 2020, from https://www.facebook.com/help/233101683907312?helpref=search&sr=3&query=booking&search_session_id=a6986e6c919d33a1d974e04bb40d1ab2
- Fyers, A., & Cooke, H. 2017. "Facebook is New Zealand's second-favourite leisure activity." <https://www.stuff.co.nz/technology/90005751/how-many-kiwis-are-on-facebook>
- Greenaway, K. E., Chan, Y. E., & Crossler, R. E. 2015. "Company information privacy orientation: A conceptual framework." *Information Systems Journal*, (25:6), pp. 579–606. <https://doi.org/10.1111/isj.12080>
- Gutierrez-Cillan, J., Camarero-Izquierdo, C., & SanJose-Cabezudo, R. 2017. "How brand post content contributes to user's Facebook brand-page engagement. The experiential route of active participation." *Business Research Quarterly*, (20). <https://doi.org/10.1016/j.brq.2017.06.001>
- Isaak, J., & Hanna, M. J. 2018. "User Data Privacy: Facebook, Cambridge Analytica, and Privacy Protection." *Computer*, (51:8), pp. 56–59. <https://doi.org/10.1109/MC.2018.3191268>
- Jayasingh, S., & Venkatesh, R. 2015. "Customer engagement factors in Facebook brand pages." *Asian Social Science*, (11:26). <https://doi.org/10.5539/ass.v11n26p19>
- Koetsier, J. 2013. "Facebook: 15 million businesses, companies, and organizations now have a Facebook page." *VentureBeat*. <https://venturebeat.com/2013/03/05/facebook-15-million-businesses-companies-and-organizations-now-have-a-facebook-page/>
- Külcü, Ö., & Henkoğlu, T. 2014. "Privacy in social networks: An analysis of Facebook." *International Journal of Information Management*, (34:6), pp. 761–769. <https://doi.org/10.1016/j.ijinfomgt.2014.07.006>
- Liu, Y., Gummadi, K. P., Krishnamurthy, B., & Mislove, A. 2011. "Analyzing Facebook privacy settings: User expectations vs reality." *Proceedings of the 2011 ACM SIGCOMM Conference on Internet Measurement Conference*, pp. 61–70. <https://doi.org/10.1145/2068816.2068823>
- Ministry of Business, Innovation and Employment. n.d.. "Protecting customer and employee information." Retrieved August 20, 2020, from <https://www.business.govt.nz/risks-and-operations/it-risk-and-avoiding-scams/protecting-customer-and-employee-information/>
- Ministry of Justice. 2019. *Privacy Act 1993 No 28 (as at 01 July 2019)*. <http://www.legislation.govt.nz/act/public/1993/0028/latest/whole.html#DLM296639>
- Ministry of Justice. 2020. *Privacy Act 2020 (as at 07 August 2020)*. <http://www.legislation.govt.nz/act/public/2020/0031/latest/versions.aspx>
- Ministry of Justice. 2020. "Key Initiatives: Privacy." <https://www.justice.govt.nz/justice-sector-policy/key-initiatives/privacy/>
- Office of the Privacy Commissioner. 2019. "Privacy for agencies." <https://www.privacy.org.nz/privacy-for-agencies/your-obligations/>
- Pelteret, M., & Ophoff, J. 2016. "A review of information privacy and its importance to consumers and organizations." *Informing Science: The International Journal of an Emerging Transdiscipline*, 19, pp. 277-301.
- Smith, K. 2019. "53 incredible Facebook statistics and facts." Brandwatch. <https://www.brandwatch.com/blog/facebook-statistics/>
- Statista. 2020. "Facebook: Active users worldwide." <https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>
- Vos, M. 2007. "An examination of New Zealand website privacy notices: Privacy and trust in the online environment in New Zealand." Masters Thesis, Victoria University of Wellington.

Appendix A

| Num | Question Group | Questions | Num of YES (NZ) | Num. of YES (Non-NZ) | Num of NO | Percentage of YES |
|---|--------------------------------|---|-----------------|----------------------|-----------|-------------------|
| Facebook Features and Services | | | | | | |
| 1 | Community Interaction Features | Are visitor post private? | | | 119 | 0% |
| 2 | | Are users informed that the visitor posts are public? | 2 | | 117 | 2% |
| 3 | | Are top fans private? | 2 | 1 | 116 | 3% |
| 4 | | Are users informed that top fans are public? | | | 119 | 0% |
| 5 | | Are comments, likes and shares private? | | | 119 | 0% |
| 6 | | Are users informed that their comments, likes and shares are public? | 2 | 1 | 116 | 3% |
| 7 | Business Tools | Is Facebook messenger blocked for customer interaction? | | | 119 | 0% |
| 8 | | Are users informed not to share personal information on Facebook Messenger? | 2 | | 117 | 2% |
| 9 | | Is custom function blocked? | 52 | 23 | 44 | 63% |
| 10 | | Users are informed that custom functions used might disclose personal information to Facebook | | | 119 | 0% |
| 11 | | Is Facebook purchase blocked? | 119 | | 0 | 100% |
| 12 | | Are users informed that purchase on Facebook might disclose personal information? | | | 119 | 0% |
| 13 | | Is Facebook booking blocked? | 119 | | 0 | 100% |
| 14 | | Are users informed that service booking on Facebook might disclose personal information? | | | 119 | 0% |
| Privacy Notice on Facebook Page and Organisational Privacy Policy | | | | | | |
| 15 | FB Privacy Notice | Is there any privacy notice on the organisation's Facebook page? | 16 | 3 | 100 | 16% |
| 16 | | Is Privacy Act 1993 Mentioned on the organisation's Facebook page? | 1 | | 118 | 1% |
| 17 | Org. Privacy Notice | Is there any link to the privacy policy of the organisation on the page? | 15 | 5 | 99 | 31% |
| 18 | | Is privacy on social media specified in the privacy policy of the organisation? | 25 | 12 | 82 | 17% |
| 19 | Qualitative Questions | Section containing privacy notice? | | | | |
| 20 | | Content of privacy notice? | | | | |
| 21 | | Content of FB hours rules? | | | | |
| 22 | | Link to organisations privacy policy? | | | | |
| 23 | | Content of organisational privacy policy? | | | | |
| Demographic Questions | | | | | | |
| What is the name of the organisation? | | | | | | |
| What is the official website of the organisation? | | | | | | |
| What is the base country of the organisation? | | | | | | |
| What does the organisation do? What's the Industry of the organisation (ANSIC)? | | | | | | |
| What is the industry privacy risk level of the organisation (high/low)? | | | | | | |
| Does the organisation have a Facebook Page? | | | | | | |
| What is the Facebook page of the organisation? | | | | | | |
| Does the organisation have a New Zealand Market Facebook Page? | | | | | | |
| Is there a link to the Facebook Page on the organisation's website? | | | | | | |

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