



BRUNEI DARUSSALAM
INFORMATION COMMUNICATIONS TECHNOLOGY (ICT)
BUSINESS REPORT 2019

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Message from the Chief Executive

I am pleased to present the first survey report on ICT adoption for businesses conducted by the Authority for Info-communications Technology Industry of Brunei Darussalam (AITI) in collaboration with Universiti Brunei Darussalam (UBD). The information presented in this report serves to demonstrate the progress of ICT usage among businesses in Brunei Darussalam.

The findings from this survey show that most businesses have implemented ICT systems and are continually improving them to stay competitive in their respective sectors. 96 per cent of businesses who responded to the survey are from Micro, Small and Medium Enterprises (MSMEs).

The report shows that 90 per cent of businesses in Brunei Darussalam have access to the Internet. Businesses rely heavily on social media platforms to tap into specific market segments and gain customer engagement. The report also shows that 58 per cent of businesses are aware of the advantage of integrating ICT into their businesses. Such businesses provide other services via the internet to add value and enhance their customers' experience.

While these figures are relatively promising, there needs to be an increase in the adoption of e-Commerce activities in Brunei Darussalam if we are to move towards a cashless society. AITI continues to put its efforts to achieve this goal by implementing various programmes including Youth in e-Commerce and ICT Saviness Program to illustrate the benefits of using ICT for the community.

It is my hope that this report will provide valuable insights for policy makers, academia, researchers, start-ups, and other industry players to come up with focused policies, strategies and solutions that contribute towards the economic growth of the nation.

Lastly, I would like to thank all businesses who have responded to the survey and everyone else who has contributed to the successful completion of the survey.

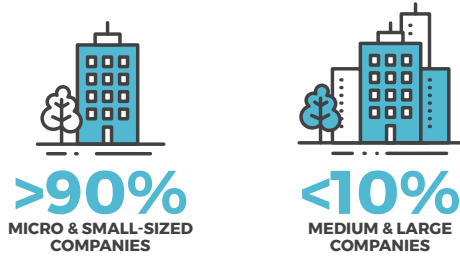
Pg Hj Mohd Zain Bin Pg Hj Abd Razak

Chief Executive

Authority for Info-communications Technology Industry of Brunei Darussalam (AITI)

ICT BUSINESS KEY FINDINGS

SIZE OF COMPANIES



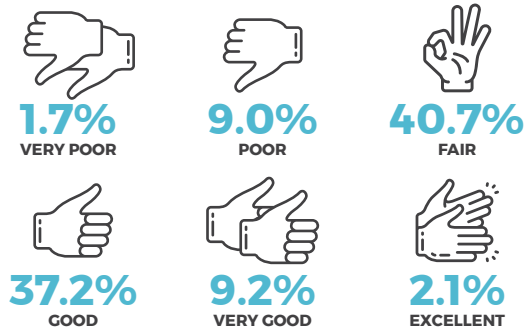
BUSINESSES SELLING PRODUCTS ONLINE



BUSINESS HAVE ACCESS TO INTERNET



BUSINESS RATE ON THE INTERNET QUALITY



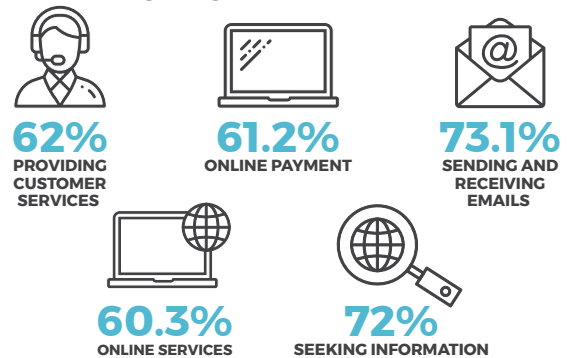
MOST USED TYPE ON INTERNET ACCESS



MONTHLY CHARGE OF THE INTERNET ACCESS



BUSINESS RELATED ACTIVITIES DONE ON THE INTERNET



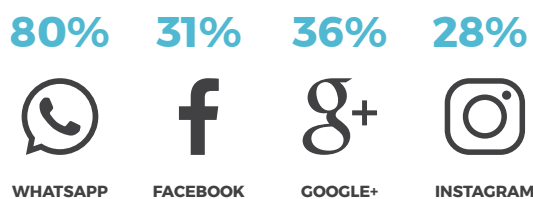
REALISING ADVANTAGE OF ICT



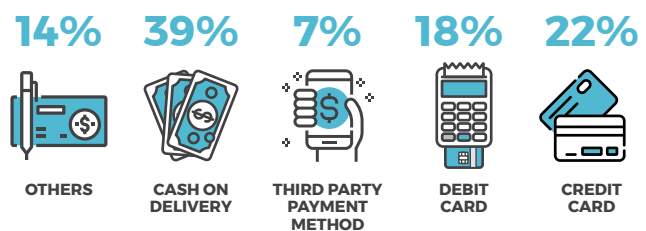
EMPLOYEE ACCESS TO COMPUTER



BUSINESS PRESENCE ON SOCIAL MEDIA



PAYMENT METHODS



01. INTRODUCTION

The Authority for Info-communications Technology Industry of Brunei Darussalam (AITI) has conducted the Brunei Darussalam ICT Business Survey 2019. The objectives of this survey are:

- 1) To collect data and provide meaningful indicators on the adoption of ICT among businesses in Brunei Darussalam;
- 2) To identify and analyse the gaps and issues relating to the adoption of ICT among businesses in Brunei Darussalam;
- 3) To understand the progress and evolving trends of ICT in Brunei Darussalam.

This survey is also in compliance with International Telecommunication Union (ITU) Manual for Measuring ICT Access and Use by Households and Individuals in order to ensure the required indicators reflect the current situation of business ICT adoption in Brunei Darussalam.



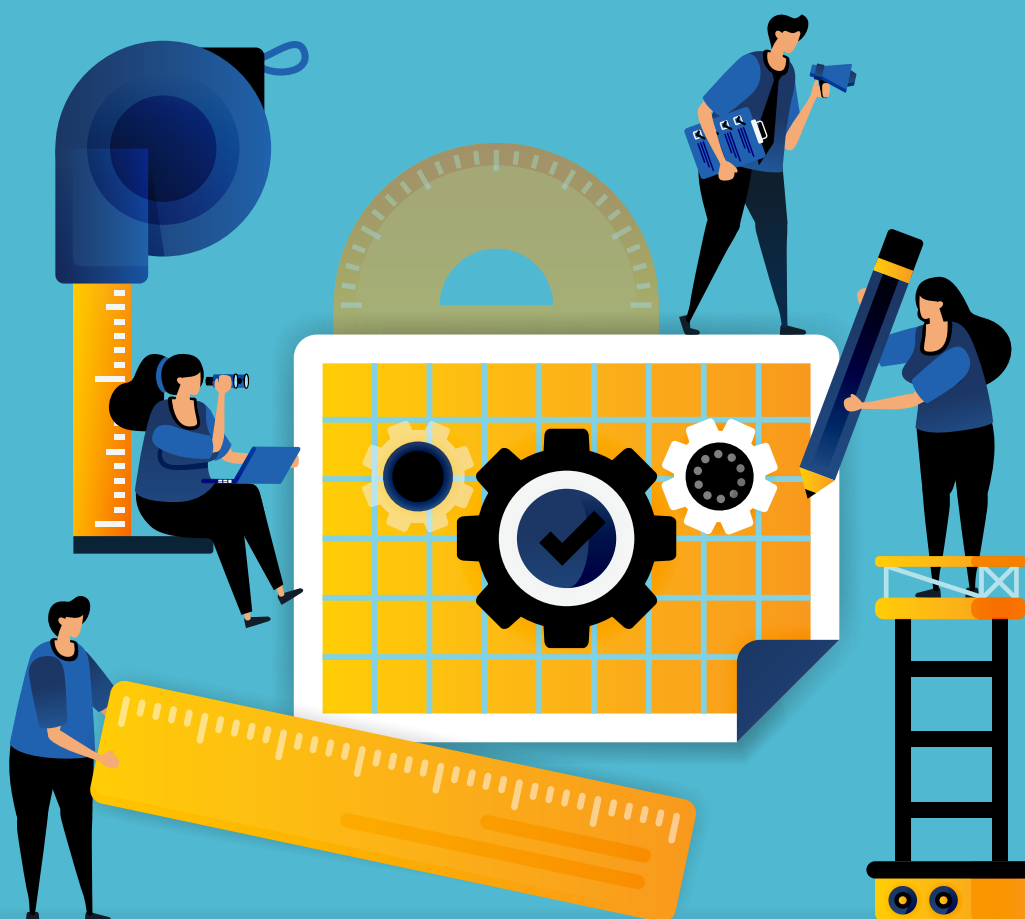
02. METHODOLOGY

2.1. OVERVIEW

The survey was conducted from March until May 2019 to all registered businesses via online platform, with each business represented by either an executive, a managerial or a support staff. The total sample consisted of 814 businesses using random sampling method.

2.2. COLLABORATION

To carry out this survey, AITI collaborated with Universiti Brunei Darussalam (UBD) which assisted in structuring the questionnaire's design, analysis of the data collected from the survey and producing the report based on the analysis.



03. DEMOGRAPHY

3.1. NUMBER OF YEARS COMPANIES OPERATE

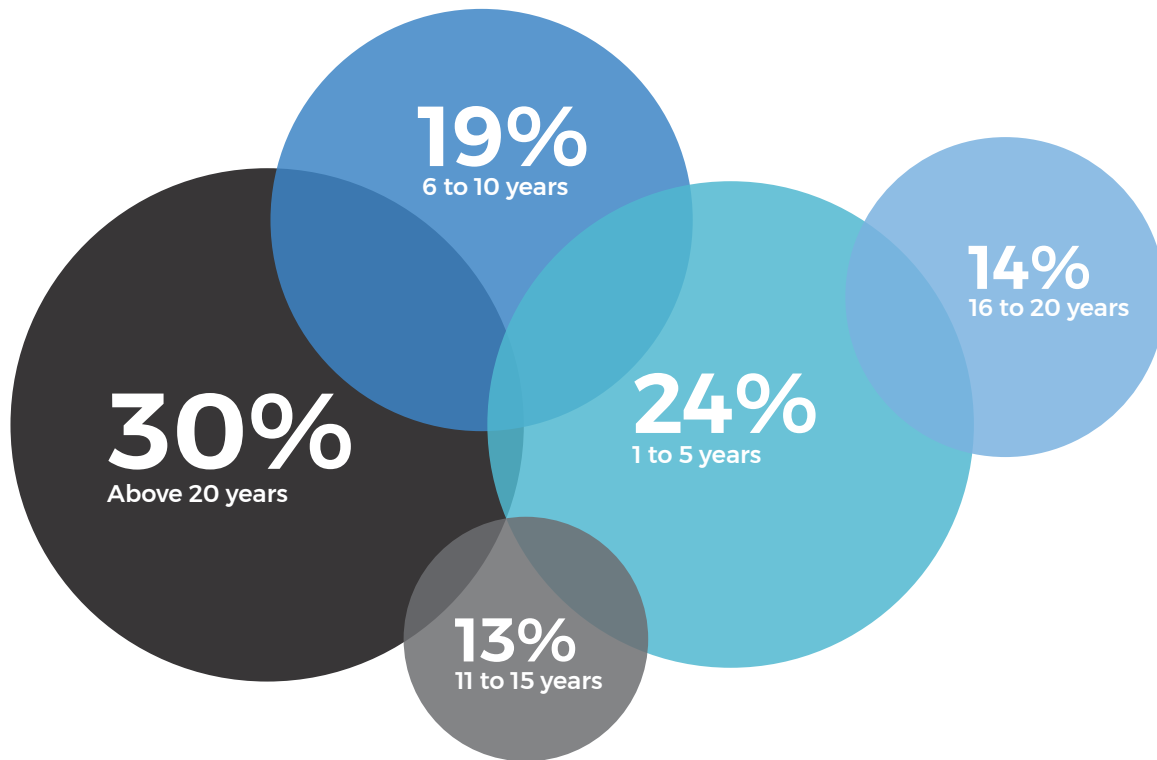


Figure 1. Number of Years Companies Operate

3.2. TYPE OF ORGANISATION

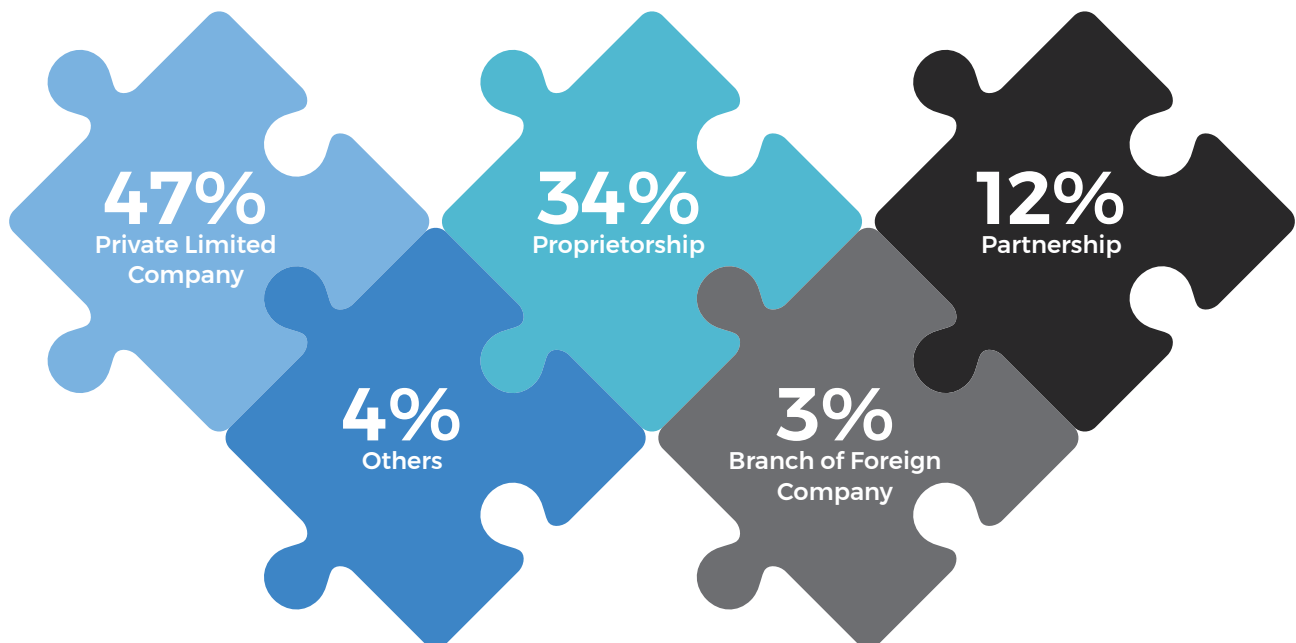


Figure 2. Types of Organisation

3.3. INDUSTRY OR SECTOR

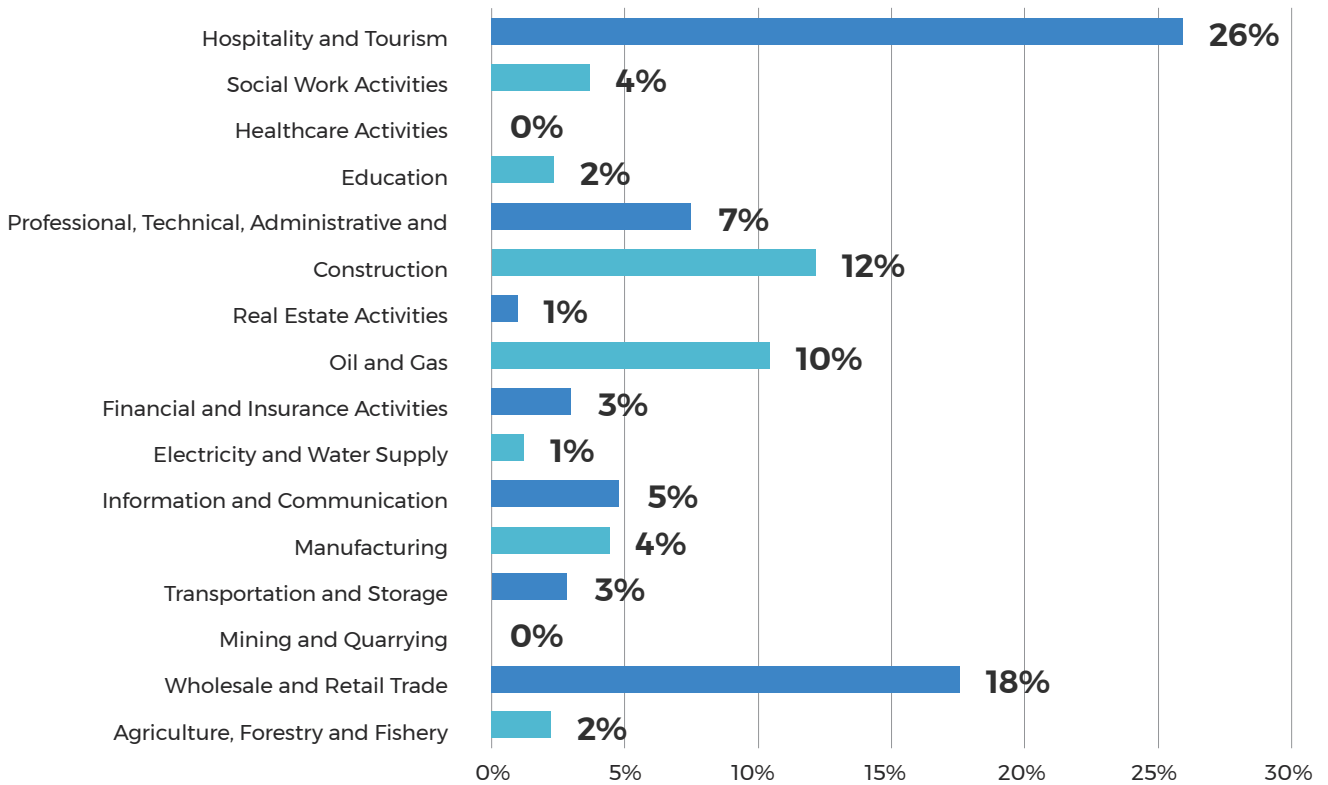


Figure 3. Industry/Sector

COMPANY SIZE

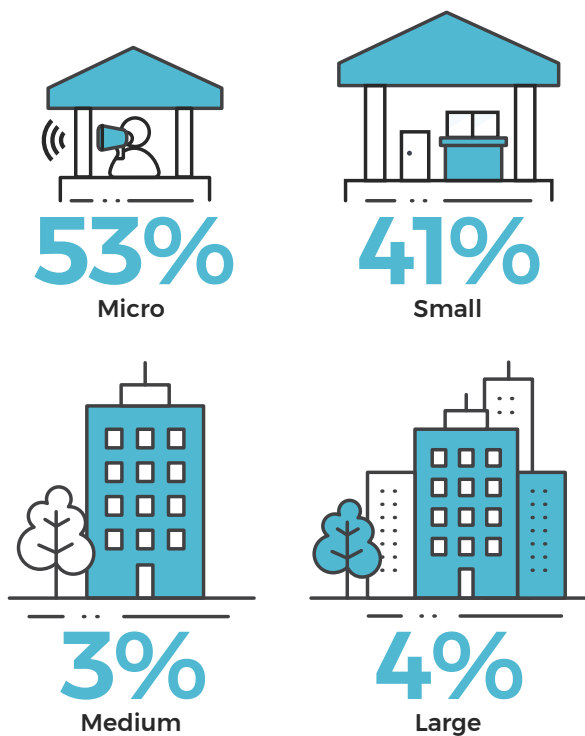


Figure 4. Industry/Sector

LOCAL AND FOREIGN EMPLOYEE

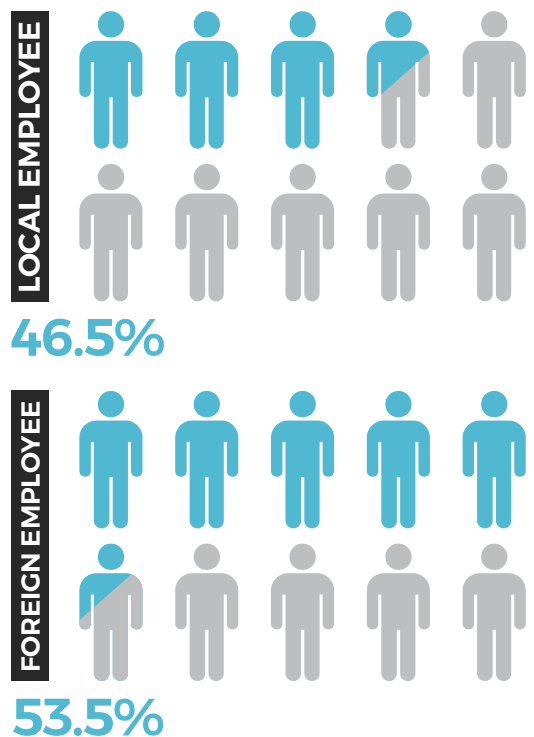
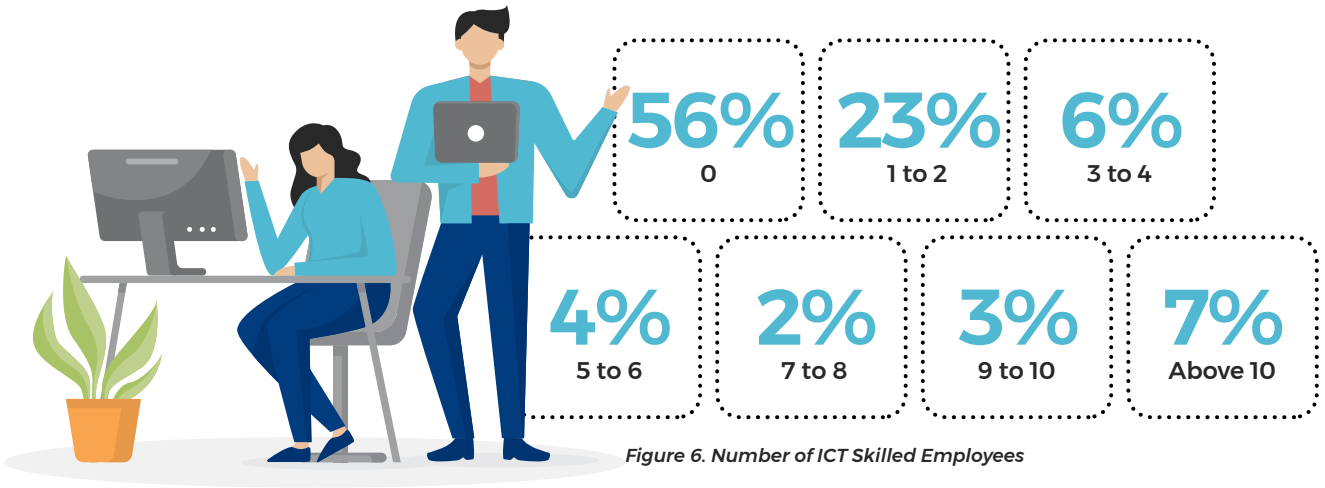


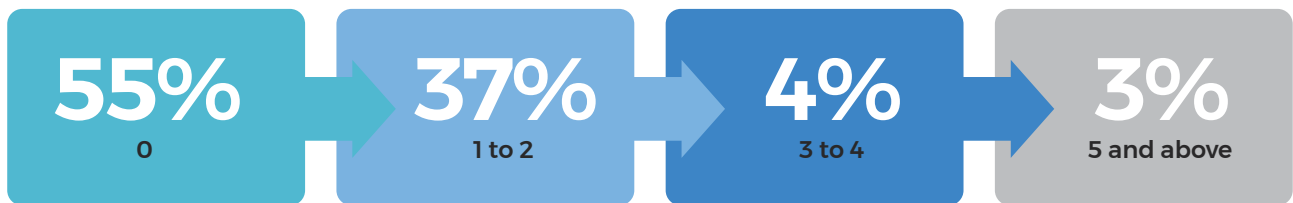
Figure 5. Local and Foreign Employee

3.4. NUMBER OF ICT SKILLED EMPLOYEE

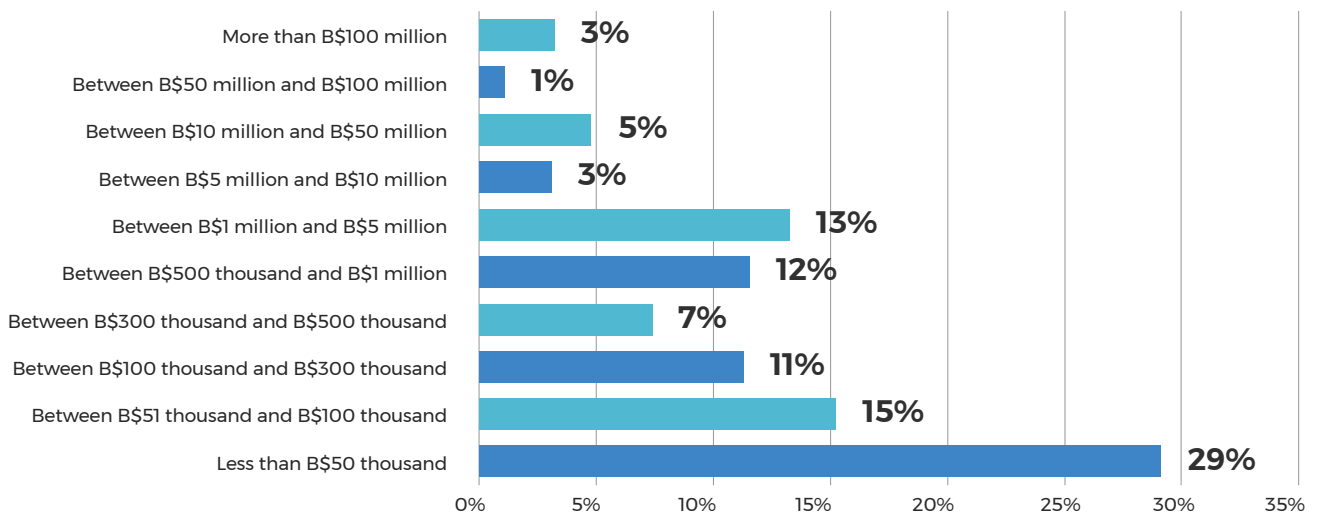


56% of businesses do not have any ICT skilled employees. The reason for this may be due to the nature of business which does not require any ICT skills.

3.5. NUMBER OF BRANCH



3.6. ANNUAL REVENUE



04. COMPUTER ACCESS

4.1. EMPLOYEE ACCESS TO COMPUTER

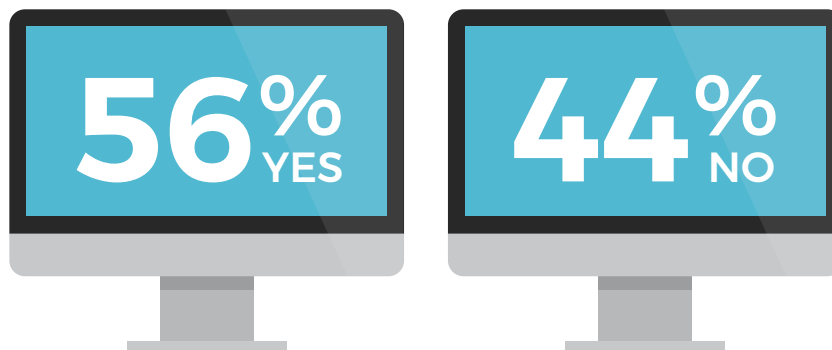


Figure 9. Employee Access to Computer

56% of the businesses have computer access for their employees while 44% of the businesses have no computer access for their employees.

4.2. PERCENTAGE OF EMPLOYEES USING COMPUTER FOR BUSINESS ACTIVITIES

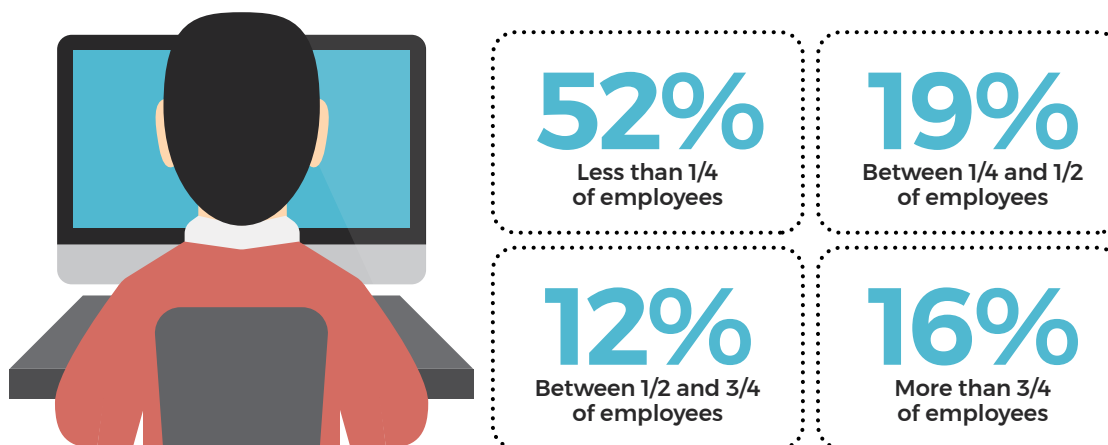


Figure 10. Percentage of Employees using Computer for Business Activities

For 52% of businesses, less than a quarter of employees use computers for business activities. Between a quarter and a half of employees use computers for business activities in 19% of businesses.

05. INTERNET ACCESS

5.1. PERCENTAGE ACCESS TO THE INTERNET



Figure 11. Percentage of Businesses Access to the Internet

According to the figure above, most businesses have access to the Internet (90%) which indicates that internet is important for most businesses to perform their business activities.

5.2. CURRENT INTERNET ACCESS

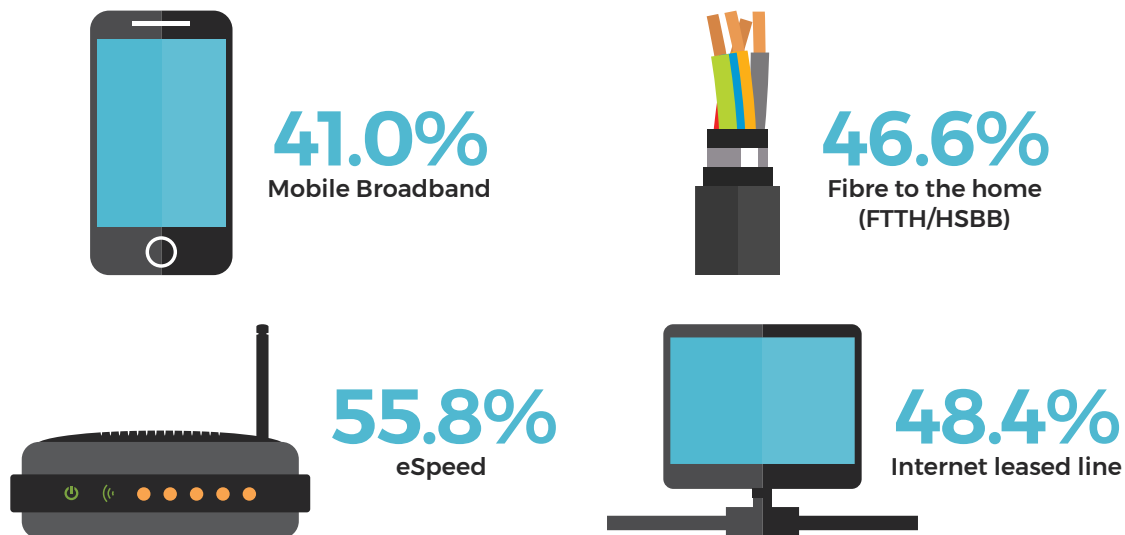


Figure 12. Current Internet Access

In general, businesses use a variety of access methods to the Internet, although the majority of them prefer eSpeed (55.8%), followed by Internet leased line (48.4%).

5.3. MONTHLY EXPENDITURE FOR INTERNET ACCESS

	None	Less than BND 100	BND 101 - BND 250	BND 251 - BND 500	BND 500 - BND 700	BND 701 - BND 1,000	Above BND 1,000
Internet Leased Line	51%	13%	21%	7%	2%	1%	5%
eSpeed	20%	26%	39%	12%	2%	2%	1%
Fibre to the home (FTTH/HSBB)	46%	16%	25%	8%	3%	2%	1%
Mobile Broadband	62%	22%	10%	4%	2%	0%	0%

Figure 13. Monthly Expenditure for Internet Access

Figure 13 shows that the majority of the businesses spend more on eSpeed connections compared to the other types of Internet access, with the amount of BND 250 per month or less.

5.4. EXTENT OF INTERNET USAGE

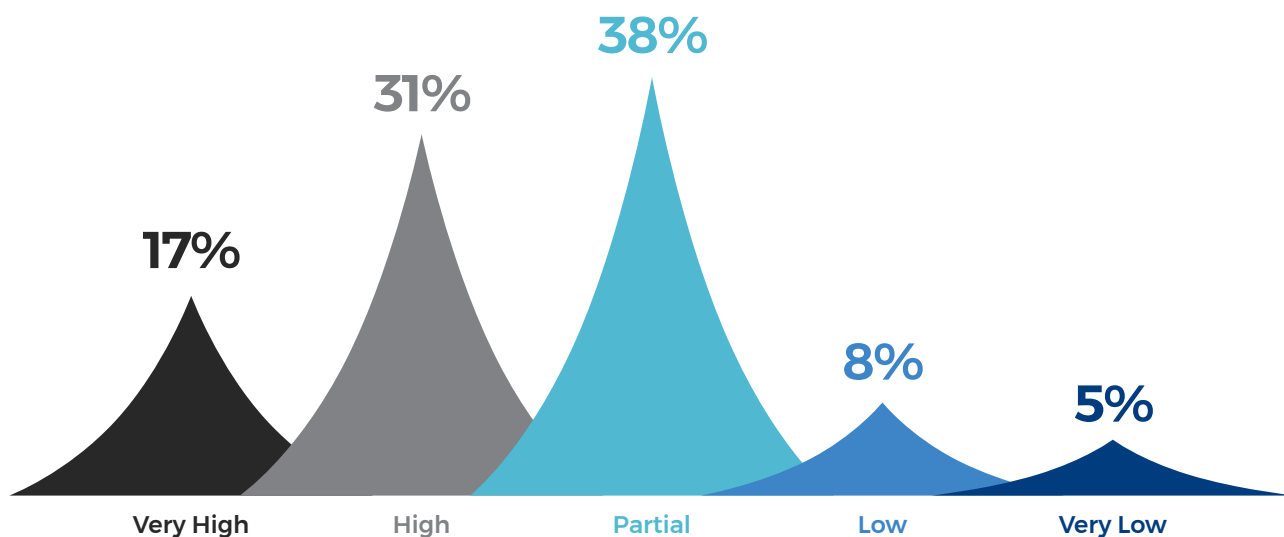


Figure 14. Extent of Internet Usage

Referring to the above graph, majority (38%) has a partial usage of the Internet. In general, most businesses use the Internet and quite a large number of them use the Internet heavily (high and very high).

5.5. INTERNET ACCESS QUALITY

Business Rate on the Internet Quality

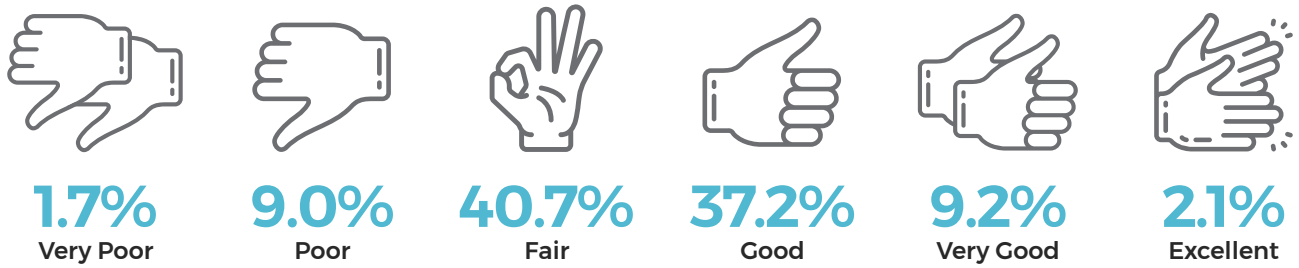


Figure 15. Internet Access Quality

More than 75% of businesses consider the Internet quality to be in the range of fair to good.

5.6. MONTHLY CHARGE OF THE INTERNET ACCESS

Monthly Expenditure Rate of Charge of Current Internet Subscribed

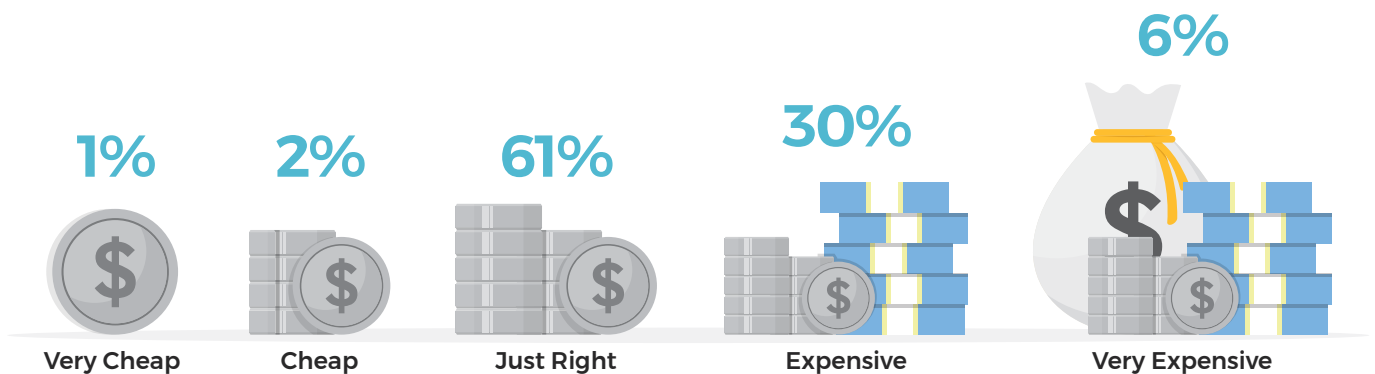


Figure 16. Rate of Monthly Internet Expenditure

By looking at the above (Figure 16), 61% of the businesses rate their Internet subscription to be just right. In general, many businesses consider the monthly expenditure for Internet subscription to be expensive or very expensive.

5.7. BUSINESS USE OF INFORMATION SYSTEMS

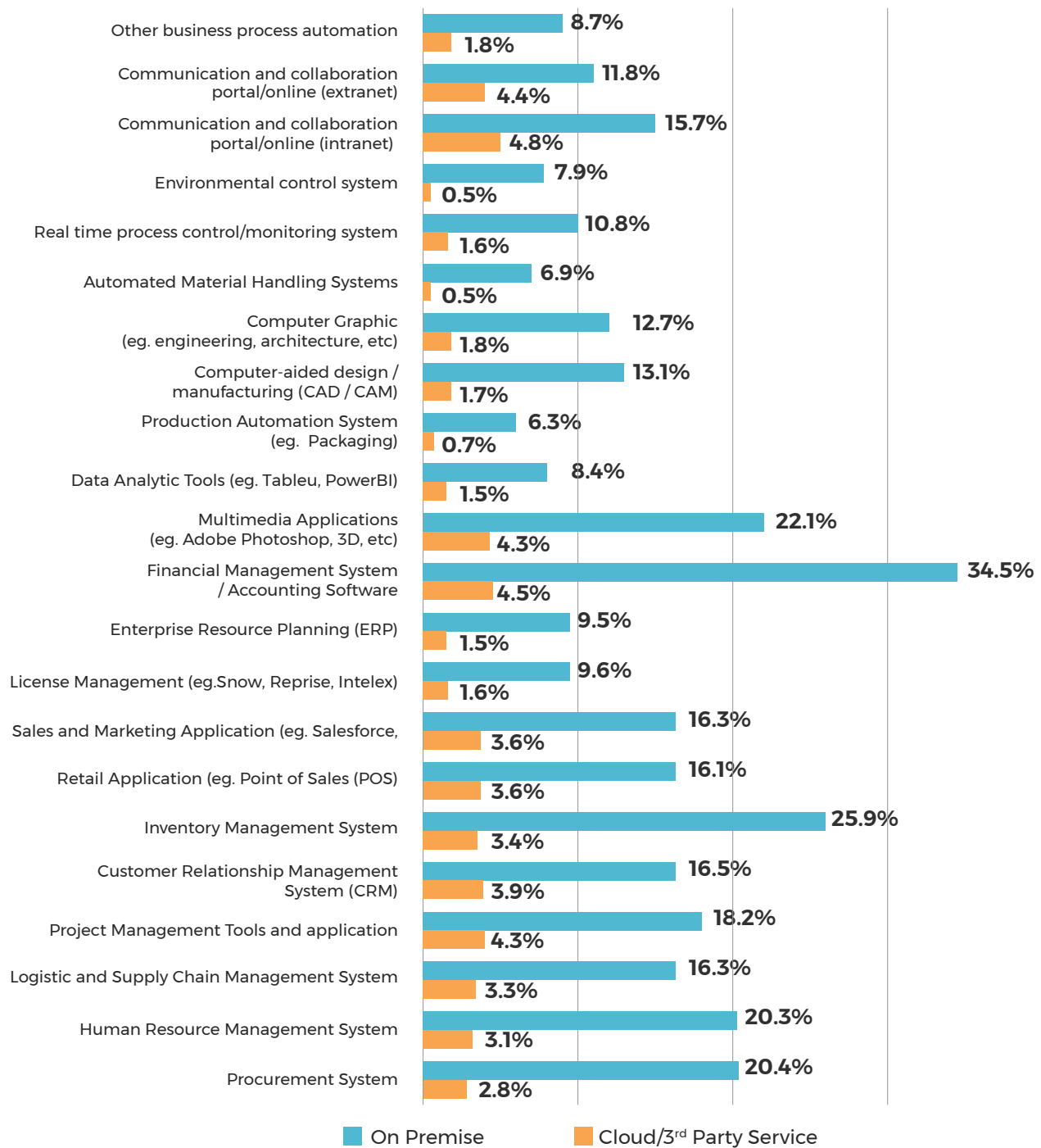


Figure 17. Business Use of Information Systems

Based on the above figure, the statistics show that majority of businesses use ICT on premises as opposed to Cloud/3rd party services.

The adoption of cloud computing to conduct core business processes is low. Most businesses use the cloud services for office related activities as shown in Figure 19 on the next page.

5.8. BUSINESS RELATED ACTIVITIES DONE ON THE INTERNET

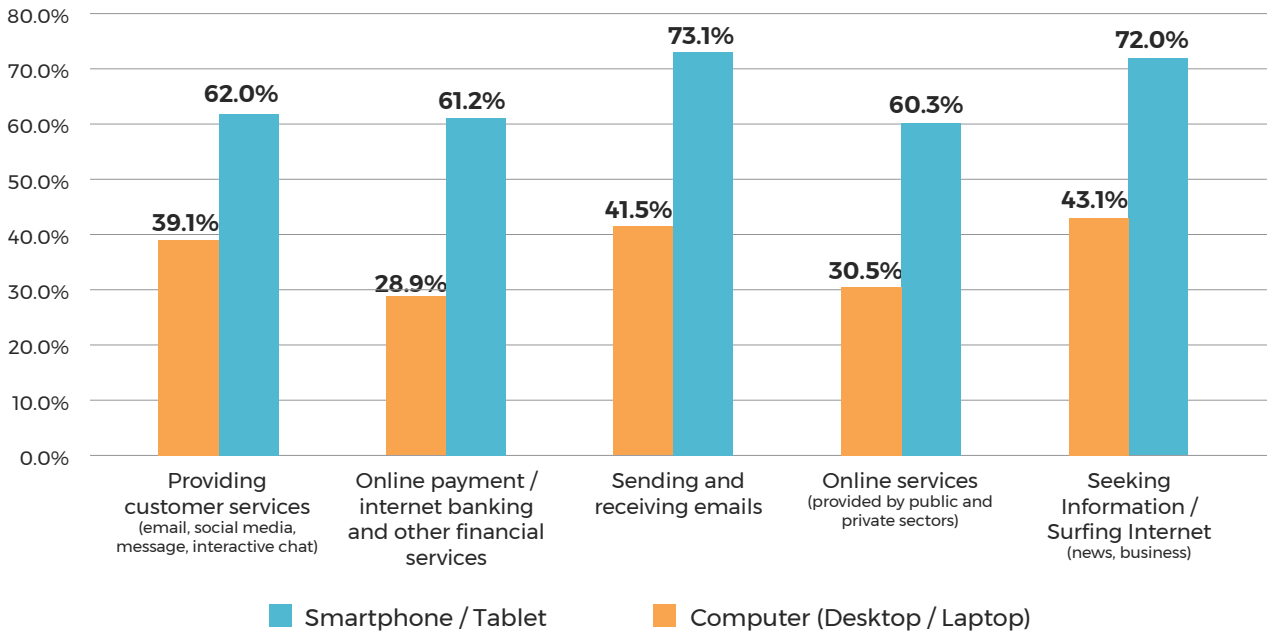


Figure 18. Internet-related Business Activities and The Way of Access

5.9. EMERGING TECHNOLOGY ADOPTION

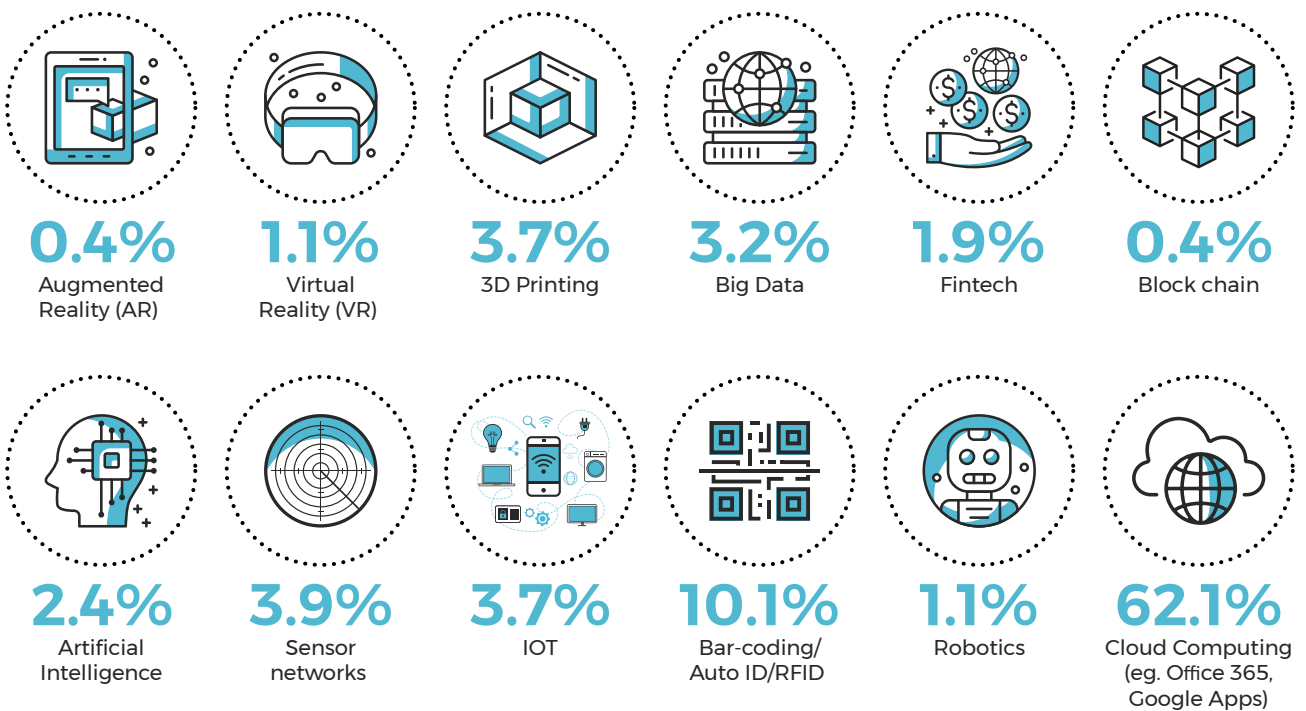


Figure 19. Adoption of Emerging Technologies

5.10. BUSINESS PRESENCE ONLINE

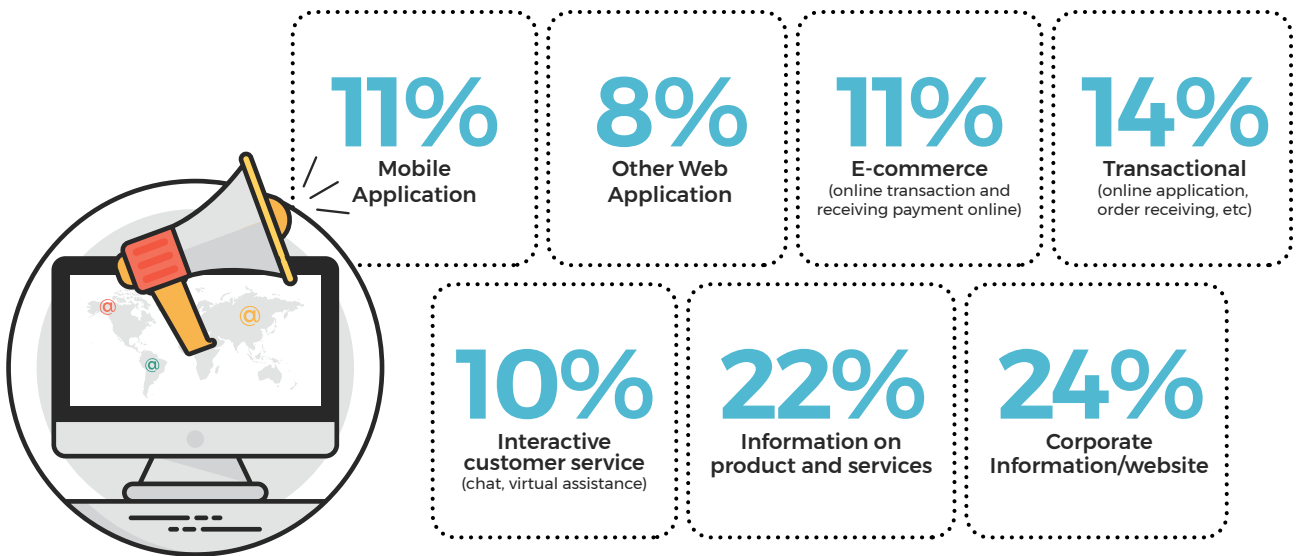


Figure 20. Online Presence

The information above shows that 24% of businesses have their own websites. Only 11% of businesses have a fully-fledged e-commerce platform which allows online payment transactions.

5.11. ADOPTION OF SECURITY TOOLS

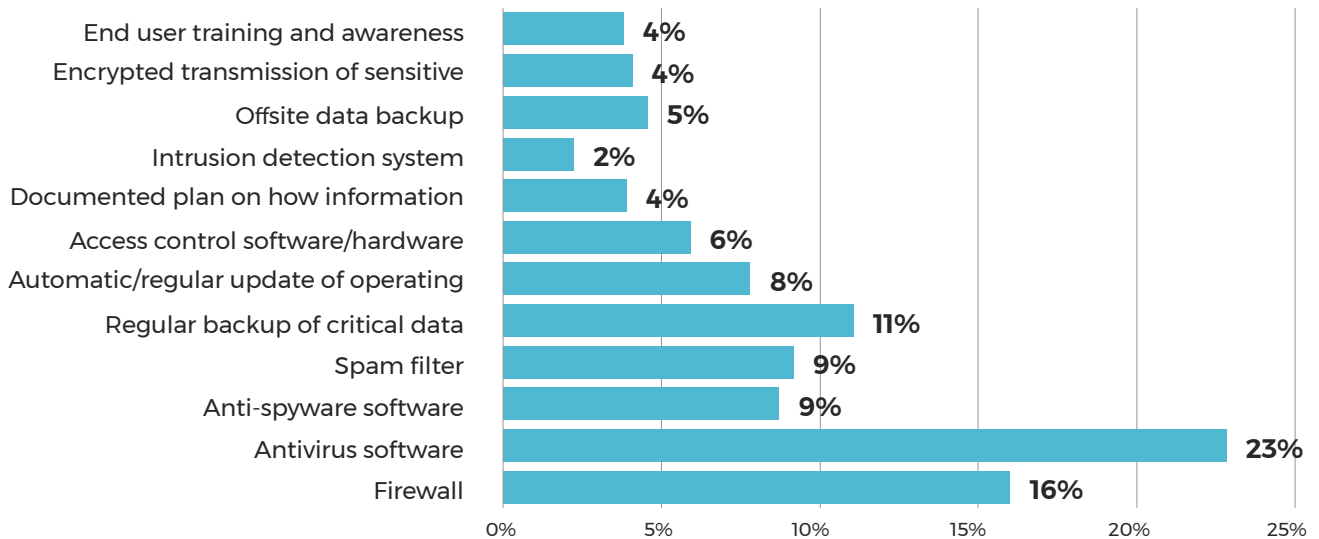


Figure 21. Adoption of Security Tools

Figure 21 shows that 23% of the businesses installed antivirus software while 16% of them have included firewall in their system.

06. SOCIAL MEDIA

6.1. USAGE OF SOCIAL MEDIA



The distribution between the businesses which use and do not use social media are almost equal. This data indicates that the adoption of social media is moderate.

6.2. FREQUENCY OF SOCIAL MEDIA USAGE

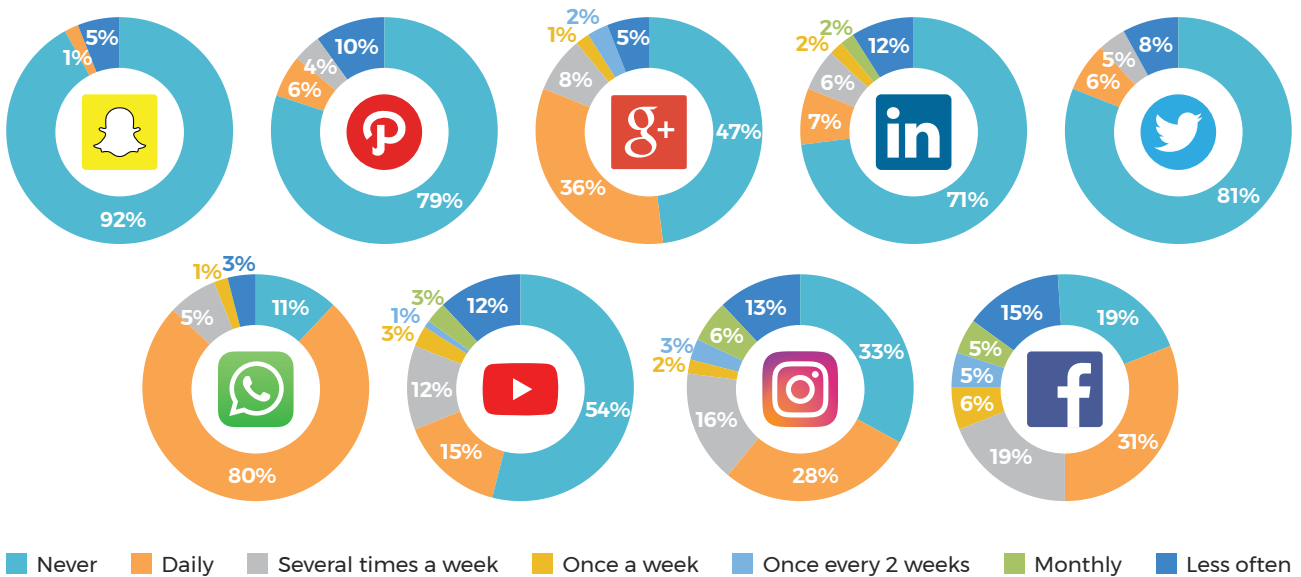


Figure 22. Frequency of Social Media Usage

According to the above statistics, businesses tend to use WhatsApp, Google+, Facebook and Instagram. Majority of the businesses use WhatsApp (80%), Google+ (36%), Facebook (31%) and Instagram (28%) daily.

6.3. BUSINESS ACTIVITIES CONDUCTED ON SOCIAL MEDIA

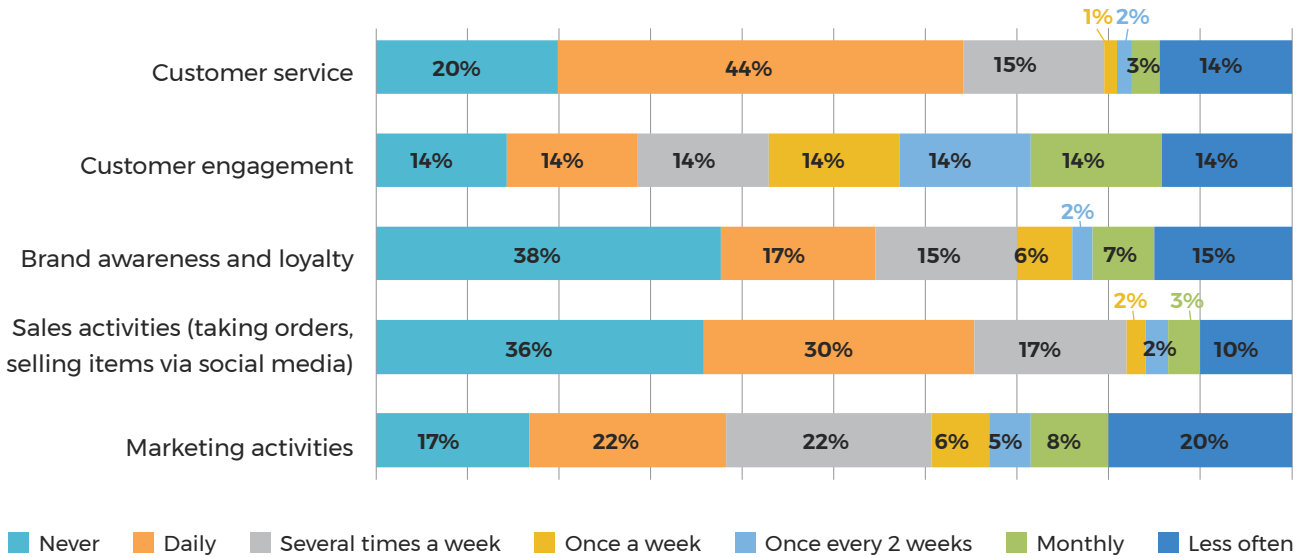


Figure 23. Business Activities Conducted on Social Media

Referring to Figure 23, 44% of businesses use social media for their customer service and 30% of businesses make sales activities by taking orders and selling items via social media.

6.4. YEARLY EXPENDITURE FOR SOCIAL MEDIA



Figure 24. Yearly Expenditure for Social Media

Looking at the figure above, 75% of the businesses invest less than BND500 on social media annually.

07. ICT BARRIERS

7.1. REALISING ADVANTAGE OF ICT



Based on the survey's results, 42% of the businesses believe to have taken full advantage of ICT in their businesses.

7.2. BARRIER FACTORS FOR NOT HAVING INTERNET ACCESS

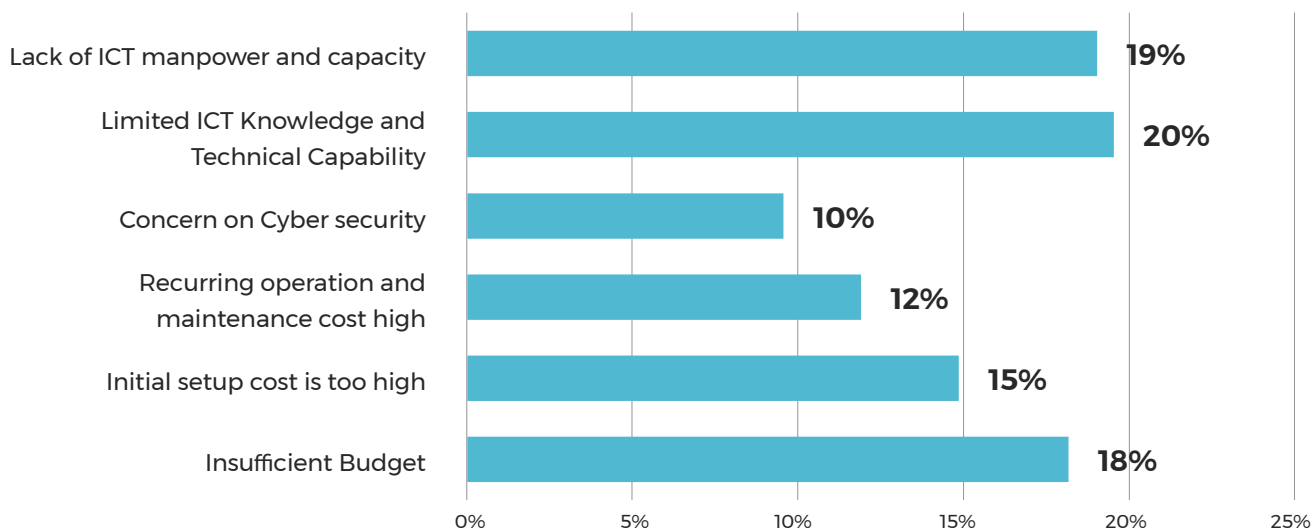


Figure 25. Barrier Factors

Referring to the above figure, the main constraints faced by the businesses for not having internet access are limited ICT knowledge and technical capacity (20%), lack of ICT manpower and capacity (19%) and Insufficient budget (18%).

08. E-COMMERCE

8.1. AWARENESS ON THE EXISTENCE OF E-COMMERCE



Figure 26. Percentage of businesses that are aware of the existence of e-commerce regulations.

8.2. E-COMMERCE PRACTICING BUSINESSES



Figure 27. Percentage of businesses which sell their products online (e-commerce).

8.3. THE COMPANIES' ONLINE SALES

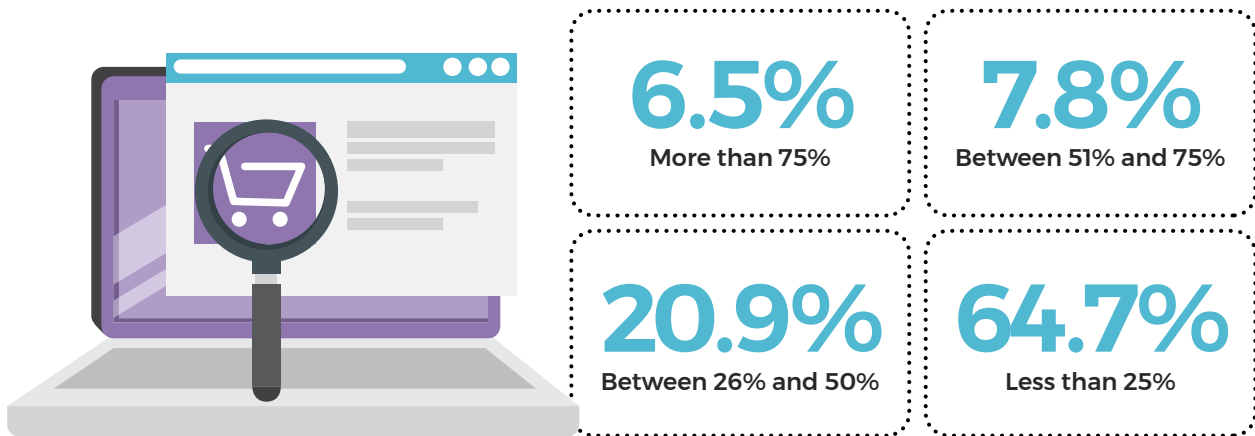


Figure 28. Online Sales

Out of 16% of businesses practicing e-commerce (refer to Figure 27), 64.7% of businesses managed to sell less than 25% of their products/services online. Only a minority (6.5%) of businesses managed to sell more than 75% of their product/services online.

8.4. REASONS FOR DOING BUSINESS ONLINE

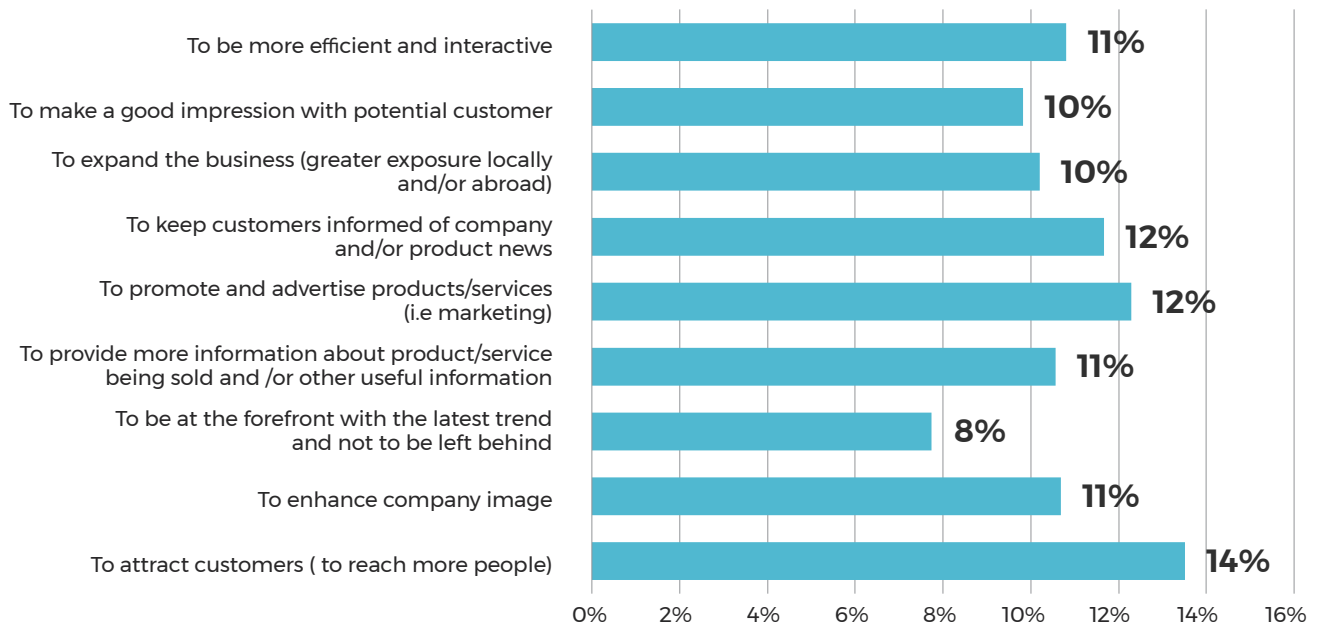


Figure 29. Reason for Doing Business Online

Figure 29 above shows that the top three reasons for doing business online are to attract or to reach more customers (14%), to promote and advertise products/services (12%) and to keep customers informed of company and product news (12%).

8.5. BENEFITS OF DOING BUSINESS ONLINE

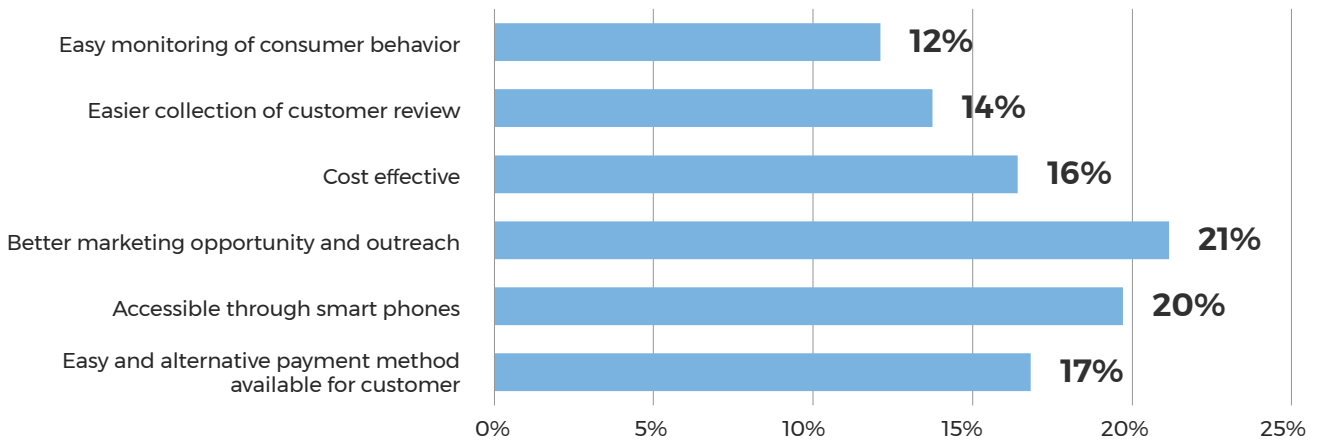


Figure 30. Benefits of Doing Business Online

From figure 30, the top benefit of doing business online is for better marketing opportunity at 21%. This coincides with the top reason for doing business online which is to attract customers (to reach more people).

8.6. PAYMENT METHODS

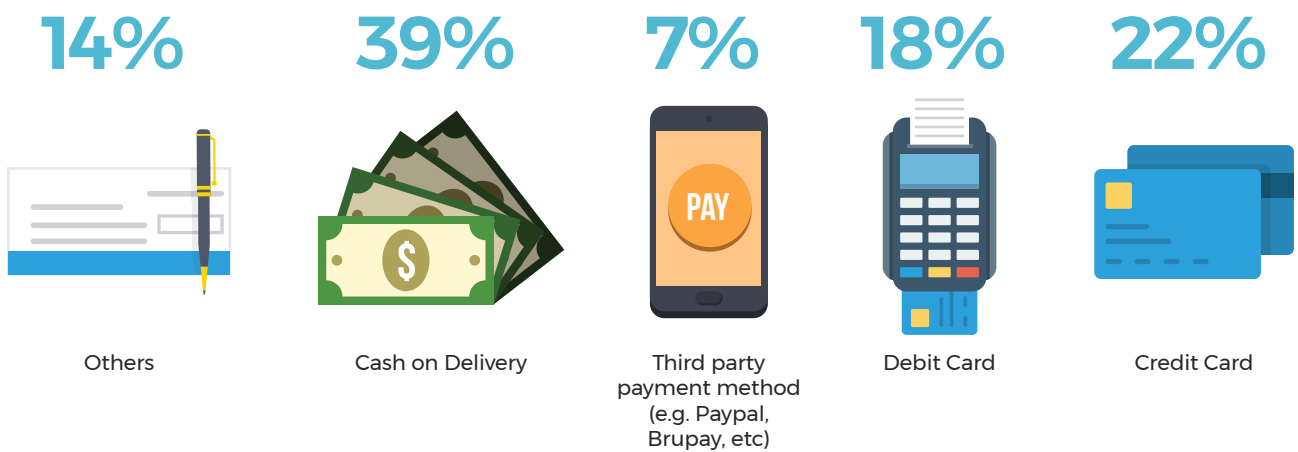


Figure 31. Payment Methods

Most customer prefer to pay cash on delivery (39%), followed by credit card (22%) and debit card (18%). This implies that people might still prefer cash over cashless payment method.

8.7. SAFETY AND PROTECTION TAKEN

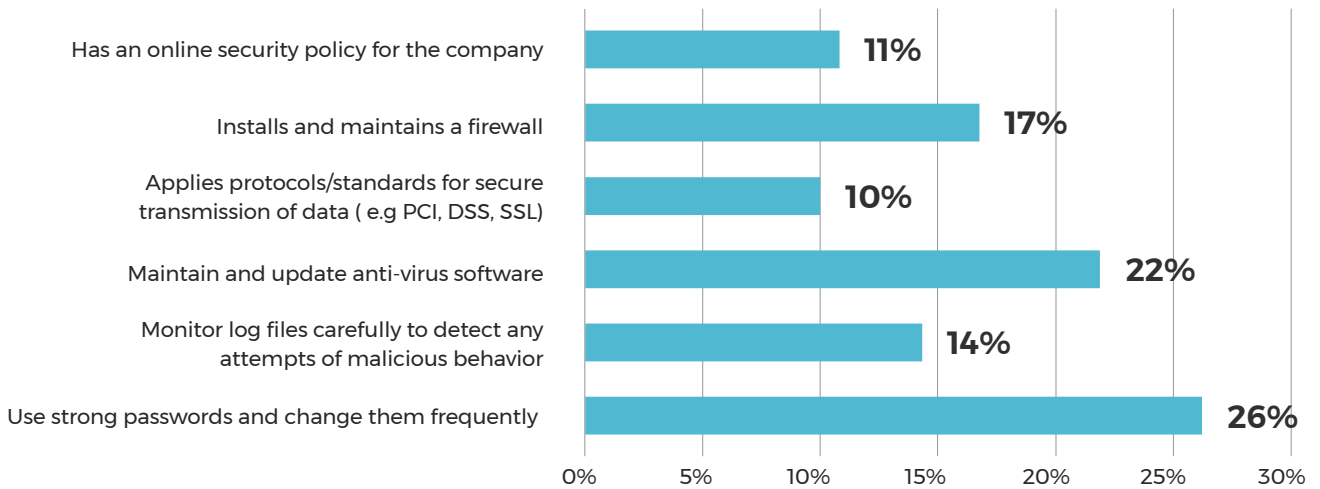


Figure 32. Safety and Protection taken for Online Business

Referring to Figure 32 above, 26% of respondents use strong passwords and change them frequently, while 22% of the respondents maintain and update anti-virus software to ensure safety and protection for their online business.

8.8. CHALLENGES IN DOING BUSINESS ONLINE

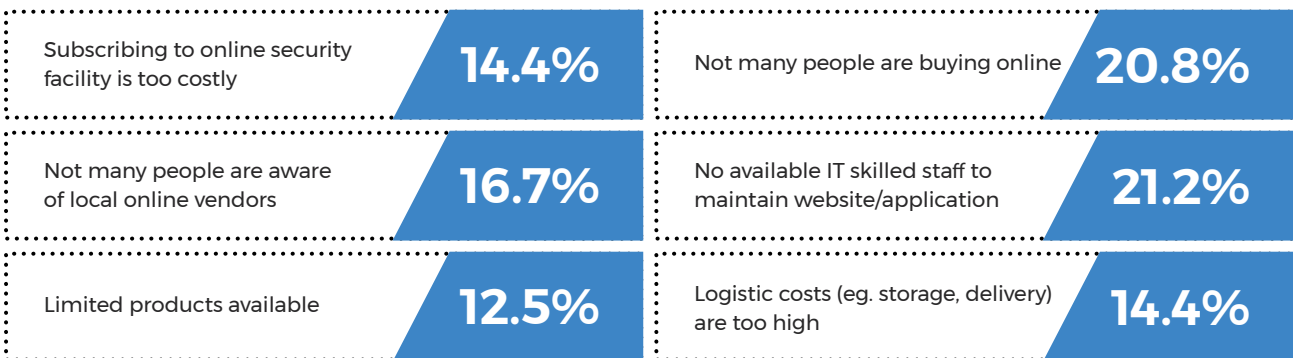


Figure 33. Challenges in Doing Business Online

8.9. REASONS FOR NOT DOING BUSINESS ONLINE

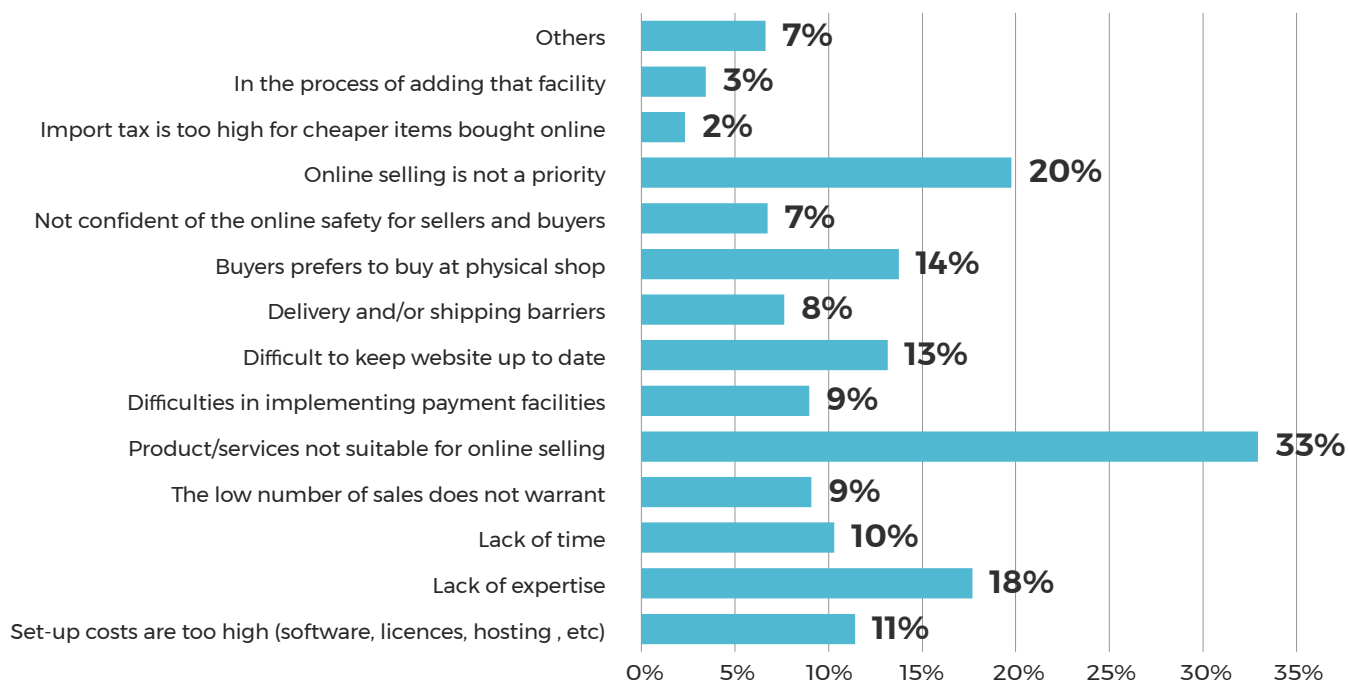


Figure 34. Reasons for Not Doing Business Online

Among the 84% of businesses not doing business online (refer to Figure 27), the majority (33%) responded that their products or services are not suitable to be sold online, 20% stated that online selling is not a priority and 18% stated that they are lacking expertise.

