

ACCEPTANCE OF VALENZUELA CITY'S E-GOVERNMENT SERVICES BY THE BUSINESS COMMUNITY

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KeyWords

3S Plus online services, business digitalization, e-government services, ICT integration in business, user acceptance of technology

ABSTRACT

The study tried to explore and analyze the Valenzuela City business establishments' acceptance and use of the electronic or online services provided by the local government of Valenzuela City. It tried to determine the respondents' perception and attitude towards the LGU's e-services, and establish a correlation between and among demographics, perception and attitude towards e-government services, and their actual use of the e-services. The study used descriptive-correlational research methods using quantitative data. 149 out of almost 20,000 business establishments in the City of Valenzuela participated in the survey. The first part of the research instrument gathered data on the business profile while the second part gathered data on their perceptions and attitudes towards 3S Plus online e-government services in terms of its usefulness, ease of use, trust in technology, behavioral intention to use, and actual use. Descriptive and inferential statistical tools, such as measures of central tendency and variability, and correlational statistical tools are used in analyzing the data. Findings show that almost all of the business establishments are already using or considering using the 3S Plus online government e-services with about 11% still preferring to physically transact their businesses with the local government. Online services are found to be very useful to the business as transactions are easier, more accurate, and faster. In addition, the system is easy to use and not difficult to understand, learn or operate. The system can be trusted as it is safe and secure to use. There is a moderate positive correlation between the respondents' perception and attitude towards the use of 3S Plus online e-services and their actual use of the system. The nature of the business activity the establishment does, their legal structure, and the size of their business have no correlation to their perception and attitude towards using 3S Plus online e-services.

INTRODUCTION

Integrating new developments and technological advancements into business has been known to provide easier, faster, and more efficient business processes and communications. Advergize (2022) lists some of the benefits of modern technology such as "ease of access to information, save time, better communication means, cost efficiency, allows working remotely, less wastage and optimal use of all resources, among others". Information and communications technology (ICT) continues to impact trade and commerce as it allows small businesses to remain agile and able to adapt to changes, allows MSMEs to run efficiently as large corporations, and generates new sources of revenue, financial savings, and better customer experience (AME Group, 2022). However, despite the benefits of ICT, there are also challenges faced by businesses in using technology some of which include "employees' resistance to change, lack of training, wrong choice of technology" (Hopwood, 2019).

During his first State of the Nation Address (SONA), President Ferdinand 'Bongbong' Marcos Jr. proposed nineteen priority bills be passed by the lawmakers. One of these priority bills is the "enactment of the proposed E-government Act which establishes an E-Government Master Plan that covers all e-government services and processes" (Bancud & Cruz, 2022). In this connection, Members of the 19th Congress led by Reps. Martin Romualdez (Leyte), Ferdinand Alexander Marcos (Ilocos Norte), Yedd Marie Romualdez and Jude Acidre (both of Tingog Party-list) authored and filed the proposed E-Governance Act of 2022 or House Bill No.3 (Quismorio, 2022). Accordingly, the proposal "will promote the use of the Internet, intranet, and emerging technologies within and across government agencies and provide citizen-centric government information and services". In support of the government's thrust for e-governance, the Department of Information and Communications Technology (DICT), under the leadership of Sec. Ivan John Uy, "has promised to provide Filipinos with the digital tools to help the economy recover and make the Philippines 'more competitive'" (Cruz, 2022). Secretary Uy added that "the DICT will push for the digitalization, harmonization, and standardization of data among

government agencies to enhance public service”.

The City of Valenzuela is a 1st class highly urbanized city in Metropolitan Manila, Philippines. According to the 2015 census, it has a population of 620,422 people. It is the 13th most populous city in the country and is located about 14 kilometers north of Manila, the nation's capital. Valenzuela is categorized under Republic Act No. 7160 and 8526 as a highly urbanized, first-class city based on income classification and population. According to the City Government of Valenzuela (2021), there are 19,912 business establishments registered in the City. The following 3S Plus e-government services are provided to the business community to efficiently and effectively transact with the local government unit: “renewal or application of new business permits; building and construction permit application; real property tax payments; requests for a certified true copy of tax declaration, tax mapping certificate, certificate of non-improvement, and appraisal of real property; and requests for a certified true copy of a birth, death, and marriage, and court decisions”.

This study tried to analyze and explore the impact of the integration of information and communications technology on the business establishments in the City Government of Valenzuela in terms of the acceptance and actual use of such e-services.

METHOD

This study utilized the descriptive-correlational research method. According to McCombes (2020), “descriptive research aims to accurately and systematically describe a population, situation or phenomenon”. The study tried to describe the perception of the business establishments on the e-government services offered by the City of Valenzuela in terms of its ease of use, usefulness, trust in technology, and behavioral intention to use. A correlational research design, on the other hand, investigates relationships between variables without the researcher controlling or manipulating any of them (Bhandari, 2021). In this study, the researcher tried to establish the relationships between the different variables used in the study such as between demographics and actual use of e-government services and between perception and attitudes towards e-government and their actual use of the e-government services.

A quantitative survey instrument following the Technology Acceptance Model (TAM) by Davis (1989) was administered to 149 business establishments in the City of Valenzuela via Google form. The respondents are those business establishments in Valenzuela City particularly situated along McArthur Hi-way in Valenzuela City, from Karuhatan, Maysan, and Malinta, that included those that are inside malls and commercial centers regardless of the nature of their businesses, legal structure, and category. Data was gathered as to the perceptions and attitudes toward the 3s Plus online e-government services provided by the local city government in terms of its usefulness, ease of use, trust in technology, behavioral intention to use, and actual use of the e-services. Descriptive and inferential statistics are used to analyze the respondents’ responses.

RESULTS AND DISCUSSION

In terms of the nature of business, more than half of the business establishments belong to the wholesale and retail trade (34.90%) and to food service activities (28.19%). According to PSA.gov.ph (2020), “the industry section on Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles includes industry groups covering the activities on selling by retail and wholesale of any type of goods and the rendering service incidental to the sale of these goods. Activities related to the sale and repair of motor vehicles and motorcycles are also included in this section”. Food Services include “full-service restaurants, self-service restaurants, quick-service restaurants, street stalls and kiosks, cafes and bars, and 100% home delivery restaurants”. The following industry sectors belong to Other Services Activities and Financial & Insurance Services, at 10.74% and 10.07% respectively. According to PSA.gov.ph (2021), “the industry section on Other Service Activities (as a residual category) includes the activities of membership organizations, the repair of computers and personal and household goods and a variety of personal service activities not covered elsewhere in the classification. “The financial and insurance activities industry groups cover financial service activities, including insurance, reinsurance, and pension funding and activities to support financial services.” (PSA.gov.ph, 2021)

Table 1

Profile of the Establishment as to Nature of Business

Industry Sector / Nature of Business	F	%
Wholesale and retail trade; repair of motor vehicles and motorcycles	52	34.90%
Food service activities	42	28.19%
Other service activities	16	10.74%
Financial and insurance activities	15	10.07%
Professional, Scientific and Technical Activities	9	6.04%
Education	4	2.68%

Arts, entertainment and recreation	4	2.68%
Human Health and Social Work Activities	3	2.01%
Transportation and storage	2	1.34%
Manufacturing	2	1.34%
Totals	149	100.00%

The legal structure of the business establishments were also considered. As can be seen in Table 2, the legal structure of 84 out of 149 business establishments is sole proprietorship at 56.38% while 40.94% are corporations. There are only four establishments that are partnership and no cooperative included in the survey.

Table 2
Profile of the Establishment as to Legal Structure

Legal Structure	F	%
Sole Proprietorship	84	56.38%
Partnership	4	2.68%
Corporation	61	40.94%
Cooperative	0	0.00%
Totals	149	100.00%

Businesses are classified as Micro, Small, Medium, or Large Enterprises. Republic Act No. 6977, also known as the “Magna Carta for Micro, Small and Medium Enterprises (MSMEs), has defined the term MSME as “any business activity or enterprise engaged in industry, agribusiness and/or services, whether single proprietorship, cooperative, partnership or corporation whose total assets must have value falling under certain categories”.

Table 3
Profile of the Establishment as to Business Category

Category of Business	Total Assets	F	%
Micro Business Enterprise	Less than P3M	63	42.28%
Small Business Enterprise	P3M – P15M	41	27.52%
Medium Business Enterprise	P15M – P100M	32	21.48%
Large Business Enterprise	P100M and more	13	8.72%
Totals		149	100.00%

Table 3 shows that 42.28% of the business establishments surveyed are Micro business enterprises with less than P3M of total assets followed by Small business enterprises, at 27.52%, with total assets between P3M and P15M. Medium business enterprises with total assets between P15M and P100M follow at 21.48%. Lastly, there are only 8.72% of the businesses are considered large business enterprises with more than P100M of total assets.

There are four factors or variables identified which were assessed by the respondents and are instrumental to the achievement of this study – to determine the acceptance and use of Valenzuela City’s e-government services. These factors are:

- Perceived usability
- Perceived ease of use
- Perceived trust in technology
- Behavioral intention to use

Table 4 shows that the respondents agreed that Valenzuela City’s e-services are very useful, with a composite mean of 3.79. With e-services, respondents agreed that transactions are easier (3.77), more accurate (3.81), and faster (3.79). This means that the use of 3S Plus online e-government services provides benefits to the business establishment and provides a positive impact on their organization.

Table 4
Perceived Usefulness

Survey Statement	Mean	Composite Mean
With e-services, transactions are easier.	3.77	3.79
With the e-services, transactions are more accurate.	3.81	
With e-services, transactions are faster.	3.79	
Interpretation	Very Useful	

Based on Table 5, the respondents agreed that the e-services are easy to learn (3.60), user-friendly (3.67), and users will become skillful easily at using the 3S Plus. In short, in terms of perceived ease of use, with a composite mean of 3.66, the respondents agreed that 3S Plus e-services are easy to use and are not difficult to understand, learn or operate.

Table 5
Perceived Ease of Use

Survey Statement	Mean	Composite Mean
Learning to use e-services is easy for me.	3.60	3.66
I find the e-services easy to use and user-friendly.	3.67	
It would be easy for me to become skillful at using e-services.	3.70	
Interpretation	Easy to Use	

Perceived trust in technology refers to the technical capability of the 3S Plus e-services to ensure the security and privacy of users' data and the reliability and safety of the provided e-services. Table 6 shows that respondents agreed that 3S Plus protects their privacy (3.62), is risk-free (3.66), and safe (3.68) to use the e-services. Overall, with a composite index of 3.66, respondents all agreed that they can trust the technology used in 3S Plus online e-services.

Table 6
Perceived Trust in Technology

Survey Statement	Mean	Composite Mean
The e-services protect the privacy of their users.	3.62	3.66
It is risk-free to use e-services.	3.66	
It is safe to use the system.	3.68	
Interpretation	Very safe and secure	

Behavioral intention to use reflects a user's desire to use technology in the future. As can be seen in Table 7, respondents agreed that using 3S Plus is a good idea (3.68), is beneficial to the respondent (3.80), and had a positive perception about using the e-services (3.74). With a composite mean of 3.74, respondents are likely to use the 3S Plus online e-government services.

Table 7
Behavioral Intention to Use

Survey Statement	Mean	Composite Mean
I think that using e-services is a good idea.	3.68	3.74
I think that using e-services is beneficial to me.	3.80	
I have a positive perception of using e-services.	3.74	
Interpretation	Likely to Use	

The study tried to establish the relationship between the perception and attitude of the respondents and the actual use of e-

government services

As can be seen in Table 8, each of the factors such as usefulness (with 0.69 coefficient correlation), ease of use (0.65), trust in technology (0.61) and behavioral intention to use (0.67) has a moderate positive correlation with the respondents' actual use of the e-services. In short, these factors have a moderate influence or impact on the actual use of online e-services. Moreover, since the correlation is positive, even though moderately, it can be said that as their perception and attitude increase, the tendency to use online services also gets higher. In other words, the higher the respondents perceive that the 3S Plus is useful, the higher the probability that they will actually use the system. The higher they perceive that the system is easy to use and that they can trust it, the more they will actually use it.

Table 8
Correlation between Perception and Actual Use

Variables	Pearson Correlation	Interpretation
Perceived usefulness	0.6944	Moderate positive correlation
Perceived ease of use	0.6534	Moderate positive correlation
Perceived trust in technology	0.6074	Moderate positive correlation
Behavioral intention to use	0.6737	Moderate positive correlation

The study also tested if the nature of the business, legal structure or category has a relationship with their perception and attitude towards 3S Plus online e-services. In terms of the nature of the business or the industry sector to which they belong, Table 9 clearly shows that with coefficients ranging from 0.02 to 0.05, there is a negligible correlation between the business establishment and their perception and attitude towards using 3S Plus online e-services. Thus, whether they are engaged in wholesale and retail, food service activities, financial and insurance activities, or other service activities, it has no significant impact on their perception and attitude towards e-government services. Similarly, legal structure and business size have a negligible correlation in their perception and attitude towards e-services, with coefficients ranging from -0.07 to -0.10. Therefore, it can be stated that whether the business is owned by a sole proprietor or by a corporation, and whether they are micro-, small-, medium- or large enterprises, it has no bearing on their perception and attitude towards using the e-services.

Table 9
Correlation between Business Profile and their Perception of the online e-services

	Perceived usefulness	Perceived ease of use	Perceived trust in technology	Behavioral intention to use
Nature of Business	0.03	0.03	0.05	0.02
Legal Structure	-0.09	-0.09	-0.08	-0.08
Business size	-0.10	-0.07	-0.08	-0.08

CONCLUSIONS

Almost all of the respondents are already using or considered using the 3S Plus online e-government services. There are about 11% of business establishments that still prefer to physically transact their businesses with the local government. Valenzuela City is therefore on the right track to realizing the vision of current President Ferdinand Marcos, Jr. for a digitalized Philippines. Owned either by sole proprietors or by corporations, most of the businesses in Valenzuela City are engaged in wholesale-retail trade and the food service industry sectors. Almost all business establishments are considered MSMEs, thus, having a vital role in contributing to the country's economy and to society through employment.

The 3S Plus online e-services is very useful to business establishments as transactions are easier, more accurate, and faster. It is easy to use and is not difficult to understand, learn or operate. The system can be trusted as it is very safe and secure to use, thus, 3S Plus online services are likely to be used by the business establishments in Valenzuela City.

There is a moderate positive correlation between the respondents' perception and attitude towards the use of 3S Plus online e-services and their actual use of the system. The higher they perceive the e-services to be useful to their businesses, the system is easy to use, the system can be trusted to be safe and secure, and believe that the e-services is good and beneficial, the higher the likelihood that business enterprises will use the system.

The nature of the business activity the establishment does, their legal structure, and the size of their business have no correlation to

their perception and attitude towards using 3S Plus online e-services provided by the Valenzuela City government.

RECOMMENDATIONS

The local city government of Valenzuela already mandates corporations to use the 3S Plus online e-services offered by the local city government. In order to realize a digitized Philippines, as envisioned by the current Philippine administration, Valenzuela City can create an ordinance to order all SMEs in the city to compulsory use the 3S Plus not only for applying and renewing their business permits but also for the other e-services provided such as building and construction permit application, real property tax payments, requests for certified true copies of birth, death, marriage or court decisions, including requests for a certified true copy of tax declaration, tax mapping certificate, certificate of non-improvement and appraisal of real property. This is in support of Dias (2020) who stated that political commitment and high-level coordination are key factors for successful e-governance.

The 3S Plus online e-services have proven to be very useful, and easy to use, and the technology can be trusted. The city government must implement an information campaign emphasizing the benefits of transacting with the government using the 3S Plus not only for the business establishments but as well as to its entire constituents, the Valenzuela City residents themselves especially when requesting certified true copies of birth, death and marriage certificates. Moreso, with the exhaustive information campaign of the local government, the perception and attitude of its citizens, and all SMEs, are expected to be higher resulting in a likelihood of the success of 3S Plus online e-services implementation.

Aside from the current 3S Plus e-services offered, the city government can also integrate into one platform other transactions on its public services such as online student enlistment and enrollment in public schools (education), requests for police clearances (public safety and security), online applications for job vacancies (employment), and online appointment systems for medical, dental, ENT and other health-related consultation services (health), among others.

Future research may focus on extending this study on the integration of ICT into business by focusing on other cities in the NCR, Luzon, Visayas, and Mindanao in order to establish the state of digitalization in the Philippines, particularly on G2B. The study may also further be expanded to include studying the ICT readiness of businesses in terms of their infrastructure, skills, and budget.

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