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# The Role of Stakeholders and their Relationships in the Sustainability of Telecentres

Thai Do Manh, Duong Dang, Morten Falch, Tuan Tran Minh and Tuyen Vu Phi

## Abstract:

**Purpose** - *This paper examines the role of stakeholders and their relationships in the sustainability of telecentres in Vietnam through the lens of stakeholder theory.*

**Design/methodology/approach** - *This study methodologically adopted a qualitative case study to identify stakeholders that have been involved in telecentres in Vietnam. It then categorizes those stakeholders' salience through the lens of stakeholder identification and salience theory. Secondary data and interviews were used as data sources for the present paper.*

**Findings** - *We identify six main stakeholders that have been involved in telecentres, including the government, entrepreneurs, international donors, telecommunications providers, civil society organisations, and individual community members/users. Among these stakeholders, the government, entrepreneurs, and users belong to definitive stakeholders, which have the greatest impact on the sustainability of telecentres in comparison to other groups of stakeholders (e.g., dominant, dependent, and dormant stakeholders). Moreover, we propose a model to identify the relationships of stakeholders toward the sustainability of telecentres. In particular, we indicate that each group of stakeholders has its own role in contributing to sustainable telecentres and they also influence others in either direct or indirect ways.*

**Originality/value** – *This study provides an additional approach for managers to make judgments in prioritizing the interests of some of their stakeholders while still maintaining a level of satisfaction among other stakeholders. For example, stakeholders that should be of the highest concern to the sustainability of telecentres are the government, entrepreneurs, and users, while civil society organisations can be maintained in lower priority to other stakeholders. In addition, we propose the model of interactions and relationships of stakeholders, which can be seen as a starting point for a study on the roles of stakeholders in sustainability not only in telecentres, but also in other fields, such as digital transformation, cyber security, and e-government.*

**Keywords** *telecentres, stakeholders, salience, role, sustainability, Vietnam*

**Paper type** *Research paper*

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## 1. Introduction

Telecentres are considered remedies for securing the rural population to access to Information and Communication Technologies (ICTs). Telecentres not only help them to be connected to electronic services (e-services), such as electronic government (e-government), electronic business (e-business), and information channels for their needs (Avgerou, 2008), but also help other institutions (e.g., governments) facilitate the provision of a wider range of services to their customers (Naik *et al.*, 2012). Due to its importance, many governments in developing countries have rolled out telecentres to develop society and the economy in those less-developed areas (Faroqi *et al.*, 2019; Mbatha, 2016). However, a large number of telecentres face challenges in their operations, such as challenges in finding appropriate mechanisms for sharing information, seeking social interaction with locals, collaborating with stakeholders, and doing business with local communities (Bailey and Ngwenyama, 2011). As a result, numerous telecentres have been closed down or forced to broaden their service portfolio in order to meet demand from the rural community (Gollakota *et al.*, 2012; Hoq, 2015), and just a few telecentres have been financially sustainable and have increased the likelihood of farmers in the community (Gollakota *et al.*, 2012). Hence, the question of how to sustain telecentres has been substantially arisen for researchers to investigate (Bailey and Ngwenyama, 2011).

There have been a number of studies conducted to find out factors to sustain telecentres (Faroqi *et al.*, 2019; Hoq, 2015; Mbatha, 2016; Naik *et al.*, 2012; Thai *et al.*, 2022). For example, stakeholders play critical roles in successful telecentres (Bailur, 2006; Madon, 2005) and in public e-services (Axelsson *et al.*, 2013; Sæbø *et al.*, 2011). However, there are surprisingly few studies analysing the degree of stakeholders' roles in keeping telecentres sustainable. A study on this issue can help managers to focus on their highest-priority while still maintaining a level of satisfaction among other stakeholders (Barney, 2018; McGahan, 2020). Telecentres or Cultural Post Offices (CPOs) in the Vietnamese context provide an interesting example of how long-term sustainability can be achieved. CPOs have been established and operated since 1998 providing basic posts and telecommunications services to rural communities, as well as promoting a reading culture in less developed areas. Although CPOs have encountered many obstacles over recent years, they are now quite successful in terms of social, technological, and political aspects (Thai *et al.*, 2022). They are now providing additional commercial services in comparison to their original ones (e.g., ICT, and Internet services). They have built up e-commerce platforms to connect farmers with consumers and traders all over the country. Those activities help them reduce economic losses and they become more sustainable in their operations.

This research looks at CPOs in the Vietnamese context through a stakeholder perspective to identify the role and relationship of stakeholders in sustaining telecentres. In particular, this research tries to understand the following research questions:

1. To what degree do CPOs' stakeholders influence CPOs?

## 2. Which lessons could be drawn for other developing countries to sustain their telecentres?

To answer these research questions, we apply the theory of stakeholder identification and salience from Mitchell et al. (1997). The paper gathered data both from primary and secondary sources. The primary source has come from interviews conducted with CPOs' staff, customers, and local government officials in Dak Lak, Kon Tum, and Soc Trang provinces of Vietnam. The secondary documents were gathered from the Vietnam Ministry of Information and Communications (MIC), Vietnam Post Office Corporation (VNPost), and the Vietnam Public Utility Telecommunication Service Fund (VTF).

The rest of the paper is organized as follows: Section 2 briefly reviews the literature on telecentre stakeholders and the theoretical framework, section 3 presents research methods and data, section 4 provides the context of this study, section 5 demonstrates the involvement of stakeholders, section 6 and 7 are discussion and conclusions.

## 2. Background

### 2.1. Literature review

Numerous studies have been conducted to investigate factors enhancing the sustainability of telecentres. However, surprisingly there are few studies analysing the role of stakeholders. Among them, the studies of Faroqi and Collings (2019) and Madon (2005) are typical. The study of Faroqi and Collings (2019) looked at telecentres in Bangladesh under a PPPP model. They used stakeholder theory to identify four stakeholder groups involved in telecentres (central government, local governments, entrepreneurs, and local community). Based on data collected from a survey and interviews, the authors indicated that due to a lack of training and support from the central government and local governments, local entrepreneurs could not operate telecentres well. Also, due to a lack of investment and poor skills, the entrepreneurs could not expand their business under the PPPP model. The authors recommended that besides equipping telecentres with faster internet and allowing them to provide a wider range of services, the central government and local government should provide entrepreneurs more training and give them more control to run telecentres. In other words, the relationship between the central government, local government, and entrepreneurs in operating telecentres should be reviewed in order to provide entrepreneurs with more space and support. Another study comes from Madon (2005). She based on analysing the literature on telecentre sustainability to propose a list of relevant stakeholders. She argued that the survival of telecentres depended on the relations among a host of actors (the government, private entrepreneurs, international donors, local banks, telecommunications suppliers, local companies, civil society organisations, and individual community members). She then also applied this list in a case in Kerala, India to examine the role of the stakeholders in implementing a telecentre project. She argued that five factors highly affected the sustainability of telecentres such as (1) Building Corporate Confidence, (2) Working with Government, (3) Renewing Grassroots Campaigning, (4) Involving the Legislative System, and (5) Continuing support of Political

Champions. She implied that the government played an important role in constructing and managing interactions between state and society in terms of fostering trust and cooperation between private companies, building communication links and corporate confidence among actors as well as providing political support for developing telecentres.

## **2.2. Theoretical lens**

Stakeholder analysis appeared in 1984 in Freeman's publication, *A Strategic Management: A Stakeholder Approach* (Donaldson and Preston, 1995; Mitchell et al., 1997). According to Freeman (2010) a stakeholder is considered to be any group or individual who can affect or is affected by the achievement of the organization's objectives. Stakeholder theory is primarily applied in the private sector, however, its insights can be applied in public sector settings as well, particularly within e-government services (Scholl, 2001). The theory is used and explained by various scholars in different settings with distinct purposes. However, contributions are often contradictory with regard to evidence and arguments (Donaldson and Preston, 1995). In order to clarify and facilitate the theory, Donaldson and Preston developed a framework, where stakeholders are characterised by three distinct aspects: a descriptive, an instrumental, and a normative aspect. The descriptive perspective aspect concerns the description of stakeholders and their interests and relations. The instrumental perspective identities connections between stakeholder management with their organisation's desirable objectives. Whereas, the normative perspective, the central core of stakeholder theory, relates to moral or philosophical principles that help managers to operate their organisations.

Mitchell et al. (1997) enhance the theory from the identification and salience view of stakeholders. They build up a knowledge body to answer the question of who (or what) are the stakeholders of the firm? And to whom (or what) do managers pay attention? They call this the 'theory of stakeholder salience'. The theory of stakeholder salience offers theoretical arguments for why the needs of some stakeholders are considered salient and thus met, while those of others are not (Sæbbø *et al.*, 2011). In the theory of stakeholder salience, Mitchell et al. (1997) focus on three attributes of stakeholders (power, legitimacy, and urgency) to generate a typology of stakeholders. Accordingly, if stakeholders who possess at least one of these attributes will be classified into one of the following stakeholder classes: domain stakeholder, discretionary stakeholder, demanding stakeholder, dominant stakeholder, dangerous stakeholder, dependent stakeholder, definitive stakeholder, and non-stakeholder. In other words, the more attributes the stakeholders have, the more salience they gain. Table I provides definitions of three attributes of stakeholders and Figure 1 illustrates stakeholder typology based on power, legitimacy, and urgency.

**Table I.** Definitions of three attributes of stakeholders

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**Figure 1.** Stakeholder typology; One, two or three attributes present (Mitchell *et al.*, 1997)

This theory has been widely applied to identify key stakeholders affecting the implementation and development of ICT projects, particularly in e-government, such as the research of Axelsson *et al.* (2013), Pandey and Gupta (2017), and Sæbø *et al.* (2011). All these studies attempt to find out who involve and how their salience is in implementing e-projects. They argue that an adequate understanding of stakeholder dynamics is critical to implement e-government projects as well as helps the managers/governments take their role properly.

### 3. Research methods and data

The research is based on a qualitative case study using Vietnamese telecentres as an example (Creswell and Miller, 2000; Yin, 2003). The paper first finds out which stakeholders have been involved in CPOs. It then applies the theory of stakeholder salience of Mitchell *et al.* (1997) to investigate the salience of these stakeholders affecting the development of CPOs in Vietnam. Based on three attributes of stakeholders (power, legitimacy, and urgency) the paper indicates the degree of their salience and relationships in operating CPOs.

To find out stakeholders, the paper is based on literature analysis. There is no consensus about who the stakeholders are in telecentres among scholars in the literature. For example, Faruqi and Collings (2019) identified the following stakeholders in telecentres in Bangladesh: The central government, local governments, entrepreneurs, and the People. While Madon (2005) identified the following stakeholders in telecentres in India: Government, local admin, small businesses, local banks, citizens, IT companies, and village council. Bailur (2006) indicated that there are five stakeholders (community, telecentre, national, regional, and international) in telecentre projects. Whyte (2000), on the other hand, based on empirical cases to provide a list of potential telecentre stakeholders: students, teachers or World Bank, United Nations, etc. As seen, stakeholders in telecentres may vary depending on context. To fit with our research, we borrow the list of stakeholders from (Madon, 2005) to analyse their role in CPOs in Vietnam. They consist of

- The government;
- Entrepreneurs;

- International donors;
- Telecommunications providers;
- Civil society organisations;
- Individual community members/Users.

The study is primarily based on data from secondary sources. The secondary data is supplemented by primary data derived from interviews with selected stakeholders. The interviews were conducted by the first author in August 2021 via telephone. Two interviewees with staff working at provincial subsidiaries of VNPost in Soc Trang and Kon Tum provinces were made. The interviews were made as structured interviews with open-ended questions. The interviews were not recorded, but extensive notes were made during the interviews, which took around 15-20 minutes for each. The interviews were conducted to get more insights into stakeholders' effects on CPOs that might not be unveiled in the secondary sources. The secondary data was gathered from official sources including MIC, VNPost, and magazines/webs. Data was also collected from the records and notes from interviews made in 2017 and 2020 with the Director of the Management Unit of the Bill and Melinda Gate Foundation Project, a Vice Director of the Department of Information and Communications in Lao Cai province, and the Chief of the CPO Division of VNPost. Using both sources of data increases the overall credibility of the data, reduces systematic bias in data, contributes to the validity of findings, and eliminates overlapping areas (Creswell and Miller, 2000; Yin, 2003).

#### **4. The case and its context**

CPOs were established in 1998 by the national telecom operator, Vietnam Post and Telecommunications Corporation (VNPT), in order to provide rural and remote areas with posts and telecommunications services and to promote a reading culture among local dwellers by lending books for free (Thu, 2014). CPOs were also a channel for disseminating information on culture, health, sport, agriculture, history, and regulations (Thu, 2014). CPOs have been later operated by VNPost, another state company, since 2008. VNPost has provincial-level-sub-subsidiaries in all 63 provinces, district-level sub-subsidiaries in all districts, and CPOs in almost all communes throughout the country. In total, they now have about 8,135 CPOs around the country. CPOs are equipped with a desktop computer connected to the Internet, a printer, a counter, a scale, a barcode reader, a table, chairs, and a cabinet. They all provide the same services such as international and domestic post services, logistics, public administration services, and commercial services

#### **5. Stakeholder involvement**

##### ***5.1. The government***

As Madon (2005) asserts the government influences telecentres, particularly in the start-up phase via their funding. The government here includes the central government and local governments impacting CPOs through their initial support and subsequent funding.

The Central Government has issued a series of regulations as well as provided funding to support VNPT/VNPost in setting up a nationwide network of CPOs. First, the Central Government has subsidized VNPost via a tax regime. In 2001, the Prime Minister permitted provincial governments to provide VNPT land for free without paying any taxes to build CPO premises (Document No 478/CP-NN). Furthermore, since 2005 CPOs have been among the places receiving subsidies from the Central Government in order to provide telephone services and internet access in rural and remote areas. This subsidy was regulated via two national universal service programs. The first program (the Program 74) subsidised VNPost to maintain around 3,211 CPOs from 2006 to 2010 (Thai and Falch, 2018). The second program (the Program 1168) subsidised VNPost to maintain around 450 CPOs from 2016 to 2020. In December 2021 another universal service program has been approved by the Prime Minister. This program partly funds VNPost to maintain CPOs located in isolated/mountainous areas as well.

In 2009, the Prime Minister stipulated that a Rural Commune was considered to be a New Rural Commune only if it had one point to provide telecommunications and postal services<sup>1</sup>. This regulation pushed local governments to give a priority to opening CPOs in their locality (if being a New Rural Commune, the local government would be allocated an additional budget) (Thai *et al.*, 2022). In 2012 CPOs were appointed to be a channel for the transfer of social benefits. In 2013 CPOs' functions were expanded to deliver social insurance benefits nationwide<sup>2</sup>. Since 2016 VNPost has started to receive and return administrative applications via public postal services<sup>3</sup>.

Besides, the Central Government also used CPOs to boost a reading culture in rural and mountainous areas. In 2013, the Ministry of Information and Communications cooperated with the Ministry of Culture, Sports, and Tourism to launch a program encouraging rural inhabitants to read books at the CPOs<sup>4</sup> in the period 2013-2020.

## **5.2. Entrepreneurs**

Entrepreneurs here include both the private and public sectors. In the case of Vietnam, it is likely that it is not easy for private entrepreneurs to invest in this network. CPOs are considered the public postal network invested by the State and they have been assigned to VNPost for management and operation<sup>5</sup>. Besides running their own business, VNPost is in charge of providing public postal services including universal postal services and postal services for national defense and security tasks and other special tasks<sup>6</sup>. However, on the other side, the private sector has been involved in CPOs in several ways. They have cooperated with VNPost under Sales Agency Contracts to sell their products in entire CPOs (such as BT Com - a consumer producer, Lien Viet Post Bank, Daichi - life insurance, and Post and Telecommunications Insurance JSC),



or in several CPOs<sup>7</sup>. Furthermore, private entrepreneurs also play a role as users even though they do not invest directly in the telecentres (22.5% of telecentre users surveyed in 2020 were private entrepreneurs (Thai *et al.*, 2022).

From the public sector, we offer to look at the role of VNPT (from 1998 to 2008), and later VNPost (from 2008 to present). Both of them are state companies.

The idea of establishing CPOs in rural and remote areas is rooted in the CEO of VNPT in 1995 (Thu, 2014) in order to run its businesses and serve rural communities socially (lending books for free). Later CPOs got a new function which was to promote a reading culture and introduce new the State Party's regulations. In the initial years, CPOs provided basic post and telecommunications services. CPOs were also equipped with a few newspapers and books on agriculture, forestry, fishery, sciences, technology, laws, and business to serve rural communities for free reading. To run CPOs, VNPT signed agency contracts with local dwellers who would perform the daily activities of CPOs. These agents had to be introduced and authenticated by local governments to assuring their capacity. Before starting their work, these agents were trained within 7 days. Agents' monthly income would include a fixed funding from VNPT, and a commission based on their performance<sup>8</sup>. In December 2005, VNPT extended its range of services to include SIM/top up cards, telephone bill payment, Internet access, and stationery. Figure 2 demonstrates the revenue of CPOs from 1999 to 2010.

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**Figure 2.** Revenue of CPOs from 1999 to 2010 (million VND)

Source: VNPT

In 2008, the Central Government restructured VNPT to separate post and telecommunications. VNPT was split to establish a new company (VNPost) managing all postal activities and CPOs. In 2014, VNPost launched a new strategy to reform CPOs<sup>9</sup>. Accordingly, they promoted its image as well as invested in facilities in CPOs like premises, desktop computers, printers, counters, scales, barcodes, and cabinets. Software and a broadband Internet connection were key means to be equipped with. In October 2015, VNPost provided new services (like bank savings, money transfers, selling non-life insurance and life insurance, detergent, softener, milk, and broadcasting) at 232 CPOs. In September 2018, VNPost expanded the provision of these services to 6,300 CPOs nationwide. With regard to public services, VNPost participated in transferring social assistance and social insurance in 2012 and delivering public administrative services in 2016. Furthermore, in 2016 VNPost set up an e-market (postmart.vn) where consumers could find local products all over the country. In 2019, they opened a new feature on this platform (<https://ocop.postmart.vn>) to promote local specialities. This market, using B2B, B2C, and C2C

models, helps rural farmers to sell their agricultural products. With all the reforms, their revenue has gradually increased. Figure 3 shows the revenue of CPOs from 2013 to 2019.

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**Figure 3.** Revenue of CPOs from 2013 to 2019 (million VND)

Source: VNPost

VNPost now offers a wide range of services from postal services, government services, social insurance benefits, and social assistance transfers to commercial services, telecommunications services and financial services (banking savings, money transfer, power bill pay, collecting presumptive taxation, and fine, and selling non-life insurance and life insurance).

### **5.3. International donors**

International donations refer to grants or in-kind support awarded to fully or partially meet the initial costs of housing the telecentre, putting in suitable power and telecommunication supplies, and equipping the telecentre (Madon, 2005).

There were several grants for CPOs funded by international donors since 2008, such as USAID and Intel in 2008 and in 2009, and the Bill and Melinda Gates Foundation (BMGF) from 2009 to 2016. Of these, the BMGF project was the largest funding. The BMGF project was carried out by MIC and BMGF. MIC was in charge of managing the project. VNPost was one of the main beneficiaries of this project. According to Thai and Williams (2017) the BMGF project named 'Improvement of computer usage and public Internet access in Vietnam' had two phases. The first was a pilot project funded with 2.15 million USD and lasted for 18 months (from February 2009 to July 2010). The pilot project provided equipment (desktop computers and printers) as well as training for staff at 99 CPOs and public libraries in three provinces in Vietnam. In 2011, BMGF agreed to expand the project to 5 years, from 2011 to 2016. The total budget of this expanded project was 50.5 million USD. The expanded project was deployed in 40/63 provinces throughout the country. The main objective was to improve the staff ability of 900 Public Libraries (PLs) and 1,000 CPOs in 40 provinces to use computers and the internet. The BMGF project subsidized PLs and CPOs facilities (like computers, printers, cameras, and basic software). After five years (2011-2016), the expanded project distributed 11,870 desktop computers, 1,900 printers, 1,900 IP cameras, and other equipment to 400 provincial/district libraries, 500 commune libraries, and 1,000 CPOs. The BMGF project made a big contribution to the social and economic development in these locales. It is illustrated via the amount of time using the computer (21 million hours) and connecting to the internet (15 million hours), the number of users accessing PLs and CPOs (12 million rural dwellers)<sup>10</sup>.

#### 5.4. Telecommunications Providers

Telecommunications Providers affect telecentres via communication costs. These costs can change from one day to another due to changes in government policies. For example, a preliminary study of USASA's experience in South Africa showed that one of the major problems was in the prices charged for telecentre services, which could vary well below or above actual costs jeopardising the financial sustainability of the centres (Madon, 2005).

According to VNPT, from the period 2004-2007 telecommunications services (like phone calls, sim/top up cards, and internet access) were the main source of revenue for CPOs. It took the largest proportion compared to those of postal services and often accounted for more than 80% of the total revenue. Figure 4 presents the proportion of revenue of services at CPOs.

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**Figure 4.** The proportion of revenue from services from 2004 to 2007

Source: VNPT

Since the divestiture of VNPT in 2008, the proportion of revenue from telecommunications services has changed significantly, revenues from phone calls and Internet access have been replaced by revenues from selling off sim and top-up cards. It is likely that the prevalence of mobile phones in Vietnam impacted considerably the revenue from telephone and internet services at CPOs (89% rural population owned mobile phones in 2017<sup>11</sup>). They are now able to connect to the Internet via their devices. Figure 5 illustrates the proportion of revenue from services at CPOs.

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**Figure 5.** The proportion of revenue from services from 2014 to 2017

Source: VNPost

#### 5.5. Civil Society Organisation

Civil society organizations like cooperatives, NGOs, religious bodies, and local media play an intermediary role between the government and citizens in mobilising participation from the community (Madon, 2005).

The involvement of civil society organizations in CPOs varies from province to province in Vietnam. In Lao Cai province, the participation of the Vietnam Association for Learning Promotion<sup>12</sup> was proved via

activities in the BMGF project. In the BMGF project, the Association encouraged and persuaded local dwellers to participate in events introducing the benefits of the Internet and in training courses on using computers. CPOs were one of the venues to hold the training courses. In an interview in 2017 with the first author, a Vice Director of the Department of Information and Communications in Lao Cai province said that ‘Members of the Learning Promotion Association participated in training courses held by the BMGF project. They then became trainers organizing other training courses or introducing rural users to public libraries and CPOs where they could access the Internet’. The Vice Director posited that this Association played a role in disseminating information as well as encouraging local dwellers to participate in training courses and in social events. Whilst in Kon Tum province, village heads or village elders have also been involved in CPOs as an intermediary between CPOs and users. They are trustworthy individuals and are respected by local dwellers. They are usually invited to events held by the CPO staff, where new services are launched. As a staff of VNPost in Kon Tum province said that ‘We invited them to take part in events launching new services (like non-life and life-insurance, health insurance, etc) due to their social position in the communities. Local dwellers usually trust them more than us and usually ask them for comments on our new services. Their involvement played a role in our business and helped us to increase sales’. In Soc Trang province, we did not find any data proving the participation from civil society organizations neither in secondary nor primary sources.

#### **5.6. Individual community members/Users**

According to Madon (2005) citizens are one of the stakeholder groups affecting telecentres. It could include both local individuals and users. Individuals refer to key informants or influential community leaders, who can encourage and influence other community members positively (Mphahlele and Maepa, 2003). Due to their role as intermediaries, we group them into civil society organizations as presented above. Hence, citizens here are referred to as local users.

Due to the diverse services, CPOs are used by many different groups. Local users come to CPOs not only to get access to public services but also to buy commercial services and goods. According to Thai *et al.*, (2022) postal services, social assistance transfers, reading books, and consumer goods are among the most common services provided by CPOs in Dak Lak and Kon Tum provinces. The daily average number of customers served by CPOs in Dak Lak and Kon Tum provinces are 22.25 and 14.47 people respectively. 83% of customers in Dak Lak province and 88% of customers in Kon Tum province usually use at least one service at CPOs. The number of monthly visits to CPOs by one customer is around 9 times in Dak Lak province and 5 times in Kon Tum province. Postal services and electricity bills are the services most widely used. The percentages of customers using these two services are 58% and 46% in Dak Lak province, and 48% and 62% in Kon Tum province respectively.

## 6. Discussion - Stakeholder salience

### 6.1. The salience of these stakeholders

Following the aforementioned section, it is important to identify which stakeholders should be of concern to the sustainability of telecentres as it helps managers to understand and focus on their highest-priority while still maintaining a level of satisfaction among lower priority to other stakeholders (Barney, 2018). In other words, managers have to make judgments in prioritizing the interests of some of their stakeholders over others (McGahan, 2020). This is done by basing on variations in stakeholders' power, legitimacy, or urgency (Mitchell *et al.*, 1997). Table II summarizes the degree of salience of the stakeholders with four classes including definitive, dominant, dependent, and dormant corresponding to the stakeholders.

**Table II.** Stakeholder salience of CPOs

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In each class, we will discuss the characteristics of those grouped stakeholders in the following sectors.

#### 6.1.1. Definitive Stakeholders

In this class, there are three stakeholder groups including the Government, VNPost, and Users defined as Definitive Stakeholders. First, the government (both the Central Government and local governments) possesses all three attributes of stakeholders: power, legitimacy, and urgency. It is clear that in the case of Vietnam, the Government has the legitimacy and the power attributes to support CPOs. Their power and legitimacy are illustrated through policies such as providing land to establish CPO premises, supporting land taxes, prioritizing them to deploy governmental projects and funding from universal service programs. Moreover, the Government has an urgency to support CPOs to provide public and social services and to close the digital divide (Avgerou, 2008). The Government's strong brand signals that the activities of CPOs are socially motivated (Madon, 2005) as well as help CPOs to become an essential part of the community infrastructure. Meanwhile, local governments also need CPOs due to the title 'A New Rural Commune'. Achieving this title helps them to be allocated more budget from the Central Government.

Second, due to being a state company, VNPost gains more advantages compared to its private counterparts in terms of financial and political support. As a state company, it could be distributed a large amount of capital to run its business. On the other hand, the ability of VNPost in diversifying services and embedding these services in ICT is also critical. Particularly, besides running traditional businesses (such as postal and telecommunication services) they are now enhancing e-commerce by operating an e-market. They have tried to connect users and traders nationwide to enhance local specialities via the e-market. Their shift to e-commerce plays an important role in contributing to the sustainability of CPOs as well. They are not only

localizing services that Heeks (2002) recommended as a success factor for ICT projects, but also they are bringing local specialities out of the communes to over the country. VNPost also gets much more advantages due to the economic scale as they manage 8,135 CPOs serving around 90% of the rural population.

Third, users possess all three attributes of stakeholders: power, legitimacy, and urgency. Their relationship with CPOs is based on the foundation between a buyer and a seller. They affect CPOs through their consumption. Their role is increasingly becoming imperative as VNPost has diversified its services and enhanced governmental and commercial services to attract customers. Hence, the degree of power of this stakeholder is high. Moreover, the demand to use services at CPOs is also so high, due to many services at CPOs being basic and necessary for them like postal services, sim/top-up cards, and governmental services. With the role of a buyer, users have legitimate and urgent claims with CPOs about their services.

#### *6.1.2. Dominant Stakeholders.*

Dominant stakeholders here are International Donors. International Donors have power in finance and management skills. They also have a legitimate standing to work with VNPost or other entities to deploy their projects. However, they have to gain approval from governments before implementing them. Moreover, their projects are usually working within a certain period and specific targets, not for a long time. So, the degree of their urgency is not high.

#### *6.1.3. Dependent Stakeholders.*

Due to possessing legitimate and urgent attributes, Telecommunication Providers are considered Dependent Stakeholders. The relationship between Telecommunication Providers and CPOs is the connection between a seller and a buyer. Both of them need each other. Telecommunication Providers have a demand to sell CPOs their services. CPOs need Telecommunication Providers' services to run their business. Furthermore, Telecommunications Providers affect CPOs considerably via their price as the revenue from telecommunications services of CPOs usually accounts for more than 60% of total revenue. Any change in the price of telecommunications services will instantly impact CPOs' revenue and profit. However, Telecommunications Providers do not have much power to enforce their will in the relationship with CPOs. They are sellers that need to cooperate with buyers more than buyers that need to cooperate with them, particularly in the market regime where a lot of operators are running.

#### *6.1.4. Dormant Stakeholders.*

The role of Civil Society Organizations in telecentres has been recommended by many scholars (Madon, 2005; Mphahlele and Maepa, 2003) due to their social standing in local communities. In the case of Vietnam, their social symbol has been also leveraged by VNPost. Although we just have data showing the participation of Civil Society Organizations in two provinces within three provinces examined, it indicates their power in attracting and encouraging local dwellers to participate in CPOs' activities. However, their

legitimacy and urgency in CPOs are not high. They do not have any binding relationship with CPOs. Their activities relating to CPOs are quite independent. Their claim seems to be not urgent with CPOs because their function is independent.

## **6.2. Interactions and relationships of stakeholders towards sustainability of telecentres**

Taken together from the roles of different classes, Figure 6 shows the stakeholders' interactions and relationships concerning the sustainability of telecentres. First, the government, entrepreneurs (e.g., VNPost), and users play a crucial role to sustain telecentres both in the short term and in the long run. In particular, the role of the government plays as a supportive actor both in financial and political resources, especially at the early stage of telecentres (Bailur, 2006a; Madon, 2005). For example, governments use their power and legitimacy to promote the substantiality of telecentres in terms of finance, opportunities, and competition (Madon, 2005; Naik et al., 2012). Meanwhile, the role of VNPost is considered an entrepreneur who operates CPOs. The role of this entrepreneur is performed via diversifying services to meet local demand (Hoq, 2015), and improving the staff's ability to serve local users better (Mbatha, 2016). Users play a decisive role in sustaining and enhancing telecentres. Their involvement impacts directly on telecentres (Gollakota *et al.*, 2012). Telecentres will be broken down if there is no involvement of this stakeholder.

<<here>>

**Figure 6.** Stakeholders' interaction and relations towards the sustainability of telecentres

Second, the second stakeholder group of International Donors and Telecommunications Providers plays a role in sustaining telecentres. Although it seems that they are less important than the definitive stakeholders, this stakeholder group also needs to be paid attention due to their roles in funding and managerial skills that are imperative with telecentres (Madon, 2005; Whyte, 2000). Moreover, Telecommunications Providers bring a large amount of revenue for telecentres to sustain their business (Madon, 2005). Third, civil society organizations can help telecentres become popular via social standing in local communities. Working as promoters, civil society organizations persuade and encourage local dwellers to participate in telecentres (Madon, 2005; Mphahlele and Maepa, 2003).

When it comes to the relations among these groups towards sustaining telecentres, the definitive stakeholders influence directly other groups (Figure 6, solid blue arrows). In particular, the government has legitimacy and power, which are illustrated through the government's policies that affect donors and telecom providers' operations. For example, the BMGF's projects had to meet the government's criteria and they had to submit to the Prime Minister for approval before their kick-offs. In turn, the other group of

stakeholders may also indirectly influence the first group (Figure 6, solid orange arrows). For example, the input of those stakeholders in terms of comments, and ideas is a source for the government to adjust its policies towards the sustainability of telecentres. For example, the government had to adjust their policy to meet the BMGF's requirements in terms of financial ability.

## 7. Conclusions

Telecentres are considered an important tool for many developing countries to provide desperately needed access to ICTs, and thus they help to tackle the digital divide, as well as to develop society and economy in less developed areas. However, the traditional business model has been disrupted by digital technologies (Dang and Vartiainen, 2020), and traditional telecentres need to transform their business models to provide revenue and opportunities. This leads to an urgent need to search for a solution to the sustainability of telecentres. We thus study this issue through the lens of the theory of salience and identification by Mitchell et al. (1997). We contribute to the literature in several ways.

First, we classified these stakeholders into three categories based on their power, legitimacy, and urgency (Mitchell et al., 1997). Each category has its role in contributing to the sustainability of telecentres. For example, we argue that the government, state entrepreneurs (VNPost), and users have the highest role, followed by international donors, and telecom providers in the second group. Civil society organisations also have some roles in the process, but it is obviously not as significant as those of the other groups. Although the role of government, entrepreneurs, and other stakeholders in sustaining telecentres has been emphasized by a great number of scholars (Faroqi et al., 2019; Heeks, 2002; Madon, 2005), our research presents their salience degree that will help policymakers, for example, in prioritising their resources to important stakeholders while still maintaining a level of satisfaction among other stakeholders.

Second, we provide the relationships and interactions among stakeholders towards the sustainability of telecentres (Figure 6). In this model, each group of stakeholders has different roles (dot arrows) in correspond to sustaining telecentres and they also influence others in either direct or indirect ways. We argue that this model can be used as a starting point for further study on the sustainability of telecentres. For example, the role of private enterprises in telecentres has been mentioned by scholars (Faroqi et al., 2019) as they have a strong motivation to reduce costs and improve quality and innovate services due to the return (Shleifer, 1998). However, it seems this is not the case in our study. Hence, it would be valuable that future studies would focus on private enterprises in relation to other stakeholders and their roles in this model. It may help a deeper understanding of the subject. Also, a study or comparison between our model and other sustainable models in different areas would provide new insight into stakeholder relationships and their roles. For example, we can integrate the current model with the sustainable model in digital innovation management (c.f., Dang et al., 2022; Mäkipää et al., 2020) for a better understanding of stakeholders ranging from micro to macro level of stakeholders.



The paper reinforces further the studies of *Faroqi et al (2019)* and *Naik et al., (2012)* by indicating the highest impact of governments and entrepreneurs in sustaining telecentres. Distinguishing from other studies, the paper points out the role of a state enterprise in sustaining telecentres in isolated areas. The role of the private sector should never be underestimated, and they need to be involved in telecentres in Vietnam. The paper presents a good case from which other developing countries can get inspiration. Many telecentre projects are experiencing economic and technical challenges and could be closed down. Policymakers have to make judgements in prioritizing the interests of some of its stakeholders over others as for the Government, Entrepreneurs, and Users in the case study.

The research has some limitations. Although we used both primary (interview) and secondary data, the data was mainly collected from secondary sources, some of the stakeholders' perspectives thus may be possibly not unveiled in the research. However, we argue that this may not affect the final result as the first author is working as a part of the authority that is supervising the development of telecentres in the country. This job helps us improve reliability through observation, gathering data, and understanding the phenomenon. Moreover, our study focuses on the period from 2013 to 2020, and stakeholders in this study also reflect on this period. As a result, other stakeholders may appear outside our period of study and thus they were not included in this study.

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#### **Notes**

1. Decision No 491/QĐ-TTg issued in 2009 on the Criteria of New Rural Commune.
2. Document No 3069/VPCP-KTTH issued by the Governmental Office on April 17, 2013.
3. Decision No 41/2011/QĐ-TTg in 2011 and Decision No 45/2016/QĐ-TTg in 2016.
4. Program No 430/CTr-BVHTTDL-BTTTT dated on February 4<sup>th</sup>, 2013.
5. Items 5 and 10, Article 3 in the Law on Post (No 49/2010/QH12). Decision No 41/2011/QĐ-TTg. Circular No 17/2013/TT-BTTTT.
6. Items 4, Article 3 in the Law on Post (No 49/2010/QH12).
7. In Kon Tum province, a provincial VNPost staff said that 'besides these services and goods that VNPost mandates us to provide, we have also signed a contract with a company to sell schoolbooks and stationery at all our CPOs'.
8. Decision no. 04/2000/QĐ-HDQT-BC dated January 6, 2000, issued by the Board of Directors of VNPT.
9. Order no. 03/CT-BDVN dated March 8, 2014, issued by VNPost.
10. Report on the performance of the BMGF project (the BMGF Project Management Unit).
11. <https://vietnamnews.vn/economy/418482/smartphone-users-cover-84-of-vn-population.html>. Accessed on August 26, 2021
12. The Vietnam Association for Learning Promotion is a society association having functions of gathering and promoting people learning. They have subsidiaries in all provinces, districts, and

almost all communes in Vietnam.

<http://www.hoikhuyenhoc.vn/modules.php?name=News&op=viewst&sid=2280>. Accessed on August 26, 2021

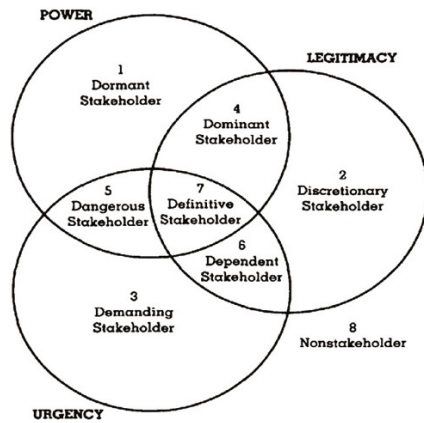
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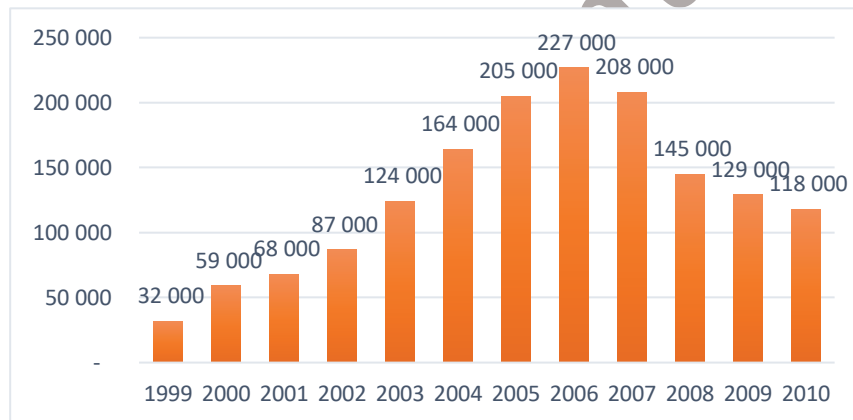
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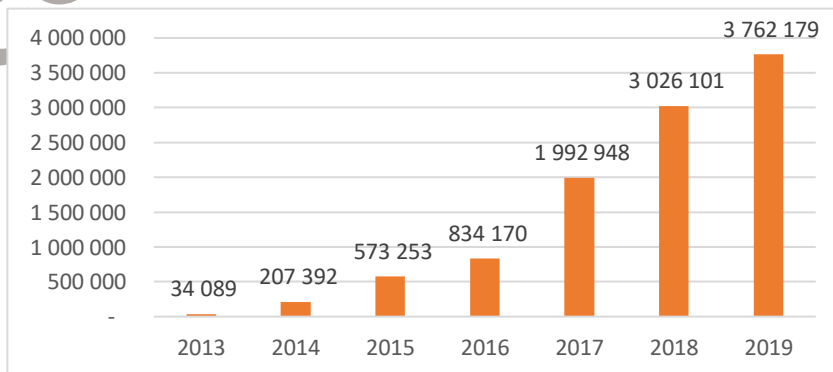


**Figure 1.** Stakeholder typology; One, two or three attributes present (Mitchell *et al.*, 1997)



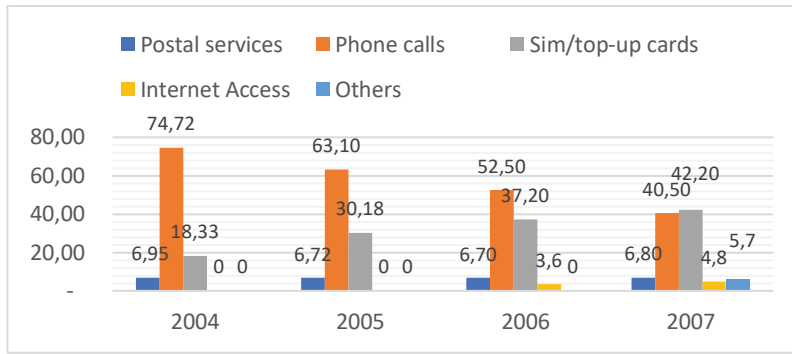
**Figure 2.** Revenue of CPOs from 1999 to 2010 (million VND)

Source: VNPT



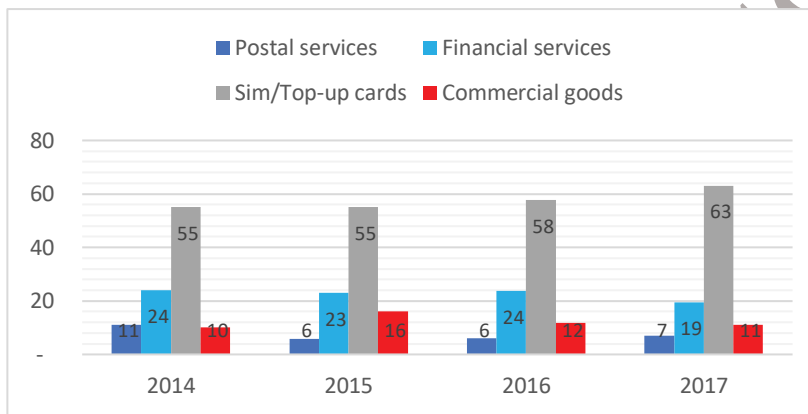
**Figure 3.** Revenue of CPOs from 2013 to 2019 (million VND)

Source: VNPost



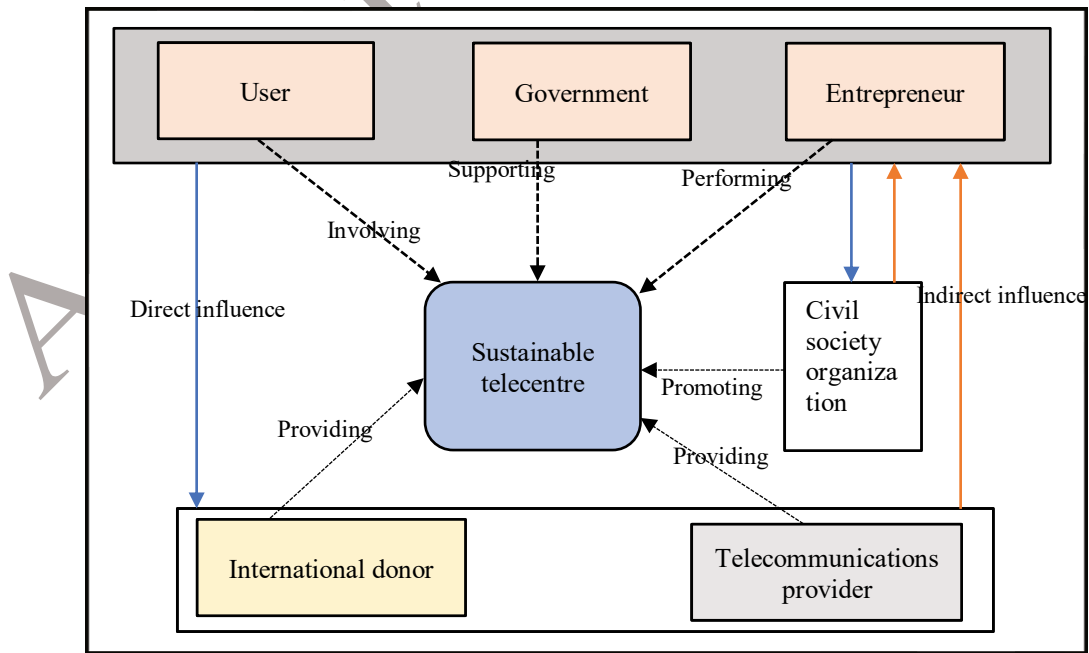
**Figure 4.** The proportion of revenue from services from 2004 to 2007

Source: VNPT



**Figure 5.** The proportion of revenue from services from 2014 to 2017

Source: VNPost



**Figure 6.** Stakeholders' interaction and relations towards the sustainability of telecentres

**Table I.** Definitions of three attributes of stakeholders

Power	"The ability of those who possess power to bring about the outcomes they desire". Resources of power can come from coerciveness (based on physical force, violence, or restraint), utilitarian perspective (based on material or financial resources) and normativeness (based on symbolic resources).
Legitimacy	"A generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions". Legitimacy is a desirable social good, that it is something larger and more shared than a mere self-perception, and that it may be negotiated differently at various levels of social organization which are the individual, organizational, and societal.
Urgency	"The degree to which stakeholders call for immediate attention". Urgency is based on two attributes: (1) time sensitivity indicating the degree to which managerial delay in attending to the claim or relationship is unacceptable to the stakeholder; (2) and criticality showing the importance of the claim or the relationship to the stakeholder.

**Table II.** Stakeholder salience of CPOs

Classes	Stakeholders	Power	Legitimacy	Urgency
Definitive	The Government, VNPost, Users	high	high	high
Dominant	International Donors	high	high	medium
Dependent	Telecom Providers	medium	high	high
Dormant	Civil Society Organisations	high	medium	medium