

## ABSTRACT

Title of Thesis:      How do the Public Libraries  
                             Use Online Media Platform to  
                             Reach Small Business Owners?

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Small business owners (SBO) do not generally think of libraries as business information sources, even though these organizations provide helpful business-related resources. Recent literature guides libraries about effective outreach to this community but offers little information about an emerging channel: social media. Therefore, we performed a comparative case study focusing on two public libraries in the Mid-Atlantic to investigate how they leverage these platforms to reach SBOs. We designed a mix-method study, including collecting qualitative and quantitative data from interviews and the two libraries' social media profiles. In this study, we found that the library, with a solid partnership with business support organizations, does not utilize these platforms as often. However, the library, which has recently started to support SBOs better, and has yet to strengthen its partnerships, leverages these platforms to reach SBOs. Nonetheless, the impact of using these platforms is still unclear, suggesting the need for future research.

How do the Public Libraries Use Online Media  
Platform to Reach Small Business Owners

by

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## List of Abbreviations

SBO	Small Business Owner
PLO	Public Library One
PLT	Public Library Two
EDC	Economic Development Center
SBDC	Small Business Development Center

## Chapter 1: Introduction

### 1.1 Role of businesses to the U.S. economy

One of the communities that play an important role in many countries' economies is the small business community. In the United States, particularly, small businesses have a substantial contribution to the marketplace. In 2017, there were 5,976,761 small business firms (1-499 employees) out of 5,996,900 total firms in the United States (The U.S Census Bureau, 2017). It indicates that more than 99% of the firms were small businesses in the United States in 2017. According to the same source, in two counties in the Mid-Atlantic, where the scope of this project resides, 93% and 88% of the firms are considered as small businesses. Overall, this community is responsible for 44% of the U.S. economic activities, and they form two-thirds of net new jobs in the United States (U.S. Small Business Administration, 2017). Despite their significant contribution to the United States' economy, they still do not have adequate access to many tools and resources that larger companies have to help them grow dynamically (González-Benito et al., 2016). Therefore, it is essential to support this community to overcome the challenges and compete with larger organizations. The success of small businesses not only benefits their immediate communities but also the country as a whole.

To help small businesses grow and develop at the same pace as other larger companies, their communities need to support them and help them meet their information needs. They should also enable them to find and use the relevant data and resources and draw insights to make critical business decisions (Apte et al., 2002). One of the information providers that can considerably help them achieve this goal is the public libraries. They provide valuable business reference collections, and some larger libraries have dedicated staff that can directly help small business owners with their information needs (Stonebraker et al., 2018). To better understand the type of services that public libraries provide to the small business community, and how the small business owners use those resources, we did an early investigation into the librarians interactions with the small business community in 2018-2019. This investigation was done as a part of a project done at the University of Maryland, College park.

For privacy reasons we cannot give the exact name of the project. Therefore, we will simply refer to this project as The Library Project.

## 1.2 The Library Project

The Library project, which was first initiated in 2018, is a research project conducted at the University of Maryland that partners with local public libraries and business support organizations to bring advanced data analytics services to public libraries to better support the small business community.

As a part of this project, we interviewed 8 librarians in different counties in the

Mid-Atlantic, and two academic librarians in a public university to better evaluate how they support the small business community.

### 1.3 Role of public libraries in supporting small businesses

From the interviews with the librarians as a part of The Library Project, we found that that they have various resources available for small business owners. For example, they have free access to business-related databases, online training, and books. Additionally, the dedicated business/research librarians at the one of the public libraries also offers free consulting and workshops to small business owners. They also have information about other helpful resources available in other business support organizations in their county, such as the Small Business Development Center (SBDC) and SCORE. By having this information, they can direct the small business owners to the appropriate resources. This can also prevent small business owners from becoming overwhelmed by the amount of information and resources and avoid misusing their time finding the proper help. While the librarians in the public library that offered additional resources were positive about the use of their services by the small business, many other librarians claimed that not many small business owners use their services.

Moreover, the results obtained from our subsequent interviews with eleven small business owners at one of the Mid-Atlantic counties indicated that many were not aware of the public libraries' business-related resources. Out of 11 small business owners, only 3 of them stated that they use libraries' resources, 1 of whom mentioned

that they use a public library in another county because they do not know what the public library in their county provides for them. Three of the small business owners mentioned that they do not have the time to visit the library, and 5 of them mentioned that they do not even know what kinds of business-related resources are available at the libraries.

One of the reasons for the small business owners' unawareness and lack of engagement with public libraries' resources could be that they often obtain information from "informal" resources such as personal contacts or consultants, rather than "formal" resources such as public libraries (Mehra et al., 2017; Welch, 2005). Although this could be one reason for the lack of interactions between these two groups, we wanted to investigate if other reasons contribute to this matter as well. For example, the public libraries could provide services that the small business owners do not particularly need, the approach they take to present their resources in the community may not be sufficient, or the ways that the public libraries reach out to small business owners may not be practical and adequate. Therefore, we wanted to evaluate the other potential reasons for this concern. This knowledge could help the libraries improve their services and communications with the small business owners and enhance their outreach activities to inform them about the libraries' available business-related resources.

## 1.4 Recent suggested outreach marketing approaches

Studies show that one way to bring small business owners' attention to the libraries' resources and services is through adequate marketing plans and programs. The marketing plans that have been discussed by scholars include, but are not limited to:

1. Networking and partnership with business support organizations to understand the business community information needs (Pryor, 2014),
2. Running a series of workshops for the small business owners (Pryor, 2014),
3. Allowing business owners to reserve meeting rooms at the libraries (Pryor, 2014),
4. Providing downloadable flyers and a booklist with the library's logo (Pankl, 2010)

Although these marketing and outreach strategies could be very beneficial, there have been limited studies concerning outreach activities through online media platforms such as social media. Therefore, this research aimed to further investigate the role of online social media in enhancing the outreach of public libraries to small business owners in their community to inform them about their business-related resources. Moreover, we planned to investigate if the changes in libraries' operations in 2020-2021, as a result of the Coronavirus pandemic, have impacted the outreach activities. We intended to focus this comparative case study on two public libraries

in two counties in the Mid-Atlantic and draw comparisons in the online media use. Moreover, to better compare their activities and draw insights, we decided to select two libraries with different interactions with the small business community. For example, one of these public libraries had a successful interaction with the small business community, while the other had less interaction with this community.

## 1.5 Research Questions

For privacy reasons we cannot give the exact name of the libraries. Therefore, we will simply refer to these public libraries as Public Library One (PLO) and Public Library Two (PLT) in this thesis.

The research questions driving this study are:

- **RQ1:** How do the librarians at the Public Library One (PLA) and those at the Public Library Two (PLT) use online media platforms, such as social media, to to promote business-related services to the small business community, pre and post Coronavirus pandemic?
- **RQ2:** What are the reasons for these observed patterns of usage?

## 1.6 Summary of Results

The results of the study showed that within a year, the organizational change and Coronavirus pandemic had a huge impact on both public libraries in terms of their online media outreach activities and supporting the small business owners in their community. With PLO considerably exceeding PLT in the use of social media



channels in general for the first time, PLO outpaced PLT in the use of social media for outreach to small businesses.

Moreover, we discovered that other factors such as partnerships with business-support organizations, dedicated business staff, and valuable resources can significantly contribute to attracting the small business owners' attention to the libraries' resources. We also learned that although both of these libraries use social media as a tool to raise awareness and to connect with their community members, they do not follow a specific social media strategic plan to reach out to the small business owners in their community.

In the following section, we described the recent literature concerning the libraries' adoption of online media technologies, the benefits and challenges they have experienced. Then, we described the research design to indicate how we collected data to answer the research question. Later, we described the findings and concluded by interpreting the results, limitations and making recommendations for future research.

## Chapter 2: Literature Review

The literature review focuses on current studies of libraries' adoption of online media platforms to understand their pattern of usage.

### 2.1 Libraries adoption to online media technologies

There have been several studies that discuss how Web 2.0 tools can magnify libraries' services (Huffman, 2006; King and Porter, 2007). Web 2.0 is a phenomenon that extends excellent opportunities for collaboration and interaction among Internet users (Murugesan, 2007). Since their emergence, online social networks and social media have been introduced to enable users to form online communities to share information (Lai and Turban, 2008). Due to this innovation in online communities and web technology, people might see libraries as the last option for their information needs because they can quickly seek information on the internet (Hussain, 2015). To prevent this, libraries have also adopted modern technologies through a movement called Library 2.0 (Connor, 2007). For example, libraries started to use and incorporate the tools for online collaborations into new methods to deliver library services to the community members (American Library Association, 2012). They also design services and use tools, such as social media platforms, to reach

new users through the online environment (Foo, 2008).

## 2.2 Benefits of adopting online media technologies

Following the Library 2.0 movement, many public libraries have been using various online tools such as blogs, content management systems for website creations, and social media networks such as Facebook (Rogers, 2009). The main reasons for using these tools are to jumpstart their online presence and market the library resources at a low cost (Gaha and Hall, 2015). Therefore, they would notice a clear reduction in marketing resources cost compared to other traditional advertising and publicizing resources (Romero, 2011). Moreover, by being active on online networks, such as social media, they are better engaged with library patrons and can disseminate information to new and large audiences without any geographical barriers (Shoniwa and Hall, 2007). Blakeman and Brown (2010) also suggested that adopting social media would improve the community networks and increase fundraising.

## 2.3 Libraries reasons for using social media platforms

A survey targeting the libraries in the United States showed that most librarians use social media to update the users about the libraries' operations, promote library resources, and for outreach to new users (Rogers, 2009). Another survey targeting libraries in China, Switzerland, the United States, the United Kingdom, Australia, and New Zealand showed that public libraries mainly use social media

tools for inclusion and outreach activities, especially to reach excluded populations (Abdullah et al., 2015). Using this technology for the above mentioned purposes comes with some challenges, but they can be optimized by developing a strategy for using social media (Romero, 2011).

## 2.4 The steps libraries take to use social media platforms

To boost visibility and reach a broader audience, libraries need to use social media strategically and deliberately (Balaji et al., 2018), while setting goals and motivations to use social media. This will allow them to take advantage of social media with high efficiency and proactive outreach at low/no cost. Barnes (2014), recommends that librarians follow strategic steps to use social media to reach audiences. For example, depending on the goals and targeted audiences, the librarians should choose appropriate platforms, tailor their messages, create a schedule to post various content on social media, and build style sheets.

There are several studies about the appropriate online and social media platforms for the libraries' use. While there are many online tools, several librarians have proposed Facebook as the most feasible platform to communicate with the users and to present the library services and support (Fasola, 2015). Furthermore, Boateng and Liu (2014) surveyed the top 100 academic libraries' websites in the United States. The results of this study revealed that Facebook, Twitter, and blogs were the most widely employed Web 2.0 tools at the libraries, while social wikis were used the least. Nonetheless, the diversity of the audience could influence this. For

example, academic libraries mainly produce YouTube videos rather than text-based content for Facebook or Twitter to reach more audiences (Collins and Quan-Haase, 2012). Moreover, depending on the type of message, the librarians might choose different platforms. For example, Canty (2012) discusses that Twitter is often used for sharing instant information, such as opening and closing times, responding to questions, and feedback. Yet, Facebook is mostly used to provide rich content such as library resources, collections, and projects. Flickr, a platform for sharing photos and videos, is used by the librarians to share pictures of the resources and collections to engage with diverse audiences.

## 2.5 Libraries' challenges of using social media

Although the previous studies show that social media use is beneficial for the libraries' outreach and marketing operations, other studies have examined the challenges of implementing online and social media in libraries. Rutherford (2008) performed a study on the social media usage of seven public libraries in New Zealand and the United States and revealed that many issues they faced were people-related, such as involuntar staff, human resource limitations, and staff training costs. In a survey of 38 academic libraries in Europe, Asia, and North America, Chu and Du (2013) discussed that many librarians pointed to social media's maintenance cost and a lack of engagement by staff to use these platforms. Collins and Quan-Haase (2012) examined the social media usage of 21 academic libraries in the province of Ontario and reported that a third of them do not have a social media presence.

They later discuss that this could be due to limited access to wireless services and other technological infrastructure, and the inability to deliver services in French and English in the largely bilingual communities.

## 2.6 Overcoming the challenges of using social media

The challenges that the librarians face in using social media are not unsolvable. For example, a white paper report by Taylor and Francis Group (2014), mentions that one of the benefits of utilizing social media is that it requires little training. Moreover, many of these platforms are free to access and provide free interactions and communications with library users (Ezeani and Igwesi, 2012). Additionally, as Romero (2011) discusses, these platforms help the libraries to save on marketing and other operational expenses. For instance, the libraries can advertise their services through these channels rather than creating expensive web traffic. They can also distribute surveys on these platforms instead of taking surveys on paper or doing telephone interviews. Romero (2011) claims that libraries that find opportunities to overcome the challenges of using social media will increase their return on investment, save costs and reach a broader audience.

Although there are many studies on how librarians should use online media platforms, such as social media, there is a lack of studies about promoting business services to the small business community through online media platforms. The primary focus of previous studies (E.g. (Balaji et al., 2018; Blakeman and Brown, 2010)) is on increasing social media interaction and communication between the

libraries and the general public, but the general public has different needs and interests than the small business community. The contents shared by librarians' on social media platforms may not be relevant to small business owners. Therefore, considering the importance of supporting the small business community and the advantages of using social media to share information, it is crucial to further study the interaction between these two groups through social media.

## Chapter 3: Research Design

### 3.1 Background

We decided to focus our research study on the two libraries, PLO and PLT, due to their locations and diversity. PLO, for example, is located in a very diverse and suburban middle class county in the Mid-Atlantic. The county, where the library is located in, has a population of more than 900,000. Moreover, according to the U.S. Census Bureau (2019), the population of this county consists of approximately 65% of the Black or African-American race, 27% of white race, and 20% of the Hispanic or Latino ethnicity. Furthermore, in 2012, this county comprised of approximately 60,000 Minority-Owned firms, 16,00 Non-Minority-Owned firms, 34,000 Women-Owned firms, and 38,000 Men-Owned firms. Additionally, the median household income of the residents of this county is approximately 85,000 per year. Lastly, the PLO includes nineteen branches in many urban and rural areas. They also offer various resources such as Business, Technology, and Education to the community members. Therefore, the county's diversity and location and its large library system made it a great case to study. The results obtained from this research could potentially become applicable to other counties in the United States.

For additional examination, we compared the online media activities of the



PLO with the PLT's online activities. The county where PLT is located is not as diverse and populated as the county where PLO is. Still, according to the U.S. Census Bureau (2019), this county that has a population of more than 200,000 is comprised of 10% of the Black or African and American race, and 16% of the Hispanic or Latino race. Moreover, according to the same source, while approximately 14,00 of the firms are owned by Non minority population, still 6,000 of the firms are owned by the minority group. Lastly, this county is wealthier than the PLO's county as the median household income is approximately 120,000 per year. PLT also includes 3 branches and offers services such as Technology, job search, and business services. Nonetheless, the main reason that we decided to compare these two libraries' online media activities with each other is because we discovered, unlike PLO, PLT interacts with many small business owners since we initially started this study, in Summer 2019. Consequently, understanding how they reach the small business owners helped us to determine the keys to their success for comparison purposes, and where/how outreach through online media might play a role.

## 3.2 Methods

To answer our research questions and the limitations inherent in master's thesis research, we performed a mixed-method study including qualitative data collection from interviews (Appendix A) and quantitative data collection from the PLO and PLT's social media profiles.

We decided to collect qualitative data because we wanted to better evaluate

why both libraries leverage social media platforms differently. This was something that could not be investigated by solely relying on quantitative data.

Moreover, we specifically collected the data from the content directly posted to the library’s main social media page or posts that were reshared to the library’s page. As a result, we did not collect data from the content automatically posted to the library’s page, such as events’ schedules, because of our focus on understanding librarians’ behaviors, rather than automatic behaviors from a tool that may or may not be deliberate.

### 3.2.1 Social Media Data Collection

To understand how these libraries were using social media, we determined to collect data from January 2020 to May 2020. However, due to the Coronavirus pandemic, most of the posts from PLO and PLT’s social media profiles were about this pandemic. To prevent its influence on the data collection and reduce bias in answering the research questions, we decided to divide the data collection into two parts. In part 1, we collected posts from a few months before the pandemic in late 2019. Therefore, we collect all of the data from Twitter, Facebook, and LinkedIn profiles of these libraries from November 1st, 2019, until January 15th, 2020. To estimate if social media activities’ patterns have changed due to the Coronavirus pandemic, we also collected data from November 1st, 2020 until January 15th, 2021, in part 2 of the data collection.

### 3.2.1.1 Twitter

The data collection was performed using the Twitter APIs and "twitterR," and "rtweets" packages with R programming languages. The following data were collected and stored in Excel files for analysis.

Field	Description
Screen_name	PLO or PLT Library
status_url	URL of the Tweet
Language	E.g., English, Spanish
is_retweet	True/False values indicating if it is retweet
text	The body of the text
hashtags	Hashtags used within the body of the tweet
favorite_counts	Number of likes
retweet_counts	Number of retweets
followers_counts	Number of followers of the profile
friends_counts	Number of profiles they follow
date	The date the tweet was published
time	The time the tweet was published

Table 3.1: Types of data collected from Twitter

### 3.2.1.2 Facebook

Due to the limitations of using Facebook API, we collected data from the libraries' Facebook accounts manually and stored them in Excel files for further analysis. They had many event posts on Facebook, which were automatically posted on their Facebook page. Therefore, we decided to remove them.

Field	Description
Time	The time the post was published
date	The date the post was published
text	The body of the text
is_reshare	True/False values indicating if it is reshare
reactions	Number of reactions
shares	Number of reshares by other users

Table 3.2: Types of data collected from Facebook

### 3.2.1.3 LinkedIn

Due to the limitations on LinkedIn, it was not plausible to extract the data from the exact dates. Therefore, we collected the posts' data approximately from early November 2019 until the end of January 2020, and November 2020 until the end of January 2021. Due to the limitations of using LinkedIn API, we collected data from this channel manually and stored them in Excel files for further analysis.

Field	Description
date	Approximate date
text	The body of the text
is_reshare	True/False values indicating if it is reshare
reactions	Number of reactions
shares	Number of reshares by other users

Table 3.3: Types of data collected from LinkedIn

### 3.2.2 Interviews

To better understand why the libraries’ patterns of social media use (RQ 2), we prepared a set of 10 interview questions (Appendix A) to learn about:

1. The library’s knowledge of the small business community’s needs.
2. The library’s approaches and strategies to connect to the small business community.
3. The library’s actions to inform the small business owners about the support and services available at the library.
4. The library’s strategies on using online media platforms to connect to small business communities.
5. The library’s preferred approaches to connecting to the small business community and the reasons for choosing those approaches.
6. The library’s partnerships with other business support organizations.
7. The types of dedicated support (e.g., funds, grants) available at their library for online outreach activities.

This study’s focus was on the libraries’ online media outreach activities and their strategies to reach small business owners. Therefore, we interviewed the librarians who are particularly experienced in this area. Accordingly, we identified two librarians from the PLO and PLT as suitable participants. Additional participants were identified by relying on the initial participants, following snowball sampling. We interviewed a total of 3 librarians from the PLO and 2 from the PLT. In order to preserve anonymity, we gave each interviewees a code name (PLO-01, PLO-02, PLO-03, PLT-04, PLT-05). Three interviews took approximately an hour, and the other two took approximately 30 minutes due to the interviewees’ limited time. However, we were able to ask follow-up questions via email.

We invited all participants via an email (Appendix B) that explained the purpose of this study and asked for their availability for a one-hour interview. If they showed interest in this research, we sent them the Google calendar invitation, along with the Zoom meeting link. Additionally, we sent the “Participation Consent” and “Audio Consent” forms to them in a separate email. Since the interviews could not occur in a physical space, due to the Coronavirus pandemic, we asked the interviewees to verbally consent during the meetings since they were not able to sign the consent forms. These interviews were also recorded and transcribed.

### 3.3 Data Analysis

#### 3.3.1 Social media data

We stored all of the data in separate Excel files. Then we added columns to these files for further analysis. We named the first column as “Relevant”, and the second column “Topic”. If the tweet’s body contained any relevant information about business resources, we put 1 in the “Relevant” field, along with the additional details about the tweet written in the “Topic” field. Otherwise, we put 0 in the “Relevant” field, and the “Topic” field was left empty.

#### 3.3.2 Interview

To perform the analysis on the interviews, we Open Coded the interview data to break down the interviews and create codes (Williams and Moser, 2019). We then drew connections between the codes to evaluate how they can be categorized as a part of Axial Coding (Williams and Moser, 2019). Lastly, we organized the codes into different categorized for the analysis as a part of the Selective Coding process. (Strauss and Corbin, 1990).

## Chapter 4: Findings

In this section, we explain the findings based on each research question. First, we explain how the two libraries online media platforms compare based on the findings. Second, we discuss the reasons for the observed patterns of usages.

### 4.1 Findings related to RQ1

In this section, we compare the online media activities of each library, per our first research question. First, we compare their use of Twitter, then Facebook, and lastly, LinkedIn, pre and post Coronavirus pandemic. Then, we discuss any additional findings learned during the interviews

#### 4.1.1 Twitter

The summary of their Twitter activities is shown in Table 4.1:



		2019-2020					2020-2021				
		total tweets		BR tweets		BR retweets	total tweets		BR tweets		BR retweets
		110		0		0	630		32		6
		likes	retweets	likes	retweets	likes	likes	retweets	likes	retweets	likes
PLO	Mean	3.02	1.23	0	0	0	1.86	0.98	2.9	0.63	0
	Median	2	1	0	0	0	1	0	2	0	0
	STD	3.99	1.77	0	0	0	2.54	1.58	2.32	1.32	0
	Max	26	14	0	0	0	24	11	8	5	0
	Min	0	0	0	0	0	0	0	0	0	0
		total tweets		BR tweets		BR retweets	total tweets		BR tweets		BR retweets
		44		0		3	60		0		1
		likes	retweets	likes	retweets	likes	likes	retweets	likes	retweets	likes
PLT	Mean	1.11	1.68	0	0	2.33	4.2	1.95	0	0	0
	Median	0	0	0	0	0	3	1	0	0	0
	STD	5.08	2.68	0	0	3.3	4.53	2.72	0	0	0
	Max	28	13	0	0	7	24	16	0	0	0
	Min	0	0	0	0	0	0	0	0	0	0

Table 4.1: Twitter data collected from PLO and PLT's profiles.

BR stands for "Business-Related"

#### 4.1.1.1 PLO Twitter Use

As shown in Figure 4.1 the Twitter activities of PLO increased significantly in the second phase of data collection. The Twitter data show that the PLO activities in 2020 - 2021 are 5.72 times greater than those in 2019 - 2020. From November 2019 to mid January 2020, they only tweeted 110 times, and none of these tweets were related to small business information. However, from November 2020 to mid January 2021, they tweeted 630 times, and 32 of them contained business-related information, as summarized in Figure 4.2:

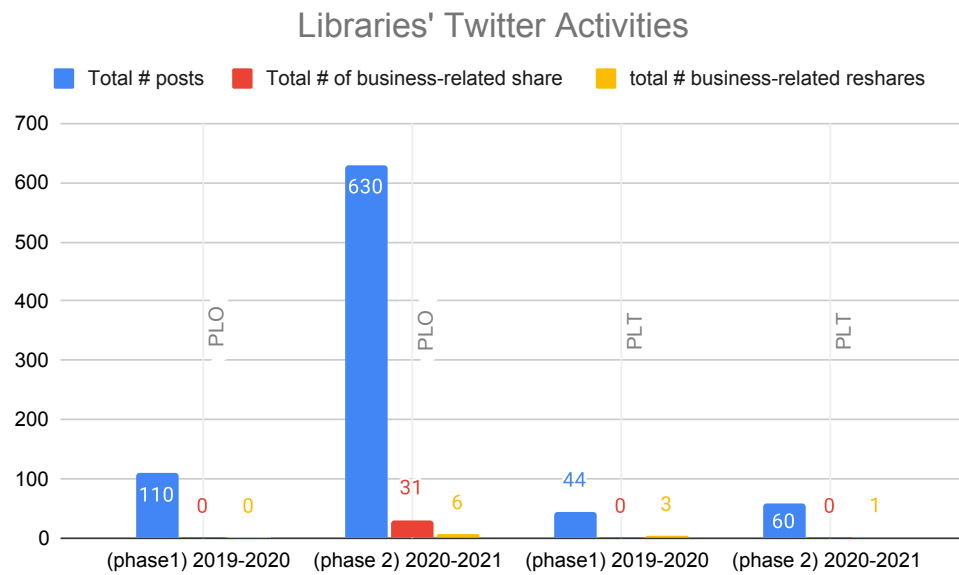


Figure 4.1: Twitter activities changes over time

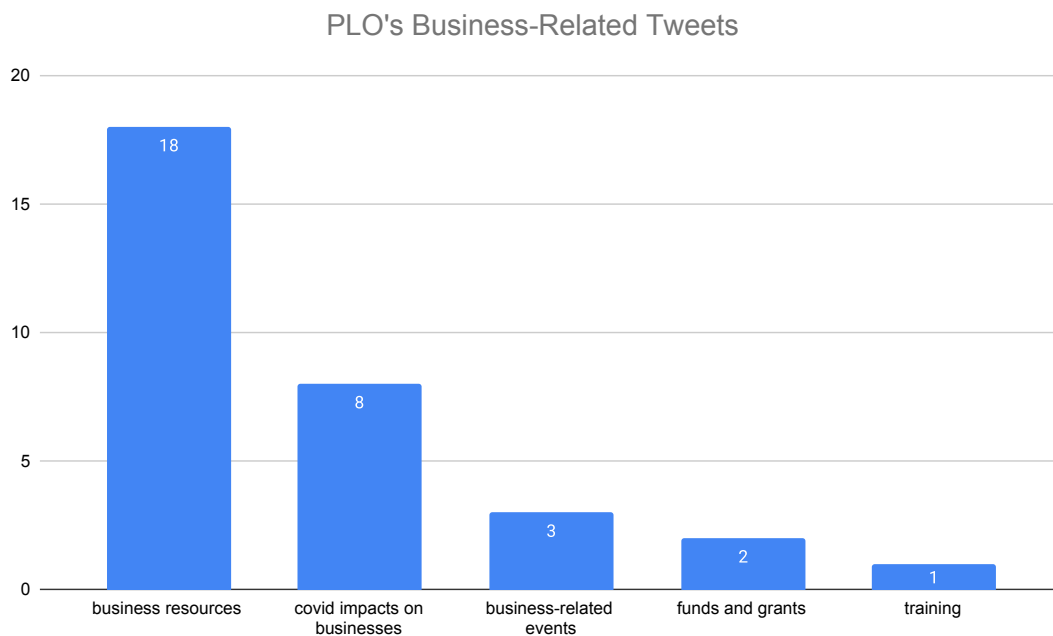


Figure 4.2: Frequency of Business-Related Tweets by PLO

As shown in Figure 4.2, 18 tweets were general information about business resources, such as:

“@UrbanLibCouncil A5 Community members are sometimes unaware of the

vast resources available to them through their public library—small business resources included. Free access to market research & legal forms is a hit among small biz/entrepreneur communities.”

Moreover, it appears that due to the Coronavirus pandemic, the number of tweets regarding its impact on small businesses increased. One example of those tweets is:

“@UrbanLibCouncil A4 Many businesses throughout the country have closed or are suffering financially as a result of the pandemic. To stay afloat, businesses have been working on their virtual presence and the ability to provide services virtually when possible. #ULCChat #GEW2020 (1/4)”

Lastly, 2 tweets about businesses related events were found. 1 of them was about how the Coronavirus pandemic has affected the businesses, and one event was about the available business resources in the county.

“Join County officials and top medical doctors tomorrow, December 22 for a webinar discussing updates from a business perspective. Learn about the county’s strategy for the COVID-19 vaccine and how it applies to the business community. Register at: [Website URL]”

The average number of likes for the business-related tweets was 1.56 times higher than other tweets (Table 4.1). Moreover, they also tagged many of their partners, as summarized in Figure 4.3.

As shown in Figure 4.3, they tagged Urban Library Council most of the time. This organization’s mission is to improve the communities by promoting public libraries’ value (Urban Library Council, 2021). Moreover, they also tagged Small

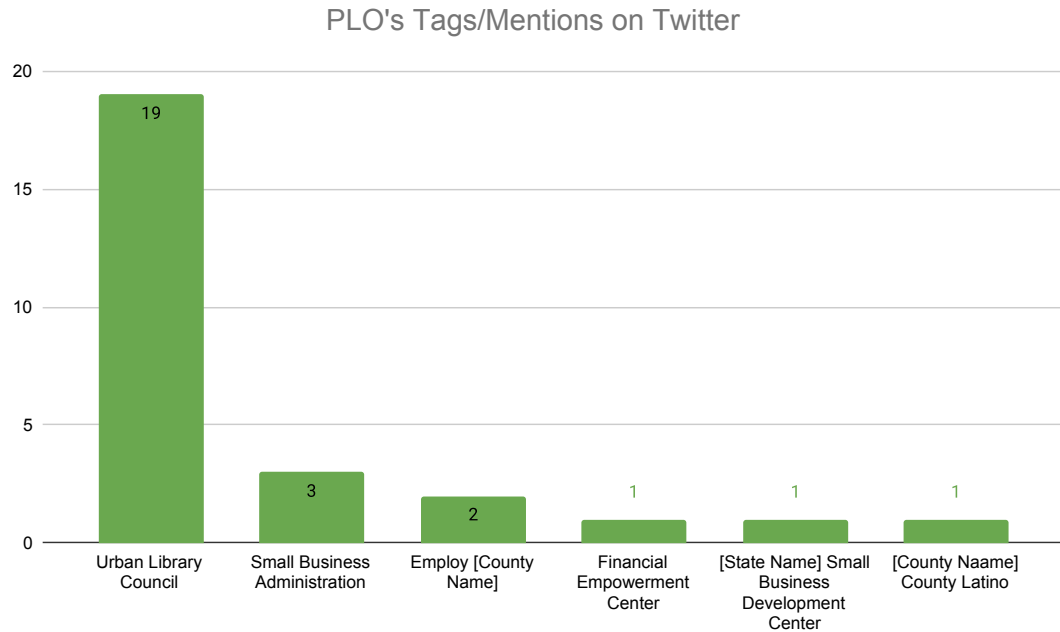


Figure 4.3: Frequency of tagging business partners by PLO on Twitter

Business Administration (3 times), Employ [County Name] (2 times), Financial Empowerment Center (1 time), and [State Name] Small Business Development Center (1 time). This pattern was also identified during the interviews, as PLO-01 mentioned:

*“I would tag the economic development corporation. If it applies to any other partners I would tag them too, I would expect them all to retweet and then we would probably get realistically 5 to 10 engagements on that post” (PLO-01).*

Moreover, we discovered that the PLO Library does not use hashtags on these tweets as frequently as they use tags. As observed, they only used the “SmallBusiness” hashtag 2 times, “Entrepreneurship” 1 time, and “marketresearch” 1 time. Nonetheless, PLO-03 mentioned:

*“People use hashtags more often on twitter and that can be if somebody’s just*

*looking up information you know hashtag small business or whatever they can get to us.” (PLO-03).*

Lastly, they also retweeted 6 tweets that contained business-related information. Yet, none of those retweets received any engagements. They did not receive any likes and they were not retweeted by the users.

#### 4.1.1.2 PLT’s Twitter Use

On the other hand, the PLT’s use of Twitter to share business-related content is different. The library’s business/research librarian has a separate professional account mainly used to share business-related and job-seeking content. The librarian who runs the official Twitter account of this library tends to retweet from their profile rather than tweeting business-related information directly. It is important to note that for the purpose of this study, we only gathered data from the official Twitter profile of PLT.

Overall, the PLT tweeted more in 2020-2021 than in 2019-2020 (Table 4.1) . From November 2019 to mid-January 2020, they only tweeted 44 times, and none of them were related to small business information. However, they retweeted 3 tweets that contained business-related information. Two retweets included information about business books/ebooks, and one retweet included information about finding grants. The average number of likes for the entire set of tweets was 1.11. However, the average number of likes for business-related retweets was 2.33. One example of those retweets is:

“Joined @[]’s Business Book Club and am diving into the first read of 2020: SHOE DOG by Phil Knight, founder of @Nike. Happy to have an excuse to stick my nose in a book and utilize @[PLT library name]!”

From November 2020 to mid-January 2021, they tweeted 60 times, and none of them contained business-related information. They also retweeted 1 tweet that contained business-related information. Yet, it did not receive any engagement. The retweet was:

“Since March, [specific program at the library] has been working with a number of new businesses who are creating technologies to support this new normal. In this week’s [specific program at the library], we had a chance to sit down with WAY Tipping which is a digital contactless tip jar.”.

During the interviews with PLT librarians, we realized the main reason for fewer retweets of business-related information is that the focus of the research/business librarian of this library has changed. As PLT-04 mentioned during the interview:

*“My role has changed. I joined a team to support our job seekers. you mentioned the social media account this is the [Business/Research Librarian Name] account, this one so I added jobs to the brief on that account partly to help support some programs that we’ve been running for job seekers. So again why so since march 2020 there hasn’t been any direct you know, I haven’t been doing any outreach, I mean and honestly as I was thinking it through and looking at some numbers I’ve only had five small businesses in a year contact me.” (PLT-04)*

They later added:

*“I’ve been doing in a specialized sense has been really helping grant seekers*

*because there are many non-profits in the community that have you know the bulk of my time in any book-a-librarian appointment.” (PLT-04)*

Due to the change of their focus, they tweeted less business-related information leading to fewer retweets of business-related information to the PLT’s main Twitter profile. We discuss the reasons for this change in the findings of the second research question.

Lastly, unlike PLO, they do not tend to tag the profiles of the business support organizations such as SCORE and EDC to their posts as often. They also claimed that they do not use hashtags often as well. We again discussed the reasons for this absence in the next section.

	PLO			PLT		
	total tweets	total retweets	total records	total tweets	total retweets	total records
2019-2020	110	4	114	44	170	214
2020-2021	630	32	824	60	85	145

Table 4.2: Overall Twitter Activities of PLO and PLT

Overall, PLO has been tweeting more than PLT since the initial time frame (Table 4.2). That is mainly because PLT tends to retweet from the expert librarians’ professional accounts. For example, in the recent time frame (Table 4.2), the PLO has been tweeting and retweeting 824 times, but PLT has been tweeting and retweeting 145 times. Yet, the PLO’s total retweets have been 23.5% of the total records, while PLT’s total retweets have been 58.6% of the total records. Nonetheless, the PLT’s entire activity has decreased by 32.2% since the Coronavirus pandemic. We

discussed the reasons for these observed patterns of usage in the findings section of the next research question.

#### 4.1.2 Facebook

The summary of their Facebook activities is compiled in the table 4.3.

		2019-2020				2020-2021			
		total posts		BR posts		total posts		BR posts	
		104		0		427		14	
		reactions	shares	reactions	shares	reactions	shares	reactions	shares
PLO	Mean	15.0	4.65	0	0	4.84	3.83	2.57	1.64
	Median	12	1	0	0	3	0	1	0
	STD	16.87	12.93	0	0	6.74	4.23	2.66	3.31
	Max	144	91	0	0	48	56	10	13
	Min	1	0	0	0	0	0	0	0
		total posts		BR posts		total posts		BR posts	
		39		0		56		0	
		reactions	shares	reactions	shares	reactions	shares	reactions	shares
PLT	Mean	30.03	2.32	0	0	12.48	1.73	0	0
	Median	23	1	0	0	7	0	0	0
	STD	26.25	3.11	0	0	91	3.32	0	0
	Max	108	15	0	0	134	19	0	0
	Min	1	0	0	0	1	0	0	0

Table 4.3: Facebook data collected from PLO and PLT's profiles

BR stands for "Business-Related"

By looking at Table 4.3, it is clear that both libraries use Facebook less often than Twitter. PLO, however, has increased its activities significantly by 4.10 times since early 2020 (Figure 4.4). From November 2019 to mid-January 2020, they posted 104 content on Facebook, and none of them were related to small business information. However, from November 2020 to mid-January 2021, they had 427



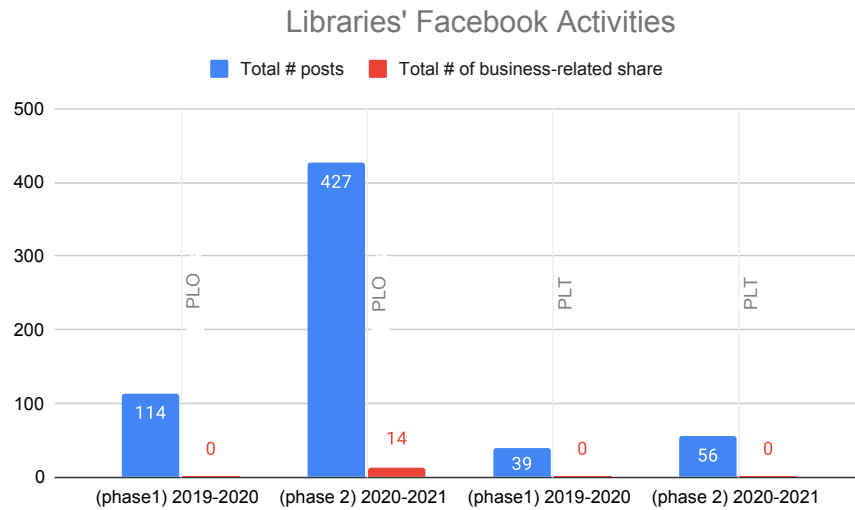


Figure 4.4: Facebook activities changes over time

posts on this platform, including 14 business-related posts. The distribution of the business-related contents are summarized in Figure 4.5.

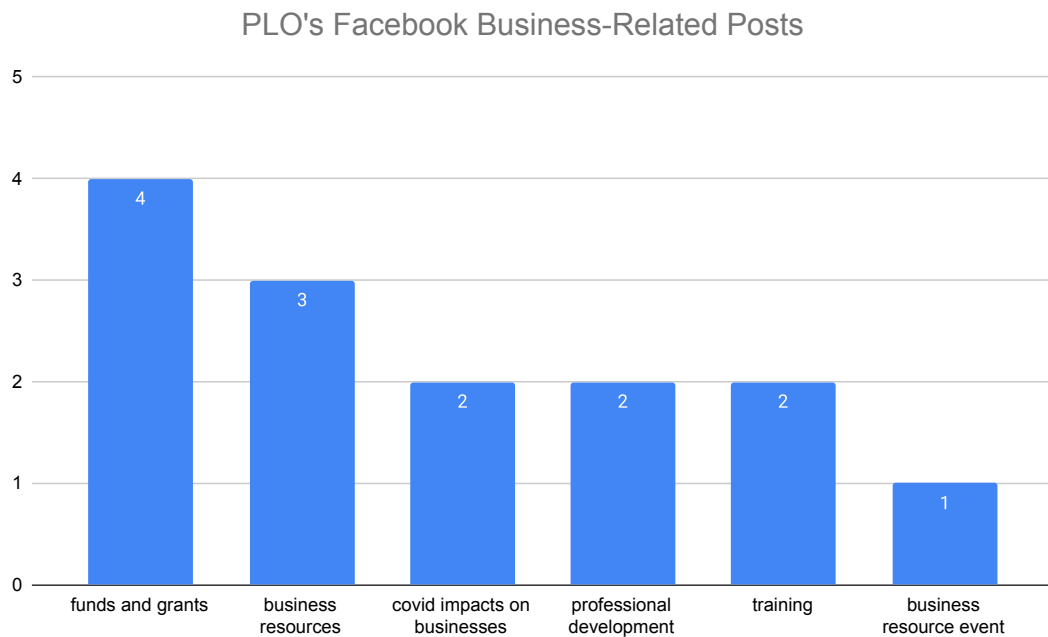


Figure 4.5: Frequency of Business-Related Posts on Facebook by PLO (20-21)

As shown, 4 posts were found that contained information about funds and

grants, such as:

“The second round of the [County Name] Arts and Humanities Council’s Community Emergency Relief Fund is open now! The deadline for submission is December 16th.”

Moreover, they posted 3 times regarding the availability of business-related resources at the library, such as:

“As part of Global Entrepreneurship Week, learn about the wide range of resources for small businesses and entrepreneurs available at no cost through the [PLO]. The Library offers access to 85+ online resources—from Lynda.com and Gale Legal Forms to Foundation Directory Online Essentials—that can help you grow your business and develop your skills. This webinar will also discuss the Library’s 3D printing program, collaboration opportunities, and provide the community with a chance to inform the future services at the Library. Co-presented with the [County Name] Economic Development Corporation.”

Although the total number of posts on PLO’s Facebook page has increased, the average number of reactions to these posts has decreased (Table 4.3. From November 2019 to mid-January 2020, the average number of reactions for the entire dataset was 15.1, but the average number of reactions for the posts from November 2020 to January 2020 was 4.84. Moreover, unlike Twitter, the average number of reactions for the business-related decreased to 2.57.

#### 4.1.2.1 PLT's Facebook Use

The PLT posted on Facebook 1.4 times more in 2020-2021 than in 2019-2020. However, they have been active on this platform a lot less than PLO. From November 2019 to mid-January 2020, they only posted content 40 times, and from November 2020 to mid-January 2021, they posted content 57 times. Moreover, the average number of reactions had also decreased by 2.4 times. From November 2019 to January 2020, the average number of reactions to their posts was 30.03, while the average number of reactions for the content posted from November 2020 to mid-January 2021 was 12.48. Furthermore, no business-related content was found in either of the time frames.

During the interviews, we found that the way that the PLT uses social media to share business-related information is different. They use these platforms mainly to share stories about how the library has been active in the community, such as in the small business community. To post a story, they first post it on their website and then share it on their Facebook profile, as they can share long content on this platform. As PLT-05 has mentioned:

*“We do our best storytelling on Facebook. So Facebook is good for long-form storytelling so whenever we have a real like uh we of course everything backs up to our website so if we have a story it goes on our website first and then we will post stories that are the same kind of stories on Facebook.”* (PLT-05)

### 4.1.3 LinkedIn

The summary of their LinkedIn activities is compiled in Table 4.4.

		2019-2020					2020-2021				
		total posts		BR posts		BR reposts	total posts		BR posts		BR reposts
		3		1		0	64		3		2
		reactions	shares	reactions	reactions	shares	reactions	shares	reactions	shares	reactions
PLO	Mean	0.33	0	1	0	0	2.89	0	1.67	0	2.5
	STD	0.47	0	0	0	0	2.21	0	0.47	0	0.5
	Max	1	0	1	0	0	11	0	2	0	3
	Min	1	0	1	0	0	0	0	0	0	0

Table 4.4: LinkedIn data collected from PLO’s LinkedIn Profile

According to Table 4.4, the PLO only posted three times on LinkedIn From November 2019 to January 2020, and one of these posts was business-related content. In this content, they introduced the “LinkedIn Learning” website where anyone, including small business owners, can learn new skills. Out of the 3 posts, the business-related content received only 1 like.

However, since early 2020, they have increased their activities on LinkedIn, in addition to Twitter and Facebook (Table 4.4 & Figure 4.6). During the interviews, PLO-01 also mentioned:

*“We would then schedule the kind of base level social media posts that advertise the event on whatever the platforms are with small business. I would have specifically*

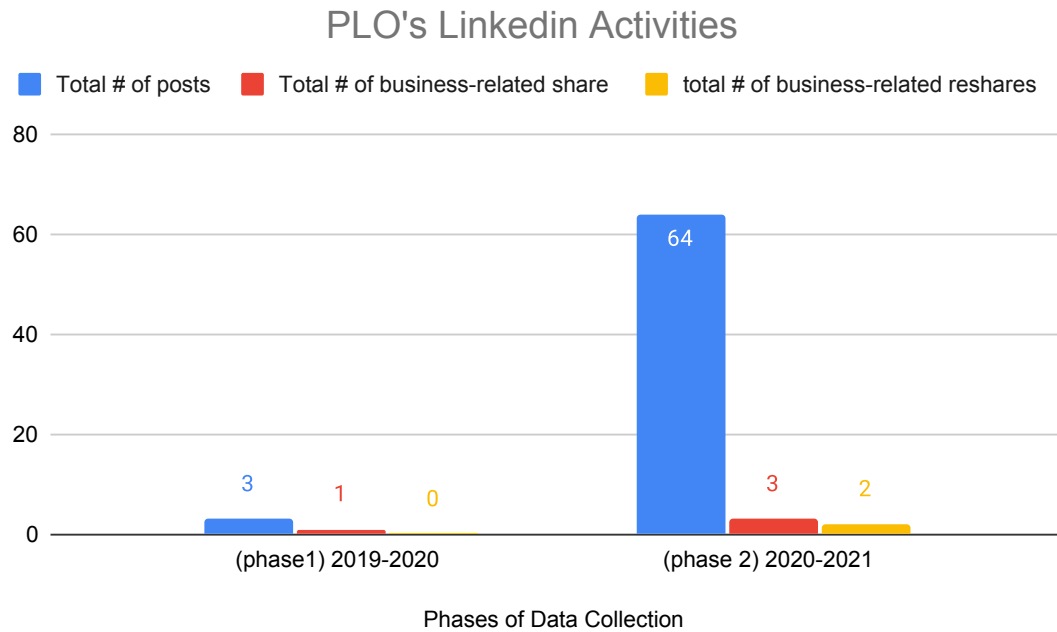


Figure 4.6: LinkedIn activities changes over time

*a high focus on linkedin and twitter.”(PLO-01)*

From November 2020 to January 2021, the PLO posted 64 times and shared 12 posts. Out of the 64 posts, 3 of them were business-related, as summarized Figure 4.6.

One example of the business resource content was:

“Learn about small business and entrepreneur resources available at #[PLT] on Thu, 11/19 at 10am for #GEW2020 @Expand[County Name] #SmallBusiness #Entrepreneurship”

As shown, they also used appropriate hashtags such as “SmallBusiness”, and “Entrepreneurship” on this post.

Additionally, the two business-related posts that they shared on the LinkedIn profile were about funds and grants, such as:

“Our Rapid Re-Employment Grants application is live on our website (see below). Businesses who hire unemployed [County Name residents, with a start date prior to December 15th, can qualify for up to \$50,000 in Rapid Re-Employment Grant funding from Employ [County Name], Inc.”

The entire datasets of the Linkedin posts received an average of 2.89 likes. However, the three business-related posts received an average of 1.67 likes, which is slightly less than the total average. Yet, two business-related posts shared by this profile received an average of 2.5 likes, which is slightly more than the average number of likes for the business-related content posted by this profile itself.

The PLO has not posted anything on their Linkedin profile. Therefore, it is not possible to compare their activities.

#### 4.1.4 Additional findings

In this section, we presented the additional social media activities of the libraries that we discovered during the interviews with the librarians. We explained the reasons for these usages later in the findings of the second questions.

##### 4.1.4.1 How they proceed to post business-related information

The social media strategies the PLO follows depends on the type of content. If the content is about an online business resource, they only share it as a base-level social media post. As PLO-01 has mentioned:

*“We would depending on the program and the profile of folks involved we might*

*do some media outreach kind of at the base level. We typically will have a media release once a month right now where it's focusing on like the big virtual programs for that month ahead so you know. If we're having a major business CEO come that's going to get a huge amount of that kind of media outreach. If it's just you know learn about the library's online resources for small businesses that's going to be kind of less elevated as a featured event and more kind of put in as you know this is just one of the events that are on offer in this period."* (PLO-01)

Therefore, when PLO plans to hold a business-related event, they usually follow a set of steps to ensure that they can reach as many business community members as possible. These steps are:

1. Finding potential partners for promotional standpoints.
2. Making additional adjustments to the content, if needed, such as rephrasing the marketing language.
3. Sharing it on the PLO's website calendar.
4. Building a Facebook event page.
5. Creating live streaming feeds and scheduling them.
6. Including the event in the monthly or bi-weekly marketing emails.
7. Performing outreach activities on social media platforms, such as including the events to the monthly media release.

Before the Coronavirus pandemic, the research/business librarian of the PLT also followed a set of steps to share information about a business-related event/workshop.

However, the steps they took were different from those of PLO. We do not know how they would do it during the pandemic as they have not held any business-related event/workshop recently.

The PLT steps are:

1. Asking the partners on business-support organizations to add the event to the calendar on the website.
2. Sharing the event on the Facebook page.
3. Asking the partners to send it to their clients.
4. Preparing flyers.

#### 4.1.4.2 PLO's additional online presence

Since early 2020, PLO has created a new page on their website to share PLO's business resources and feature community and online library resources. The workforce development committee at the library is also developing a new micro-website that focuses on the community members with the skills they need to establish their own small businesses. As PLO-02 has mentioned:

*“After the pandemic hit and as a lot of our business was shifting to more digital media”. They also add, “I’ve started kind of diving into partnerships and things like that, but I do realize that our business has had to change and pivot in the past year and we’ve developed a lot of websites, web pages that I can show you throughout our discussion that kind of specifically focuses on businesses and community resources.*



*And a lot of what we've been sharing over social media the past year has been to try to help folks out in the community small business owners or even just average citizens get by and you know have an accurate and authentic source of information."*

(PLO-02)

PLO-03 also mentioned:

*"We're also almost finished with a micro site to our main site for small business, I mean well for the workforce that will include resources for small businesses. So right now we already have a page for small business resources that conduct links to some community resources into our online resources like the databases, LinkedIn learning things like that, but we want to expand that space to include all the workforce. (PLO-3)*

PLT, however, has had a page on the website since before the pandemic that contained most of the information that the small business community needs to start the business. We, unfortunately, did not have a chance to go deeply into the details of the website during the interview due to the time limit. However, based on the conversation, and our findings from their websites, we noticed that they have made major updates on their website.

Overall, we discovered that these two libraries use online media platforms, such as social media and web pages to share business-related information differently. These differences are apparent in both the quantitative and qualitative data. These results are summarized below:

1. After the Coronavirus pandemic, PLO became more active on social media

in terms of sharing business-related information and started to create a new micro-website focusing on sharing small-business information and resources. However, PLT has been less active on social media in terms of sharing business-related content since the pandemic.

2. PLT has a high focus on Twitter and LinkedIn to share business content, rather than Facebook. PLO also was more active on Twitter during the initial data collection phase, mainly to retweet from the business/research librarian's personal account. They also claimed that they used Facebook to share stories about how they have been active in the community. We also found that PLT has not been active on LinkedIn pre and post pandemic.
3. PLO tags their partners on business-related posts and sometimes use relevant hashtags. PLT, however, does not tag their partners and does not include business-related hashtags within the posts.
4. PLO follows a subsequent step to share business-related information. PLT also used to follow a subsequent step to share information about business-related events before the pandemic. However, now they followed different subsequent steps.

We discuss the reasons for these patterns of usages in the following section.

## 4.2 Findings related to RQ2

In this section, we discuss the findings related to the second research question, which aimed to find the reasons for the observed patterns of usage in RQ1?

### 4.2.1 Social media activities pre and post pandemic

Our interviewees explained that the PLO has gone through some changes and innovations in communications and digital marketing, and has increased their focus on the small business community since early 2020. These adjustments are mainly due to the Organizational Change and Coronavirus Pandemic.

With the new organizational change, they have brought marketing and digital services together as one division, enabling them to create a more collaborative environment. Moreover, they have hired new experts and have renewed their mission and vision to ensure that they follow the county's government's priorities to deepen their connections with the community members. As PLO-01 has mentioned:

*“We’re working on the track to our county government’s priorities under our county executive and make sure that that kind of ethos is infused into everything that we’re doing as a library system. Whether it’s new media partnerships whether it’s our advocacy work whether it’s doing our programs whether it’s figuring out how to move to virtual programs which we did on pretty much like two weeks notice last year not having had any substantive live streaming before and then making sure that our public persona on the website on third party platforms on social media platforms in the media is as being all of those points of access are being used strategically to reach*

*more people to deepen the connection with our community members.” (PLO-01)*

Due to the Coronavirus Pandemic, the PLO was required to close its branches for community safety. However, it quickly transitioned to an online library to meet the community’s needs. For example, they started to host Zoom meetings with community members and partners, recorded them, and uploaded them on their Website and Social Media Channels such as Facebook and YouTube for community access. Moreover, they often stream their events live to their social media feeds to interact and engage with the patrons.

Before the Coronavirus pandemic, the PLO had not focused its attention on helping the small business community as much as other underserved communities. However, according to PLO-03, [County Name] County experienced an 8% unemployment rate recently. Therefore, the workforce development committee at the library began to focus on this community more than before. They believed that the people who have become unemployed could take this as an opportunity to establish their ideas into building a small business. Therefore, they started to build a micro-website to include business-related information and resources.

These changes have caused the PLO to increase their use of online media platforms and social media and start providing more support for the small business community than before. With the new organizational change and new experts, the library further adopted the technology and started to positively take advantage of online media platforms and social media channels. They created new pages on their website with more information about the library’s resources, and strategically planned to reach out to the community members through social media. Moreover,

the Coronavirus pandemic led to two changes; 1) an increase in the unemployment rate; 2) Closing the physical spaces at the library. Therefore, supporting the small business community and using social media platforms to share information about the library's events and services and connect with others was inevitable. As PLO-01 has mentioned:

*"Without promotion on social and/or email marketing, just having a virtual event will do nothing because you know you can add it on your event calendar but the fact the matter is that most people do not access the virtual events by perusing our virtual event calendar. They are hooked at an access point. Whether it's email marketing, or in media word of mouth, or social, and then they might come to us through one specific program type or program and then that initial its kind of like the in the business."* (PLO-01)

PLT, however, has been less active on social media after the start of the Coronavirus pandemic. Due to this pandemic, the PLT had to reduce staff and reprioritize their priorities. They realized that their community's new demands were to seek jobs and grants. Since they had a long-term partnership with other business support organizations, such as the EDC, they decided to leave the small business owners' needs with the EDC and focus on the community's new demands because they are a smaller library system. As PLT-04 has mentioned:

*"Obviously small businesses have been you know seriously impacted by the situation and we have left it up to our local our economic development agency which has been primarily the primary point of contact for small businesses or entrepreneurs. You know our small businesses who are looking to pivot or looking for PPE funds*

*you know that that's really been in their purview so the focus has not been on doing anything active.” (PLT-04)*

Therefore, this also led the research librarian to pay less attention to posting on social media and tweet/retweet and share fewer business-related information.

#### 4.2.2 Using different kinds of social media platforms, and using hash-tags and tags

Although PLO tries to post business-related content to all of the social media platforms they use, based on the librarians' personal experiences and acquired knowledge on these platforms' user behaviors, they believe that the small business community is most active on Twitter and LinkedIn. Therefore, they consider that these two platforms are appropriate for reaching out to the small business community, engaging with them, and informing them about the events and services at the PLO. According to PLO-01:

*”LinkedIn has been one that I’ve been really focused on using because it is especially in the business community, and in the entrepreneur community and the job seeker community everyone’s on there, and that’s where people are making those professional connections, and you know it’s a platform where you shouldn’t be on there if you’re not going to be active as with all of these. but on LinkedIn, there’s a huge amount of benefit and some of that is more like some it’s, and I know you know this from your perspective, but it’s like LinkedIn doubles as reaching the small business folks.” (PLO-01)*

Furthermore, they use Twitter mainly for three reasons:

1. Since Twitter allows them to share short and instant messages, Canty (2012), they use it to share information about a live event with its URL, shortly before it starts.
2. Twitter encourages small discussions between users.
3. They can use relevant hashtags and tag their partners, such as the Economic Development Center (EDC).

Lastly, during the data collection, we did not find many posts that include business-related hashtags. However, they tag their partners. Yet, PLO-03 mentioned:

*“People use hashtags more often on twitter and that can be if somebody’s just looking up information you know hashtag small business or whatever they can get to us.”*(PLO-03)

Moreover, when they tag their partners, they expect them to retweet their posts. The reason is that they believe the majority of audiences of their partners’ profiles are small-business owners. Therefore, those contents would have a higher chance of being viewed by the targeted audiences, and they usually get 5 to 10 engagements.

PLT does not yet use social media only for sharing event information. They use this platform to share stories about how the library has been active in the community. During the interviews with the PLT librarians, we learned that they use

social media, especially Facebook, to post long content and tell a story. According to PLT-05:

*"Being able to tell the stories of the people who we help is one of the best ways to use social media to reach the people of [County Name]". (PLT-05)*

They also mentioned that only the people at the early stage of thinking and opening a small business would use library resources as they are free. According to the same source:

*"People who we need to reach aren't the people who already are a small business that's established. It's the people who are thinking about becoming a small business. It's the people who are thinking about establishing something, who are thinking about can I become a small business, Do I want to become a small business." (PLT-05)*

As an example:

*"People we need to reach are the the woman who's been making soap in her bathroom and her kitchen and selling it to her family for the last five years for Christmas and says maybe I should start making a business out of this. the woman who's been making jewelry, the person who's been making you know gardening in their own garden and says could I open a flower shop you know what what would it be like if i open my own business." (PLT-05)*

Therefore, this library aims to reach these people. However, those people do not tend to share their stories at the beginning of starting a small business. Again, they continued:

*"We have the books about what it's like to build a business plan. We actually have a librarian who can help you because it's very opaque to understand what this*



*looks like so those are the stories that we try to figure out how to tell it's hard to try to figure out how to tell these stories because people don't often don't want to talk about. What they're doing when they are at the beginning of it so we're constantly trying to figure out like how can we tell these stories.” (PLT-05)*

Therefore, it has been challenging for the librarians to try to figure out how to tell those stories, and share them on social media channels such as Facebook.

Moreover, as mentioned before, we found out that PLT also used Twitter to share business content. However, most of the time, the retweeted information was from the business/research librarian's personal account. This is a strategy that they defined to share business information on social media channels.

Lastly, PLT does not tend to use hashtags or tag their partners. When we asked about the reasons for not including the hashtags, PLT-05 mentioned:

*“If the hashtag is something that's universally important and if the hashtag is going to inform that in some way then I should add the hashtag, but if the hashtag is like if my tweet says [County Name] county job fair Tuesday July 4th for ages this and this this time register here I would not use hashtag that.” (PLT-05)*

Moreover, PLT-05 also discussed that the [County Name] EDC, one of their partners, usually follows the PLT's Twitter profile. They also discussed that:

*“I can post almost anything and if it has anything to do with anything they're doing they'll retweet it like that because they are looking for things I'm posting so I waste space by tagging them”(PLT-05).*

However, sometimes they do need to tag some of their partners. According to the same source:

*”[County Name] County which is our overarching entity, is trying to keep track of so many things that if I want [County Name] county to pick up on something, I need to tag them. But I usually don’t have space to tag them because I’m trying to use up all my characters to say something important because I’m usually trying to communicate something complicated or something sophisticated. So my personal strategy is that I try to include an image in my tweets, and then I use the image to tag them so they get it in their mentions but it’s not obvious that I’m tagging them. Now that’s my personal strategy. Would I say that this is a strategy that everybody ought to use, I don’t know, because if I was trying to say, hey people, you should also be following [County Name] County, that would be a different strategy right but what I want is for [County Name] to notice what I’m tweeting when I want in order to notice when I’m tweeting and I want them to retweet.” (PLT-05)*

Therefore, by tagging them on the images, they again can leave some space to add additional characters to their tweets.

## 4.2.3 Reasons for the mentioned methods on posting on social media

### 4.2.3.1 PLO

As we learned during the interviews, PLO’s online resources are less likely to be mentioned on social media. The reason is that, since the Coronavirus pandemic, this library’s main focus has been on hosting live events with partners and community members, and there has been both less focus and fewer opportunities to create demos for the online resources. Since some online resources require training and demos,

it has been challenging to train the public on using them without being physically present. Therefore, these resources have been less advertised on social media. As PLO-02 has mentioned:

*“We have over 85 online resources that the library pays for and we stand behind. We have them on our online resources page, we also have them split up onto different pages. So for this particular category, I would just clue into business finance investing, and we have about eight online resources here. and these get used quite a bit, but in the library, it was really when the library is open it’s a really good opportunity because we would have these programs that we would specifically show these resources, and the librarians would kind of train the public on how to use it for their benefit. So that is kind of what has been lacking because we don’t have the opportunity to do that online we could do it. We’ve done digital demos of our products, but that doesn’t include a live audience that’s more just like a walk-through of what the resource.” (PLO-02)*

Moreover, some librarians believe that the community members are already aware of the library’s online resources and other available services. As PLO-03 has mentioned:

*“I’m sure they are aware of our resources like our online resources the market research that they can do. A lot of people utilize well when we had people in the branch utilize our meeting room spaces our study rooms our group study rooms to you know meet with colleagues or have meetings you know that they needed to for their small business.” (PLO-3)*

Therefore, they might not feel the need to promote these services as much as

other recently started programs.

Yet, when PLO wants to host a business-related event, they follow their standard steps (see previous section) to ensure that they can reach a wide range of audiences. The specific reason for following each step is summarized below.

- The first step they follow before posting a business-related events on their social media platforms is finding the appropriate partners for the promotional standpoints. One of the reasons is that the PLO's primary audiences are not the small business community members. Therefore, to inform this community of the relevant events at the library, they feel the need to promote their events through their partners, who interact with this small business community on a daily/weekly basis. Moreover, the promotions that take place by partners are usually free of charge because they often support each other to better help the community members meet their needs. As PLO-01 has mentioned:

*“Once a program concept is set and we’ve got all the information to be able to promote it we would look at like what are the potential partners that could be involved just from a promotional standpoint and like a lot of our partnerships with EDC and anyone else. There’s no money involved we basically support each other by opening up the avenues of communication”*(PLO-01)

- The second step that they follow before sharing the event with the community is to modify the marketing language, if needed. According to PLO-01:

*“The PR team would make any adjustments that are needed in terms of*

*the the marketing language around the program if there's a title change that needs to happen we would kind of get involved at that point."*(PLO-01)

- The third step they follow is to post the event to the PLO's website calendar to ensure that the website visitors can see the event and learn about it. Moreover, they categorize their events on the event page. This will ensure that the website visitors can filter the events based on their interests.
- The fourth and fifth steps are to create an event page on their social media channels, such as Facebook, build the live streaming feeds, and schedule them. These steps ensure the event is shared with a broader audience range and can be attended by anyone, at anywhere, and at any time. As PLO-01 has mentioned:

*"We create a Facebook event but then we also create the Facebook live stream and there's two different steps to that but there are different algorithms that reach different people with each of those two components. so it's a very interesting beast and I could spend my whole day just working on social media for the library there's there's an endless amount of potential there"*(PLO-01)

Additionally, PLO-02 mentioned that the number of fans on Facebook has reached almost 8,000, and it has doubled since 2019. They then mentioned:

*"We didn't put events on Facebook as widely as we did during the pandemic so pretty sure that's a direct indication of the events are reaching*

*people that's what kind of makes sense and as you can see here this so paid shares is huge so people our fans our followers are sharing our page to their friends who are then following our page as well. If we have one event that they're interested in they go to that event they have a positive experience then they'll follow our page and then you know they can browse for later on when we might have an event that they might be interested in."* (PLO-02)

- The sixth step is to include the event in the monthly or bi-weekly virtual event marketing emails sent to 200,000 people in the community. This step ensures that the patrons who do not visit the PLO's website or follow their social media profiles would become aware of the event and attend if the event's concept aligns with their interests. Moreover, they sometimes send both English and Spanish language marketing emails, depending on the target audiences for the events.
- The seventh step is to perform outreach activities on social media platforms to inform an even broader audience about these events. These outreach activities usually occur on Twitter and LinkedIn because most small business community members are mainly active on these platforms. However, the procedure is different for different types of business-related events or services. According to PLO-01,

*"Depending on the program and the profile of folks involved we might do some media outreach. kind of at the base level, we typically will have a*

*media release once a month. Right now, where it's focusing on like the big virtual programs for that month ahead so you know if we're having a major business CEO come, that's going to get a huge amount of that kind of media outreach um if it's just you know learn about the library's online resources for small businesses that's going to be kind of less elevated as a featured event and more kind of put in as you know this is just one of the events that are on offer in this period". (PLO-01)*

#### 4.2.3.2 PLT

As we mentioned before, PLT has not had the chance to hold business-related events and workshops after the start of the pandemic. Even before the pandemic, they did not hold many business-related events. As PLT-04 mentioned:

*"I didn't do that many single stand-alone small business events other than an instruction on how you use this database and why you would want to use this database." (PLT-04)*

However, they explained what kinds of steps they took to advertise the events before the pandemic:

- The first step they took to advertise an event was to ask partners to promote the event/workshop on their event calendar. Unlike PLO, they did not need to spend time to find partners for the promotional standpoints because they already have strong partnerships with EDC and SCORE. Therefore, they could directly ask them to put the event details on their website.

- The second step that they took before holding a business-related event was to share it on Facebook. Unfortunately, they did not specify why they would share the events on this social media platform. However, based on the discussion, we interpreted that they wanted to reach a wider range of audiences.
- The third step mentioned that they asked their partner to send the event details to their clients. Again, we did not get the chance to go deeply into this step. However, based on the conversation, we determined that most clients of the business-support organizations are small business owners. Therefore, their partnership gave the library the advantage of reaching many people.
- In the last step, the mentioned preparing flyers with the details of the events. This would give the library patrons, who visit the library, the chance to learn about the events and attend if they are interested.

### 4.3 Interpretations

Based on the finding, we believe that PLO is at the early stage of both supporting small businesses and using social media. Due to the Coronavirus pandemic and the increase in [County Name]’s unemployment rate, the PLO noticed a change in the community needs. They realized that they have the potential to help the unemployed people establish their ideas into small businesses and help the current small business owners find resources. However, they had limited business-related resources and did not have a dedicated staff to help those individuals. Therefore, they started to strengthen their partnerships with business-support organizations and



leveraged technology to create a website dedicated to providing business resources. Moreover, they also started to leverage social media to improve their online presence, raise awareness and connect with the community members easier and faster than before.

PLT, however, has a dedicated staff and a strong partnership with the business support organization. Therefore, people who look for small business information would find them through words of mouth and their partners. Moreover, their partnerships have enabled them to adjust to sudden environmental change quickly. For example, after the Coronavirus pandemic, they could divide their responsibilities with their partners, and each could focus on a specific community need to better serve their community. Furthermore, due to their established reputation with the small business, they do not feel the urgency to share the library's business resources on social media, as they have realized that people who seek information would find them through words of mouth or through their partners. In other words this library has reached a point that has given it resilience and flexibility dealing with small business communities.

## Chapter 5: Discussion

### 5.1 Lessons Learned

In this study, we discovered that while PLT decreased their social media activities within a year, PLO increased their activities on these platforms exponentially. Moreover, they both followed different strategies to utilize these platforms. For example, while PLO tags the business partners, PLT does not tag business partners on the business-related posts as often. Additionally, although PLO uses Twitter and LinkedIn to connect with the small business community, share instant information, and encourage engagement among users, PLT uses Facebook to share long and rich content to tell stories of their impact on the community. These findings also relate to the literature by (Barnes, 2014) and (Balaji et al., 2018). They discussed how libraries should employ social media strategically to reach people. Some strategic steps recommend that libraries choose appropriate platforms based on the targeted audiences and tailor messages before sharing them on social media.

Both libraries changed their attention to social media activities due to the organizational change and the pandemic. PLO noticed an increase in the small business information demand. Therefore, they improved their partnerships with business support organizations and leveraged social media to reach Small business

owners. They also followed strategic steps, such as choosing appropriate platforms and tagging partners to reach a wider audience range. PLT, however, noticed an increase in the job-seeking and grant information needs. Therefore, they decreased their activities on social media in terms of sharing business-related information. Moreover, they specified that they usually use social media platforms to share stories of their role in the county as they believe they could reach the county's people better. For this purpose, they shared their stories on Facebook more often as this platform enabled them to share long content. Furthermore, they did not tag their partner on the posts as they believed those partners followed them on social media nevertheless.

## 5.2 Contributions and Recommendations

In this study, we demonstrated that online media platforms, such as social media, are among many techniques the libraries can use to better connect with the small business community. However, their significance in bringing small business owners' attention to the library resources is not as important as other established techniques as what we initially expected. This finding is a significant contribution to future research.

Other well-known techniques for connecting with the small business community are providing helpful business resources, having dedicated staff, and improving partnerships with business-support organizations. Moreover, some interviewees also suggested that the librarians should spend time outside the library to interact with the small business owners and attend their events to inform them about the library's

actionable information resources. However, based on the study results, we determined that each different technique's weights on attracting small business owners to libraries' resources are different. Therefore, we cannot evaluate the impact of these different techniques independently of each other. For example, by not having solid partnerships with business-support organizations, small business owners are less likely to visit the library to seek information, even if the library has an online presence. That is because small business owners do not usually think of libraries as places where they could get actionable information. Therefore, with the help of business support organizations, which are usually the main places that small business owners tend to visit first, they can be referred to the libraries.

The purpose of this study has been to estimate the use of online media platforms for bringing small business owners' attention to the library resources. However, we realized that other well-known techniques, including providing helpful business resources, having dedicated staff, and improving partnerships with business-support organizations, could be more effective in reaching this community. Therefore, we recommend that the librarians better manage these three existing methods better before/while presenting their business resources on online media channels, such as social media platforms.

Still, if the public libraries desire to start presenting their business-related services on online media platforms, we recommend that they consider asking themselves the following questions before reaching small business owners through these channels.

1. Does the public library identify the small business owners' information needs?

(a) If Yes:

i. Can the public library help the small business owners with their information needs with the existing resources?

A. If Yes:

- How much does the small business community know about the library resources?

A. If No:

- Can they collaborate with the business support organizations to provide those resources?

(b) If No:

i. Can they collaborate with the business support organizations such as EDC, and SBD to learn about the small business owners' information needs?

ii. Can they perform environmental scanning to learn about small business community needs?

iii. Can they send out surveys to the small business owners to learn about the specific needs of this community?

2. Is it possible for the library to hire dedicated business librarians, who is also experienced in utilizing online media channels, to support the small business community, if they do not already have one?

3. What kinds of tools and skills can it take to utilize social media platforms to present the business-related resources on these platforms?

(a) Do the library have those skills and tools?

By considering these questions, they can better understand better understand whether/how to undertake a concerted social media outreach approach strategy. As a result, the small business owners, especially those that are at early stage of starting a business, would seek information from the library resources.

### 5.3 Future Research

In this comparative case study, it is still unclear how much effect social media has on bringing small business owners to the library. The PLT has had a 20-year old partnership with business-support organizations, which has made this library resilient and has given it flexibility interacting with small businesses. Therefore, they did not feel the urgency to use social media as many of their patrons were referred to the library by their partners or from other clients. PLO, however, has recently started to strengthen its partnership with the business-support organizations on a system-wide level and has started using social media to promote business-related services. Therefore, it is not yet possible to measure social media's impact to bring small business owners to the library as they are still in the early stage. Future information science researchers can estimate if libraries that recently started to use social media can quickly connect to the small business community without the need to have a very long partnership with business support organizations. If the find-

ings estimate that social media has a significant impact, they can also recommend some strategies to use social media to attract small business owners to use library resources.

## 5.4 Limitations

Although this comparative case study provided the opportunity to present detailed information about two libraries' performances and insights for future research, some limitations should be noted.

First, there is no doubt that the sample size is small, especially considering the unexpected changes in trends due to the Coronavirus pandemic. In this study, we only investigated the performance of two libraries. Therefore, the results could lack scientific rigor and cannot be generalized to a wider population, such as to all public libraries in the United States.

Second, although these two libraries were chosen due to their location and diversity, the results could still be challenging to be replicated.

Third, due to the time restrictions, the depth of analysis could be impacted. For example, we had a limited time interviewing the librarians at the PLT. Therefore, we need to skip some questions and only ask a few questions that mattered the most. Moreover, the researcher's subjective feelings may have affected the results of this comparative case study.

And Lastly, due to limitations on Facebook and LinkedIn APIs, the data needed to be extracted manually. Therefore, there is a small chance that some posts could have been missed.

## Chapter 8: Conclusion

The small business community plays an essential role in the U.S. economy. As discussed before, according to the 2017 Statistics by Business Size from the U.S. Census Bureau, 99% of the firms are considered as small businesses in the United States. Therefore, communities need to support small businesses to grow and develop. In addition to many institutions and business-support organizations that offer to support the small business owners, the public libraries also play an essential role in supporting them.

Many public libraries have access to free databases, business books and offer meeting room reservations for small businesses. However, not many small business owners identify these resources. The reason is that people might see libraries as the last option for their information needs when they can look up information online (Hussain, 2015). Therefore, the libraries should strengthen their partnerships and network with business-support organizations because they have strong relationships with the small business community. They should also employ dedicated staff and be present in places where small business owners gather. Moreover, the libraries, especially those in the early stage of providing business support, are encouraged to be active on social media to reach a broader audience range.



In this study, the impact of social media's in outreach activities is still unclear. However, this great tool can still be used to raise awareness as it enables libraries to reach many people without any geographical barriers.

## Appendix A: Interview Questions

### **Introduction:**

Thank you for taking the time to meet with me/us today. As a reminder we're here trying to better understand how your organization meets the information needs of the local business community, not to assess you. We're interested in understanding how your organization works, what kind of business-related information resources you have available here, and what kinds of skills it takes to reach the small business owners in the community. Basically, we are trying to understand how you communicate with the small business owners in your community to inform them about your library's supports and services, and how The Library Project can help meet this community's information needs.

There are a couple of things we need to make sure we cover before we dive in. First, this is a research project done at the University of Maryland. Because this research involves people, it is important that all participants are aware of their rights. For example, you have the option to discontinue this conversation at any time. We are not promising any specific benefits to you of participating, although we hope this discussion will provide insight into the operations of your organization. Also, you can be sure that your responses will remain confidential. Our results will

be made available to the public, and we will be happy to send you an early copy of them if you would like. These and other specifics about your participation are covered in what is called the Research Consent form, which I believe we sent to you as an email attachment earlier. Have you had a chance to look it over? If not, please feel free to take a look now.

Do you have any questions? (Tell them that you are going to start the recording to record their response on if they consent to participate in this research study)  
Can you say your name again and if you consent to participate?

One last thing before we begin, it would be very helpful to us if we could record this session just to make sure we don't miss anything important as we take notes. Again, these recordings will remain confidential, and if you need them, we can send you the recording as well. If you are comfortable with this, could you tell me if you consent to record this session?

Do you have any questions?

If consent - do not stop the recording Just to clarify, do you consent that these recordings could be used in this research project, publications, and/or presentation at professional meetings?

Do you have any other questions?

1. First, your title here is [ ] , is that right?

(a) Can you tell me a little about what you do here?

2. .

(a) If you have interviewed them already:

- i. I understand that we have already asked you about the business resources that are available at your library. However, could you tell me if anything has changed, especially that now everything is virtual?

A. If yes:

- Could you tell me more about the new changes to these resources?
- Do you know on average, how many patrons use these services in a day/month?
- Do you know what they generally use these resources for?
- Probe: How do you decide what programs and services to offer to the small business community?

(b) If you have not interviewed them before:

- i. Could you tell me about the available business programs and resources at your library?
- ii. How do you decide what programs and services to offer to the small business community?
- iii. Do you know on average, how many patrons use these services in a day/month?
- iv. Do you know what they generally use these resources for?

3. Could you tell me how our library connects/ reaches out to the small business owners in your community?

- (a) Probe: How does your library do online media outreach activities to reach out to the small business community?
  - (b) Probe: Do you have any specific strategy for using social media?
    - i. If Yes:
      - A. How does it align with your outreach programs?
    - ii. If No:
      - A. Do you coordinate your posts with any other library activity?
4. I have noticed that your library posts on Facebook and Twitter. Could you tell me why your library uses these platforms?
- (a) I have noticed that your library does not post about business-related services available at the library on these platforms very often. Could you tell me why is that?
  - (b) Are there any other social platforms that you use that I do not know of?
5. Imagine that your library is holding a business-related workshop/event, could you describe how your library would advertise this event?
- (a) Probe: Do you use online media platforms, and if yes, what kind of online media platforms does your library use to inform small business owners about these events?
6. Do you know if your library follows any of the online business forums of your community to understand their needs, and to inform them about the resources at the library?

- (a) These forums include Facebook groups, Stride Work Forum, Alignable, etc.

7. Could you describe your partnerships with business support organizations such as SBA (Small Business Administration, SBDC (Small Business Development Center), EDC (Economic Development Corporation), or SCORE, if any?

- (a) Probe: What kind of partnerships are there?
- (b) Probe: Are these partnerships related to outreach programs to small business owners?
- (c) Probe: Do you know if any of these organizations have ever mentioned the library's business resources on their websites or on social media?
- (d) Probe: What kind of partnerships you wish to partner with more often with these organizations?

8. Does your library have any type of supports (e.g., budget, funds, grants) dedicated to online outreach activities, particularly to small business owners?

- (a) Probe: Is there any staff member who is solely responsible for online outreach activities?

- i. Who?

9. Is there anything else I should know about how your library uses online media platforms to support the local businesses

### **Conversational Interview Debrief:**

Thank you for lending your time to help us understand the readiness and needs  
of (Library / Businesses)

Would it be alright for me to follow up with you if I have any further questions?

Circle ( y / n )

Would email or phone be the preferred contact? Circle (email / phone / other)

Write follow up contact info:

Make sure that you have 1. Deactivated the Recorder (if applicable) 2. Download  
the audio recorder.

## Appendix B: Email Invitation

Below is the template invitation template that we sent to participants. Some details of the actual emails sent might vary.

Hello [participant name],

My name is Zahra Farhadi and I am a graduate research assistant at the University of Maryland, College of Information Studies. I am part of the The Library Project and it is a collaboration between the college (also known as iSchool) and public libraries in some counties in the Mid-Atlantic to strengthen the informational tools for the small businesses.

For my master's study, I focus on how the PLO and PLT connects and reaches small business owners, especially through online media platforms such as social media. If you are available in the next week or so, I would love to schedule an interview with you, which should not take longer than an hour. If you are willing to talk to me, could you please give me your availability?

Thank you so much for your time and help,

Zahra Farhadi



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