

## Digital competency among the aged entrepreneurs under the silver economy with soft power in Thailand

Kamolrat Intraratat<sup>1\*</sup>, Piyachat Lomchavakarn<sup>2</sup>, Ratanasuda Punnahitanond<sup>3</sup>, Panicha Boonsawad<sup>4</sup>, Duangkamol Intaratat<sup>5</sup>

<sup>1,2,5</sup>School of Communication Arts, CCDKM, STOU, Thailand; kamolratchim@gmail.com (K.I.).

<sup>3</sup>School of Communication Arts, Bangkok University, Thailand.

<sup>4</sup>Srisavarindhira Thai Red Cross Institute of Nursing, Thailand.

**Abstract:** The rise of the elderly in Thailand experiencing a significant demographic transformation resulted in a growing senior population to become a super-aged society by 2030. This affected the demand for “silver economy in Thailand. The objectives are to study (1) the overview of digital competency among the aged entrepreneurs under the silver economy with soft power; and (2) the mechanism for digital competency empowerment among the aged entrepreneurs under the silver economy with soft power in Thailand. Mixed-research method was employed by quantitative (survey questionnaire) and qualitative (Focus group discussion and interview) with a total of 100 samples and 15 key informants involved: the government workers, the aged entrepreneurs, the private & industrial workers, the digital competency expertise, the elderly expertise, and the community leaders. Two main results reflected the objectives accordingly: 1) the overview of digital competency summarized from survey questionnaire found most of the positive factors as follow; 1.1) positive attitude toward digital competency even of their quite low educational background; 1.2) their positive practical existing skilled in digital competency : digital communication, digital media production, privacy, security, analytic thinking skills that can be well applied with their silver economy’s activities. 2) the mechanism for digital competency empowerment among the aged entrepreneurs found most urgent needs in more closed collaboration among all relevant sectors, starting from the lead government sector, private sector, and the local sectors to help expanding all kinds of empowerment activities. Deepen links by driving more inter-sectoral mechanism, resources sharing, regular consultation for internship, apprenticeship, on-site training, employment, market outlet and other schemes with equity, quality and sustainable practices.

**Keywords:** *Aged entrepreneurs, Digital competency, Silver economy, Soft power in Thailand.*

### 1. Introduction

#### 1.1. Overview of the Silver Economy with Soft Power Contexts in Thailand

##### 1.1.1. Thailand 4.0

Is an economic model that is based on innovation, creativity, high-quality services, and new technology, employed for boosting the quality of life. This initiative is, however, a steppingstone in the advancement of the country’s development. Thailand 4.0 would focus on rotating the country’s labor force into knowledge workers across key economic segments as to align with the 20-year National Digital Economy Masterplan. Since 2022, 61% of Thailand’s GDP is predicted to be digitalized, due to growth in every industry driven by digital enhancement.

Thailand 4.0 focuses on a “value-based economy,” as the country needs to deal effectively with disparities and the imbalance between the environment and society with its three elements, which mark

a significant change in the country's economy and production: 1) Become a high-income nation by enhancing the country's standing to become a high-income nation through developing it as a knowledge-based economy. With an emphasis on research and development, science and technology, creative thinking, and innovation; 2) Move toward an inclusive society with equitable access to the fruits of prosperity and development; and 3) Focus on a sustainable growth and development in order to achieve economic growth and sustainable development without destroying the environment. So, new economy model “less for more” vs “more for less” and strategies has been implementing by changing the country's traditional farming to smart farming. Traditional SMEs to smart enterprises, and traditional services to high-value services, under the concept of “less for more” rather than “more for less” driven with six key strategies are: (1) national security; (2) national competitiveness enhancement; (3) human capital development and strengthening; (4) social cohesion and just society; (5) eco-friendly development and growth; and (6) public sector rebalancing and development.

### *1.1.2. Silver Economy*

The rise of the elderly or the aged in Thailand has created a significant opportunity for investment in multiple business sectors. Like much of Asia, Thailand is experiencing a significant demographic transformation. The age of the population is shifting upwards due to urbanization and developments in technology and health services. Shrinking family sizes, coupled with longer life expectancies, have resulted in a growing senior population. As a result of these factors, Thailand will become a super-aged society by 2030, meaning that 30 percent of the population will be 60 years or older. This growing population of seniors is living longer and consuming more, creating myriad business opportunities not only in the healthcare sector, but also in the technology, mobility, entertainment and tourism, and real estate and housing sectors. The demand for products and services in the “silver economy” market is booming in Thailand and other ASEAN countries. In recent years, ASEAN has witnessed a significant increase in health expenditures. For instance, healthcare expenditures in Thailand accounted for 3.71 percent of GDP in 2016<sup>1</sup> and that percentage is expected to increase in the coming years. The amount of money spent by, and on, aging Thais is predicted to increase at an even faster rate than the population ages because of new technologies, the costs of treating chronic illnesses and conditions, and the Universal Health Coverage scheme. These silver economy businesses not only serve Thai seniors, but also the foreign seniors immigrating to Thailand at increasing rates, often settling in resort cities. This trend is not unique to Thailand, which makes future investments in the Thai aging economy even more lucrative. Thailand has both a growing domestic demand for aging services and, due to its seamless connection to other ASEAN markets, serves as an ideal gateway to larger demand in the ASEAN region. These factors position investors in Thailand to profit from market shifts related to aging populations. The Thailand Board of Investment (BOI) offers a number of tax incentives and non-tax incentives to support elderly-related products and services. The following activities are eligible for three to eight year corporate income Along with these supportive tax incentives, the BOI also offers nontax incentives such as permission to own land, 100 percent foreign-owned companies, visas, work permits and more – efficient services facilitated by the BOI's One-Stop Service Center. The combination of the Thai government's policies, investment promotion incentives, efficient tax (CIT) exemption: manufacturing businesses, including medical devices or parts, parts for electronic control and measurement instruments for medical/scientific devices, food and drugs, including medical food, food supplements, active pharmaceutical ingredients, targeted medicines as well as conventional and traditional medicines. In addition, manufacture of embedded software, high value added software and digital services such as medical technology also enjoy the same level of incentive. In the service industry, investors of hospitals, specialty medical centers, transportation services for patients, doctors or medical equipment can receive three to five years of CIT exemption privilege. However, health rehabilitation centers can qualify for non-tax incentives, but they do not receive CIT

exemption, connectivity, and the rapidly growing demand of aging populations in Thailand and Asia has set the foundation for businesses looking to profit from strong growth in the silver economy [1].

### 1.1.3. *Soft Power*

The power of creativity to build the Thai economy is one among the current flagship policy of Thailand. The government promotes creative economy blended with Soft Power developed from intangible heritage, knowledge, intellectual property, expertise, and creativity; linked to culture and society, and technology and innovation for the further development of the production of goods and services. National pilot of Five Thai Soft Power since 2022 are 5 Fs: Food, Festival, Fashion, Fighting, and Film. Currently, Soft power has become an important tool in supporting all kinds of Creative Economy of Thailand including the Silver Economy under Thai Ageing society now.

## 2. Overview Policy in Digital Competency and Aged Entrepreneurs in Thailand

Digital literacy and competency among the increasing aged group found only 63.10% while there is an increasing realization that digital connectivity can help reduce social isolation among aged people, facilitate their access to online public services, and enhance their productivity in any Silver economy activity under the current flagship policy “Silver Economy”. Because, according to the United Nations [2], approximately 34% of the aged people live in poverty, many of them live under the poverty line with less than 5-6 US\$ a day even of their monthly support by the government around 20 US\$ per person while under the high cost of living and inflation. Anyhow, the statistics from the Office of The Office of the National Digital Economy and Society Commission (ONDE) [3] in Thailand there are 86.90% men and 85.90% women Internet users, with a gap of only 1%. The government has been anticipating this shift since the late 1980s and has been addressing the changes through comprehensive plans and strategies. The main strategy is the drive of “the 2nd National Aging Plan on the Elderly (2002-2021)” with several policies and programs for seniors that support wellness, financial security, and active involvement in society and the economy. Numerous supporting measures have been enacted, such as the promotion of employment and income for the elderly through tax incentives for hiring older workers. Extension of the retirement age for civil servants is being considered as well. In addition, the government is also focusing on innovation and digital technology for healthcare, including medical services, long-term care, and all kinds of economic dimension under the Creative & Silver economy with Soft Power. Some of the key agencies are;

Ministry of Digital Economy and Society with a budget of more than 1.99 billion baht to train new graduates who may not have basic digital skills or do not meet the market needs (approximately 50,000 people for 3 months). The project will provide 10,000 Baht per month for project participants. Participants can choose at least 2 of the 4 training courses: 1) Online Content Creation, 2) Big Data Management, 3) Online Marketing, and 4) Online Commerce. After the training, job matching is done so that entrepreneurs can find people with skills that match their needs. It is expected that this job matching will be done under the platform “Thais have jobs”. Success indicators of the project include 5,000 graduates who were able to progress into becoming digital entrepreneurs, and another 15,000 who were employed in digital business groups of workers replaced by technology or in excess capacity.

DEPA Digital Manpower Fund to support the digital skill development, both upskilling and reskilling, through “DEPA Digital Manpower fund.” It is granted to individuals, youths, students, unemployed, government officials, government agencies, public and private institutes. The measure focuses on improving people’s digital skills in high demand such as cybersecurity, programming, data analytics, coding, and cloud computing, etc. through both offline and online learning scheme.

Office of the National Digital Economy and Society Commission support the Digital Economy and Society Development Funds to finance digital development including the implementations and projects related to digital technology education for youth, the elderly and the workforce. 2.4 CCDKM (The Research Center of Communication and Development Knowledge Management) under the umbrella of

Sukhothai Thammathirat Open University (STOU), has been committed to increasing the social and economic impact by ICT (information and communication technologies) or digital tooling since 2006 till currently targets at all the grassroots and all the marginalized communities in Thailand and the ASEAN region. One among the popular empowering activities are for among the groups of SME, the MSME (Micro SME), the Start Ups, and others. Women entrepreneurs are one among the top beneficial groups.

### 3. Overview of Digital Competency of Thai People

Digital competency is a combination of knowledge, skills and attitudes with regards to the use of digital devices, digital technology in their daily life and earn a living to perform tasks, solve problems, communicate, manage information, collaborate, as well as to create and share content effectively, appropriately, securely, critically, creatively, independently and ethically (Kamolrat applied from Anders [4]). Digital competency is all the essential skills and knowledge that professionals have to effectively use Information and Communication Technologies (ICT) in their work environment. Examples include IT literacy, digital literacy, media literacy, information literacy, internet literacy, etc. The ICT and its relevant services sector has the most demand for Thailand's emerging jobs. The Emerging Jobs analysis from both LinkedIn 2020 Emerging Jobs Report Thailand and The Future of Jobs Report 2020 state the alignment of top emerging role in Data Analysts, Data Scientists, Digital Marketing Specialist, Software and application developer are top emerging jobs across industries in Thailand. To support digital competency development among all Thai people, the government set up the "Strategic 20-Year National Digital Economy Masterplan" as well as all relevant massive policies including the "Digital Economy and Society Development Plan (2017 - 2036)", a strategy dedicating to develop human capital towards the digital age by equipping all Thai people especially all groups of workers including the aged entrepreneurs with appropriate digital competency both of knowledge and skills in preparation for a life and career in the digital age and meet all the market demand under the digital era and the 4<sup>th</sup> Industry Revolution [5].

### 4. Research Methodology

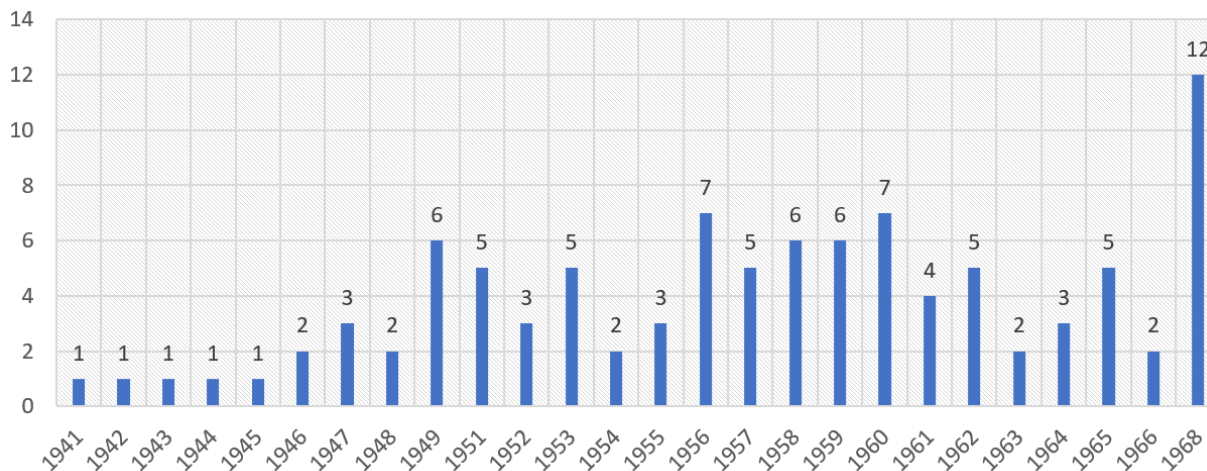
Mixed-research Method using quantitative and qualitative techniques has been used to collect data from 100 aged entrepreneurs together with focus group discussion among 15 key informants from all relevant stakeholders: the government workers, the aged entrepreneurs, the private & industrial workers, the digital competency expertise, the elderly expertise, and the community leaders.

### 5. Findings

Two main results reflected the objectives of the study accordingly: (1) the overview of digital competency include eight main factors; and (2) the mechanism for digital competency empowerment among the aged entrepreneurs as follow;

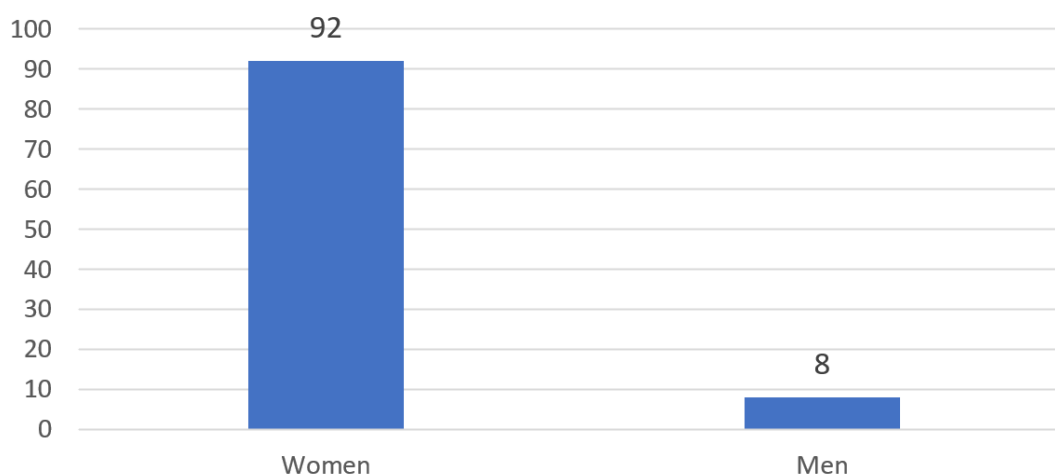
#### 5.1. Demography

Of the 100 aged entrepreneurs who run their silver economy activities. Majority of them are mid 50s to 70s years old. Bangkok and the outskirts of Bangkok are the top number of respondents. Majority of them gain upper and lower secondary school. Most of them reported as being the informal workers. Their most monthly income is 10,000 Thai Baht (below the minimum wage) follow by within the 10,000 to 20,000 Baht range.



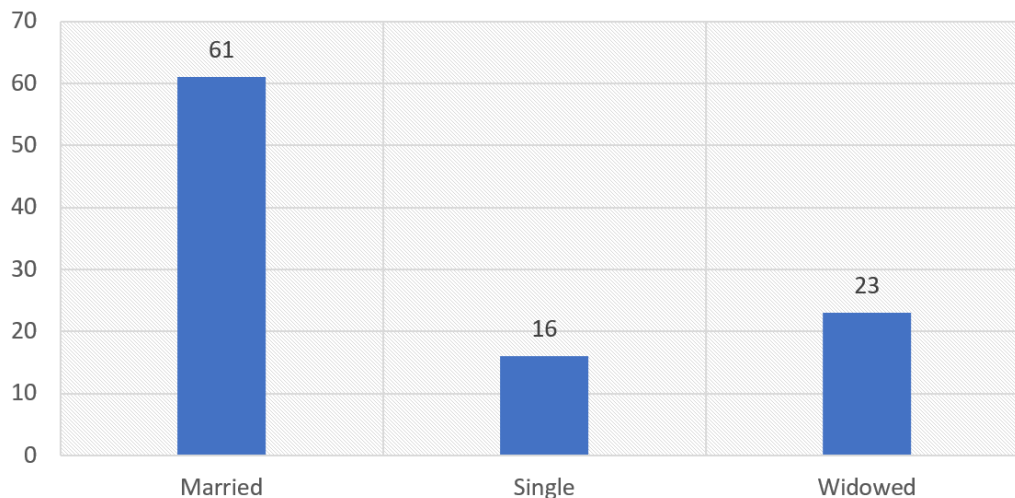
**Figure 1.**  
The aged entrepreneurs.

The majority of the aged entrepreneurs comprises women, who constitute a significant portion of the participants.



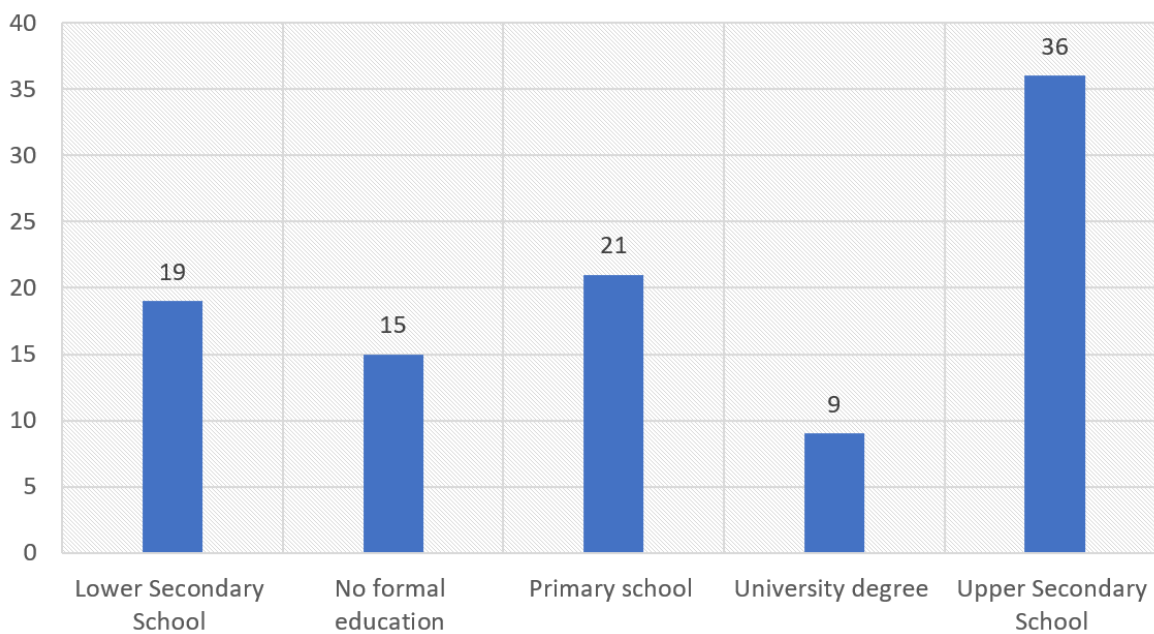
**Figure 2.**  
Gender of the aged entrepreneurs.

The data indicates that a predominant number of the aged entrepreneurs are married. This is followed by a significant portion who are widowed, and a smaller group who are single.



**Figure 3.**  
Marital status of the aged entrepreneurs.

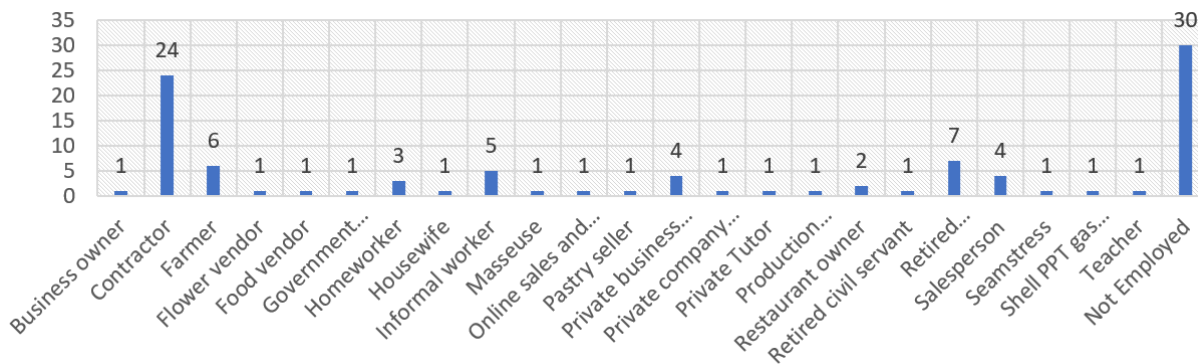
The majority of the aged entrepreneurs have children, with a large number of them living with their children in their household.



**Figure 4.**  
Educational background of the aged entrepreneurs.

The majority of the aged entrepreneurs are currently employed, primarily engaged in part-time informal work.



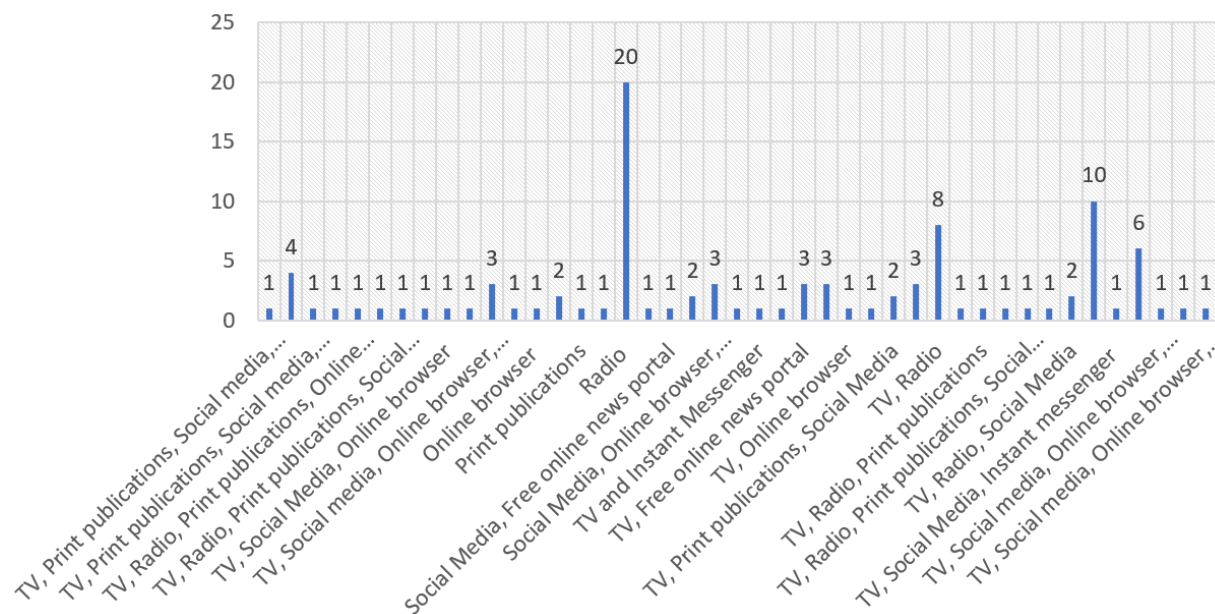


**Figure 5.** Silver economy activities of the aged entrepreneurs.

A significant number of the aged entrepreneurs reported earning within the 10,000-20,000 Thai Baht range, as well as in the 20,000-30,000 Thai Baht bracket, both of which are above the minimum wage. However, a substantial portion also reported earning less than 10,000 Thai Baht per month, which falls below the minimum wage.

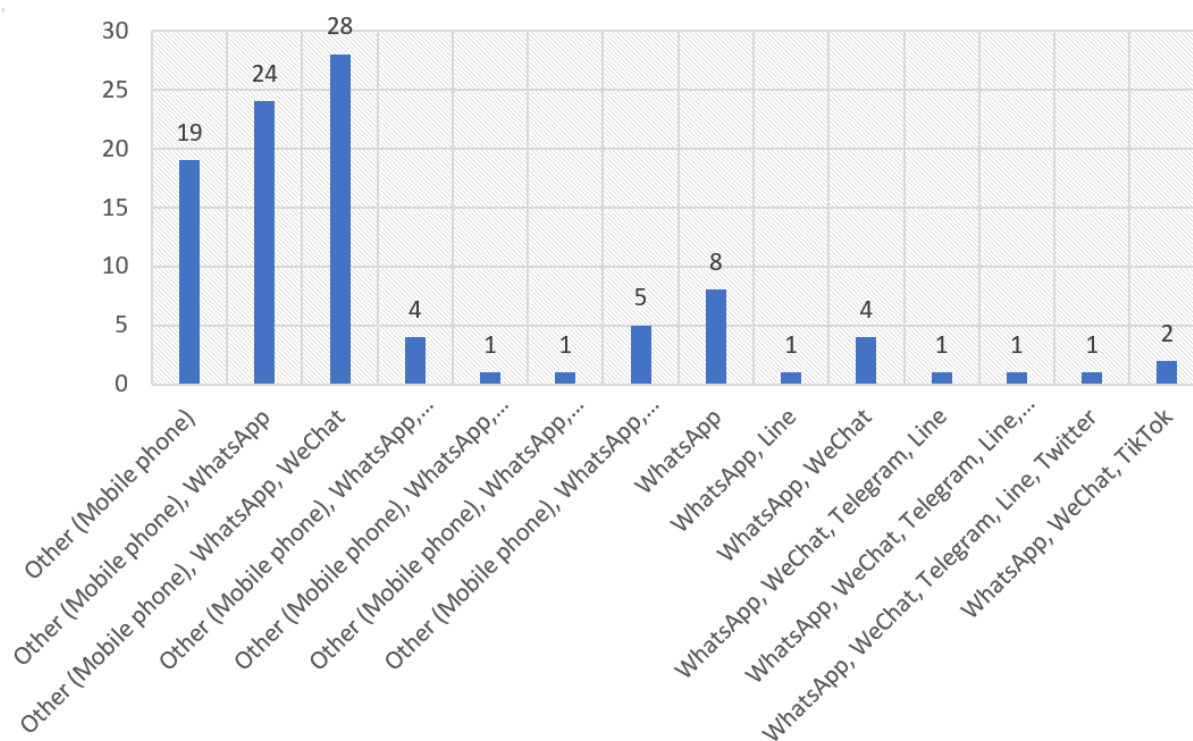
### 5.2. Digital Competency of the Aged Entrepreneurs

The aged entrepreneurs provided insights on their use of digital devices for accessing the Internet, e-services, their preferred communication channels, platforms, and information sources.

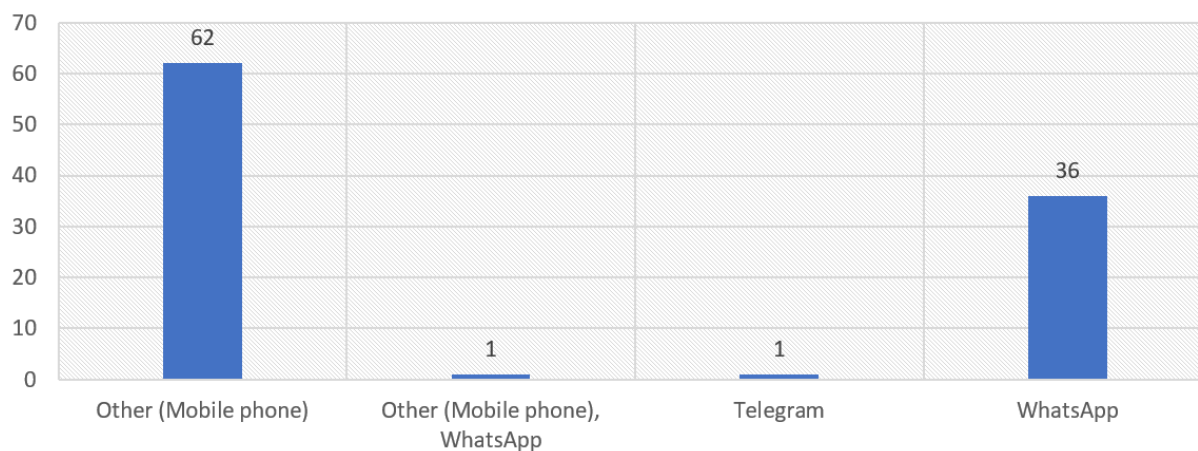


**Figure 6.** News platforms used by the aged entrepreneurs.

The majority of the aged entrepreneurs primarily use mobile phones as their main communication devices, including for online access. Popular applications among these youths include Line, Facebook, and Instagram, with Twitter and WeChat also used by a notable portion.

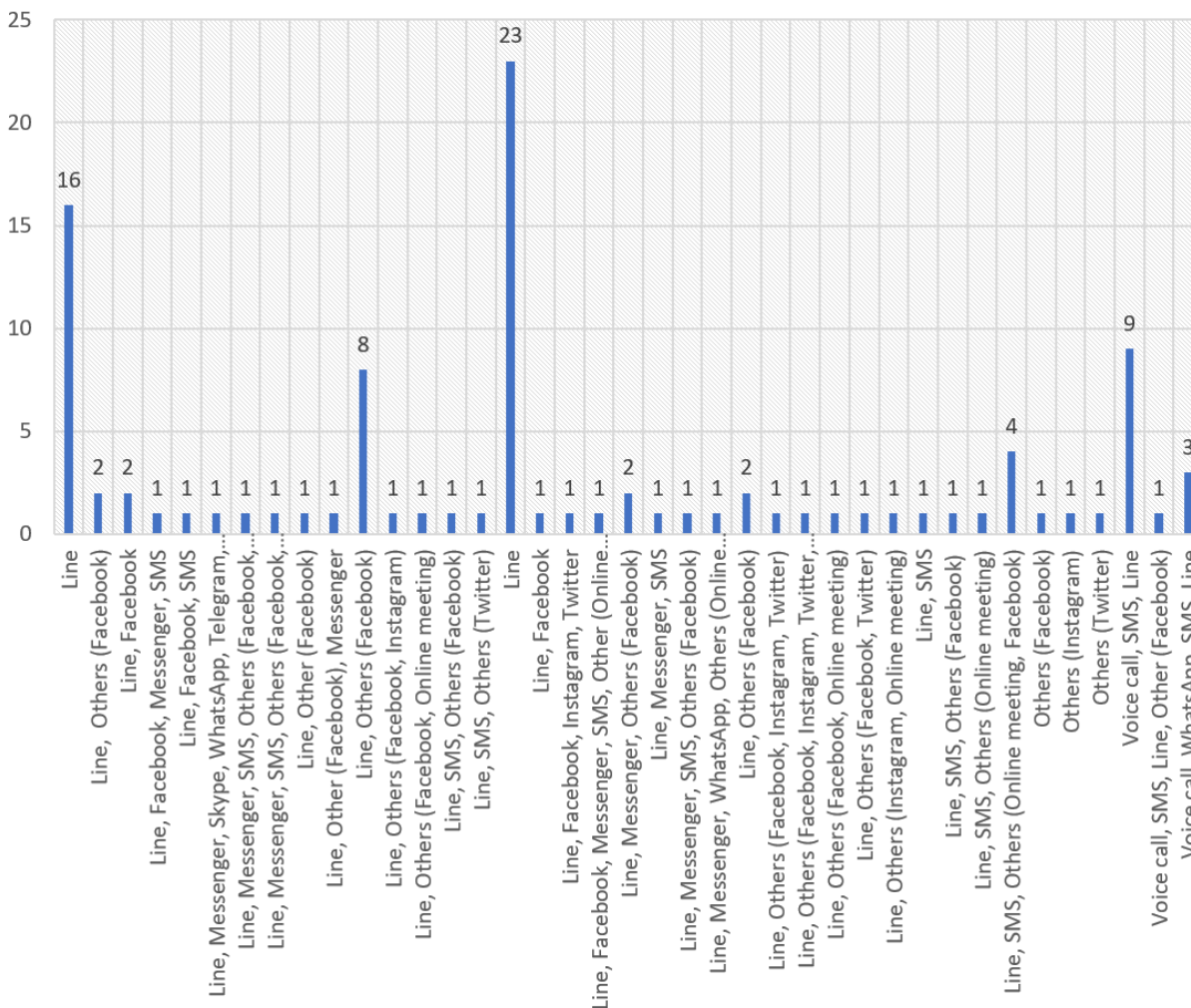


**Figure 7.**  
Digital devices used by the aged entrepreneurs.

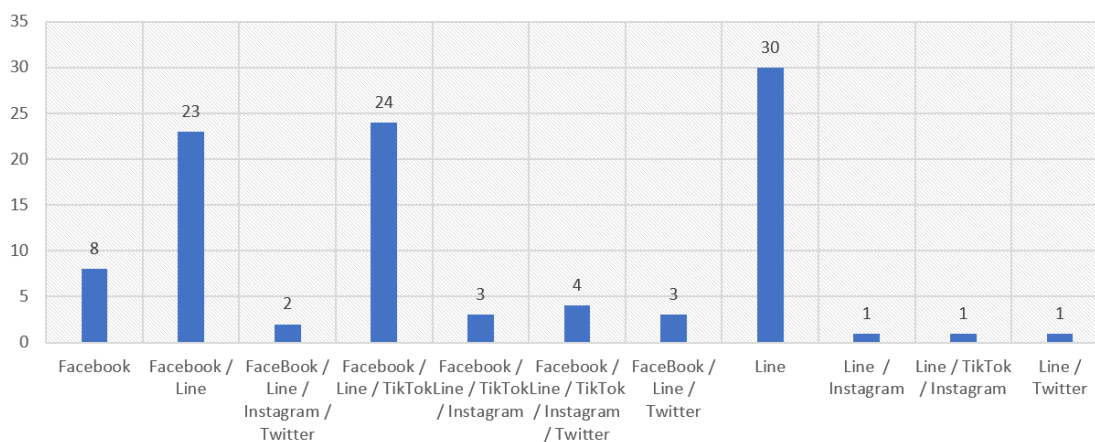


**Figure 8.**  
Digital devices used for online access relevant to their silver economy's activities among the aged entrepreneurs.





**Figure 9.** Digital convergent devices uses by the aged entrepreneurs relevant to their silver economy’s activities.



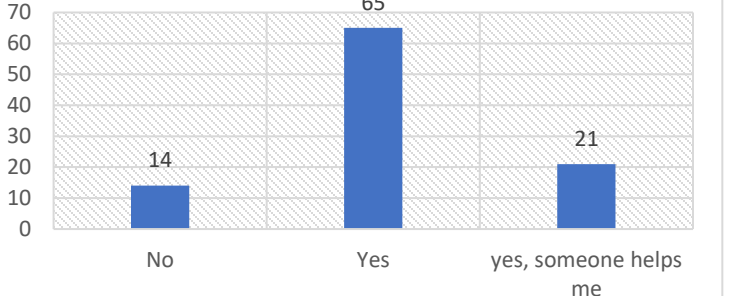
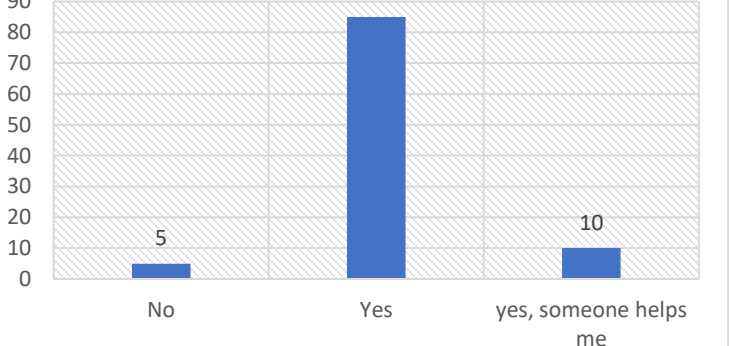
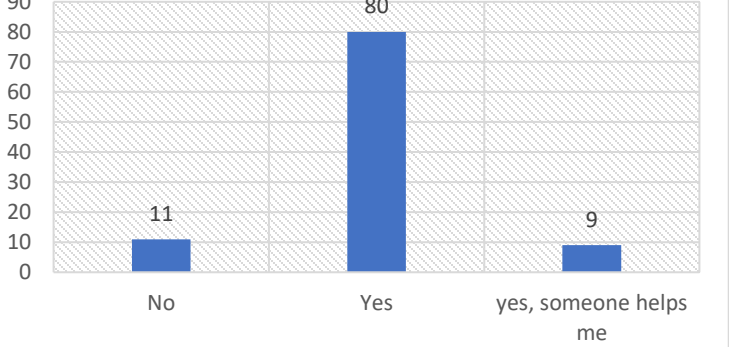
**Figure 10.** Most popular social media platforms used by the aged entrepreneurs relevant to their silver economy’s activities.

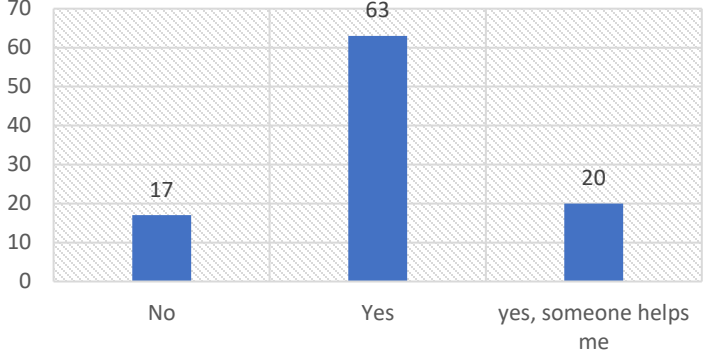
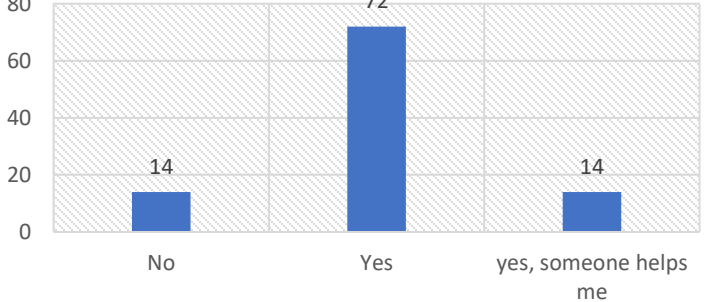
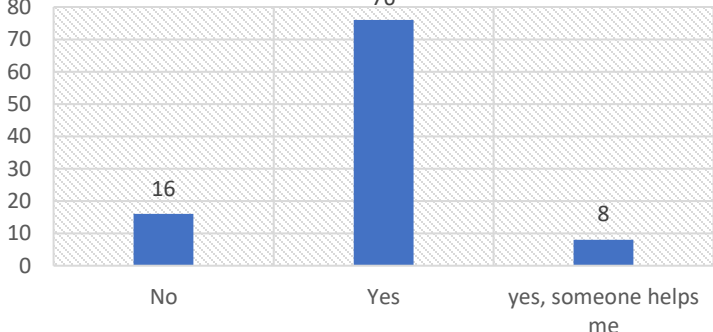
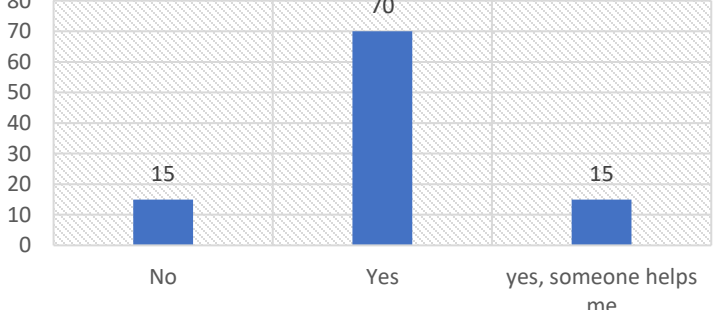
### 5.3. Digital Competency: Digital Communication of the Aged Entrepreneurs relevant to Their Silver Economy's Activities

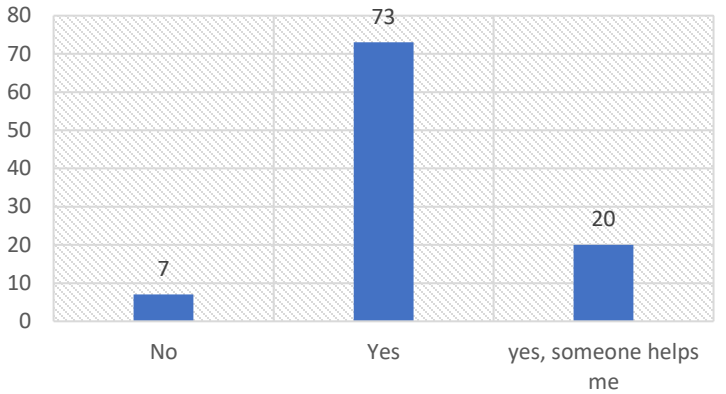
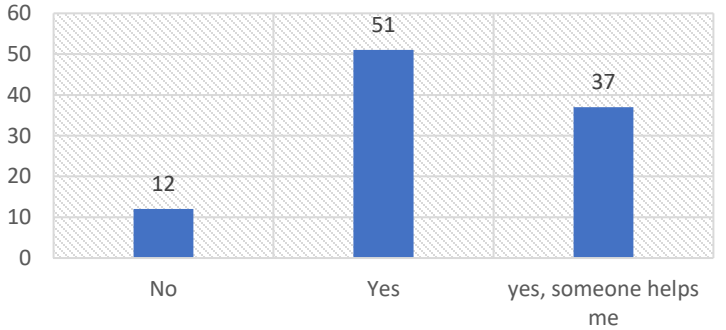
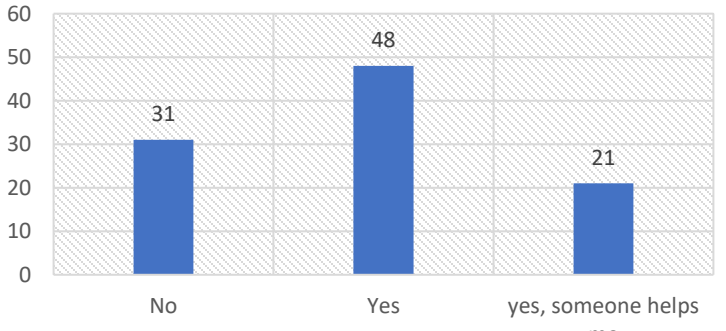
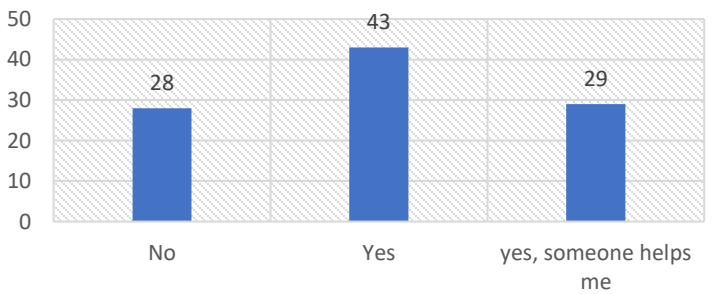
The graphs in the Table 1 show digital communication competency skills of the aged entrepreneurs relevant to their silver economy's activities.

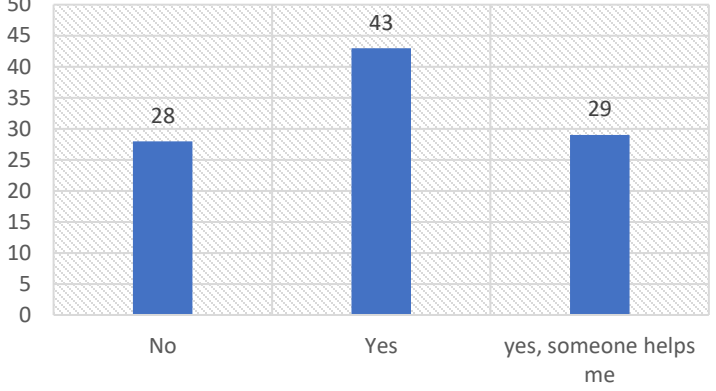
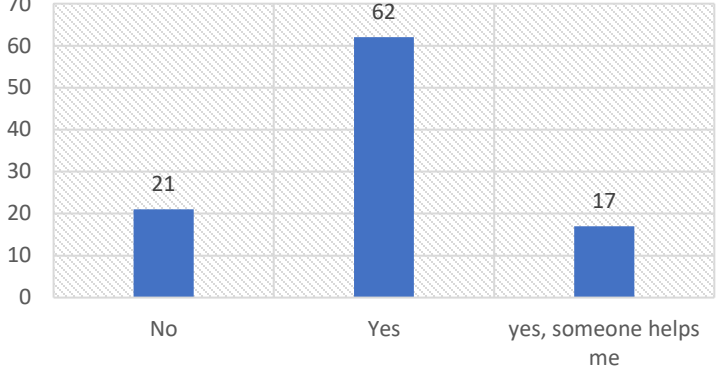
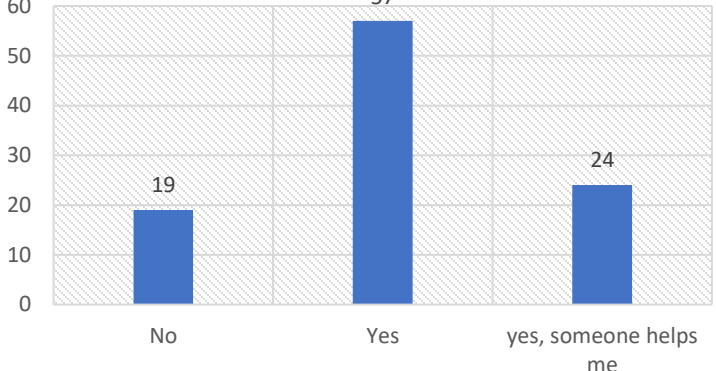
**Table 1.**

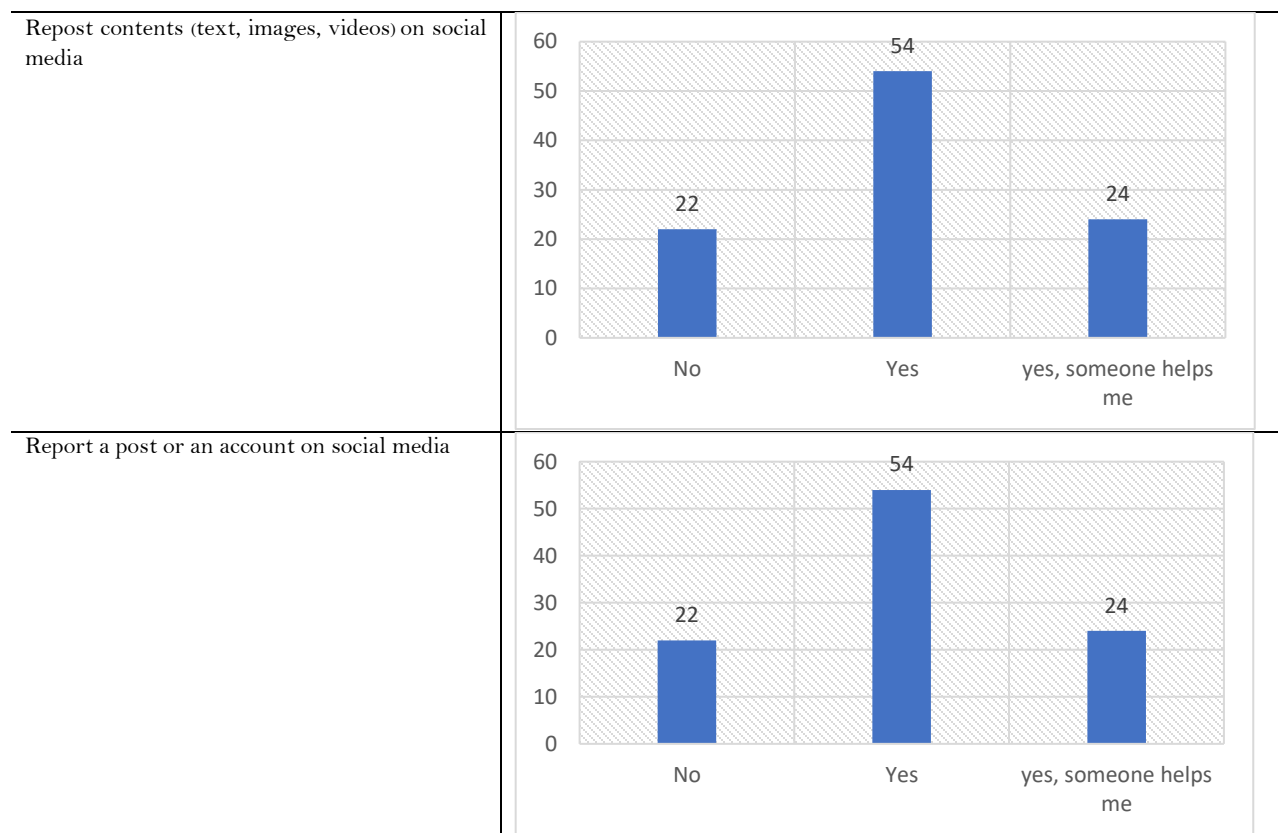
Digital communication competency of the aged entrepreneurs relevant to their silver economy's activities.

Reply to chats in the messenger platform and other instant messaging apps	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>14</td> </tr> <tr> <td>Yes</td> <td>65</td> </tr> <tr> <td>yes, someone helps me</td> <td>21</td> </tr> </tbody> </table>	Response	Count	No	14	Yes	65	yes, someone helps me	21
Response	Count								
No	14								
Yes	65								
yes, someone helps me	21								
Take pictures using their mobile phones	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>5</td> </tr> <tr> <td>Yes</td> <td>85</td> </tr> <tr> <td>yes, someone helps me</td> <td>10</td> </tr> </tbody> </table>	Response	Count	No	5	Yes	85	yes, someone helps me	10
Response	Count								
No	5								
Yes	85								
yes, someone helps me	10								
Record videos using their mobile phones	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>11</td> </tr> <tr> <td>Yes</td> <td>80</td> </tr> <tr> <td>yes, someone helps me</td> <td>9</td> </tr> </tbody> </table>	Response	Count	No	11	Yes	80	yes, someone helps me	9
Response	Count								
No	11								
Yes	80								
yes, someone helps me	9								

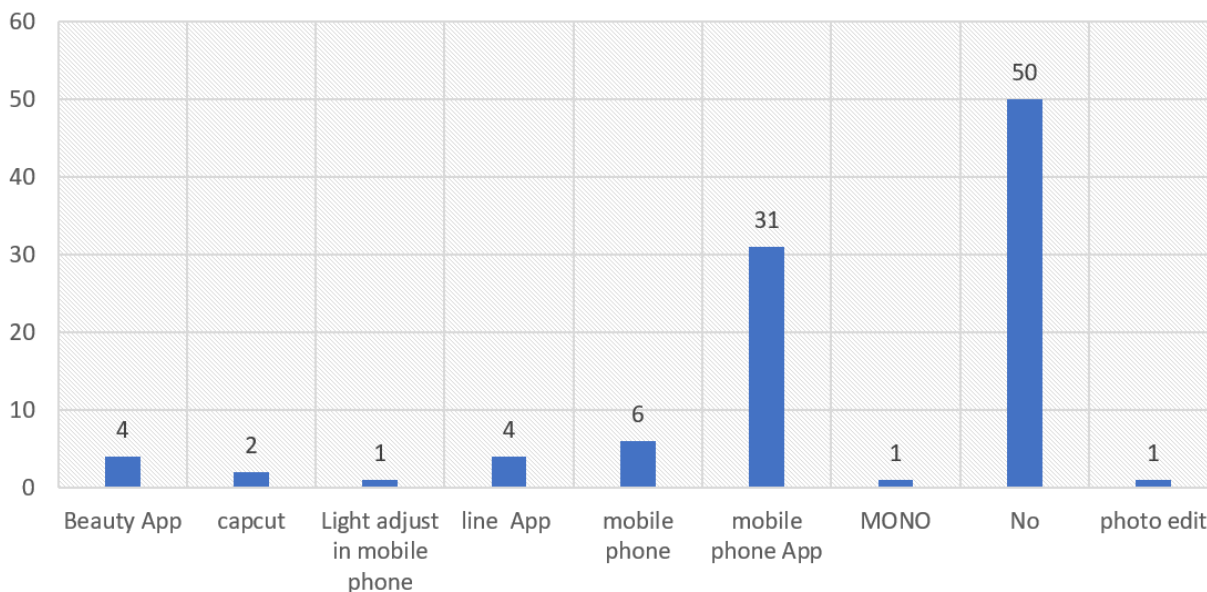
Block connections and friends on social media	 <p>A bar chart with a y-axis from 0 to 70 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue with their values labeled on top: 17 for 'No', 63 for 'Yes', and 20 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>17</td> </tr> <tr> <td>Yes</td> <td>63</td> </tr> <tr> <td>yes, someone helps me</td> <td>20</td> </tr> </tbody> </table>	Response	Percentage	No	17	Yes	63	yes, someone helps me	20
Response	Percentage								
No	17								
Yes	63								
yes, someone helps me	20								
Copy and save screenshots on their mobile phones	 <p>A bar chart with a y-axis from 0 to 80 in increments of 20. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue with their values labeled on top: 14 for 'No', 72 for 'Yes', and 14 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>14</td> </tr> <tr> <td>Yes</td> <td>72</td> </tr> <tr> <td>yes, someone helps me</td> <td>14</td> </tr> </tbody> </table>	Response	Percentage	No	14	Yes	72	yes, someone helps me	14
Response	Percentage								
No	14								
Yes	72								
yes, someone helps me	14								
Forward news/ information with others using instant messaging applications such as Line, WhatsApp and Telegram	 <p>A bar chart with a y-axis from 0 to 80 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue with their values labeled on top: 16 for 'No', 76 for 'Yes', and 8 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>16</td> </tr> <tr> <td>Yes</td> <td>76</td> </tr> <tr> <td>yes, someone helps me</td> <td>8</td> </tr> </tbody> </table>	Response	Percentage	No	16	Yes	76	yes, someone helps me	8
Response	Percentage								
No	16								
Yes	76								
yes, someone helps me	8								
Create and send voice messages using instant messaging applications such as Line, WhatsApp and Telegram	 <p>A bar chart with a y-axis from 0 to 80 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue with their values labeled on top: 15 for 'No', 70 for 'Yes', and 15 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>15</td> </tr> <tr> <td>Yes</td> <td>70</td> </tr> <tr> <td>yes, someone helps me</td> <td>15</td> </tr> </tbody> </table>	Response	Percentage	No	15	Yes	70	yes, someone helps me	15
Response	Percentage								
No	15								
Yes	70								
yes, someone helps me	15								

Send image/ video using instant messaging applications such as Line, WhatsApp and Telegram	 <p>A bar chart with a y-axis from 0 to 80 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue and have their values labeled on top: 7 for 'No', 73 for 'Yes', and 20 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>7</td> </tr> <tr> <td>Yes</td> <td>73</td> </tr> <tr> <td>yes, someone helps me</td> <td>20</td> </tr> </tbody> </table>	Response	Percentage	No	7	Yes	73	yes, someone helps me	20
Response	Percentage								
No	7								
Yes	73								
yes, someone helps me	20								
Send documents using instant messengers	 <p>A bar chart with a y-axis from 0 to 60 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue and have their values labeled on top: 12 for 'No', 51 for 'Yes', and 37 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>12</td> </tr> <tr> <td>Yes</td> <td>51</td> </tr> <tr> <td>yes, someone helps me</td> <td>37</td> </tr> </tbody> </table>	Response	Percentage	No	12	Yes	51	yes, someone helps me	37
Response	Percentage								
No	12								
Yes	51								
yes, someone helps me	37								
Block and repost people and phone numbers on instant messengers	 <p>A bar chart with a y-axis from 0 to 60 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue and have their values labeled on top: 31 for 'No', 48 for 'Yes', and 21 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>31</td> </tr> <tr> <td>Yes</td> <td>48</td> </tr> <tr> <td>yes, someone helps me</td> <td>21</td> </tr> </tbody> </table>	Response	Percentage	No	31	Yes	48	yes, someone helps me	21
Response	Percentage								
No	31								
Yes	48								
yes, someone helps me	21								
Write and send emails	 <p>A bar chart with a y-axis from 0 to 50 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue and have their values labeled on top: 28 for 'No', 43 for 'Yes', and 29 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>28</td> </tr> <tr> <td>Yes</td> <td>43</td> </tr> <tr> <td>yes, someone helps me</td> <td>29</td> </tr> </tbody> </table>	Response	Percentage	No	28	Yes	43	yes, someone helps me	29
Response	Percentage								
No	28								
Yes	43								
yes, someone helps me	29								

Send and forward documents through emails	 <p>A bar chart with a y-axis from 0 to 50 in increments of 5. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue. The values are 28 for 'No', 43 for 'Yes', and 29 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>28</td> </tr> <tr> <td>Yes</td> <td>43</td> </tr> <tr> <td>yes, someone helps me</td> <td>29</td> </tr> </tbody> </table>	Response	Count	No	28	Yes	43	yes, someone helps me	29
Response	Count								
No	28								
Yes	43								
yes, someone helps me	29								
Create posts on social media accounts	 <p>A bar chart with a y-axis from 0 to 70 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue. The values are 21 for 'No', 62 for 'Yes', and 17 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>21</td> </tr> <tr> <td>Yes</td> <td>62</td> </tr> <tr> <td>yes, someone helps me</td> <td>17</td> </tr> </tbody> </table>	Response	Count	No	21	Yes	62	yes, someone helps me	17
Response	Count								
No	21								
Yes	62								
yes, someone helps me	17								
Comment on social media posts	 <p>A bar chart with a y-axis from 0 to 60 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue. The values are 19 for 'No', 57 for 'Yes', and 24 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>19</td> </tr> <tr> <td>Yes</td> <td>57</td> </tr> <tr> <td>yes, someone helps me</td> <td>24</td> </tr> </tbody> </table>	Response	Count	No	19	Yes	57	yes, someone helps me	24
Response	Count								
No	19								
Yes	57								
yes, someone helps me	24								

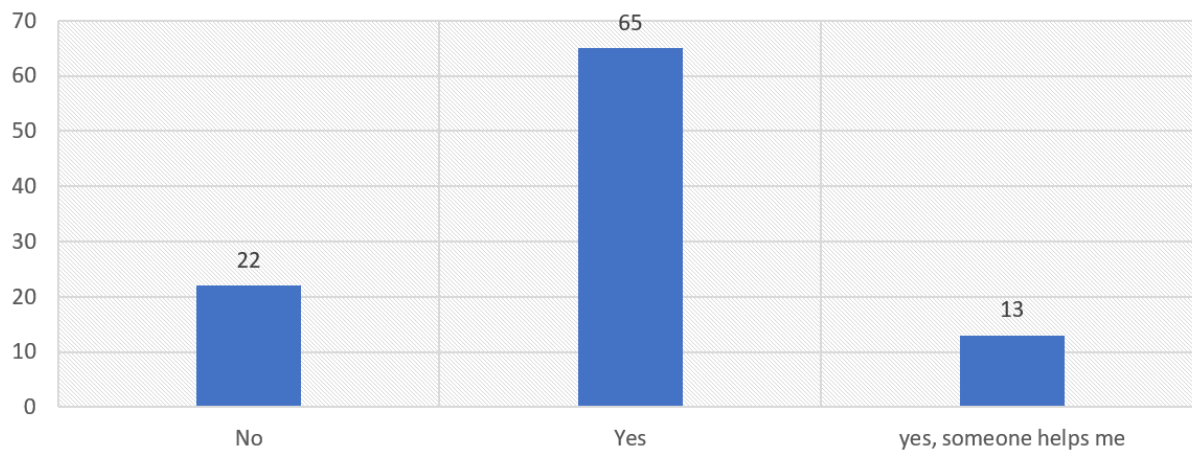


5.4. Digital Competency: Digital Media Production Skills among the Aged Entrepreneurs relevant to Their Silver Economy’s Activities



**Figure 11.** Photo editing tools used in silver economy among the aged entrepreneurs.

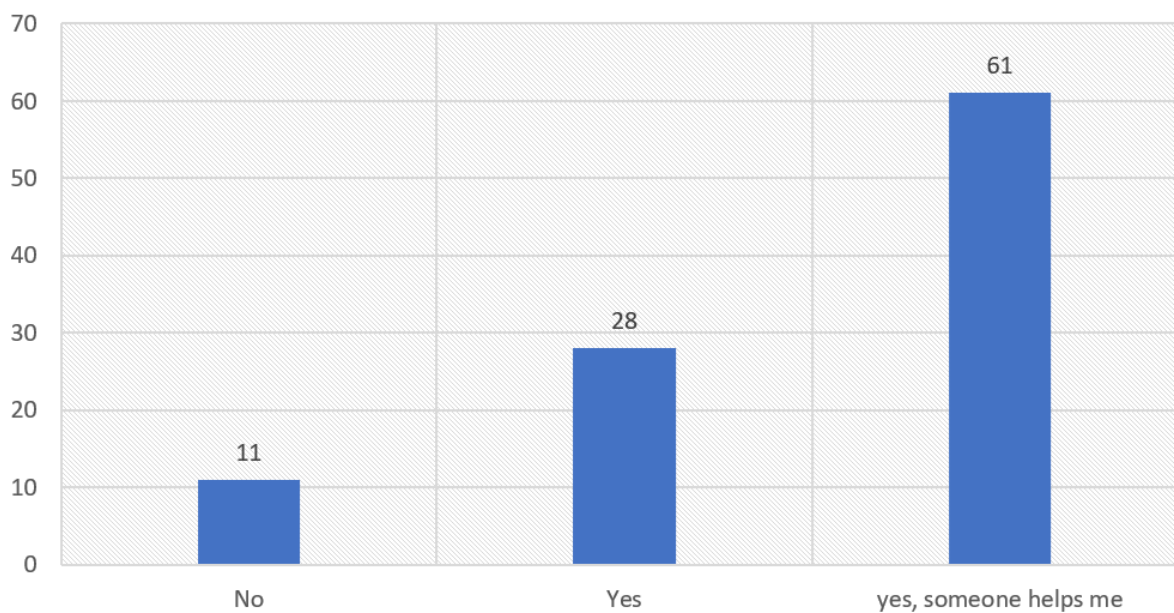




**Figure 12.**  
Recording videos and posting on social media used in silver economy among the aged entrepreneurs.

### 5.5. Privacy and Security Skills among the Aged Entrepreneurs Group relevant to their Silver Economy's Activities

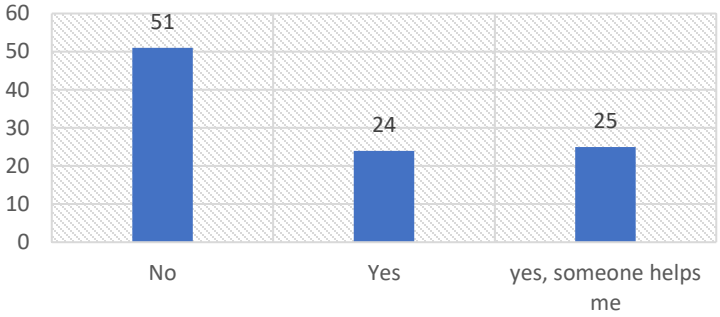
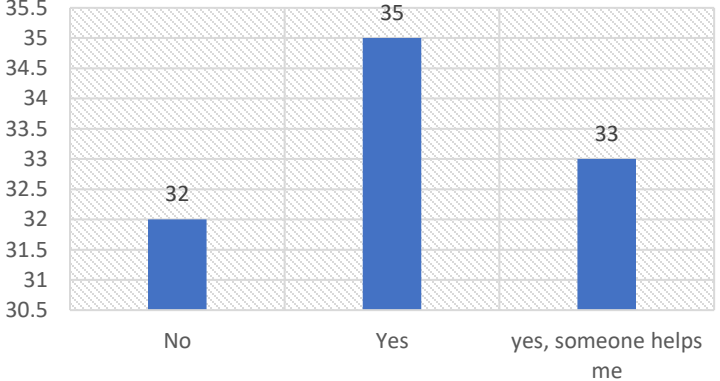
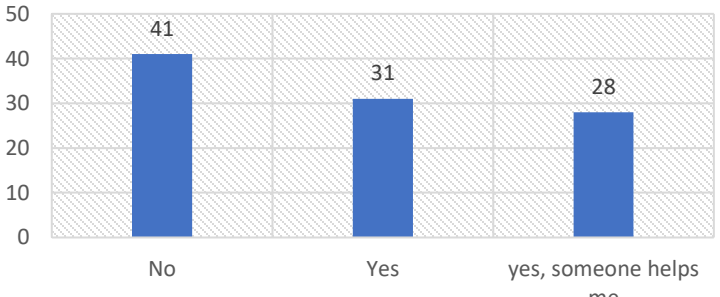
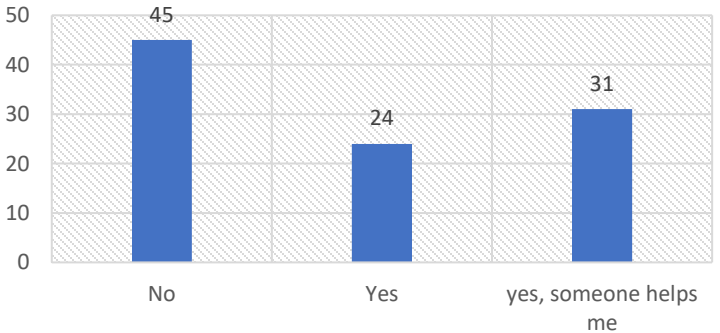
Majority of the aged entrepreneurs require assistance to understand and set their privacy and security settings.



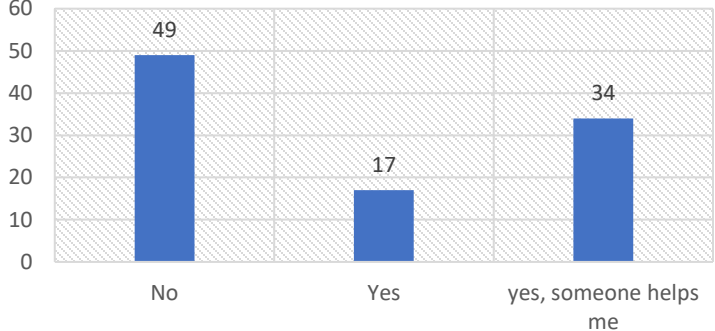
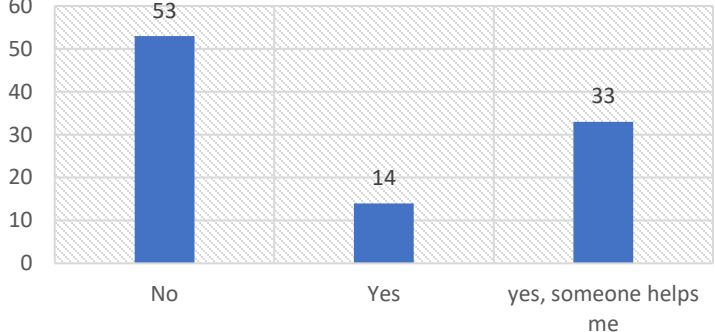
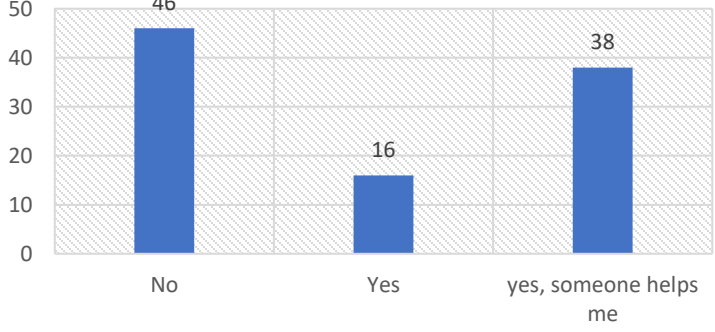
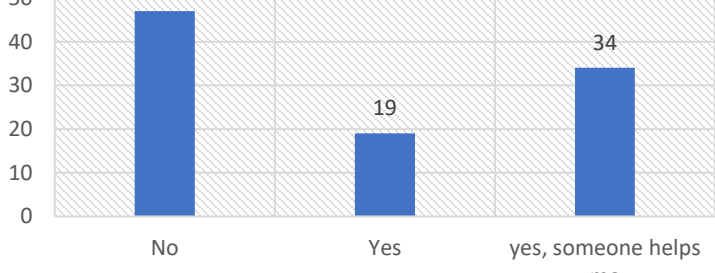
**Figure 13.**  
Skills of the aged entrepreneurs about privacy & security settings on their devices or digital platforms relevant to their silver economy's activities.

**Table 2.**

Skills of aged entrepreneurs in privacy & security settings on their devices or digital platforms relevant to their silver economy's activities.

Skills of Aged Entrepreneurs on their Devices or Digital Platforms relevant to their Silver Economy's Activities	Privacy & Security Settings								
Set to last seen online	 <table border="1"> <tr> <th>Response</th> <th>Percentage</th> </tr> <tr> <td>No</td> <td>51</td> </tr> <tr> <td>Yes</td> <td>24</td> </tr> <tr> <td>yes, someone helps me</td> <td>25</td> </tr> </table>	Response	Percentage	No	51	Yes	24	yes, someone helps me	25
Response	Percentage								
No	51								
Yes	24								
yes, someone helps me	25								
Block certain accounts and people	 <table border="1"> <tr> <th>Response</th> <th>Percentage</th> </tr> <tr> <td>No</td> <td>32</td> </tr> <tr> <td>Yes</td> <td>35</td> </tr> <tr> <td>yes, someone helps me</td> <td>33</td> </tr> </table>	Response	Percentage	No	32	Yes	35	yes, someone helps me	33
Response	Percentage								
No	32								
Yes	35								
yes, someone helps me	33								
Report people, accounts and phone numbers	 <table border="1"> <tr> <th>Response</th> <th>Percentage</th> </tr> <tr> <td>No</td> <td>41</td> </tr> <tr> <td>Yes</td> <td>31</td> </tr> <tr> <td>yes, someone helps me</td> <td>28</td> </tr> </table>	Response	Percentage	No	41	Yes	31	yes, someone helps me	28
Response	Percentage								
No	41								
Yes	31								
yes, someone helps me	28								
Set who can see profile photo	 <table border="1"> <tr> <th>Response</th> <th>Percentage</th> </tr> <tr> <td>No</td> <td>45</td> </tr> <tr> <td>Yes</td> <td>24</td> </tr> <tr> <td>yes, someone helps me</td> <td>31</td> </tr> </table>	Response	Percentage	No	45	Yes	24	yes, someone helps me	31
Response	Percentage								
No	45								
Yes	24								
yes, someone helps me	31								

<p>Set who can see posts choosing only certain people or groups</p>	<p>A bar chart with a y-axis from 0 to 50 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue and have the following values: 45 for 'No', 26 for 'Yes', and 29 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>45</td> </tr> <tr> <td>Yes</td> <td>26</td> </tr> <tr> <td>yes, someone helps me</td> <td>29</td> </tr> </tbody> </table>	Response	Percentage	No	45	Yes	26	yes, someone helps me	29
Response	Percentage								
No	45								
Yes	26								
yes, someone helps me	29								
<p>Set the visibility of your personal information to certain people or groups</p>	<p>A bar chart with a y-axis from 0 to 50 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue and have the following values: 45 for 'No', 28 for 'Yes', and 27 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>45</td> </tr> <tr> <td>Yes</td> <td>28</td> </tr> <tr> <td>yes, someone helps me</td> <td>27</td> </tr> </tbody> </table>	Response	Percentage	No	45	Yes	28	yes, someone helps me	27
Response	Percentage								
No	45								
Yes	28								
yes, someone helps me	27								
<p>Read receipts</p>	<p>A bar chart with a y-axis from 31 to 34.5 in increments of 0.5. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue and have the following values: 32 for 'No', 34 for 'Yes', and 34 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>32</td> </tr> <tr> <td>Yes</td> <td>34</td> </tr> <tr> <td>yes, someone helps me</td> <td>34</td> </tr> </tbody> </table>	Response	Percentage	No	32	Yes	34	yes, someone helps me	34
Response	Percentage								
No	32								
Yes	34								
yes, someone helps me	34								
<p>Set who can see the people, pages and lists you follow</p>	<p>A bar chart with a y-axis from 0 to 50 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue and have the following values: 47 for 'No', 21 for 'Yes', and 32 for 'yes, someone helps me'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>47</td> </tr> <tr> <td>Yes</td> <td>21</td> </tr> <tr> <td>yes, someone helps me</td> <td>32</td> </tr> </tbody> </table>	Response	Percentage	No	47	Yes	21	yes, someone helps me	32
Response	Percentage								
No	47								
Yes	21								
yes, someone helps me	32								


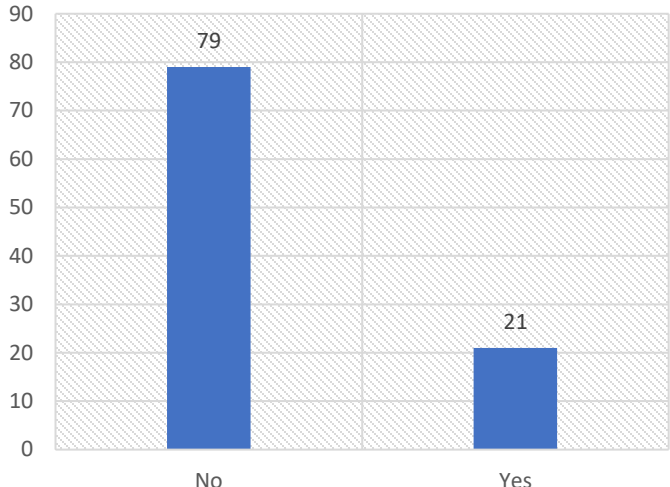
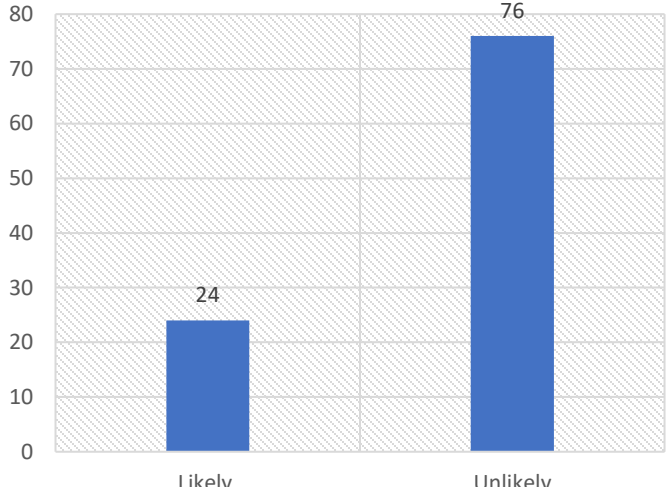
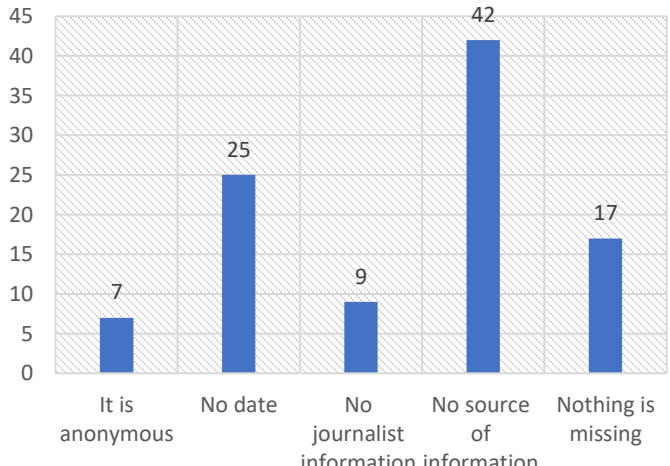
Limit the audience for old posts on your timeline	 <p>A bar chart with a y-axis from 0 to 60 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue. The values are: No (49), Yes (17), and yes, someone helps me (34).</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>49</td> </tr> <tr> <td>Yes</td> <td>17</td> </tr> <tr> <td>yes, someone helps me</td> <td>34</td> </tr> </tbody> </table>	Response	Percentage	No	49	Yes	17	yes, someone helps me	34
Response	Percentage								
No	49								
Yes	17								
yes, someone helps me	34								
Review posts you're tagged in	 <p>A bar chart with a y-axis from 0 to 60 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue. The values are: No (53), Yes (14), and yes, someone helps me (33).</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>53</td> </tr> <tr> <td>Yes</td> <td>14</td> </tr> <tr> <td>yes, someone helps me</td> <td>33</td> </tr> </tbody> </table>	Response	Percentage	No	53	Yes	14	yes, someone helps me	33
Response	Percentage								
No	53								
Yes	14								
yes, someone helps me	33								
Create password for device or account	 <p>A bar chart with a y-axis from 0 to 50 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue. The values are: No (46), Yes (16), and yes, someone helps me (38).</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>46</td> </tr> <tr> <td>Yes</td> <td>16</td> </tr> <tr> <td>yes, someone helps me</td> <td>38</td> </tr> </tbody> </table>	Response	Percentage	No	46	Yes	16	yes, someone helps me	38
Response	Percentage								
No	46								
Yes	16								
yes, someone helps me	38								
Change password regularly	 <p>A bar chart with a y-axis from 0 to 50 in increments of 10. The x-axis has three categories: 'No', 'Yes', and 'yes, someone helps me'. The bars are blue. The values are: No (47), Yes (19), and yes, someone helps me (34).</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>47</td> </tr> <tr> <td>Yes</td> <td>19</td> </tr> <tr> <td>yes, someone helps me</td> <td>34</td> </tr> </tbody> </table>	Response	Percentage	No	47	Yes	19	yes, someone helps me	34
Response	Percentage								
No	47								
Yes	19								
yes, someone helps me	34								

### 5.6. Creative & Critical Thinking Skills in Silver Economy among the Aged Entrepreneurs

The aged entrepreneurs were interviewed a series of questions relevant to critical thinking skills in their silver economy activities and daily life.

**Table 3.**

The aged entrepreneurs' reaction to online website information relevant to their silver economy's activities

	<p>Is the online news credible?</p>	 <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>79</td> </tr> <tr> <td>Yes</td> <td>21</td> </tr> </tbody> </table>	Response	Percentage	No	79	Yes	21						
Response	Percentage													
No	79													
Yes	21													
	<p>Will you share the information with others?</p>	 <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Likely</td> <td>24</td> </tr> <tr> <td>Unlikely</td> <td>76</td> </tr> </tbody> </table>	Response	Percentage	Likely	24	Unlikely	76						
Response	Percentage													
Likely	24													
Unlikely	76													
	<p>I spot aspects of the news that are missing (...)</p>	 <table border="1"> <thead> <tr> <th>Aspect</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>It is anonymous</td> <td>7</td> </tr> <tr> <td>No date</td> <td>25</td> </tr> <tr> <td>No journalist information</td> <td>9</td> </tr> <tr> <td>No source of information</td> <td>42</td> </tr> <tr> <td>Nothing is missing</td> <td>17</td> </tr> </tbody> </table>	Aspect	Percentage	It is anonymous	7	No date	25	No journalist information	9	No source of information	42	Nothing is missing	17
Aspect	Percentage													
It is anonymous	7													
No date	25													
No journalist information	9													
No source of information	42													
Nothing is missing	17													

Majority of the aged entrepreneurs had critical thinking skill to analyze digital media and information from online sources and were unlikely to share it with others. The majority cited the absence of a source of information and a publication date as reasons for their skepticism.

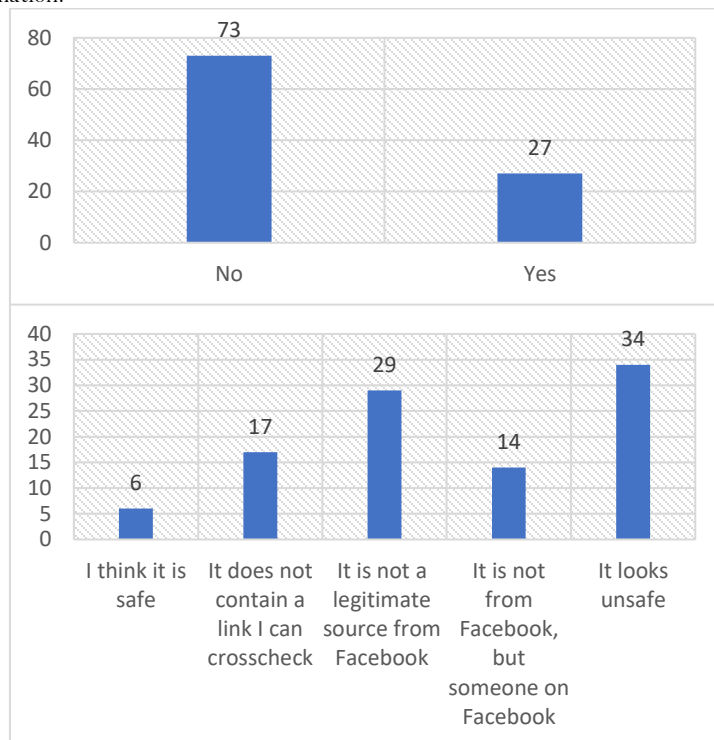
**Table 4.**

The aged entrepreneurs's reaction to Facebook information.



Is this post credible?

I spot aspects of possible disinformation (...)



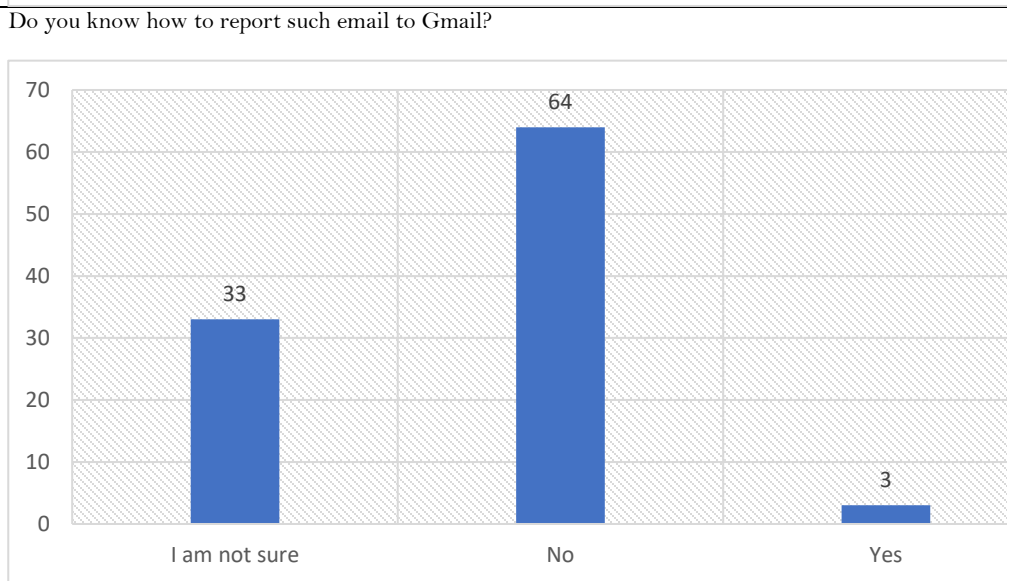
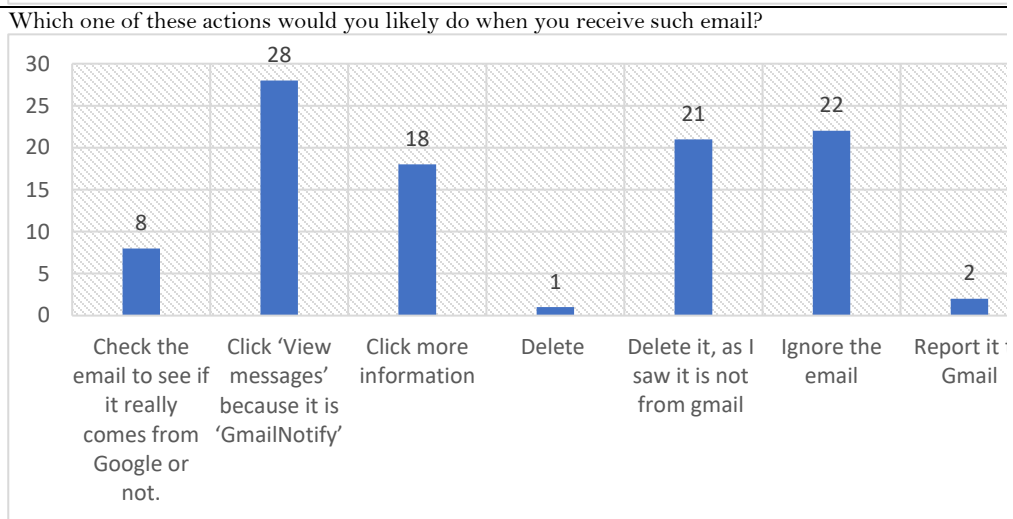
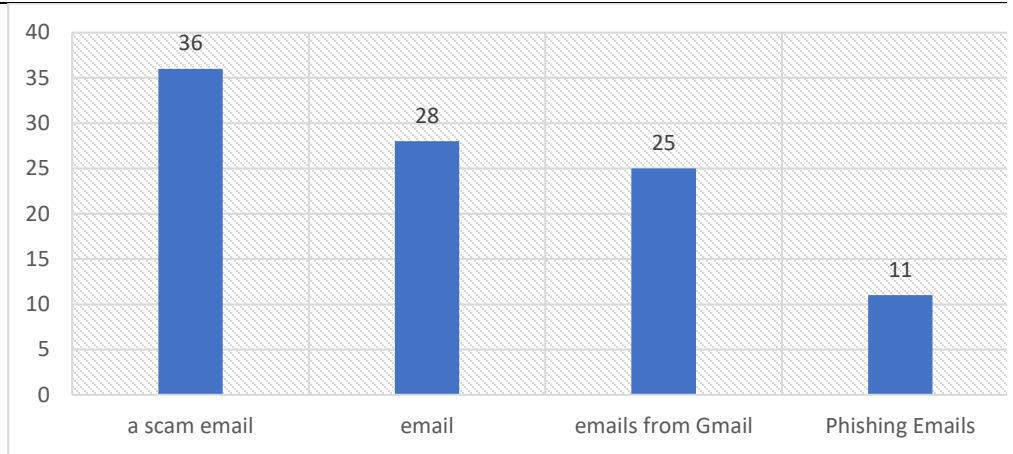
Upon encountering the Facebook information, the majority of the aged entrepreneurs also reported that it appeared not credible and seemed unsafe. They showed awareness that the facebook information did not come from a reliable source.

**Table 5.**

The aged entrepreneurs' reaction to Gmail information.

kamolrat, here's your new	Do you know what is this Figure?
---------------------------	----------------------------------





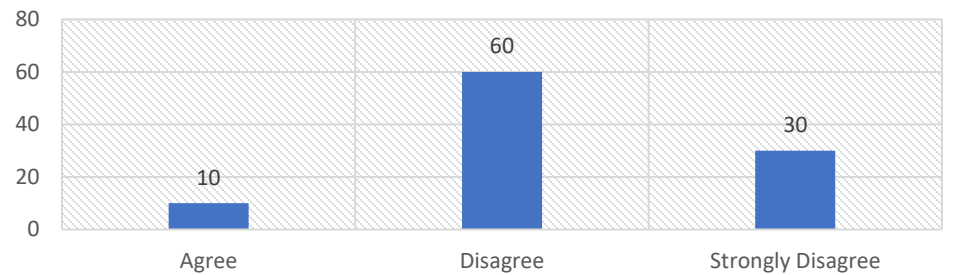
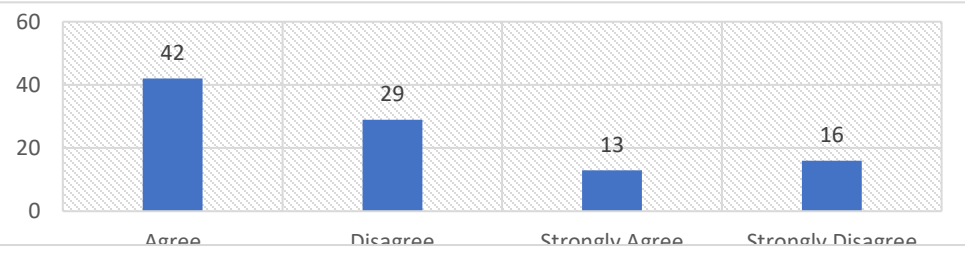
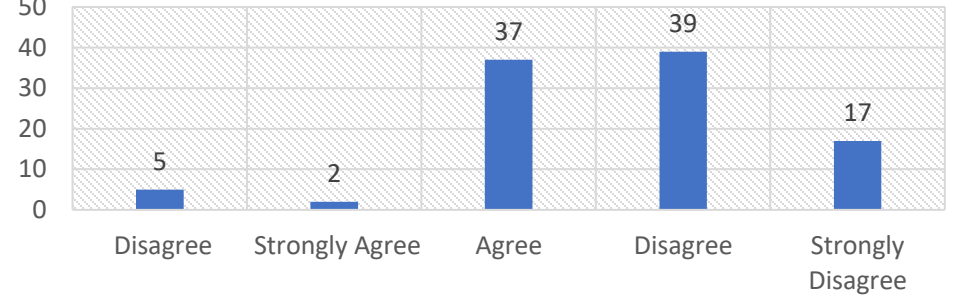
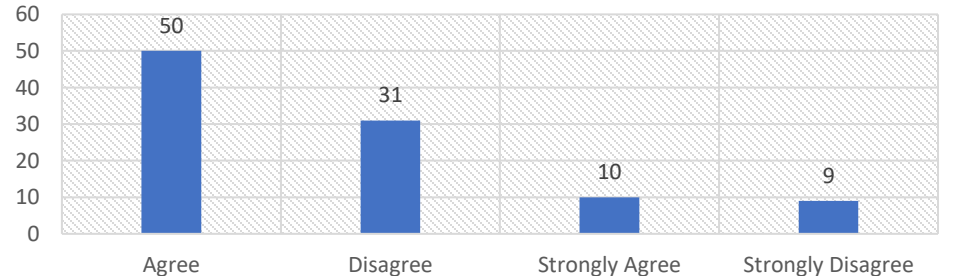
Majority of the aged entrepreneurs identified the figure as a scam email, while others simply recognized it as an email. A smaller number specifically noted that it is an email from Gmail. Many indicated they would click to view the message because it originates from Gmail Notifier, whereas others expressed a preference to either ignore or delete the email.

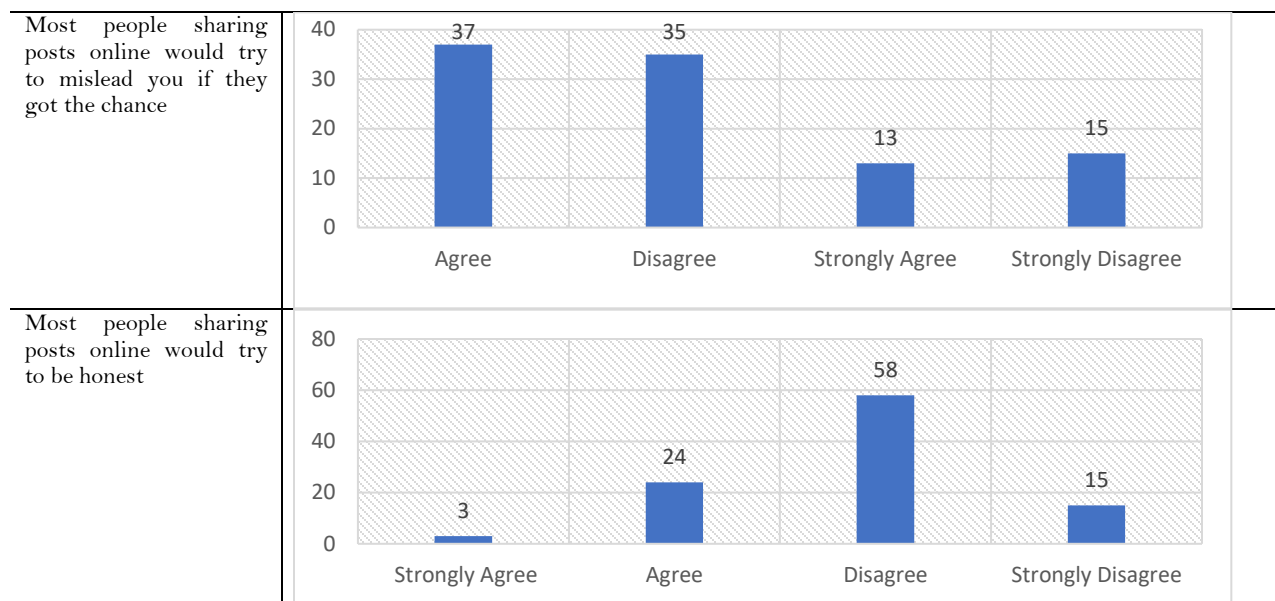
### 5.7. Trust in Social Media of the Aged Entrepreneurs

In evaluating trust in sharing information on social media, the findings indicate that the aged entrepreneurs gained more critical and analytical skills regarding the trustworthiness of social media posts.

**Table 6.**

The aged entrepreneurs' trust in social media's information.

Generally speaking, social media posts can be trusted	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Agree</td> <td>10</td> </tr> <tr> <td>Disagree</td> <td>60</td> </tr> <tr> <td>Strongly Disagree</td> <td>30</td> </tr> </tbody> </table>	Response	Count	Agree	10	Disagree	60	Strongly Disagree	30				
Response	Count												
Agree	10												
Disagree	60												
Strongly Disagree	30												
I cannot be too careful in dealing with social media posts	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Agree</td> <td>42</td> </tr> <tr> <td>Disagree</td> <td>29</td> </tr> <tr> <td>Strongly Agree</td> <td>13</td> </tr> <tr> <td>Strongly Disagree</td> <td>16</td> </tr> </tbody> </table>	Response	Count	Agree	42	Disagree	29	Strongly Agree	13	Strongly Disagree	16		
Response	Count												
Agree	42												
Disagree	29												
Strongly Agree	13												
Strongly Disagree	16												
Most of the time, people sharing social media posts try to be helpful	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Disagree</td> <td>5</td> </tr> <tr> <td>Strongly Agree</td> <td>2</td> </tr> <tr> <td>Agree</td> <td>37</td> </tr> <tr> <td>Disagree</td> <td>39</td> </tr> <tr> <td>Strongly Disagree</td> <td>17</td> </tr> </tbody> </table>	Response	Count	Disagree	5	Strongly Agree	2	Agree	37	Disagree	39	Strongly Disagree	17
Response	Count												
Disagree	5												
Strongly Agree	2												
Agree	37												
Disagree	39												
Strongly Disagree	17												
Most of the time, people sharing social media post look out for themselves	 <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Agree</td> <td>50</td> </tr> <tr> <td>Disagree</td> <td>31</td> </tr> <tr> <td>Strongly Agree</td> <td>10</td> </tr> <tr> <td>Strongly Disagree</td> <td>9</td> </tr> </tbody> </table>	Response	Count	Agree	50	Disagree	31	Strongly Agree	10	Strongly Disagree	9		
Response	Count												
Agree	50												
Disagree	31												
Strongly Agree	10												
Strongly Disagree	9												



A significant majority of the aged entrepreneurs disagree with the notion that social media posts can be trusted. These respondents concur that one must exercise caution when engaging with such posts. The aged entrepreneurs exhibit a much greater level of skepticism regarding the helpfulness of social media posts. A majority of them affirmed that most people sharing posts online would likely try to mislead them if given the opportunity.

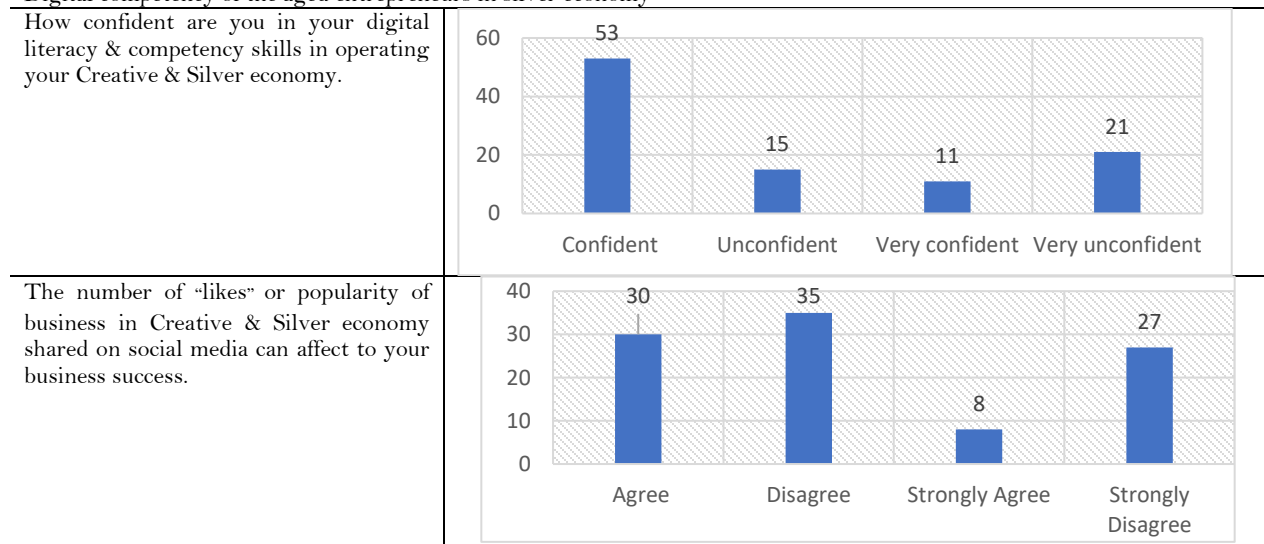
5.8. Digital Competency: Confidence & Analytic Thinking Skills of The Aged Entrepreneurs in Silver Economy.

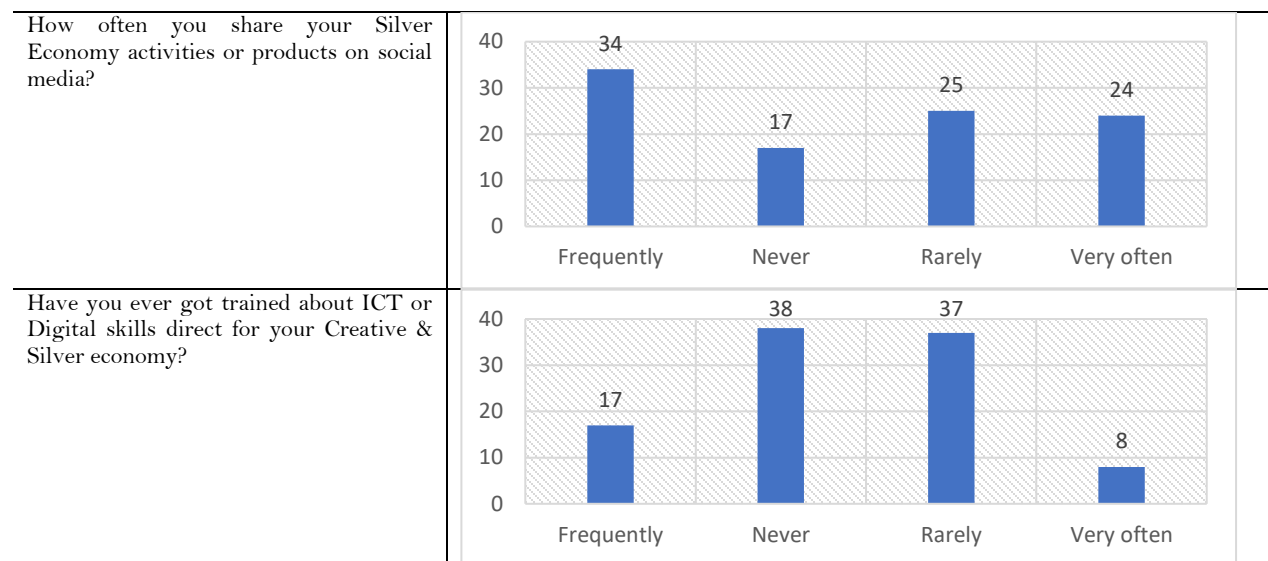
The results found quite positive among the aged entrepreneurs as showed in Table 7-8.

5.8.1. Digital Competency: Confidence & Analytic thinking Skills of the Aged Entrepreneurs in Silver Economy

**Table 7.**

Digital competency of the aged entrepreneurs in silver economy



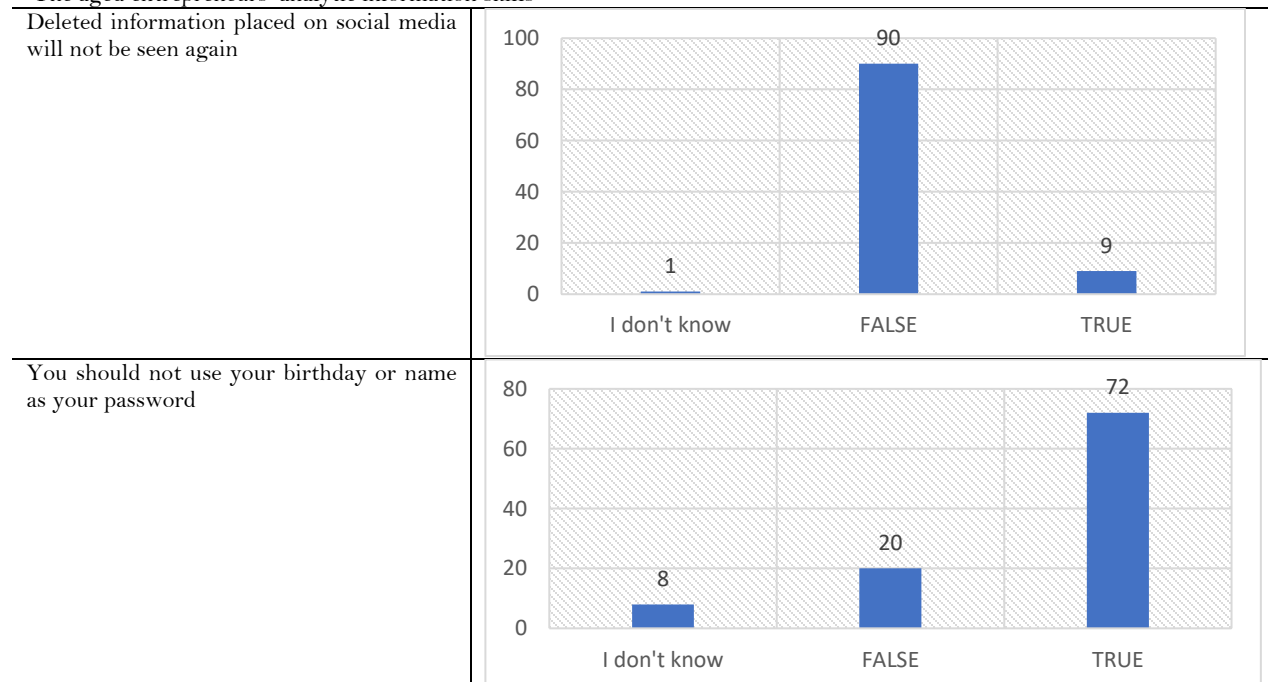


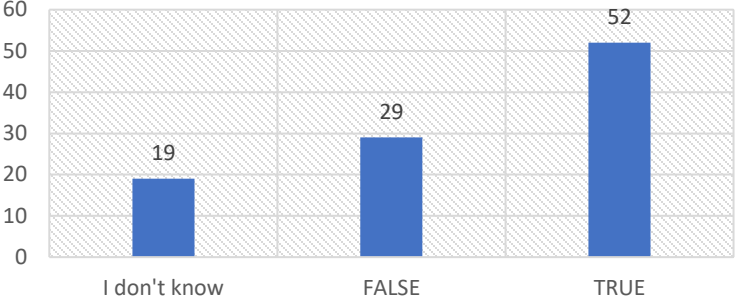
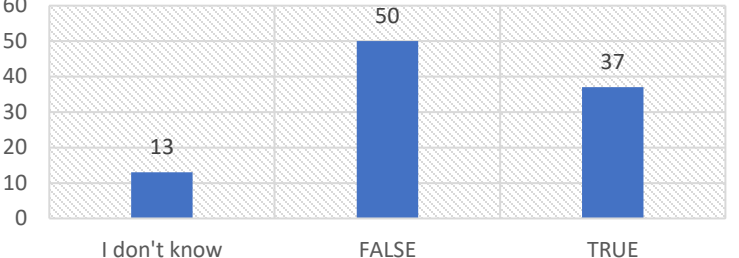
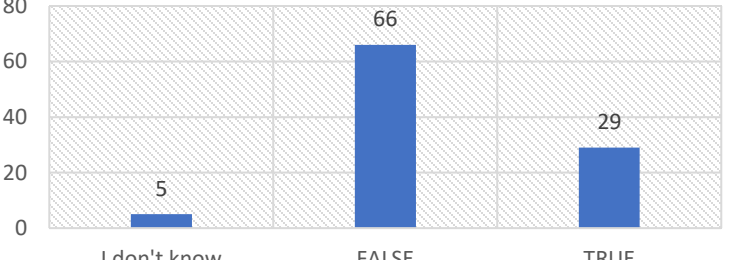
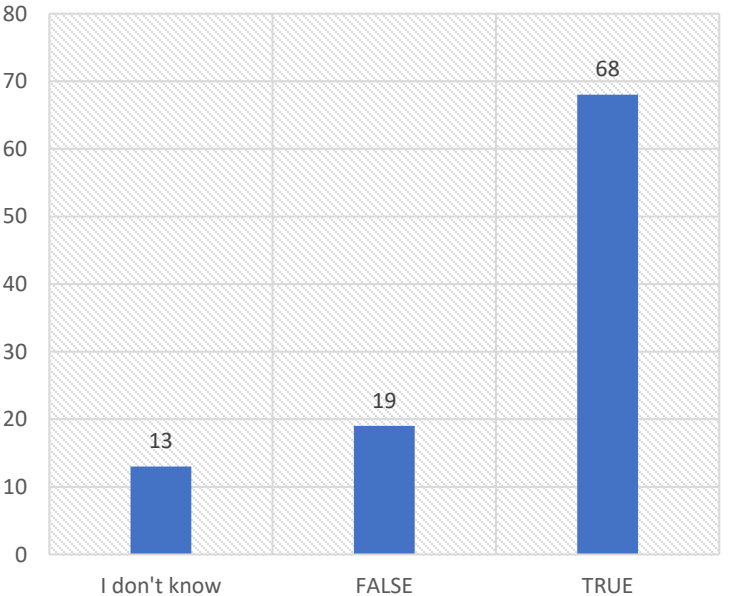
In assessing the digital competency of the aged entrepreneurs in silver economy found more than half of them feel confident and good attitude toward digital skills to be used in their silver economy's activities, though only a few got trained in this issue.

*5.8.2. Digital Competency: Information Analytic Skills of the Aged Entrepreneurs in Silver Economy showed a higher level of awareness regarding the dangers of sharing information online and its potential consequences.*

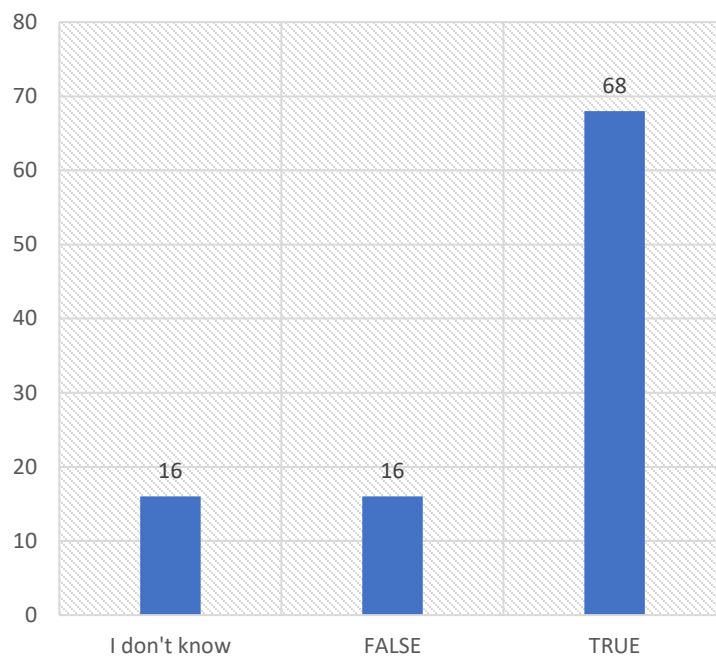
**Table 8.**

The aged entrepreneurs' analytic information skills

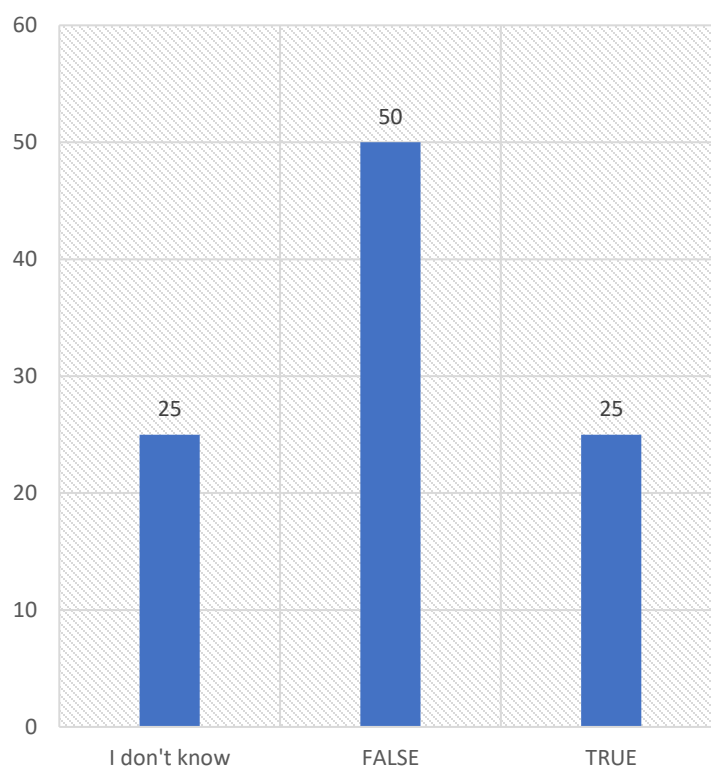


<p>Anonymous online posts/comments can possibly be traced back to the author</p>	 <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>I don't know</td> <td>19</td> </tr> <tr> <td>FALSE</td> <td>29</td> </tr> <tr> <td>TRUE</td> <td>52</td> </tr> </tbody> </table>	Response	Percentage	I don't know	19	FALSE	29	TRUE	52
Response	Percentage								
I don't know	19								
FALSE	29								
TRUE	52								
<p>Once a picture is uploaded to your social media account, it's easy to remove it completely</p>	 <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>I don't know</td> <td>13</td> </tr> <tr> <td>FALSE</td> <td>50</td> </tr> <tr> <td>TRUE</td> <td>37</td> </tr> </tbody> </table>	Response	Percentage	I don't know	13	FALSE	50	TRUE	37
Response	Percentage								
I don't know	13								
FALSE	50								
TRUE	37								
<p>You may provide your bank account password to the officer over a phone call</p>	 <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>I don't know</td> <td>5</td> </tr> <tr> <td>FALSE</td> <td>66</td> </tr> <tr> <td>TRUE</td> <td>29</td> </tr> </tbody> </table>	Response	Percentage	I don't know	5	FALSE	66	TRUE	29
Response	Percentage								
I don't know	5								
FALSE	66								
TRUE	29								
<p>It can be dangerous to click on any Internet or social media links</p>	 <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>I don't know</td> <td>13</td> </tr> <tr> <td>FALSE</td> <td>19</td> </tr> <tr> <td>TRUE</td> <td>68</td> </tr> </tbody> </table>	Response	Percentage	I don't know	13	FALSE	19	TRUE	68
Response	Percentage								
I don't know	13								
FALSE	19								
TRUE	68								
<p>People can generate fake news or videos</p>									

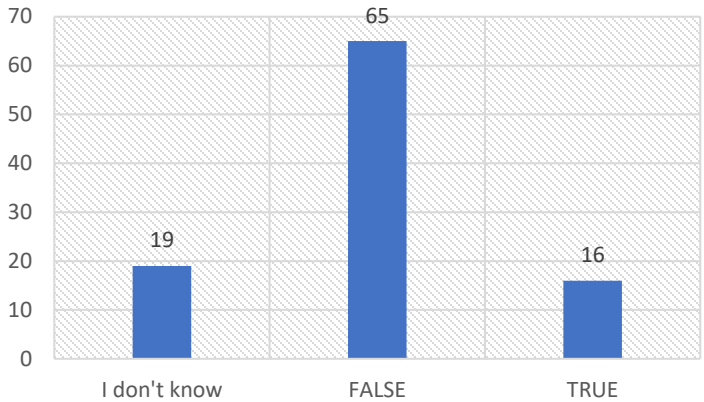
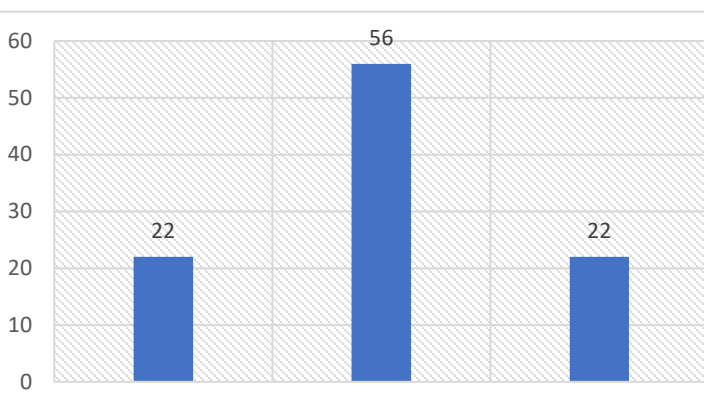
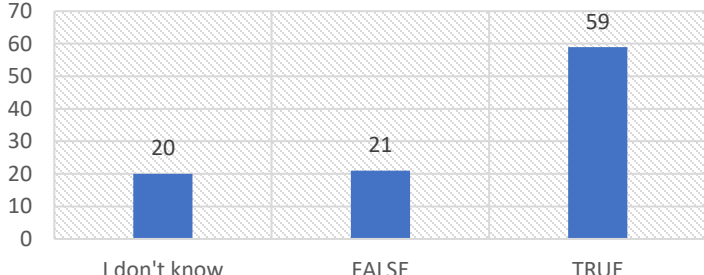
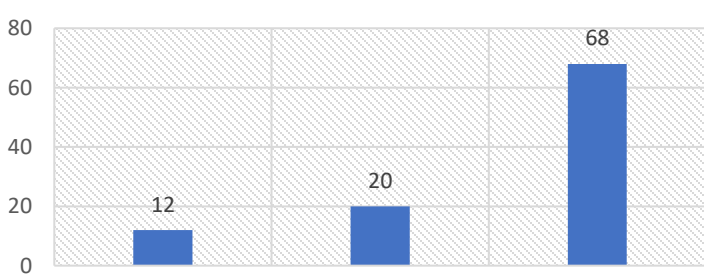
with someone else's face using advanced apps



It is safe to do financial transactions on your phone using free Wi-Fi/public Wi-Fi





Online news or reports are always correct	 <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>I don't know</td> <td>19</td> </tr> <tr> <td>FALSE</td> <td>65</td> </tr> <tr> <td>TRUE</td> <td>16</td> </tr> </tbody> </table>	Response	Percentage	I don't know	19	FALSE	65	TRUE	16
Response	Percentage								
I don't know	19								
FALSE	65								
TRUE	16								
You will need to transfer money before claiming any prize or parcel by the courier over the phone	 <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>I don't know</td> <td>22</td> </tr> <tr> <td>FALSE</td> <td>56</td> </tr> <tr> <td>TRUE</td> <td>22</td> </tr> </tbody> </table>	Response	Percentage	I don't know	22	FALSE	56	TRUE	22
Response	Percentage								
I don't know	22								
FALSE	56								
TRUE	22								
Scammers can transfer money from your bank account over the phone if you share your password and pin with them	 <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>I don't know</td> <td>20</td> </tr> <tr> <td>FALSE</td> <td>21</td> </tr> <tr> <td>TRUE</td> <td>59</td> </tr> </tbody> </table>	Response	Percentage	I don't know	20	FALSE	21	TRUE	59
Response	Percentage								
I don't know	20								
FALSE	21								
TRUE	59								
Your ID number is sensitive personal data that should not be shared easily with others	 <table border="1"> <thead> <tr> <th>Response</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>I don't know</td> <td>12</td> </tr> <tr> <td>FALSE</td> <td>20</td> </tr> <tr> <td>TRUE</td> <td>68</td> </tr> </tbody> </table>	Response	Percentage	I don't know	12	FALSE	20	TRUE	68
Response	Percentage								
I don't know	12								
FALSE	20								
TRUE	68								

### *5.9. Mechanism for Digital Competency development among the Aged Entrepreneurs under the Silver Economy with Soft Power in Thailand*

As highlighted results earlier in this report, Thai government has implemented various urgent initiatives, policies, and regulations to support silver economy with all relevant sectors especially the aged entrepreneurs, the youths in their own family or community business relevant to silver economy. Key agency found to be the most important factor to drive all successful mechanism of the silver economy with soft power among the aged entrepreneurs. CEA (Creative Economy Agency, Public Organization) found to be the key agency to lead and play all important roles to make successful silver economy truly happen under the missions of silver economy, Thailand. CEA must assist and facilitate all friendly and creative ecosystem of Thai's silver economy. CEA must act as the silver economy hub to lead, to direct, to facilitate, to communicate then to support all kinds of silver economy with soft power among all sectors and targeted groups. CEA has to collaborate with all sectors i.e. the private sectors, the communities, and the local government agencies in arranging all kinds of the creative silver economy at all levels. Some examples of CEA moves with creative & silver economy engagement are;

#### *5.9.1. Thailand Creative District Network or TCDN*

A platform to build a system for provincial area development via creativity and design work, which helps add value to the existing assets, improve quality of life, and revitalize the old neighborhood with creative & silver economy engagement.

#### *5.9.2. UNESCO Creative Cities Network or UCCN*

An international city development platform that facilitates the strategic exchange of art and cultures, creativity, information, experiences, personnel, projects, and activities with other cities in the network across the world. On the international scale, it is also advantageous for city public relations in terms of commerce, investment, and tourism with creative & silver economy engagement.

#### *5.9.3. A Platform to Demonstrate Thai Creative People's Potentials and Creative Businesses:*

Design Week is considered a cultural product that boosts the local economy and generates revenue from tourism with creative & silver economy engagement (CEA.<https://www.cea.or.th/en/single-softpower/cea-soft-power>).

## **6. Conclusions**

One focus of this research is that building an inclusive digital nation involves leveraging the social and economic benefits of digitalization to ensure no individual, community, or business is left behind. While digital competency with communication, media, technology and innovation can enhance access to information, knowledge, skill development, business opportunities, social protection, health, financial independence, and divinity with their own soft power. Also help bridging the digital divide requires a comprehensive understanding of the barriers faced by diverse demands of the aged groups who are the rapid emerging population in Thailand. Silver economy driven by all this group calls "the aged entrepreneurs" is a must to be urgently support and empowered. So, main recommendation gains from this research is the most urgent fixed in all government policy gaps to help the aged entrepreneurs as well as other beneficiaries groups to access and gain more digital competency skills and knowledge relevant to their silver economy by Soft Power. Main mechanism is to closer government sector, private sector, and the local sectors' collaboration more kinds of supportive incentives aims to help expanding and scaling up more empowering activities such as training, sharing, and collaborating among all the aged entrepreneurs in silver economy across the country and industries. Deepen community, school, private sectors and industry links by driving formal inter-sectoral mechanism for empowerment, resources sharing, regular consultation for internship, apprenticeship, on-site training, employment, market outlet and other schemes with equity, quality and sustainable practices.

### Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

### Copyright:

© 2025 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

### References

- [1] Thailand Investment Review, "Silver economy: Opportunities with Thailand's growing senior population, Vol.29, July,2019," Retrieved: extension://efaidnbmnnnibpcajpcgclefindmkaj/[https://www.boi.go.th/upload/content/TIR\\_JULY2019.pdf](https://www.boi.go.th/upload/content/TIR_JULY2019.pdf). 2019.
- [2] United Nations, "United nations population fund: Country programme document for Thailand," Retrieved: [https://www.unfpa.org/sites/default/files/portal-document/ENG%20-%20DP.FPA\\_CPD\\_THA\\_12%20-%20Thailand%20CPD%20-%202022%20FRS%20-%20FINAL%20-%201Dec21\\_0.pdf](https://www.unfpa.org/sites/default/files/portal-document/ENG%20-%20DP.FPA_CPD_THA_12%20-%20Thailand%20CPD%20-%202022%20FRS%20-%20FINAL%20-%201Dec21_0.pdf). 2021.
- [3] The Office of the National Digital Economy and Society Commission (ONDE), "Annual report Thailand digital outlook," Retrieved: [https://www.onde.go.th/view/1/News details/All news/1646/TH-TH](https://www.onde.go.th/view/1/News%20-%20details/All%20news/1646/TH-TH). 2022.
- [4] S. Anders, "Digital competency center of digital dannelse," Retrieved: <https://digital-competence.eu/dc/ed/front/what-is-digital-competence/>. 2016.
- [5] K. Intaratat, "Elderly labor study in the outskirts cities of Thailand," 2023.