

Chapter 16

Digital Home Strategy

ABSTRACT

The goal of this chapter is to discuss and analyze strategies related to private computer users and digital homes. The chapter begins with an analysis of ICT users based on (1) age and (2) skill level in using digital technologies. Based on these two factors, four categories of users are identified: (1) young uninformed, (2) old uninformed, (3) old informed, and (4) young informed. The chapter analyzes each category in detail and discusses digital strategies for each group. Next, the chapter examines strategies that can be used to digitize houses, such as the use of temperature monitoring and light controls. The chapter concludes with an analysis of smart home trends.

INTRODUCTION

The inhabitants of small countries tend to have the best internet connections in the world. For instance, in the Falkland Islands, as many as 99% of inhabitants use the internet, ranking the country first place in the world. Looking at the map, one can see that these islands are almost at the “end” of the world. Thus far, it has been popular to classify people as either financially excluded or not excluded, that is, the “haves” and the “have nots”. Among the “haves” one can distinguish “old” and “new” money; however, these groups can also be linked to the criterion of information. Doing so reveals that those with “old money” are usually less informed than those with “new” money. Furthermore, the “have nots” who are uninformed have no chance of improving their existence; however, the “have nots” who are informed have an opportunity to strengthen their presence, as their ability to access information brings new opportunities for strategic action and the possibility of breaking out of so-called “poverty cycles”.

CATEGORIES OF USERS BASED ON AGE

Information technology in the 21st century is used in economic, political, and socio-cultural ways for production and communication purposes. People with better access and more technological knowledge are, therefore, better able to exploit the full potential of information and communication technologies

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(ICT). Those with the latest technical experience benefit more, resulting in a higher socio-economic status. The skills involved in using the internet can be defined based on the number of websites visited, the time spent on the internet, proficiency in internet use, and the ability to use the internet in a variety of ways. Those who possess these skills benefit more from using ICT, resulting in a divide between information “haves” and “have nots”. Furthermore, the skills used to access the internet are more complex than those used to access oneself. This indicates a paradigm shift in the commonly understood definition of digital exclusion, that is, who has access and who does not (Barupal, 2017).

The new definition of digital exclusion is now based on user skills and access quality. This division can be assessed in terms of the age, educational qualifications, and economic status of a person, which in turn are influenced by one’s geographical location and government policies. According to a report by the International Telecommunications Union (ITU), people with internet access doubled worldwide in five years (2012-2017). The number of households with internet access was 16% in developing countries and 66% in developed countries. Therefore, there is an apparent digital exclusion between high-income and low-income countries. The former provides higher speeds, higher bandwidth, and better access quality, while the latter offer lower speeds, lower capacity, and worse access quality. Therefore, digital exclusion has changed from mere access to including both user skills and access quality (Barupal, 2017).

Keeping in mind the consideration of how information affects wealth, let us move on to consider the criterion of age, which plays a significant role in mastering the use of computers in the private home.

The model of user categories classified by age is given in Figure 1.

STRATEGY FOR USER Y- YOUNGER UNINFORMED USERS

This category of users includes young people and children, including those who are either out of school or are studying but have a limited budget.

- Purpose of computerization: Gain access internet and email
- Digital strategy: take possession of used equipment, such as smartphones, tablets, or PCs. If that is not possible, use digital hardware in a library or internet café.
- Adverse effects: there is a concern that fake news and data may influence the minds of users with limited training and those who have few relationships with people other than data maniacs.

Young people and children who grow up digitally excluded feel increasingly deficient and hopeless, with no chance of a better life.

The internet is becoming increasingly important in school curricula, and young people and children use home internet connections to fulfill school tasks, connect with classmates, and pursue various interests and hobbies. Young people and children who cannot access the internet risk losing the opportunity to develop their education further. This threat is even more present among communities that have faced challenges in the past.

Research shows that internet access is closely linked to socio-economic factors, such as poverty and racial demographics. In Detroit, researchers at the University of Michigan found in 2019 that up to 70% of young people and school children in economically disadvantaged neighborhoods do not have internet access at home (Rundle, 2020).

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