THE ROLE AND READINESS OF LIBRARIANS IN PROMOTING DIGITAL LITERACY: A CASE STUDY FROM LATVIA

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Abstract

Rapid development of digital technologies significantly transforms the world, and it demands new approaches to the education. Formal education systems are not ready to provide digital skills needed for citizens to follow those changes. Informal, nonformal and lifelong education become more significant source of knowledge in this area and public libraries as well as librarians are expected to play a significant role in promoting of digital literacy. The main goal of this study is to understand the readiness of librarians from public libraries to be promoters of digital literacy and their awareness about their role in this context. Discussion in this article is based on findings of a case study in Latvia. Data were collected using qualitative research methods including focus group discussions with library experts and in-depth interviews with librarians from public libraries. Research results indicated that librarians do not have a clear understanding of their role, rights and responsibilities in supervising of young people`s digital activities in public libraries. Non-awareness of their role as mediators of digital literacy together with lack of time and insufficient technological preparedness seem to create a risk for librarians to a giving-up attitude, but if not giving-up then applying restrictive

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mediation practices. Results indicated that active, collaborative mediation practices are still in the evolving stage. Research results suggested that it is very important to support librarians via providing them opportunities to participate in professional development programs raising awareness about their role as mediators of digital literacy and increasing their readiness for that role.

Keywords: *public library, librarian, mediation, digital literacy, youth*.

Introduction

Rapid development of digital technologies has significantly transformed the world and human lives. Public libraries like other institutions have met different challenges as a result of technological transformations, but at the same time they can play a significant role in promoting digital literacy necessary for citizens living in digital society. Authorities as local governments and European Parliament focussing to the needs of individuals in emerging digital society are doing efforts to define a new role of public libraries. Libraries are expected to act as useful resources for digital literacy and the role of librarians should be changed from sharing and archiving information to promoting skills needed in current societies [Lison & Reip 2016; Zignani et al. 2020]. International Federation of Library Associations (IFLA) announced that libraries should position digital literacy as a core service, with adequate planning, budget and staff, pointing out that librarians may need training themselves to be able to teach digital literacy [IFLA 2017].

In the time when formal education systems mostly don't provide digital skills needed for youth today [Oļesika et al. 2021; Turner et al. 2017] informal learning activities outside of school and also in libraries have become a significant source of promoting digital literacy. Libraries today are trying to attract young people by developing programs aiming to facilitate informal learning, creation and socialization [Koh & Abbas 2016]. Such initiatives are necessary today when teens and tweens make more and longer use of different digital platforms than ever, meantime being highly self-confident and independent from their parents and educators in their attitudes towards their life in digital landscape [Brikse et al. 2014] as it has been pointed out also in the recent EU Kids Online survey 2019 as well [Smahel et al. 2020].

Earlier research data from the EU Kids Online study indicated that Latvia was at the top of Internet usage by children in public libraries: 46% of young respondents indicated that they connect to the Internet from libraries and other public places, while the EU average it was at only 12%. To the question of whether they had ever received advice on Internet usage from librarians, 21% answered that they had –

nevertheless a high indicator compared to the European average (6%) [Brikše & Spurava 2014]. The difference can be related to the significant investments on free-of-charge Internet access points in public libraries in Latvia. In late 2006 with the support from the Bill and Melinda Gates Foundation the supply of computers and software to public libraries, providing Wi-Fi Internet access, training of librarians started [Sawaya et al. 2011].

According to Digital Economy and Society Index (DESI) Latvia ranks in the 18th position among European Union (EU) countries and there are problems with digital skills of citizens of Latvia – only 43% of people have basic digital skills (EU average: 58%), and – 24% have advanced digital skills (EU average: 33%) [European Commission 2020]. Meantime digital skills are recognized as important and necessary to develop in several political and conceptual documents of Latvia (Plan for National Development of Latvia, 2020–2027 [Cross Sectoral Coordination Center 2020]; Cultural Policy Guidelines: 2021–2027 (Project) [Latvijas Republikas Kultūras ministrija 2021] etc.). Based on these documents it is possible to conclude that the main directions of the library work in the context of digitalization of society are the following: development of digital resources; development of new digital services; and training in digital literacy.

This article suggests discussion about readiness of librarians of public libraries in Latvia to promote digital literacy in society. Latvia is one of the richest countries with libraries in Europe, according to statistical data there is one library per 2254 inhabitants [Public Libraries 2030, 2019]; there were 770 public libraries with 4.2 million direct and 2.7 million virtual visits and with 1635 librarians working there in 2020 [Latvijas Nacionālā bibliotēka n.d.]. Discussion in this article is based on findings of case study in Latvia. Empirical data were collected using qualitative research methods, library experts and librarians from public libraries were inter-viewed for this study. The main focus is on librarians as mediators of digital literacy of young people. Young people are considered here based on their biological age as under-aged, under 18 years old, school-aged from 9 years up as in the EUKIDS Online study [Smahel et al. 2020].

Librarian as mediator of digital literacy

Two main approaches of librarian's role have been discussed: *pragmatic approach* rationally defining librarians' responsibilities and accordingly required digital skills in information society and *critical-transformative approach* based on idea about librarians' mission as agents of change promoting cooperation and participation in knowledge society. Looking *pragmatically* to librarians' roles Janes has formulated some new jobs for librarians: for example, embedded librarian, content packaging librarian, robotic maintenance engineer, lifestyle design librarian [Janes 2013].

Vassilakaki et al. have similarly listed, for example, librarian as technology specialist, information consultant and knowledge manager [Vassilakaki et al. 2014]. Whilst looking from *critical-transformative* perspective librarians are rather responsible for creating conditions for people to learn, for example, via cooperation, mutual communication or by providing access to conversations and materials to enrich conversations together with enhancing knowledge creation and building upon the motivation of members or communities.

In this case study, librarians are considered as *mediators* of digital literacy. Their approach to mediation may show out either *pragmatic* or *critical-transformative* approach in understanding media uses and information as well. Moreover, there might show out *transmission-based* approach as a top-down information transfer of digital literacy [e. g. Grossberg et al. 1998; Livingstone 1990; Sefton-Green et al. 2009].

According to Jose Martin-Barbero [Martin-Barbero 1993; 2006] mediation is a user-centred critical approach to media focusing to the subjects and movements as actors in the interaction process. Carlos Scolari translates mediation as a space for understanding the interactions between digitalized production and receivers [Scolari 2015]. For example, mediation happens when the user is reading news online through his/her critical interpretations. As a concept, mediation has been used in several fields and contexts and, it is criticized that the meaning has been taken in most cases as given instead of contextual reflection [e. g. Scolari 2015]. In this study mediation is considered as librarians interaction practices as mediators in between youth as users and digitalized media like social media and games as production.

Close to this study have been reflections on parental mediation and teachers' mediation. The concept of *parental mediation* in the context of youth media usage has been used regarding television studies, where it mainly is reflected as parents' supervision modes. Previous studies have identified different parental mediation practices as *active, restrictive, technical, instructive mediation, co-use* among others [Livingstone & Helsper 2008]. Later explanation of restrictive, co-use and active mediation have been constituted by *gatekeeping, diversionary, discursive and investigative activities* [Jiow et al. 2017].

Parents have been perceived as the most significant adult mediators in children's digital media experiences [Livingstone & Haddon 2009] as well in Latvia [Brikse et al. 2014] in which results indicated that the ability of parents to serve their children as mediators of Internet use is questionable because of their lack knowledge and interest in youth digital culture. Hence the potential role of other possible adult mediators, such as teachers and librarians, takes on added significance. There are few studies on *teachers' mediation* also in Baltic countries Estonia and Latvia [Kalmus

et al. 2012] in which teacher's capacity is rated high indicating teachers as *"the most powerful mediators of digital technology"* at school [Karaseva et al. 2015].

Even parental and teachers' media practices have been studied, there remains room for conceptualization of librarians as mediators of digital literacy for young people. Regarding youth guidance and supervision, recent librarian-oriented studies focus on defining new roles of librarians as educators, supporters, co-creators and coordinators of youngsters in libraries' technology-enabled environments connected informal learning – as mediators-like [Koh and Abbas 2016; Clegg et al. 2018], suggesting that these informal venues of learning can be important spaces where digital literacy is employed and cultivated [Meyers et al. 2013]. However, question remains how well-prepared librarians are to provide digital support to citizens [Ojaranta and Litmanen-Peitsala 2019] and more specifically to young people.

Frameworks of digital literacy

Academic discussion on digital literacy dates back to the 1980s [Pangrazio 2014] and, some authors place the start to the 1990s as Gilster who approaches it as *transmission of information*: the ability to understand and use the information retrieved from various digital sources and resources [Gilster 1997]. Transmission model has been criticized, for example, as being a top-down model focusing on information processing and effects of the contents online to the user. Julian Sefton-Green, Ola Erstad and Helen Nixon have criticized the transmission model focusing the teaching of computer-related technical skills and having the unintended marginalizing mechanism in the concept of digital literacy echoing the illiterate person as well: these skills are not available for all. In this respect, public libraries belong to those institutions which can overcome this kind of digital inequalities [Sefton-Green et al. 2009]. Moreover, Colin Lankshear and Michelle Knobel [2015] have criticized the traditional frameworks of digital literacy too much focusing on the transmission model as truth-centric stance concerning of truth as users being "manipulated *or duped*" and focusing to alphabetic, print literacy as an autonomous entity [Lankshear & Knobel 2015]. Especially the latter one belongs to the core basis of libraries.

Approaches to the digital literacy range from focussing on skilful use of digital tools and services and the ability to use information and digital technologies to more *pragmatic frameworks,* where digital literacy means more than mastering the technical aspects of digital tools available. For example, Buckingham [Buckingham 2019] sees the concept of digital literacy as quite narrow, mostly with the focus on the use of technologies and he suggests concept of media literacy as much broader, but Meyers et al. suggest digital literacy comprising three elements: technology skills, critical thinking capacities and contextually situated practices, where digitally

literate person is creative agent who operates within socio-technical network that affords opportunities for extension, sharing and learning [Meyers et al. 2013]. Additionally, digital literacy for some authors means the involvement of managing the social situations and structuring users' social identities in digital cultures [e. g. Jones & Hafner 2012].

Renee Hobbs sees digital literacy in the historical line of the elite's literacy movements associated with modernity and technological progress [Hobbs 2016]. Together with Colin Lankshear & Michelle Knobel [Lanshear & Knobel 2015] she is calling for contextual and situational examination of digital literacy through *sociocultural framework of literacy* following the ideas of Vygotsky [Vygotsky 1978]. Lankshear & Knobel [Lanshear & Knobel 2015] suggest for understanding digital literacies as multiple literacies following the concept of multiliteracies by Cazden et al. [Cazden et al. 1996] as the *transformative, critical framework.* Suggesting as an overcoming of critical and pragmatic frameworks Luci Pangrazio [Pangrazio 2014] is formulating *critical digital design literacy.* That counts, for example, transcendental critique through distancing oneself from digital networks and, then realising positive changes and data visualization to de-contextualise digital texts, tools and practices through self-creation as critical design, which mostly is in the core of multiliteracy as well [Cazden et al. 1996].

Apparently digital literacy can mean different things to different people in different contexts as it is suggested also by Hobbs & Coiro [Hobbs & Coiro 2018]. That is a reason why it is important to understand what digital literacy means in a particular context like library. Terminology matters because it is related with professional identities of educators and necessary for representatives of academic environment, learning developers and learning technologists for development of shared understanding of their aims [Secker 2018]. Thus, how is the readiness of librarians in public libraries to act as mediators of digital literacy for young people? Which frameworks of digital literacy they apply as the base for their understanding?

Methods

Data collection (2015–2017) for this case study was based on qualitative research methods including three focus group discussions with *library experts* (all total 24) and twelve in-depth interviews with *librarians*. Experts were represented by managers of different departments of National Library of Latvia and managers of regional public libraries representing different regions of Latvia. Focus group discussions took place in Riga in the premises of the Latvian National Library. Additionally, semi-structured interviews with librarians from public libraries in Latvia were conducted. The selection of respondents locally was based on convenience sampling and voluntary cooperation.

Interviews with librarians were conducted as face-to-face communication at the libraries where interviewed librarians were working at the time of the interview. Interviews were done and focus group discussions were moderated in the Latvian language by the corresponding author of this paper being a native Latvian. All interviews and discussions were recorded, and they were transcribed before analysing the text. In reporting the findings, librarian respondents are referred as *Interviewees* and, senior library experts as *Experts*. Translation from Latvian into English has been done by the corresponding author.

To analyse the data, framework of thematic analysis suggested by Braun & Clarke [Braun & Clarke 2006] was applied. According to them thematic analysis is the method for identifying, analysing, interpreting, and reporting themes or patterns arising within qualitative research data. Researchers started to be familiar with these study data already in the process of conducting interviews and moderating focus group discussions. As suggested [Braun & Clarke 2006; Castleberry & Nolen 2018] transcriptions were done by researchers to be even more familiar with the data, after reading and rereading was done through all the data set in full [Castleberry & Nolen 2018]. The next phase was coding, looking for similarities and differences in data identifying themes, concepts or ideas that have some relations with each other [Austin & Sutton 2014]. After all data were coded, sorting of different codes into potential themes was done [Braun & Clarke 2006]. The following major themes in data sets were identified: (a) librarians' mediation practices of young people's Internet use in libraries; (b) librarians' awareness of their role in promoting digital literacy; (c) librarians' technological preparedness.

Findings

Responses given by librarians regarding their mediation practices of young people's Internet use in libraries varied from *given-up or non-aware* attitudes to either *transmission-based and/or pragmatic* approaches of librarians. Mostly these differences were related to (a) understanding or non-understanding of a librarian's own role as mediator, (b) librarians having or lacking digital capability and skills of using the technologies, and (c) the time resources of all librarians.

1. Lacking time with given-up attitude

Library experts describe librarians' given-up attitudes in several ways linked with lacking time as in this example: "*When it comes to playing computer games situation is a very painful topic. There are many librarians who do not see it as a problem. And they are very busy. They have learnt to put up with the situation – so what! Yes, they are playing computer games – what can we do about it?*" (Expert 7). Similarly, some of the librarians admit that they do not pay much attention to what children do on

the Internet in libraries and often their activities are not monitored at all, because of lacking time even if they had interest to monitor: *"I do not sit down with them and do not watch what they do here. Sometimes I have seen some young people come here and have fun together... then I monitor something, but not always, I don't have time always"* (Interviewee 8).

In focus group discussions with library experts, it was indicated that safe Internet use is mostly left in the hands of young people alone because of missing technological filters and other tech aid for monitoring: *"Safety is something visitors need to deal with alone. There are no technological possibilities and filters used to monitor and restrict anything. Recently there was a big scandal in the library because some children had watched porn, but the librarian's response was – well, there are rules, and according to the rules it is not allowed. It is all up to children"* (Expert 13).

In these examples above the respondents apply *transmission framework* as the base of their understanding since there is seen a wish to restrict or technically monitor [e. g. Sefton-Green et al. 2009; Livingstone & Helsper 2008]. Moreover, restriction is hidden to the referring of the rules in the library for the Internet use, as in this example: *"Every library has its own rules of Internet use, which are very important, and this is the place where the main conditions are specified, and a librarian tries to control them."* But in some cases, the usefulness of these rules is put under question: *"The rules are displayed on the wall. But how many of them have actually read it – I don't know!"*

2. Awareness of own role as mediator

Findings show that librarians are often confused, non-aware of their role and responsibilities to influence processes related to youngsters' online activities in libraries, as has been the case with parental mediation as well [e. g. Livingstone & Helsper 2008]. For example, they express confusion with the lack of understanding of their own role together with rights to influence on youth gaming: *"I don't know if I have the right to my opinion, but I think that they don't need to play online games all day long. It can turn anyone into a fool. Some of them are completely addicted to it. I have no idea what can be done there"* (Interviewee 3). Librarians also admitted their poor understanding about online gaming: *"Those shooting games they play there; they can always find them. I do not understand it. They are much smarter than me in terms of computer games"* (Interviewee 5). These examples show librarians' understanding of youth gaming based on the transmission framework, since they are worried about the effects [e. g. Sefton-Green et al. 2009] and their wish to apply restricting as mediation [Jiow et al. 2017].

One librarian respondent reflects her role as mediator with *critical aspect on the autonomy of librarian* when providing anonymity-based public services balancing with personalized supervision online, as in this example: *"It is a complicated matter*

when it comes to the use of social networking sites in libraries and to what extent a librarian can get involved in it... The idea is that the public library services should be anonymous. In theory a librarian cannot really control the use of social networking sites. On the other hand, users are only children and young people, who require supervision. Where is that balance?" (Interviewee 3).

There is prevailing opinion in the interviews with librarians and expert focus group discussions that the librarian should be capable of teaching a child that the Internet can be used for other things but entertainment or communication in social networking sites: *"In terms of information literacy, the most important task of the librarian is to encourage a child to study. A librarian should be able to understand the child's interests and to show how to search for what is interesting to him and also needed for his studies"* (Expert 5). Results show that librarians do not really know their role in supervising it: *"I would like to say that the situation is very poor when it comes to researching and learning something on the Internet. They are simply not interested. And I cannot really restrict them, what should I tell them – that they should not play computer games and do something else?"* (Interviewee 4). Similar observations prevail in the statements of majority librarians as respondents of this study transmission based, still hesitating some other possible solutions to interact with young people as this latter interviewee states. Mixed transmission and pragmatic orientations showed up [e. g. Jones & Hafner 2012; Meyers et al. 2013]. Both librarians and experts arrived at the same conclusion that the most important task of librarians would be to teach youngsters how to work with information: *"To search for information on particular topics correctly, to master various guides, to look for the shortest way. Information evaluation. It can be the basic task. For slightly more advanced teenagers – practical skills in audio processing, video processing. Different creative expressions"* (Interviewee 8).

The librarians pointed out that in order to provide professional support to children and young people in the field of digital literacy they need to understand what their role is and what kind of knowledge and skills are necessary to fulfil their duties: *"If I know what I need to know, I will learn it. But I have to tell that there are children who are smarter than me. They grasp everything faster"* (Interviewee 8).

3. Technological preparedness

Nearly all librarians and experts admitted that children have much better capabilities to use new digital technologies than they have: *"Nowadays children understand what to do with a computer. You may laugh but nowadays those wearing nappies, have a better understanding of computers than I do"* (Interviewee 5). However, librarians do not self-assess their digital skills and capabilities equally, librarians working in cities evaluate themselves higher, whereas the librarians of country regions with some exceptions are more critical. It is also acknowledged in the expert

discussion: *"The level is much higher in the city libraries of regional centres. You will not always come across a parish librarian with the highest level of skill"* (Expert 3).

The role of training and teaching courses providing the pure technological knowledge and skills for librarians was emphasized both in librarian interviews and expert discussions as *transmission-based understanding* [e. g. Sefton-Geen et al. 2009]. Library experts described how the management of libraries plays a significant role in the provision of librarian training. Currently, there is lack of public resources and non-awareness in applying for funding. This situation leaves librarians on their own for educating themselves: *"Public libraries had very many courses, everybody went to some training. Now, it is up to a librarian to think of it or it depends on the library's management. In the places where the library's management is not so advanced and able to attract funding, librarians are left alone with their problem"* (Expert 11).

It was described as a challenge requiring time and effort from librarians to follow up with any changes in the development of technologies: *"It is a common situation that at the beginning it is difficult for a librarian to accept the novelties. You feel yourself comfortable with what you have learnt, and whenever there is something new that needs to be mastered and you need to make yourself do it, it is extra time and efforts that are needed"* (Expert 4). Posing that problem together with significant changes in the use of technologies, experts brought the necessity for more *transformative approaches* to the work of librarians with young people: to work with children through collaborative means rather than only monitor and supervise based on transmission-oriented top-down ways: *"The emphasis and roles of the Internet use and especially the use of technologies has changed, as often as not it is the children who train the older generation"* (Expert 5).

Discussion

This case study indicates that librarians are not well prepared and do not have a clear understanding of their role, rights and responsibilities in supervising of young people's digital activities. This is the main contextual hindering aspect for mediation practices in digital literacy for young people among respondents. Because of the lacking understanding together with the lack of time and low level of technological competence, librarians in this case study often avoid taking any mediation activities at all.

Non-awareness of their role as mediator together with lack of time from other daily-based duties seem to lead to a **giving-up attitude**. It means that they let young people to act, play and communicate online on their own in the library. This is the main finding of this study.

If not given up, they mostly apply **restrictive mediation practices** through *transmission framework-based understanding,* which is in the line with studies on

parental mediation [e. g. Livingstone & Helsper 2008; Jiow et al. 2017]. Findings in this case study suggest a wish to technically monitor youth activities: librarians were missing, for example, technological filters. Moreover, librarians and experts were worried about the effects of media, especially gaming and if there was too much usage of entertainment online instead of studying online.

Even though transmission framework shows up as mainstream in this study, many of the respondents were hesitating some other possible solutions to interact with young people. *Mixed transmission and pragmatic orientations* showed up as well, which follows previous library studies [e. g. Jones & Hafner 2012; Vassilakaki & Moniarou-Papaconstantinou 2015]. Both librarians and experts arrived at the same conclusion that the most important task of librarians would be to teach youngsters how to work with information as youth-based creations by digital means. Especially, expert respondents brought the necessity for more transformative, critical approaches to the work of librarians with young people: to work with children through collaborative means rather than only monitor and supervise based on transmission-oriented top-down ways. Based on the case study, this kind of **active, collaborative mediation practices** are in the evolving stage.

According to librarians themselves in order to provide professional support to children and young people in the field of digital literacy, many of them were keen to understand, clarify their role: what kind of knowledge and skills are necessary to fulfil their duties. Moreover, **reflection with critical aspect on the autonomy** of librarian was visible in the study, asking the balance between supervision of youth groups and anonymity-based public services in the library. Even librarian respondents would be interested in educating themselves, this study shows the lack of public resources and management of libraries which leave education to librarians themselves, even pure technological one. How then to overcome a solution for educating librarians?

Conclusions

Despite the limitations of this study as a qualitative culture-sensitive Latvian case study not reaching any generalizations [Bennett & Elman 2008], some suggestions can be made based on it. Data collection of this study is from 2015–2017, so it can be considered a bit old in a changing digital society. Still, for example, Heinonen has pointed out the need for finding ways to update and stabilize the ways of updating librarians' interest and skills in digital media literacy in Finland, even though the country has had cultural policy guidelines for media literacy since 2013, updated 2019 [Ministry of Education and Culture 2019].

As practical conclusion, first youth involvement will be highlighted as one solution. Younger people have potential to become not only the beneficiaries of digital literacy, but also the drivers of this field as being the ones who gain the

knowledge and educate others like librarians. It can be suggested that young people can become agents of change in libraries who can fill the knowledge gaps regarding different aspects of digital literacy. It is essential to change the mindset and redefine librarians' roles focussing on their potential support in creating libraries as connected, interest-driven and peer-supported environments for young people allowing them dictate directions by themselves [Clegg & Subramaniam 2018].

This is in line with the second conclusion, the social value of public libraries as cooperation, with their capacity to bring together different stakeholders – including government, community organizations as schools, retirement homes to create effective partner networks with these institutions [Field & Tran 2018]. For example, Virve Miettinen [Miettinen 2018] suggests co-designing with the users of library, a method which highlights new possibilities to develop libraries as places of community's collective life. Libraries have a good potential to become also community hubs for digital and media literacy education, where patrons of libraries are active and interested in learning. Libraries encourage community engagement via providing different innovative teaching-learning programs and services [Hobbs et al. 2019]. Moreover, data suggested that it is important to support librarians by providing opportunities for them to participate in professional development programs in digital literacy, designed based on knowledge about librarians' needs and understanding of their motivation to learn as similarly it is suggested by Hobbs & Coiro [Hobbs & Coiro 2018]. This conclusion is also supported by recent quantitative research aiming to map librarians` professional development needs in Europe [Zignani et al. 2020]. According to results of this research majority of librarians in public libraries in Latvia agree that it is highly important for them to regularly improve digital skills related to information, data, and media literacy [Zignani et al. 2020].

Third solution is collaborative research initiatives with academy and library. The opportunity to serve the research needs of libraries cover digital literacies as well as plural, both from the perspective of professional experts as librarians, perspective of children and youths and, perspective of library as an institution and a community hub. Large-scale statistical evidence-based studies can be suggested including comparative settings which are needed, for example, in the Nordic region with close of each other having networks of public libraries. But it is important to develop innovative research approaches, appropriate for a fast-changing world to serve society, but also at general approach to educational policy and, professional development. The participatory research methods-based approach can be the way forward to work together with librarians and young people to create a future-oriented environment in public libraries, suitable for informal learning activities and promoting digitally sustainable life.

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