

# Youth Partnership

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Partnership between the European Commission  
and the Council of Europe in the field of Youth



## Analysis of the Digital Transformation of Society and its Impact on Young People's Lives

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## Executive Summary

This paper aims to offer some analytical and strategic implications regarding the digital transformation of society and its impact on young people's lives. The purpose of this paper is to explore the intersection between young people's lives and the digital transformation of society, incorporating the purpose of enhancing social inclusion. In order to do so, 16 different policies, mainly from the Council of Europe and the European Union were selected and analysed. From the analysis, conducted in a way that the underlying or explicitly interpreted problems in specific policies are made visible, four main themes were derived. The themes focus on understanding the digitalisation through perspectives on technology, explaining the understanding of isolated or integrated attitudes, and bringing forward the broad palette of instruments that are offered through national policies to support readiness for the ongoing digitalisation. Moreover, the example of digital youth work is used to understand transformation of organisations. The themes generated two main implications, also considered as outcomes or syntheses.

The first implication is understood from leadership and governance perspectives. It implies that the understandings of, and support to, the relation between various levels of decision making and participation, described as chains of command, can be one starting point in supporting digital transformation. More specifically, it can be a mapping of and a more profound understanding of chains of command in national, regional and local contexts. This can be helpful in order to know to whom the 'right type of questions' should be addressed, or possibly to discover 'bottle-necks' that hamper or block digital transformation. To analyse chains of command may also reveal how different levels of decision-making cooperate and the dialogues between them. This may be useful for instance in order to form or align to various national or international strategies or to understand if and how young people can access services or decision-making processes. All with the ambition to develop *transformation readiness*, resulting in a situation where young people can access the 'right information at the right time' and being able to choose when to use technologies or not.

The second implication focus on *context-based negotiations of the use of information and communication technologies (ICTs)*. More specifically, and to highlight the importance to contextualise ambitions for digital transformation, it means that a deeper understanding of e.g. 'small decisions' in everyday work that 'really matters' need more attention. The assumption is based on the fact that the use of ICTs in e.g. various organisations today is a result of step-by-step developments throughout history, due to factors like different needs, knowledge, political, economic and technological structures, trends etc. This can for example raise questions that, if social inclusion is the purpose, engage in discussing how ICTs are used in relation to specific purposes and in what sense they may support the view of social inclusion. Hence, can the use of ICTs alter viewpoints of social inclusion, or can viewpoints of social inclusion alter viewpoints on how ICTs should be used?

The final conclusion of the paper suggests an integrated attitude between the governance and leadership perspective of transformation readiness and the perspective of context-based negotiations that may result in the 'small decisions' of everyday work, including the situation where individuals can choose when to use technologies or not, and the purposes of which they are used for. The result of the integration between perspectives can be seen as a constructive meaning or even an alignment between e.g. users and decision makers; policy and practice; or international and local viewpoints, in this paper with the purpose of enhancing social inclusion.



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## Introduction

This analytical paper is a contribution to the 2018 Symposium organised by the partnership between the European Commission and the Council of Europe (CoE) in the field of youth *Connecting the dots: Young People, Social Inclusion and Digitalisation*. In relation to the topics of the symposium, this paper offers interpretations and implications based on policy, reflected through research. Rather than offering solutions the paper serves as a contribution to dialogues regarding digitalisation and youth. The guiding question of this paper is formulated as: How can implications of digital transformation of society be related to young people's lives in order to incorporate understandings of social inclusion? The more specific purpose of this paper is to explore the intersection between young people's lives and the digital transformation of society, incorporating the purpose of enhancing social inclusion. Hence, this paper will focus on policies within youth work that focus on digitalisation and young people's lives and less on the issue of social inclusion. The conclusions and implications will mainly be directed towards the youth sector, including youth work, youth policy and youth research, touching down on arguments that may be related to the social inclusion of young people by means of digital transformation.

The concept of digital transformation (of society) will be used to better describe processes of digitalisation of society at large. This is explored in the main analytical part of the paper. Simplified, digital transformation of society refers to a process where humans are re-shaping the way society 'works' by ways of interpreting and understanding society, including the usage of digital technologies in everyday life. Young people or Youth are in this paper defined to the age-group 13-30 years old, based on Perovic (2016). The concept of youth work throughout the paper is understood as actions that can take place in many different forms and settings such as through youth centres or specific youth projects. The content and framing of what is considered as youth work depends on e.g. how the term is used in various countries or local contexts. In general, the actions are "directed towards young people regarding activities where they take part voluntarily, designed for supporting their personal and social development" (EC 2018: 38).

The policies identified here are largely representing EU and CoE, in addition to other bodies such as the OECD (The Organisation for Economic Co-operation and Development) and UNESCO (The United Nations Educational, Scientific and Cultural Organisation). The nature of the policies is that they are published at an international level by intergovernmental organisations. The particular policies in this paper are selected because of their relation to the digital transformation of society and the influence it may have on young people's lives (see table 1 below). In general, the policies below can also be considered as policies that encourage digitalisation and the use of digital technologies in

order to access and enhance e.g. community services with a purpose to support democratic ideas, values and processes.

Table. 1. Policies that are incorporated in the analysis of this paper.

Council of Europe.	Your digital rights in brief - Guide to Human Rights for Internet Users.	2014
Council of Europe.	Guide to Human Rights for Internet Users.	2014
Council of Europe.	Internet Governance – Council of Europe Strategy 2016-2019.	2016
Council of Europe.	Young people’s access to rights. Recommendation CM/Rec (2016)7 and explanatory memorandum.	2016
Council of Europe.	Internet literacy handbook.	2017
Council of Europe.	Digital Citizenship Education - Overview and new perspectives.	2017
European Commission	Opening up education: Innovative teaching and learning for all through new technologies and open educational resources.	2013
European Commission	Shaping the Digital Single Market.	2017
European Commission	Developing digital youth work: Policy recommendations, training needs and good practice examples.	2018
European Union	Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning.	2006
European Union	Are schools making the most of digital technologies?	2017
European Union	Digital Education Action Plan.	2017
European Union	The European Digital Competence Framework for Citizens.	2017
European Union	Youthgoals: Structured dialogue.	2018
OECD	Going Digital: Making the transformation work for growth and well-being.	2017
United Nations	Resolution on <i>the promotion, protection and enjoyment of human rights on the Internet</i> . Resolution A/HRC/32/L.20.	2016

## Reflexivity and approaches

The paper presents several concepts and conceptions that in a way can be understood as being dualities, distinct negotiated parties, that are isolated in meaning, like ‘separate dots’. Some examples are: Youth work vs. Digital Youth work; Digitalisation vs. Young people’s lives; online reality vs offline reality. Moreover, the discourse within policies or research related to the field of youth and the field of digitalisation is sometimes presented with metaphors like gaps, distances or bridging (cf. EU 2018; OECD 2017). To highlight, discuss and try to understand dualities, a kind of dualistic approach, can sometimes be challenging even provocative. However, in this paper the dualistic approach is seen as a helpful starting point in order to present and discuss the ‘grey areas in between’ and maybe even

merge and integrate various conceptions to new understandings. The dualistic approach is further developed in the below section where isolated and integrated attitudes are explained.

In order to collect, analyse and discuss various policies within youth work that focus on digitalisation and young people's lives I have been inspired by the 'WPR' approach. 'WPR' is developed by Carol Bacchi and the abbreviation stands for 'What's the Problem Represented to be?' The specific approach is a tool or resource to support critical interrogation of public policies (Bacchi 2012; Bacchi and Goodwin 2016). It consists of six steps that partly or as a whole have been applied in a process to make sense of a policy:

1. "What's the 'problem' (for example, of [...] 'global warming', sexual harassment) represented to be in a specific policy or policy proposal? [In this paper e.g. information access or problem to interact with society (authors comment)]
2. What presuppositions or assumptions underpin this representation of the 'problem'?
3. How has this representation of the 'problem' come about?
4. What is left unproblematic in this problem representation? Where are the silences? Can the 'problem' be thought about differently?
5. What effects are produced by this representation of the 'problem'?
6. How/where has this representation of the 'problem' been produced, disseminated and defended? How has it been (or could it be) questioned, disrupted and replaced?" (21)

The 'WPR' approach has served as a helpful strategy to make problems in policy visible (Bacchi 2012; Bacchi and Goodwin 2016) and in formulating core themes and the outline of the paper. In the final part of this paper, the problems that are presented throughout will be summarized and synthesized into two analytical and strategic implications. To the reader of this paper, it can be useful to have the questions of the 'WPR' approach in mind when reflecting on the content of next part of the text. The reader's own perspective on what this paper offers or fail to acknowledge, is related to, for example the national or local context or the reader's own interest in digital transformation and young people's lives. Hence it is important throughout the process to understand and consider the implications of this paper and how it can be useful.

### The outline of this paper

The introduction including purpose, definitions and the presentation of reflexivity and approaches, is followed by the main part of the paper. The main part contains four subsections, or themes, based on the problems depicted to be present in current policy and research, motivated in each section. The themes reflect the authors choices on how to take on the challenge to analyse the digital transformation of society and its impact on young people's lives. The chosen themes are considered as possible

arguments or suggestions of research fields that can open up for dialogues and deeper understandings of the intersection between young people's lives and the digital transformation of society, incorporating the purpose of enhancing social inclusion. The themes can also be understood as thesis that make synthesis of the paper possible, resulting in analytical and strategic implications. The themes have the following titles:

- Understanding the digitalisation through perspectives on technology.
- Integrated or isolated attitudes
- A broad palette of instruments to support readiness for the ongoing digital transformation.
- Transformation of organisations that support the younger generations – Digital youth work?

The final part of the paper contains the synthesis of the four themes in the main part, and ends the paper with conclusions and implications for youth work and youth policy, including some possible future research themes. The analytical and strategic implications for young people's lives and youth work are related to two outcomes of this analytical paper called:

- Transformation readiness,
- Context-based negotiations of the use of ICTs

## Understanding digitalisation through perspectives on technology and the role of information

To understand the role of technological developments, the digitalisation and the role of information in society today, this paper has chosen a starting point in the mid-20<sup>th</sup> century, more specifically with the launch of Sputnik 1957. This starting point and the following historical developments presented below are some examples that can be understood as the developments from industrial society towards a post-industrial society and later on towards the emergence of an information economy where information becomes a commodity and the access to information will be a key for individual and social well-being (Bell 1973; Lyon 1987a; 1987b, Floridi 2014a; 2014b). A historical approach is helpful in order to better understand the digitalisation of society and how technological developments may have an impact on various situations today. Looking back to learn from history is also a way to develop understandings of formulations in current policies in order to see which e.g. 'societal problems' that are represented. Economic crisis is for example understood as one 'problem' that works as a driver for change of societies alongside with technological advances. This will be highlighted below through the example of education before shifting focus towards the question of what digitalisation really is, leading towards perspectives of the role of information.

## Historical aspects of technological developments and the example of education



The launch of the Russian Sputnik in 1957 is often described as a starting point for the increased funding of technological developments that took place in the 1960's. One can say that Sputnik started a technological hype or even a competition between countries on how to be 'the best' at technological developments. The hype concerned explicitly the former Soviet Union and the United States of America (that invested increasing sums of money in technology) but it grew to become a global phenomenon. Parallel to the technological spending there was a debate about how technology could or should be a driver in changing education and society as a whole (Molnar 1971; Säljö 2010; Haugsbakk 2013). The beliefs in technology as playing a key role in the change, alongside the financial crisis, put pressure on e.g. school systems. Schools were understood as adapting to slowly to socio-economic changes and that the formal education system failed to keep pace with the developments and needs stated by the wider society – called the World Educational Crisis presented by UNESCO (Coombs 1968; Fordham 1993). As a result, the World Bank stressed the need to reach out to (young) people outside of traditional or formal systems by e.g. providing education in other forms than existing formal education systems. Enhanced by discussions in UNESCO and the publication *Learning to be: The world of education today and tomorrow* (Faure 1972), where the concept of Lifelong learning was born, the first and commonly used understandings of formal, non-formal and informal education were defined (Coombs et al. 1973).

The 2000's and 2010's showed that the history can be understood as having a cyclic pattern. The relation between technological developments, economic crisis, education and reaching out to young people seemed to repeat its patterns from the 1960's. The collapse of two Bear Stern hedge funds in the summer of 2007 resulted in a world-wide economic crisis. This economic crisis evolved alongside with years of significant technological advances of ICTs and technologies that benefitted from a faster transportation of digital data. The internet became useful and used by growing numbers of people throughout the world, increasing the number of users between 2007 and 2016 with a bit over 2 billion users to an estimated total sum of almost 4 billion users today (Internet Live Stats 2018-05-29). Even though the digitalisation of society has been an ongoing process from the day the modem was invented, the extent of it and the economic crisis can be seen as factors that once again 'forced' policy into formulations similar to the policies in the 1960's and 1970's. Education was seen as failing to keep pace with the digital society and economy (EC 2013) and questions were raised as to whether the schools make the most of digital technologies or not (e.g. EU 2017a).

The use of technologies is cultivated differently in different contexts. This is due to e.g. different needs, knowledge, economy, trends etc. Today, the internet-enabled ICTs have developed to smartphones, tablets, GPS devices, VR-glasses or various forms of wearable technologies such as glasses or watches. The ICTs have developed into being understood as interactive, transformative and like environmental forces (Jahnke 2016; Floridi 2014b). In addition, Säljö brings forward an

understanding that “knowledge is expressed in our abilities to merge and collaborate with external tools and to integrate them into the flow of our doings, whether these are intellectual, physical or mixed” (2010: 62).

## Digitalisation

When a router translates the analogue data from a computer into digital data in order to transmit it to another router that can receive and translate the digital data back to analogue data for another computer to read, then we experience the most basic form of digitalisation. This is basic knowledge in order to understand that digitalisation in a way is related to the sending and receiving of information, digitalised information.

The information can be transmitted from one agent to another with more or less effort, understood as a variety in informational friction (Floridi 2014a). The old and ‘slow’ dial-up internet from the 1990’s was connected to a telephone line and transmitted with a speed of 56 kilobyte per second (Kbps). Today, the telephone nets have often been replaced with more modern routers and broadband with other preconditions. A transmitting speed of 10 - 30 megabyte per second (Mbps) is more or less ‘normal’. In Europe 2017 the average Internet speed per country in Europe differed between 5,8 Mbps (Albania) and 19,1 Mbps (Sweden) (Fast metrics, online information retrieved 2018-05-03).

The informational friction in the examples above differs between countries simply because of variations in access to the internet. On top of that, differences in socio-economic status between individuals mean that some have a new smartphone, and in addition probably also several various forms of computers, while others do not. Hence, the informational friction differs not only between countries but also between individuals due to varying possibilities or preconditions for sending and receiving digitalised information.

## Digitalisation calls for digital transformation of society

The United Nations Resolution on *the promotion, protection and enjoyment of human rights on the Internet* “[...] affirms that the same rights that people have offline must also be protected online, in particular freedom of expression, which is applicable regardless of frontiers and through any media of one’s choice, in accordance with articles 19 of the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights” (UN 2016: 3). The Council of Europe (CoE) states that access to internet “[...] enables you to exercise your human rights. As a general principle, you should not be disconnected from the Internet against your will, except when it is decided by a court” (CoE 2014a: 2). The Digital Single Market is a strategy of the European Commission to “[...]”

ensure access to online activities for individuals and businesses under conditions of fair competition, consumer and data protection, removing geo-blocking and copyright issues” (EC 2015).

The policies, identified in this paper, regarding digitalisation and the digital transformation of society agree on the problem that it is not an equal situation when not all humans have equal access to online activities, and the access to the internet has become a human right. Today the conditions within and between EU member states or within and between member countries of CoE have various opportunities when it comes to internet access. A variety of sources report that there are examples throughout Europe where countries in 2016 and 2017 could have an internet access, based on the population, that differed between 50% to more than 90% in some countries (We are Social 2017; Eurostat/European Union (A)). Young people tend to have more access to internet than the overall populations, in general more than 90% can access internet within three months periods of time, but still there are numbers reporting inequality between countries and regions within Europe (see Eurostat/European Union, (B)).

Obviously, the (lack of) internet connection affects the digitalisation of societies and young people’s access not only to information such as newspapers, brochures or books but also to platforms that enable people to gather societal information, participate in collective democratic or job-searching activities or get the right support or access to financial support that they are entitled to because bureaucratic forms have been made machine readable and digitalised. In summary, because of the digital transformation of societies, humans are going through processes of re-shaping the way society ‘works’, including patterns for information and communication (cf. Floridi 2014a), is affected, reproducing old or shaping new socioeconomic or techno-structural inequalities within and between countries.

#### Established frameworks and understandings are challenged

As mentioned earlier, the digital transformation today is a result of constantly ongoing, step-by-step developments that from a historical perspective can be seen as results of socioeconomic and technological developments. (cf. Selwyn 2011). New concepts of how to explain or understand the developments are constantly emerging but what is clear is that information itself plays a crucial role in our lives, and this influence us to such extent that one can say that the majority of all Europeans now live in an information society, in a hyperhistorical context (cf. Lyon 1987; Webster 2014; Floridi 2014). In the following section some concepts that explain and argues for the importance of understanding the role of information will be presented. The concepts are related to being an individual in an era which underlines our dependence on information and communication technologies (ICTs). However, what is important in this paper is that those concepts are examples that are

introduced as means to explore the intersection between young people's lives and the digital transformation of society, incorporating the purpose of enhancing social inclusion, starting with an EU initiative that resulted in e.g. The Onlife Manifesto:

“The deployment of ICTs and their uptake by society affect radically the human condition, insofar as it modifies our relationships to ourselves, to others, and to the world. This digital transition shakes established reference frameworks, which impact the public space, politics itself, and societal expectations toward policy making. The Onlife Initiative intends to explore these impacts within the policy context of the Digital Agenda for Europe. (Floridi 2014b: 41)”

The Onlife manifesto is a result of The Onlife Initiative: concept reengineering for rethinking societal concerns in the digital transition (Floridi: 2014b). The initiative offers concepts like infosphere, Onlife and Hyperhistory. These concepts are examples that support motives and new constructions of meaning related to the digital transformation and the role of information. To find motives and to develop understandings of the digital transformation seem to be an urgent need and problem in policy to get as many citizens as possible to be involved in the digital transformation of society.

Inspired by the concept of a biosphere, Floridi started to develop the concept of the Infosphere (Floridi 1999; 2007). The Infosphere is presented as all information around us coming together in one ‘information sphere’. The Infosphere includes all information systems in the world, similar to the notion of the biosphere that includes all ecosystems. The Infosphere makes the online and offline merge into Onlife. Minimally, an Infosphere includes all digital online and analogue offline spaces of information. Maximally, the Infosphere is “synonymous with reality” if we view reality from an informational perspective (Floridi 2014a: 41). The number of possible connections (with low information friction) within the Infosphere and all its information systems is enabled by (internet connected) ICTs. Onlife refers “to the new experience of a hyperconnected reality within which it is no longer sensible to ask whether one may be online or offline (Floridi 2014b: 1). Hyperhistory is a concept that refers to a societal development (fig. 2) where societies are dependent on ICTs for individual and social well-being.

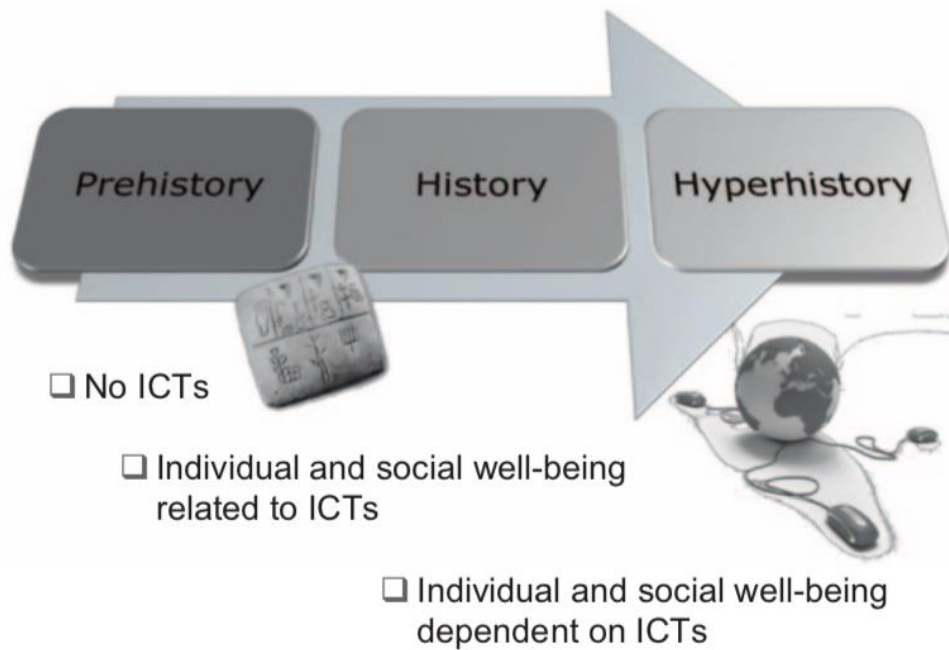


Fig. 2. From Prehistory to Hyperhistory (Floridi 2014: 52)

Following the Onlife initiative and other policies presented in Table.1, the problem represented to be can be explained as a continuum of the possibilities to being involved in digital transformation (fig. 3). The question to raise, and a problem that seems to be of importance, is if young people can move between either of the opposing positions of the continuum and what implications it might have on their lives?

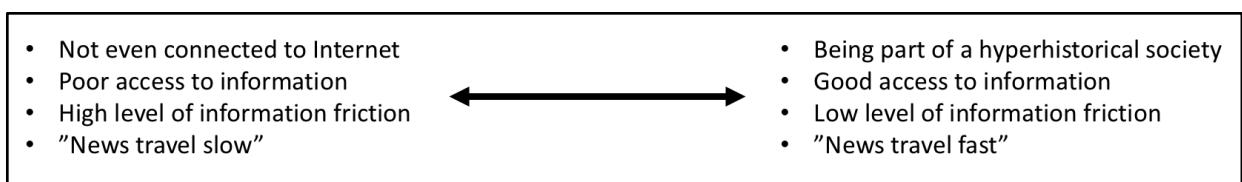


Fig. 3. Continuum of the possibilities to being involved in digital transformation

The continuum and concepts like onlife (Floridi 2014a) can also be related to the next section that will consider in-betweenness of dualities or opposing parties in order to think differently about them and maybe even formulate new understandings, especially in relation to digital transformation and young people's lives, also incorporating viewpoint on inclusion, social or not.

### Integrated or isolated attitudes

From a pedagogical perspective, an attitude includes three aspects: cognitive, emotional and intentional (Aspelin and Persson 2011). This can explain an individual's attitude towards the topics of

inclusion or digitalisation, as an individual who thinks, feels and intends to act in a certain way towards subjects or concepts related to given topics. Integrated attitudes, in a simplified version, can be explained as to being willing to integrate or to talk about concepts or subjects in such way that they are seen possible to integrate, based on the individual's thoughts, feelings and intentions. On the other hand, talking about concepts as dualities, isolated from each other in understanding and not seeing possible combinations can be understood as an isolated attitude.

A first step in order to understand attitudes as being integrated or isolated, can be to problematise in-betweenness. In-betweenness can be understood as being between humans in various situations as e.g. what happens in-between the teacher and a student in education or between young people and youth workers. In this sense the in-between is about forming new understandings through for example the co-existence and collaborative knowledge-building. This view follows for example Buber's theories of how to e.g. "overcome dualities between individuals and society" (Aspelin 2010: 131) or Bhabha who bring forward the view that construction of meaning is a result between two negotiated and distinct parties. These viewpoints were further developed in educational contexts by Aspelin through the relational construction of pedagogical attitude (Bhabha 1994; Aspelin 2010; 2014). In this analytical paper, the viewpoints on attitudes and below presented viewpoints of in-betweenness and isolated and integrated attitudes are present to highlight and to find possible ways to approach problems to agree or combine various understandings, situations, meanings, combinations or ideas.

From a technological perspective, the in-betweenness can also be between humans and nature where technologies are the in-betweenness that e.g. help us to protect ourselves from the sun (a hat) in the most basic form. More developed, the in-betweenness can be more advanced tools than a hat, being computers or robots that help us manage advanced problems such as constructing and building vehicles or houses. Or, as a bridge between youth in rural areas and the education they seek to sign up for. This perspective of technology in-betweenness is based on the work of Floridi (2014a) and is helpful to understand the role of technology with regard to how humans use it and how e.g. ICTs have advanced the use of technologies to such extent that computers can take over human tasks so humans can e.g. prioritise work differently.

To understand in-betweenness and to find out developments that can come out of combination of dualities are considered to be in line with the 'WPR' approach (Bacchi 2012) of finding out firstly what a problem can be (e.g. youth do not have access to information or education); and, secondly analyse how this problem may have arisen before thirdly; the problem is thought about differently, from other viewpoints, to find solutions to the problem and possibly find new understandings.

There are examples of notions and understandings related to the field of youth that are expressed in a dualistic way, possibly to understand as two negotiated and distinct parties bringing forward isolated or integrated attitudes. Borders, distances or gaps between e.g. formal and non-formal education, distance education, social inclusion or distance participation have to be overcome or bridged; young people must be reached; the digital divide affects young people's lives; there is a distinction between e.g. physical and virtual spaces as a way of explaining and promoting specific aims with digital transformations and initiatives (cf. EU 2018; OECD 2017). Hence, various contexts are seemingly separated or even isolated from each other rather than integrated. On the other hand, there are also examples of ideas and understandings, in which attitudes are integrated rather than isolated. Learners across contexts and 'learning in motion' (Erstad 2012) a time-based blended learning model and learning Onlife (Norberg 2011; 2017), or a pedagogical attitude that means integrated views on learning (Norqvist, Leffler and Jahnke 2016). These are all examples of perspectives with integrated attitudes, 'boosted by' certain understandings of the role of technology as an 'integrating force'.

The viewpoints of isolated, integrated attitudes or in-betweenness can be seen as an implication directly related to the part of the guiding question that incorporates understandings of social inclusion in relation to implications of digital transformation of society. The viewpoints can also put discussions or purposes of digitalisation, mobility, learning, youth work, inclusion etc. into new light. The attitudes can boost and reveal negotiations in a variety of contexts, considered as negotiations between 'what has been and what will come'. In this paper the topics and some of the relevant challenges are related to issues of technological developments, retrieval of information, being part of communication, getting access to fundamental institutions, social well-being, reaching out to youth in remote areas or how to organise education from lifelong; life-wide and life-deep perspectives. (cf. Erstad 2012; Floridi 2014a; 2014b; Norberg 2011; 2017; EU 2017). To tackle these challenges and to take advantage of opportunities that are related to the topic of digital transformation, the CoE suggests a broad palette of instruments (CoE 2017a).

### [A broad palette of instruments to support readiness for the digital transformation](#)

Certain algorithms in the form of e.g. programs, Computer agents (C-A), Artificial intelligence (AI), robotics or robots are created to carry out certain tasks and are increasingly present in society today. Examples of this can be seen in the financial market where computers are programmed to send orders to trading venues (cf. The Government Office for Science 2012); when computers are programmed to measure students ability to collaborate (Rosen and Foltz 2014; OECD educationtoday 2017); or in commonly used applications to e.g. learn languages (Settles and Meeder 2016). A Swedish municipality reported using a Robot (an algorithm) to administrate routine tasks concerning applications for economic maintenance support during unemployment. The robots could provide an

answer to the citizens within 45-60 seconds instead of 3-17 minutes for an administrator. As a result, the municipality report savings for the municipality because of more effective work procedures. The administrators' roles changed and they were now able to provide more support to citizens to go back to work, instead of performing routine administration. In the end, the new situation resulted in more citizens that came back into the labour market after unemployment (Swedish Radio 2018).

From the above examples the motivation for access to internet and e.g. initiatives for increased programming in education are understandable. The examples can also be seen to reflect that the digital transformation of society needs new skills and competences and has vast potentials, and (as always) the economic incentives to use technologies seem strong. However, there are also risks with using digital technologies such as ICTs and that is why this part also will bring forward downsides such as destructive behaviour on internet or use of algorithms that shake the very foundations of democracy. Before moving on to the part regarding competences and literacies related to the digital transformation, one conception of this paper is clarified: This paper's viewpoint is that humans (human agency) are 'behind' the algorithms used in any context or situation. Even though machine learning exists there is still a human, alone or together with others, that has started the process via a certain way of designing e.g. programs and algorithms. And, the creation, or idea with the algorithm does have its specific purpose, limitations, pros and cons etc. This conception is likely one explanation to why local, national, and international policy and frameworks express the importance of education to develop knowledge in line with concepts like digital competence, digital literacy, media literacy or 21<sup>st</sup> century skills. In other words, there is a need for digitally competent persons in the digitally transformed society including a digitally transformed labour market.

#### Competences and literacies

There are a number of policy documents and frameworks that argue for the development of competences and literacies related to the digital transformation. Moreover, the competences and policies are also oriented towards specific fields such as education, industry, citizens, youth work etc. The starting point in Europe for the development of a digital competence framework is often related to the EU Key competence framework that was adopted in 2006 (EU 2006). This framework has recently been revised and the new framework will be presented during 2018, as part of the Digital Education Action Plan (EU 2017b) and aligned with the European Digital Competence Framework (DigComp) (EU 2017c). The European Digital Competence Framework includes five areas:

- 1) Information and data literacy, including management of content;
- 2) Communication and collaboration, and participation in society;
- 3) Digital content creation, including ethical principles;
- 4) Safety; and



## 5) Problem solving.

In general, the policy documents and frameworks that argue for development of competences and literacies related to the digital transformation highlight a need to handle ICTs and the digital transformation of society. The variety of concepts underline the strategy of offering a broad palette of instruments “...aimed at tackling the many challenges and at taking advantage of the many opportunities that have come in the wake of the Internet.” (CoE 2017a: 9). Applied in Digital Youth Work, youth workers are encouraged to “being willing to try new things and learn from both success and failure, and be supported to do so” – underlining that “an agile mindset is crucial” (EU 2018: 7). On the other hand, policies and initiatives that describe and promote skills and competences reveal a number of problems that seem to be present in society. Firstly, the talk about skills and competences as a way to measure competence seem to highlight a need to recognise knowledge and education in other ways that the formal institutions for education does, using grades and diplomas. Secondly, and more in line with the challenge of digitalisation: The recent updates of EU key competences, specifically the digital competence and the Cultural awareness and expression competence seem to highlight a problem that there are people that need to adapt faster and better to societal transformations. In line with the same ambitions as the EU key competences, related to the field of youth work, there are also specific competencies developed to transform youth work and youth workers competences in order to support young people (SALTO). Moreover, there seem to be a problem among youth to adapt to the situation of digital transformation and how digital media is used to influence debates, deliberately share of false information, enhance negative behaviours and even threaten the freedom to speech and other fundamental democratic rights.

### Risks and destructive actions challenge ethics and democracy

Not all things in Onlife are ‘good things’. Neither are all things in online spaces ‘good’, nor in offline spaces. There are risks such as destructive behaviour on internet or use of algorithms that shake the very foundations of democracy. During spring 2018 the British company Cambridge Analytica closed down following disclosures about its use of Facebook data (Wall Street Journal 2018-05-02). This is an example where use of algorithms affected the highest level of the political arena in USA and Great Britain. The company has been accused of harvesting and using data from almost 87 000 000 Facebook users. The ambition of the company, according to press, was to support politicians and political organisations to get favourable results of political campaigns (New York Times 2018-04-04; 2018-04-08). However, not all risks and downsides in a digital, internet connected society have impact at a high level political arena. Various forms of destructive behaviour on internet via digital media such as ICTs can be a reality for any individual, at any time. Especially with the situation when informational friction is reduced with faster internet download capacity, better ICTs and the ‘new

normal' situation of being Onlife. There are numerous terms used in policy for the EU and the CoE like e.g. cyber-bullying, hate speech, discrimination, harassment and cyber-hate (CoE 2014b). What term to use or how to define destructive or social behaviour depends on contexts and situations.

From young people's perspective the activities in social media can be understood as expressing social and gender norms or discussing self-representations in pictures. Young people's perceptions of actions in, and use of, social media can be understood as part of complex relations and processes of identity construction in order to e.g. "position themselves and others in the struggle to doing gender and a desire to participate in a certain peer culture" (Björk 2017: abstract). According to policy recommendations, digital youth work should incorporate an inclusive approach and make use of technology to increase access and support young people's participation in society. To overcome barriers, to participate and to be digitally engaged is underlined. At the same time young people's safety and privacy must be respected. And, both youth workers and young people must be equipped "with the necessary competences to safeguard the rights of young people online" (EC 2018: 12).

No one should be harmed in such a way that they cannot participate in the future they themselves would like to form. This seems like a notion that policy is based on, but of course, this is a complex matter since opportunities, risks and obstacles will be constructed along this process of forming future life, sometimes not even possible for the individual to influence. If policy could decide it seems like it would address the problems of risks and destructive actions that challenges ethics and democracy with awareness and digital competences in order for youth to e.g. navigate safely in the social media landscape, with privacy protected where they understand impacts of algorithms, programming and underlying purposes in flows of information. Thus, allowing freedom of speech, exploring identity and participation in local, national and international society (CoE 2016a; 2017a; 2017b; UN 2016). In short, the battle between 'the good' and 'the bad' can be understood as including a battle between 'the opportunities' and 'the risks' with use of digital technologies such as ICTs.

The next section will move on with a more applied perspective of the policies that are presented. This is done because what policy states must in the case that it is going to be 'fulfilled' in some way be applied in local and regional contexts (cf. CoE 2016b). The policy statements are in local contexts negotiated in understanding, meaning and in relation to perceived values of the policy with regard to local needs. In the case of digitalisation and the impact on young people's lives, target groups as youth workers and local decision makers faces the problems of how to describe, analyse, explain, understand, design, lead and govern structures, cultures, functions and processes where young people can learn and actively participate in community and society. Hence, the next section will be based on an educational perspective where the focus is on the example of youth work, leadership and governance regarding the matter of how to digitalise and transform organisations.

## Transformation of organisations that support the younger generations – Digital youth work?

The example of *Competences for digital youth work* show digital transformation from an education perspective. It is based on the concept of 'mediendidaktische Kompetenz' (Blömeke 2000; Knaus et al. 2017). The planning, designing and implementation of digital youth work requires competences related to youth work, merged with co-existing digital competences interpreted to include all organisational levels such as the competencies of participants, students, teachers, leaders and decision makers (cf. fig. 4.) The development and the presence of competences are influenced by the organisational digital development that in turn is influenced by the digitalisation of society.



Fig. 4. Three dimensions impacting the success of digital youth work (European Commission 2018: 14)

These levels of digitalisation show that digitalisation in any context is not an isolated event. It is an event that has to be enabled by organisational structures and the developments of society. The European Commission presents a working definition of digital youth work that also includes implications of how to understand technology and digitalisation in relation to the organisation of youth work:

Digital youth work means proactively using or addressing digital media and technology in youth work. Digital youth work is not a youth work method – digital youth work can

be included in any youth work setting (open youth work, youth information and counselling, youth clubs, detached youth work, etc.). Digital youth work has the same goals as youth work in general, and using digital media and technology in youth work should always support these goals. Digital youth work can happen in face-to-face situations as well as in online environments – or in a mixture of these two. Digital media and technology can be either a tool, an activity or a content in youth work. Digital youth work is underpinned by the same ethics, values and principles as youth work. Youth workers in this context refer to both paid and volunteer youth workers (EC 2018: 6)

The working definition above can also be understood from the perspective that digitalisation should be aligned with the current structure and culture of the organisation, including aims and purposes. Hence, the development of technologies that led to a situation of digitalisation today is a result of step-by-step developments throughout history and the same goes for the development of structures and cultures of organisations (cf. Tondeur et. al. 2009; Selwyn 2011). With this in mind the several examples of more or less successful implementations of technologies, such as e.g. ICTs in schools, are shown to having or not having taken the historical and contextual aspects into account to understand the structures and cultures of the organisations (Cuban et.al. 2001; Tondeur et. al. 2009). The success can be interpreted to happen in cases where the use of technology is aligned with e.g. the learning culture, a form of learning-centered technology alignment (Norqvist 2016). From these perspectives, the leadership at various levels is crucial in order to have successful strategies for transformation of organisations e.g. where to put the effort for making ‘digitalisation happen’, to align it with existing structure and culture, and to consider how digitalisation can influence and have an impact on the organisation integrate the digital tools “into the flow of our doings, whether these are intellectual, physical or mixed” (Säljö 2010: 62).

In youth work the organisation of various levels of actors, participants, leaders and decision makers will probably look different in various countries and context. The image below is one example of how a ‘chain of command’ can be organized. The chain of command in this case describes a sequence from decision makers at international, intergovernmental level – decision makers at national level – decision makers at local and regional level – Youth organisations – Youth workers – Youth (fig. 5). The understanding of how a chain of command can be used to explain challenges of transformation in educational contexts stems from a Swedish national Inquiry for the Ministry of Education (SOU, 2015). The remit of the Inquiry “included examining how the working situation of head teachers within the school system can be changed to enhance opportunities to improve pupil outcomes in school” (17). This analytical paper considers this perspective since similar approach can be taken in order to understand the problem of how to make policy ambitions related to the digital transformation realised in local contexts of youth work, aiming to enhance opportunities for social inclusion of young

people.

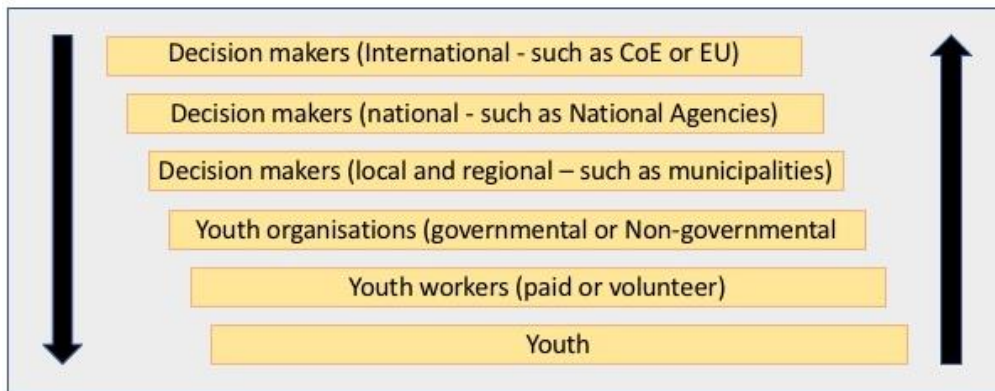


Fig. 5. Example of a chain of command from international to youth level

It is important to stress that one or more are lacking in the chains of commands of some contexts. And in the same way, there can be levels missing or being more developed because of ‘inner structures’ in organisations such as various hierarchies including e.g. head of units and employees.

To study and understand the chains of command can raise awareness of how decisions or strategies at various levels directly or indirectly affect and influence the conditions of digitalisation in specific contexts. It is also strategic in the sense that it can make visible current structures for decision making with regard to ‘whom to address the right questions at the right time’ in e.g. transformation processes. In chains of commands, in an educational context, problems can be related to unclear dialogues that negatively affect the possibility to decide common strategies; lack of trust between authorities; or that the organisation does not build on needs of the actors involved (SOU 2015). In summary, to look at existing structures and cultures, including the mapping of existing chains of commands, supports the exploration and understanding of how to transform organisations (digitally or not) to better create opportunities for youth and meet the needs of e.g. social inclusion.

Furthermore, drawing on conclusions from policy for Digital youth work (EC 2018), organisations within youth work should prepare for meeting and collaborating with youth in not just offline and online environments but also in a mixture of these situations. This means that the involvement of young people in the chains of commands is most relevant at local and regional levels, following recommendations from the Council of Europe, considered as a right for young people (CoE 2016b); young people that are supported by systems that can be understood as providing the ‘right’ information, at the ‘right’ time, in the ‘right’ place, in the ‘right’ way, to the ‘right’ person (Fischer 2012).

## Analytical and strategic implications

This paper aims to offer some analytical and strategic implications regarding the digital transformation of society and its impact on young people's lives. The guiding question is: How can implications of digital transformation of society be related to young people's lives in order to incorporate understandings of social inclusion?

The final part of the paper will present implications, presented as some possible ways ahead for the youth sector, including youth work, youth policy and youth research. The implications are results of synthesis based on the problems that have been presented throughout the paper, problems made visible with the 'WPR' approach (Bacchi 2012; Bacchi and Goodwin, 2016). These problems have generated two implications that can be understood as building on each other, overlapping and somewhat integrated into each other, including use of technologies and the purposes of which they are used.

### Transformation readiness

The reason for this implication is based on the situation that young people and humans in general are (constantly) going through a process of re-shaping the way society 'works' including patterns for information and communication (c.f. Bell 1973; Lyon 1987a; 1987b, Floridi 2014a; 2014b). It is a known problem that preconditions for taking part in this transformation differs between contexts such as lack of access to internet or high friction for information ('slow' or no internet). However, this implication is not firstly about that even though it is included in the problem. Instead it focuses on how organisations, and to some extent individuals, can be prepared for digital transformation of society, like for instance; how are youth work organisations prepared for digital transformation? This implication is firstly understood from leadership and governance perspectives and in a sense, it is about how to prevent a situation where 'you build the railroad when the train has left the station'. A question that is in place is, whether individuals and organisations in various contexts are ready for the digital transformation in ways that the policy propose? Because, being ready doesn't only mean having appropriate technologies and a fast internet connection. There also need to be a readiness for processes and systems that make this transformation possible.

A starting point that might be a door-opener for supporting transformation readiness is deeper understandings of how to support and possibly develop existing chains of command. More specifically, it can be a mapping of chains of command in national, regional and local contexts in order to e.g. know who takes what type of decisions. This can be helpful in order to know to whom the 'right type of questions' should be addressed, or possibly to discover 'bottle-necks' that hinder e.g. digital transformation. To analyse chains of command may also reveal how different levels of decision making work together and the dialogues between them, in order to e.g. form or align to various

strategies. Furthermore, it will likely also facilitate questions concerning leadership in the sense that problems will be visualized regarding how to describe, analyse, explain, understand, design, lead and govern structures, cultures, functions and processes where young people can learn and actively participate in community and society. Hence, to make the most out of digital transformation to have an impact on young people's lives means to understand how to support *transformation readiness*, what it means and how to get there.

Access is a word often used in this paper and in policies that offer strategies and initiatives related to digitalisation, youth or human rights. It often refers to having access to information or communication by being connected to internet. What this paper would like to highlight is that the concept of access also can be interesting to understand for organisations and individuals that strive towards transformation readiness. What does access really mean? What kind of access to what kind of contexts using what kind of technologies? Who wants access to who and in what ways are young people given access? And, as highlighted earlier (cf. fig. 3), can young people today be considered as involved in digital transformation or not, with the 'right type' of access, in a situation where they can choose to use technology or not, guided by adequate skills and knowledge?

**Opening up for future questions to research, some examples:**

How do organisations and decisions, at various levels of decision making, support digital transformation in relation to social inclusion of young people?

How are organisations in various countries and contexts structured (including chains of command) in order to support digital transformation?

What are key elements to make individuals and organisations 'transformation ready'?

What is access?

What kind of access do young people need and to what kind of contexts?

Who wants access to who and in what ways are young people given access?

[Context-based negotiations of the use of ICTs](#)

The first implication is considered to firstly be understood from leadership and governance perspectives. The second implication will focus on context, more specifically to highlight the importance to contextualise ambitions for digital transformation, interested in understanding 'small decisions' in everyday work that 'really matters'. The implication is based on the fact that use of technologies develops differently in different contexts and that the technologies that are used in relation to digitalisation, in general, are understood to be information and communication technologies (ICTs). The use of ICTs in e.g. various organisations today is a result of step-by-step developments throughout history, due to factors like e.g. different needs, knowledge, structures, economy, trends etc. This implies that the various use of ICTs is negotiated in relation to e.g. these factors and that the use

of ICTs is 'adjusted' to its distinct context, at least if the contexts that are compared have e.g. different needs or structures.

With respect to the issue that this paper has presented understanding of the developments of technology in relation to digitalisation and the impact of young people's lives, it is important to underline that deeper understanding about how ICTs are used must be related to purposes that the individual or the organisation have with the use. Hence, the use of ICTs themselves cannot be 'de-contextualised'. With this in mind it can be interesting to make visible the negotiations of the use of ICTs in relation to purposes and aims with the use of them. To understand how meaning is constructed or how problems are solved may also reveal how the use of ICTs are aligned with purposes and aims with the use of them. If e.g. social inclusion is the purpose, how are ICTs used in relation to this purpose and in what sense does it support the view of social inclusion. Furthermore, can the use of ICTs alter viewpoints of social inclusion, or can viewpoints of social inclusion alter viewpoints on how ICTs should be used?

Integrated in this understanding of context-based negotiation of the use of ICTs lies an assumption that the role of education is important. To be able to move discussions and negotiations forward the need of 'new' knowledge is inevitable. A need for education is already underlined in the paper with regard to raising awareness and enhanced digital competences in order for youth to e.g. navigate safely in the social media landscape, with privacy protected where they understand impacts of algorithms, programming and underlying purposes in flows of information.

To learn from concepts about transformation such as transformative learning or transformative leadership can probably give some hints of how to design the education that is needed. Key words in several policy documents present solutions where responsibility, common core values, role modelling, abilities to both support and confront, personal care, empowerment, participation or creativity are developed. This reveals that the nature of transformation implies that it is not enough to transmit or transfer adequate knowledge – it must be constructed by the actors involved in the transformation. Again, the need to understand context-based negotiations of the use of ICTs underlines the need to understand contexts where the ICTs are used and for what purposes, including the voice of the actors that are involved. In this paper it can be the voice of young people in local and regional contexts, involved in the small decisions in everyday work. However, in relation to the implication of transformation readiness one might ask who the actors really are that negotiate the use of ICTs that has an impact on young people's lives?



**Opening up for future questions to research, some examples:**

How can negotiations of the use of technology be understood, especially with regard to the concepts of digitalisation and social inclusion?

What are examples of arguments that show alignment between use of technology and certain purposes and aims of organisations?

Who are the actors that negotiate the use of technologies that has an impact on young people's lives?

What are examples of 'small' decisions at the local and regional level that has made an impact of young people's lives from the perspective of social inclusion?

What problems and possibilities arise, in local and regional contexts, with regard to access and social inclusion?

Conclusions and further dialogues

This analytical paper ends with a conclusion that aims to open up for dialogues about how digital transformation can have an impact on young people's lives, incorporating the purpose of enhancing social inclusion. The two implications above are presented in figure 6 including the situation where individuals can choose when to use technologies or not, and the purposes of which they are used for.

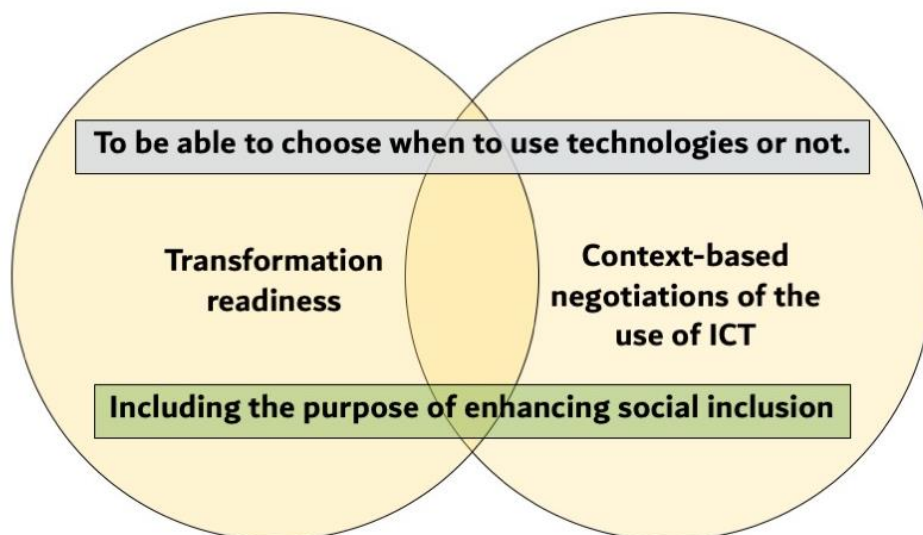


Fig. 6. Opening up dialogues about digital transformation and impact of young people's lives, incorporating the purpose of enhancing social inclusion.

The figure implies an integrated attitude between the governance and leadership perspective of transformation readiness and the context-based negotiations made in the 'small decisions' of everyday

work. The result of the integration between perspectives can be seen as a constructive meaning or even an alignment between e.g. users and decision makers; policy and practice; or international and local viewpoints. The ability to choose when to use technologies or not, and the specific purpose to enhance social inclusion are elements that must be present in both processes of striving towards transformation readiness and the context-based negotiations of the use of technologies, at least if the purpose is to understand and explore the intersection between young people's lives and the digital transformation of society, especially incorporating the purpose of enhancing social inclusion.

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