



CAREERS

AROUND ME

innovative technology
in career guidance



Career e-guidance and tools online

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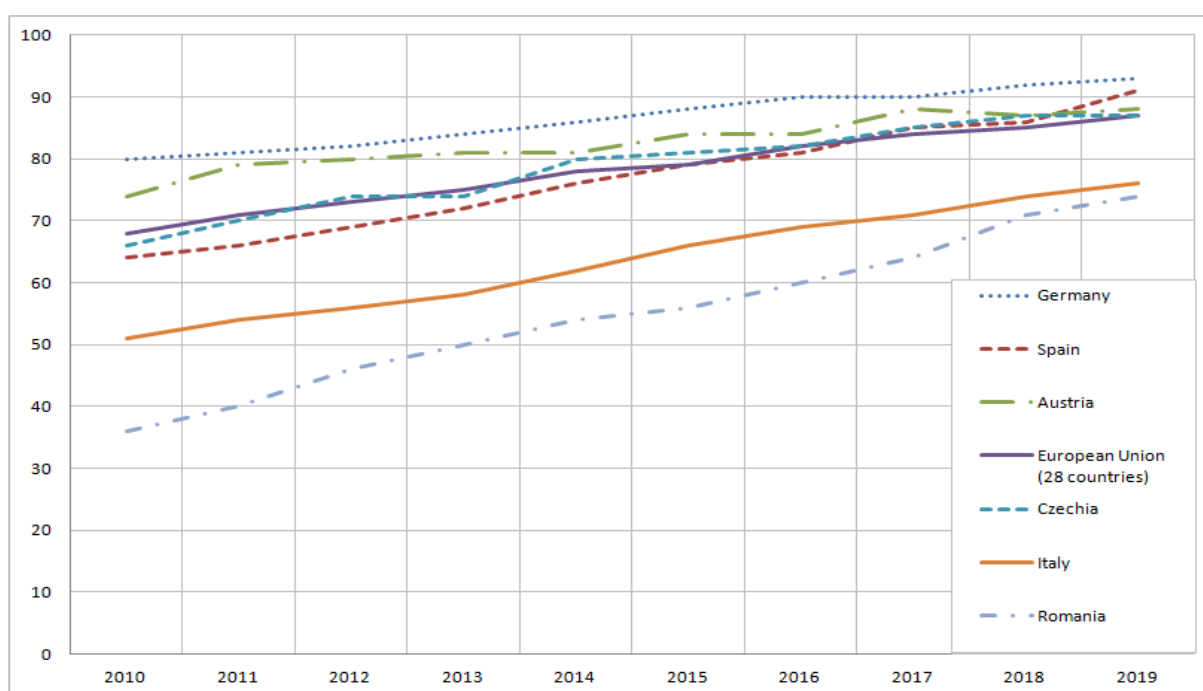
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1 Introduction

Internet has become an important place of our life and an unprecedented channel for obtaining information and communication. The number of people who use it for various reasons is still increasing (Fig. 1) which is changing not only the way people communicate, but also the way business is conducted, and new digital technology-based industries are emerging. This is happening in all countries. The increase in internet use has been 19% in the last nine years in EU countries (13 % in Germany, 14 % in Austria, 21 % in Czechia, 25 % in Italy, 27 % in Spain, 38 % in Romania).

Figure 1: Use of Internet by individuals in EU and partner countries¹



Undoubtedly, career guidance is one of the sectors affected by the development of new technologies. And in all respects. First of all, most of the career guidance information resources are available online. And not just that. Most of career guidance counsellors are also online, and the number of online tools and applications of various professional levels thematically related to or applicable to career guidance is expanding.

The emergence and development of career guidance in the form of online services was very naturally triggered by the transfer of tools and resources for both job search and potential employees to the Internet. Employers quickly learned the benefits of posting job vacancies

¹ Eurostat, <https://ec.europa.eu/eurostat/> - Individuals - internet use [isoc_ci_ifp_iu], own calculation.

on the Internet, and job seekers began to take advantage of searching vacancies on internet just as quickly. Logically, career guidance is also following this trend.

Not only the whole range of career information can be found on the Internet, i.e. information from the world of work (e.g. job descriptions and requirements, job vacancies, the average wage of individual professions) and education (e.g. overviews of educational opportunities and their providers), but also a number of different tools and applications related to addressing labour market issues. These tools and applications have different focus, professional level, quality of processing, target group, etc. Some tools and applications are freely available, the more elaborated and provided by private entities ones are mostly charged.

Online tools and applications are provided by different entities, such as public employment services, career and youth centres, trade unions, non-profit organizations, private organizations, educators, but also private individuals. Online tools and applications are generally intended for stand-alone use without specific interaction between the user and the career guidance counsellor. However, there are also online tools and applications that declare possibility of online communication with a career guidance counsellor or that the evaluation of the information entered in the web form or questionnaire is performed on an individual basis by a career guidance counsellor or psychologist.

The Internet, digital technologies and social media are becoming the primary means of human interaction. They enable not only communication, but also the acquisition of certain skills, and during mutual interaction there may happened a certain formation of professional identity (Kiselev et al., 2020).

Despite the great expansion of the Internet and digital technologies, not all potential possibilities of their use in career guidance have yet been revealed. Great potential can be expected from artificial intelligence technologies to gather and analyse career information such as multilevel expert system, machine learning, business intelligence, data mining, etc., and the involvement of artificial intelligence in career guidance tools (Ansari, 2017).

Among the career guidance counsellors are also creatives who have proven that career guidance tools and aids can be digitized and use the potential of digital technologies to increase their effectiveness and attractiveness. These career guidance counsellors have a developed "digital mind-set" skill, i.e. they think creatively about the use of digital tools in career guidance and for the development of career management skills (CMS), which belong to the desired, expected, and intended outputs of the career guidance process.

* * *

The main content of this study is in the second and third chapters. The second chapter provides an overview of career guidance provided online through digital technologies (e-guidance), distinguishing whether the service is provided with (Chapter 2.1) or without online support of a career guidance counsellor (Chapter 2.2). Where appropriate, available examples of applications and their use in working with clients in developing career management skills are given. The third chapter summarizes the challenges and risks of using career e-guidance.

2 Career e-guidance

There is not much explanation of the term "e-guidance" in the available literature. E.g. the European Lifelong Guidance Policy Network (ELGPN) Glossary defines it as follows:

„E-guidance: Counselling or guidance that is delivered using ICT and which may or may not directly involve a guidance counsellor. Frequently used to describe the provision of information or the use of self-assessment tools and exercises via the internet (ELGPN, Glossary).“

The definition of ELGPN is inherently contradictory. While there is nothing to contradict in the first part of the sentence *"Counselling or guidance that is delivered using ICT"*, the continuation of this sentence *"and which may or may not directly involve a guidance counsellor"* is debatable. If we consider career guidance to be a "process", can the guidance process be carried out without the participation of a career guidance counsellor? How many websites or applications can be considered comprehensive enough for the guidance process to take place without the participation of a career guidance counsellor? The second sentence of the ELGPN definition then describes e-guidance tools rather than e-guidance: *"Frequently used to describe the provision of information or the use of self-assessment tools and exercises via the internet."*

However, there are other definitions. E.g. M. Offer considers online career guidance to be a coherent system equivalent to how full-time career guidance is provided (Offer et al., 2001):

"E-guidance should be as coherent a system as its off-line equivalent, with an equally integrated range of activities - informing, assessing, advising, enabling or teaching, as the need requires, and providing clear progression between these activities".

Which definition is more adequate will certainly be the subject of expert discussion. In this work we lean towards the definition of M. Offer.

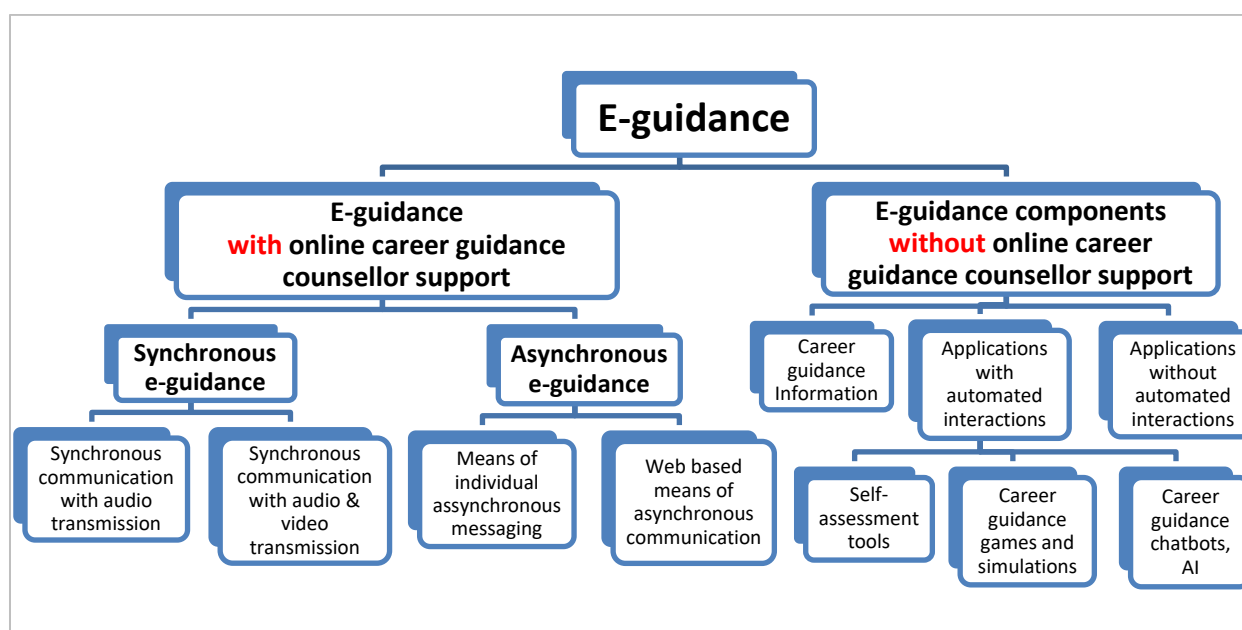
We work with the concept of career guidance in accordance with the definitions given in the resolutions of the European Council of 2004 and 2008 (Council, 2004, 2008). The 2008 Resolution of the Council reaffirmed the definition of lifelong guidance as:

"... a continuous process that enables citizens at any age and at any point in their lives to identify their capacities, competences and interests, to make educational, training and occupational decisions, and to manage their individual life paths in learning, work and other settings in which those capacities and competences are learned and/or used. Guidance

covers a range of individual and collective activities relating to information- giving, counselling, competence assessment, support, and the teaching of decision-making and career management skills.” (Council, 2008, p. 2)

The desk research carried out under the CAREERS project in 2020 revealed the structure of the online career guidance (e-guidance) components, which is shown in Figure 2. The first distinguishing feature is whether the provision of online career guidance is supported online by one or a team of career guidance counsellors (Chapter 2.1).) or is provided without their support (Chapter 2.2).

Figure 2: E-guidance basic typology



We then distinguish e-guidance with the online support of a career counsellor according to the course in time into synchronous and asynchronous. In e-guidance without online career guidance counsellor’s support are differentiated resources and tools according to their interactivity.

The use of ICT for CMS development has its advantages as well as pitfalls. It changes the way information is conveyed, increases its availability and reduces the cost of publishing it. ICT is changing the way individuals interact with information, with each other and with the labour market. At the same time, there is still a certain group of people who, for various reasons, do not use ICT and the services provided through them.

2.1 E-guidance with online career guidance counsellor’s support

Basic element of the e-guidance with online career guidance counsellor’s support is direct communication between the counsellor and the client. Their communication can take place

via various ICT. Depending on whether the communication between the client and the career guidance counsellor takes place via information and communication technology (ICT) **in real time** or with a **certain delay**, a distinction is made between asynchronous and synchronous e-guidance (Venable, 2010).

2.1.1 Synchronous e-guidance with online career guidance counsellor's support

The term synchronous e-guidance refers to direct communication between the counsellor and the client, which takes place via ICT in real time, and is provided mainly by ICT means that transmit audio and video (telephone, web applications enabling online calls).

Possibilities of using synchronous communication tools when working with clients to develop their CMS are exactly the same as in classic face-to-face career counselling:

- Client's CMS discovery
- Training of CMS with one or more clients.
- CMS thematic group lectures, conferences, seminars, workshops, etc.

Advantages of tools for synchronous communication use:

- Possibility to establish personal contact.
- The client can contact career guidance counsellor from the other side of the world and have with him/her personal contact without travelling.
- Most applications allow online meetings of more people, so it is possible to use online meetings with multiple clients.
- Both the client and career guidance counsellor can participate in a familiar environment with intimate and secure atmosphere.
- Reduction of financial demands of the service provided.
- At the time of the epidemic, the risk of infection is greatly reduced.

Disadvantages of tools for synchronous communication use:

- Occasional internet connection problems and outages.
- Possibility of disrupting the conversation by a third party, which cannot be prevented even in the counsellor's office. However, if the client and the counsellor are not in the same room, the possibility of disruption is doubled.

2.1.1.1 Synchronous communication using only audio transmission

Telephone conversations are a major example of synchronous communication with audio transmission.

2.1.1.2 Synchronous communication using audio and video transmission

A great competitor to classic telephone calls is web online meeting applications, which enable audio & video transmissions. A necessary condition is that each of participants has an

electronic device (PC, mobile phone, tablet, notebook) with access to internet, web browser (like Internet Explorer or Firefox). Some of the applications require registration with email address. The basic service use to be free of charge. The paid versions usually offer more possibilities like schedule sessions, recording, voting, file sharing etc.

Several examples of applications for online meetings in alphabetic order (Top free video, Drake & Turner, 2020):

- BigBlueButton, <https://bigbluebutton.org/>
- Blizz, <https://www.blizz.com/>
- Bluejeans Meetings, <https://www.bluejeans.com/>
- Cisco Webex, <https://www.webex.com/>
- ClickMeeting, <https://clickmeeting.com/>
- Easymeeting, <https://www.easymeeting.net/>
- ezTalks, <https://www.eztalks.com/meetings>
- Google Meet, <https://meet.google.com/>
- GoToMeeting, <https://www.gotomeeting.com/>
- Join.me, <https://www.join.me/>
- Lifesize, <https://www.lifesize.com/>
- MegaMeeting, <https://www.megameeting.com/>
- Microsoft Teams, <https://www.microsoft.com/en-US/microsoft-365/microsoft-teams/group-chat-software>
- ProfiConf, <https://proficonf.com/>
- RingCentral Video, <https://www.ringcentral.com/online-meetings/overview.html>
- Skype Meet Now, <https://www.skype.com/en/free-conference-call/>
- Skype, <https://www.skype.com/>
- U Meeting, <http://www.umeeting.com/>
- Videosign.co, <https://www.videosign.co/>
- WebRoom, <https://webroom.net/>
- Whereby, <https://whereby.com/>
- Zoom Meetings, <https://zoom.us/>

2.1.2 Asynchronous e-guidance with online career guidance support

The term asynchronous communication refers to communication that takes place outside the real time, i.e. there is a certain time lag in between the contacts. This group of tools includes, in particular, tools enabling electronic messaging and information processing.

Use of asynchronous communication tools in CMS development:

- Establishing contacts and arranging online meetings
- Obtaining information about client's CMS.
- Sending information and online resources for CMS training.
- Assigning tasks to think about, etc.

Advantages of asynchronous career services use:

- The client can send his request / question at any time.
- The client is stimulated to clarify their request / question in advance.
- The counsellor has more time to think about the answer, to find the necessary information sources, or to consult the problem with another counsellor or expert in the field of client's request.

Disadvantages of asynchronous career services use:

- There may be a time lag between the question and the answer, during which the client ceases to be interested in the service.
- The counsellor must carefully and understandably formulate the answer, and be polite and correct.
- The interaction between the client and the counsellor is limited to written form.
- The counsellor does not have the opportunity to observe client's body language and other non-verbal forms of communication.
- It can be difficult for a client to formulate their request clearly, and for a counsellor, a vaguely worded request can be difficult to understand.

2.1.2.1 Means of individual asynchronous communication

Most career guidance providers publish on their web pages an e-mail address where potential clients can send their requests. The career guidance provider can use standard e-mail software (e.g. MS Outlook, Mozilla Thunderbird, Windows Live Mail, eM Client) or "tailor-made" e-mail software equipped with support functions that collect information about clients and activity of career guidance counsellors, and allow their analysis. An example is E-guidance management software (Fig. 3), which was developed in the UK by Graduate Prospects Ltd. for the needs of university counselling centres (Madabar et al, 2004).

Text messages can also be send by SMS via mobile devices.

Figure 3: Prospects.ac.uk. Database of careers queries awaiting reply

The screenshot shows a web browser window displaying the Prospects.ac.uk e-Guidance interface. The page has a blue header with the Prospects.ac.uk logo and the text 'Prospects e-Guidance'. Below the header is a 'Main Menu' with links: 'List accounts', 'View main settings', 'View monitoring stats', 'View questions awaiting replies' (highlighted with a red star), 'View archived questions', and 'Search for archived questions'. The main content area displays a table of queries awaiting replies.

Question No.	From	Subject of email	Subject/area of study	Received	Status	Staff member
2	Lucy	Written applications	Art & Design	15/4/2003 9:44 am	* New *	-
4	Helen Cartwright	Job hunting	Business Studies & Economics	7/5/2003 9:35 am	In progress	Careers Liaison Team
6	Gareth	Written applications	Art & Design	2/6/2003 8:51 am	* New *	-
3	Lucy	What to do with my degree	Urban & Planning Studies	24/6/2003 1:03 pm	* New *	-
1	Helen Cartwright	Mature Students	Modern Languages	4/11/2003 12:26 pm	In progress	CSJ Admin
5	Liz Hagger	Mature Students	Humanities & Law	18/11/2003 10:19 am	* New *	-
7	Lucy	Career change	Art & Design	25/11/2003 3:03 pm	In progress	CSJ Admin

Below the table, it says '(viewing matches 1-7 out of a total of 7)'. At the bottom, there are navigation links: 'Start of Questions', 'Previous Questions', 'Next Questions', and 'End of Questions'. The footer includes 'Copyright 2003 Graduate Prospects Ltd.' and the 'Graduate Prospects' logo.

Use of e-mail in CMS development:

- Establishing contacts and arranging meetings.
- Obtaining information about the client's CMS.
- Sending information and online resources for CMS training.
- Assigning tasks to think about, etc.

2.1.2.2 Web based means of asynchronous communication

Common form of communication between clients and career guidance counsellors is communication through online tools and applications, including contact forms, self-assessment tools and applications with online career guidance counsellor support.

2.1.2.2.1 Contact forms

Contact forms are intended for asking questions to a career guidance counsellor or for ordering meeting with the counsellor.

Use of contact forms in CMS development:

- Establishing contacts and arranging meetings
- Requirements and questions can also relate to CMS.

Examples of web pages with contact form:

- Denmark, educational guide, <https://www.ug.dk/evejledning>
- United Kingdom, Birmingham City University, <https://www.bcu.ac.uk/alumni/finding-work/access-our-service/e-guidance-and-chat-live>
- Ireland, iCareer, <https://www.icareer.ie/>

2.1.2.2.2 Self-assessment tools and applications

Some career guidance providers have various self-assessment tools and applications on their websites (e.g. in the form of an interest questionnaire, career guidance, study prerequisites, career choices, etc.). Some of them declare that their processing is not automated and performed by an experienced psychologist. Evaluation of these tests is usually charged.

Use of self-assessment tools in CMS development:

- Clients gradually get acquainted with CMS and realize the extent to which they can work with them and use them in practice.

Example of CMS self-assessment tools with online “live” career guidance counsellor:

- Emiero, <https://www.emiero.com/>
- Pracovní a profesní počítačová diagnostika COMDI (Work and professional computer diagnostics), <https://www.comdi.cz/>

2.1.2.2.3 Section for questions and answers, FAQ, blogs

The effectiveness of providing career guidance can be increased by setting up a web section to collect questions and publish answers. Clients can insert their requests / questions into a form on the website or send them by e-mail. The advantage is that information intended for individual users can also be useful for other users with the same needs.

Use of FAQ and blogs in CMS development:

- Client can learn on career management skills.
- Client can ask questions to career guidance counsellor.

Examples of CMS FAQ and blogs:

- Blog: Career Management, <https://managementhelp.org/blogs/career-management/>
- Teaching matters blog, <https://www.teaching-matters-blog.ed.ac.uk/tag/curriculum-toolkit-career-management-skills-and-insights/>
- JobMob, <https://jobmob.co.il/>
- Blogs, <https://www.brainwonders.in/blog>
- FAQs for Career Management, <https://careervision.org/faqs-career-management/>

2.1.2.2.4 Social media

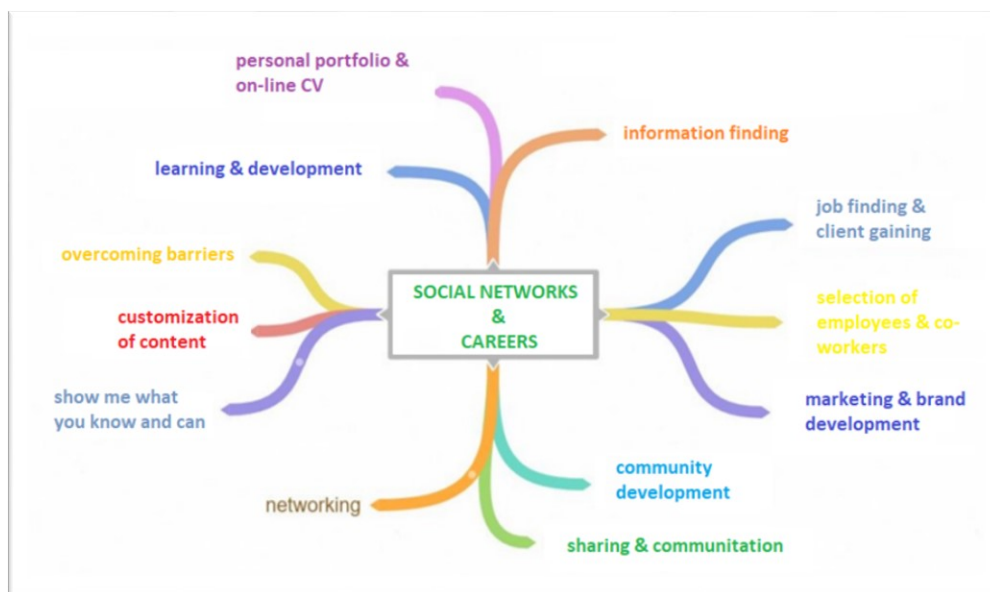
Social media are used to disseminate, share, exchange information and also to establish, maintain and expand contacts with others, and make individual, group, institutional etc. promotion. The use of social media in career guidance is in principle the same. The information may be intended for clients or other career guidance counsellors. Likewise, contacts can be established among counsellors, between clients and counsellors, or among clients. Both groups can thus inform each other, influence each other, share various resources, draw attention to training opportunities, etc. Social media can be used for career services promotion, career education, personal and career development, finding a job or

starting own business, watching what is new in the field, using communities and building a network of contacts useful for a career (Fig. 4).

The most popular are the following social networks:

- Facebook, www.facebook.com
- Instagram, <https://www.instagram.com/>
- Twitter, www.twitter.com
- LinkedIn, www.Linkedin.com
- Xing, www.Xing.com
- Viadeo, www.Viadeo.com

Figure 4: Social networks & careers (Václavíková, 2018)



Use of online social networks in CMS development:

- Information dissemination, sharing & exchanging
- Establish, maintain and expand contacts with others (counsellor-counsellor, counsellor-client, client-client)
- Gain career information and new ideas & collaborative career exploration
- Increase interaction with others

2.1.2.2.5 E-learning courses focussed on CMS development

The aim of these courses is usually to strengthen clients' CMS, prepare them for the transition to the labour market and support them in taking responsibility for their own career path and career development.

Example of e-learning courses focused on CMS development:

- Course on Career Management Skills, <https://www.business.unsw.edu.au/degrees-courses/course-outlines/MGMT5940>

- Career Planning, <https://www.skillsoft.com/channel/career-planning-3c623b30-e71c-11e6-9835-f723b46a2688>
- Strategic Career Self-Management, <https://www.classcentral.com/course/strategic-career-self-management-5457>
- Personal Development Courses, <https://www.udemy.com/topic/personal-development/>
- Career Management, <https://www.pluralsight.com/courses/career-management-2dot0>

2.2 E-guidance without online career guidance counsellor's support

The largest group of e-guidance tools without online career guidance counsellor support consists of various sources of career information from the world of work and education, self-assessment tools and instructions on how to prevent them in different life situations.

2.2.1 Resources of career information

Many career guidance providers publish on their web pages a variety of free-to-use information materials online for free use. These are mainly informative brochures and leaflets possibly on services provided and various instructions (e.g. how to present yourself to the employer, how to compile a CV, how to style a cover letter, where to look for information on job vacancies or further education, etc.).

For the development of CMS, it is important that the client is able to orientate in the available information sources from the field of labour market and education and be able to assess their timeliness, truthfulness and balance. Information resources on education and employment are available online in every EU country.

Selected information can be found on the European Commission's portal:

- EURES, <https://ec.europa.eu/eures/>
- Europass, <https://europa.eu/europass/>
- Eurostat, <https://ec.europa.eu/eurostat/>
- CEDEFOP, <https://www.cedefop.europa.eu/en/themes/skills-labour-market>

2.2.2 Online tools with automated interactions

Career guidance providers are increasingly using applications on their websites that enable automatic interaction with their clients. In this group of applications also belong games and simulations supporting career orientation and decision-making, the aim of which may be, for example, to examine the level of the CMS and alert the client to selected skills that he lacks or uses little from the CMS. These technologies support user control and self-sufficiency, but can also automate some of the more routine aspects of the counselling process.

2.2.2.1 Self-assessment tools with automated interactions

Portals offering self-assessment tools for identifying interests, assumptions and other personal characteristics of various levels and processing appear quite abundantly on the Internet. Evaluation of entered data is automated and may incur charges.

Self-assessment questionnaires have different orientations, are based on different theoretical foundations and only a few of them are officially standardized. Favourites include self-assessment tests of personal and social competencies, professional interests and prerequisites, etc.

The theoretical basis on which these questionnaires were based is generally not given for these questionnaires. For those who give a theoretical basis, the most widely used theory is Holland's theory using the RIASEC codes. Some questionnaires can be filled in free of charge, but obtaining the result of the questionnaire is charged.

The disadvantage of these tests is that they measure only a limited number of general skills and no test is accurate enough to be able to predict with certainty the final success of an individual in the labour market (Vendel, 2008).

There are only few self-assessment tools dealing with CMS.

Examples of CMS self-assessment tools:

- Career Skills Assessment Tool, <https://app.career-skills.eu/index.php/en/assessment-tool>
- Career Management Skills Assessment, <https://gradpathways.ucdavis.edu/career-management>
- Know Yourself, <https://alis.alberta.ca/careerinsite/know-yourself/skills-quiz/>

2.2.2.2 Online career guidance games and simulations

Most career guidance games are designed for children and young people. However, online games are also played by adults, and they would certainly like to learn something in a fun way while playing about their preconditions for performing a certain profession or about the requirements for performing a certain profession. In games of this type, there is a requirement to reconcile the ratio of entertainment and gaining practical information, which is to guarantee that the user will have enough fun while obtaining an adequate body of new information about the labour market and his professional orientation. Recently on internet available online career guidance games have different focus, different levels of processing, different technological base, etc.

From the 2020 CAREERS project desk research the following types of games were identified, which can become a suitable complement to career guidance.

2.2.2.2.1 Career guidance games

In the category of career guidance games are included games that take place in a non-specific environment, and lead users to learn about the labour market and other areas of human life.

Examples of games:

- The Real Game, Canada, charged, <https://www.realgame.com/>
- Jobs that care, United Kingdom, free of charge, <http://www.jobsthatcare.co.uk/>
- Career Quest, USA, free of charge, <http://j.whyville.net/smmk/fortune/outside>
- The Career Game, USA, www.careergame.com

2.2.2.2.2 Career guidance games in a city

The main elements of these career guidance games include, in particular, an interactive city map. Through various activities in the city, such as construction or just discovering city buildings, the user is introduced to various aspects of certain number of occupations.

Examples of games:

- Mapa Karier, Poland, Free of charge, <https://mapakarier.org/city>
- Career Locker, USA, Charged, <https://careerlocker.wisc.edu/Products/Elementary>
- Paws in Jobland, Canada, Charged, <https://www.xap.com/paws/>

2.2.2.2.3 Games to plan future career based on living costs

The aim of these games is to enable users to assess the financial situation of selected professions. The games are equipped with a database of occupations, including their average salaries. After choosing a profession, the system asks for an idea of the cost of living (accommodation, food, transport, education, etc.). Games make users realize the need to make money on everything they expect from life.

Examples of games:

- Claim your future, USA, free of charge, <https://fame.claimyourfuture.com/>
- Můj život po škole – My life after school, Czech Republic, free of charge, <https://www.muizivotposkole.cz/>
- JA Plan your future, USA, free of charge, <http://educgames.ja.org/economics/>
- JA Build your future, USA, free of charge, <https://www.juniorachievement.org/s3/apps/ja-byf/#/career>

2.2.2.2.4 Strategic and civilization management games

Although these games are not primarily focused on career guidance, they have certain elements and economic models potentially inspiring for career guidance. They lead users to

think about the occupations needed for the full function of the city they are building, and also to make people want to live in that city.

Examples of games:

- SimCity, USA, charged, <https://www.ea.com/cs-cz/games/simcity>
- Venture Towns, USA, charged, <https://www.nintendo.com/games/detail/venture-towns-switch/>

2.2.2.3 Career guidance chatbots

And the future? We may see in near future that instead of a career counsellor, a chatbot machine will communicate with the client online in real time using artificial intelligence for machine learning from data mining and processing of large data files using business intelligence and a multilevel expert system. These chatbots will be able to find and process the required information in a few minutes. To do this, the chatbots will need to firmly define ethical boundaries and other essentials that we are not able to define precisely here.

2.2.3 Online application without automated interactions

2.2.3.1 Personal / client's e-portfolio

The application called e-portfolio allows users to collect various electronic evidence of their knowledge, skills, results from all forms of education and employment, as well as acquired in leisure activities. It can also contain various self-assessment tools. The user can usually decide who to view and which files, and a resume can be easily generated from the information entered.

Use of e-portfolio in CMS development:

- The client is guided to collect, sort and store evidence of knowledge and skills acquired in formal, non-formal and informal learning.
- The client is guided to continuously evaluate their CMS.

Examples of e-portfolios:

- Europass, Your free, personal tool for learning and working in Europe, <https://europa.eu/europass/en>
- Create Your Portfolio, <https://www.portfoliogen.com/create.cfm>
- Free Online Portfolio Maker, <https://www.flipsnack.com/digital-portfolio>
- Assessing you. The First Step in Career Planning, <https://alis.alberta.ca/media/697159/assessingyou.pdf>
- ePortfolio online, <https://kyvyt.fi/>

2.2.3.2 YouTube: videos

The offer of videos about CMS, their importance and the way of development on the Internet is very modest. Most of videos with CMS topics promote career guidance providers.

Examples of videos concerning CMS:

- Career Management Skills, Raimo Vuorinen,
<https://www.youtube.com/watch?v=YPS2E4MtX3w>
- Why career guidance has never been so important? Antony Mann,
<https://www.youtube.com/watch?v=WxIXfuNG21o>
- Introduction to the careers information, advice and guidance available from Skills Development Scotland throughout school and from our network of careers centres on high streets across the country,
<https://www.skillsdevelopmentScotland.co.uk/what-we-do/scotlands-careers-services/>
- Career management skills: An introduction, Yoke Yue Kan,
<https://www.youtube.com/watch?v=keGMG3C7t7g>
- Career Guidance: Career Counselling as a Career Path,
<https://www.youtube.com/watch?v=DVrcOKqE4Kw>

2.2.3.3 Massive open online courses, MOOC

MOOCs are online training courses that are freely available. Their completion is usually free and the final exam and obtaining a certificate are charged (Doležalová, 2019). To increase the level of CMS, it would certainly be appropriate to take a course, but there are only a few on the Internet.

Examples of MOOC on CMS topics:

- How to Get Skilled: Introduction to Individual Skills Management (Project-Centred Course), Valeri Chukhlomin, Amy Giaculli, <https://www.coursera.org/learn/skills-management?action=enroll&courseSlug=skills-management&showOnboardingModal=check>
- Enhance Your Career and Employability Skills, Laura Brammar, David Winter,
<https://www.my-mooc.com/en/mooc/career/>

3 Challenges and risks of using e-career guidance tools

From the above mentioned findings, it is clear that the range of e-career guidance tools for CMS development is not very rich. It should be noted here that in their search, we focused only on English sources. Offerings in different EU languages may vary.

Using digital technologies to work with clients to develop their CMS has its advantages as well as pitfalls. The way information is searched and transmitted has changed, its availability has increased and the cost of publishing it has been reduced. The way we communicate with each other, how we obtain information and how we communicate with the world of work has changed. At the same time, there is still a certain group of people who, for various reasons, do not use digital technologies and services provided through them (Hooley et al., 2010).

The challenges and risks of using e-career guidance can be seen from three perspectives: from the position of career guidance counsellors, clients and from the form and content of the website.

3.1 E-career guidance counsellors

It can be assumed that there are career guidance counsellors who use e-career guidance tools and even those who are involved in their creation, while many other counsellors do not use these e-tools because they do not trust them or have a negative attitude towards everything that is online.

Career guidance counsellors who use e-tools are advised, especially for clients who have no problem using digital technologies, not to focus on just one e-tool, but to combine different tools with different focus and different media, such as videos, YouTube, games, websites, social media (LinkedIn), etc. It is also appropriate and effective to increase the level and training of CMS with clients to combine different learning styles, which contributes to better skills acquisition.

For clients who do not have access to digital technologies or have a positive relationship with them, the use of e-tools can help increase their digital literacy and support the relationship with the use of digital technology. Therefore, special attention should be paid to the training of career guidance counsellors in the use of e-tools as well as their ability to strengthen digital literacy for clients and especially for clients listed in the following subchapter "Career e-guidance clients", as CMS should be strengthened for all citizens. At

the same time, it is necessary to take into account multicultural differences, social and local conditions that may have an impact on the client.

3.2 Clients of career e-guidance

The use of digital technologies is increasingly reflected in career guidance in order to offer and make career guidance services, tools, aids and information available to the widest possible public. One of the important tasks in the design and development of career e-guidance is to adapt online services to the diversity of clients and their needs.²

Certain groups of clients who, for various reasons, cannot or do not want to use these services are disadvantaged when providing career e-guidance. These are, in particular, individuals who, for various reasons, are at risk of social exclusion due to low education, disability or restriction, different socio-cultural background, addictions, long-term unemployment, criminal record, or who have at-risk reading disorders, limited verbal skills, limited knowledge, self-confidence and motivation as well as a negative attitude towards work. These clients usually have low incomes and no financial resources to pay for the Internet or mobile data.

For these groups of clients, direct contact with a career guidance counsellor is more appropriate than self-help provided by career e-guidance.

3.3 Content and form of career e-guidance sites

For the provision of career e-guidance, it is important that the form and publicly available content of the website meet the following requirements (Nucuta, 2009):

- compliance with the ethical principles of the provision of advisory services,
- obtaining consent to the processing of personal data if they are collected through career e-guidance,
- collect only relevant personal data from clients, use them only for the declared purpose and process them in accordance with the legislation,
- the content of the information published must be obtained in a legal form, the information must be clear, current and true, be provided with the source from which it was obtained and the date of publication,
- self-assessment e-tools must be validated for self-help use, the purpose of their use must be clearly demonstrated and the target group for which they are intended,
- the digital devices on which career e-guidance is run must comply with security rules and ensure secure communication and access.

² VOURINEN, R. (2019) *Recent trends in lifelong guidance practice*.
<https://www.slideshare.net/Nordvux/recent-trends-in-lifelong-guidance-practice>

4 Conclusions

There are many different websites that provide, for example, online guides on how to apply for a vacancy, where to look for information on further education, where and how to find a career guidance. There are also job servers with the option of choosing vacancies according to various personal parameters or a website offering training opportunities. In addition, there is a wide range of career guidance websites on the Internet, providing career guidance information and online tools and applications that have a broad focus, expertise, quality of processing, target group, etc. Some of these elements of e-guidance are provided free, others for a fee. This website is owned by various bodies such as public employment services, government, trade unions, career and youth centres, NGOs, educators, career guidance counsellors, etc. Only in exceptional cases do these sites deal with them.

The question is whether these online resources and tools can be considered career e-guidance. The authors of this study leave this question unanswered and recommend it for a wider professional discussion. They recommend revising the ELGPN definition and adopting the above definition of M. Offer (Offer et al., 2001) and considering career e-guidance as career guidance that is provided using digital technologies with direct or indirect career guidance support, leading the client to self-employment. career decisions (self-help). Everything else can be considered as e-career guidance tools.

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Career e-guidance and online tools

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