



**Work Package 3: Development of TechCMS Catalogue and Learning Model
(D3.1)
Popi Christopoulou/ AKMI SA**

Co-funded by the
Erasmus+ Programme
of the European Union



This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein



Project Information

Project Acronym: TechCMS

Project full title: Technology-Enhanced Career Management Skills

Project Number: 612900-EPP-1-2019-1-IT-EPPKA3-PI-FORWARD

Funding Scheme: Erasmus+, European Forward-Looking Cooperation Projects in the fields of Education and Training

Start Date of the Project: 01/01/2020

Duration: 24 months

Document Information

Work Package 3: Development of TechCMS Catalogue and Learning Model

Type: Framework document/Report

Version: 1.1

Dissemination Level: Public

Delivery date: 03/11/2020

Date of Submission: 03/11/2020

Author: Popi Christopoulou

Reviewer: Giulia Rigoli

Status: Project Manager

D3.1- The TechCMS Catalogue and Learning Model

Table of Contents

1	LEARNING AREAS BLUEPRINT	4
2	LEARNING MODEL FOR CMS	9
3	CONTEXTUAL ELEMENTS.....	17
3.1	RESOURCES	17
3.1.1	LEARNING MATERIALS.....	17
3.2	SERVICE DELIVERY APPROACH	20
3.3	COMMUNITY OF PRACTICE.....	21
3.4	POLICY CONNECTION	22
4	SUMMARY.....	24
	REFERENCES.....	26

Executive Summary

The TechCMS catalogue and learning model uses the findings of the WP2 research to offer a range of Career Management Skills (CMS)-related Knowledge, Skills, and Attitudes (KSA) mapped for different competencies of individuals. This Catalogue is designed in a manner to make it possible for professionals to self-assess their competency levels. The identified KSA are then supported with a training roadmap to build the next level of competencies in the professionals interested in building their CMS.

The first part of this catalogue lists the career learning areas as identified through the literature review and survey conducted in the WP2 for 150 individuals from Italy, Cyprus, and Greece. Divided amongst three main areas of the personal self, the professional self, and the digital skills, this list identifies various KSAs required by professionals whether they are the end users of CMS, policy makers, teachers and trainers, or career managers. The further sections of this report detail the learning model for CMS with its four levels of implementation with the end users, policy makers, teacher trainers, and career managers. It further discusses the required resources, service delivery approach, community of practice, and policy implementation which are required to institutionalise CMS and ensure its effective delivery.

1 Learning Areas Blueprint

1. The Personal Self

- a. Ability to take self-responsibility
- b. Ability to self-introspect for
 - i. identifying strengths and
 - ii. weaknesses
 - iii. Skills and achievements
- c. Setting of life priorities
- d. Setting personal goals and objectives
- e. Developing a personal goals action plan
- f. Monitoring progress against the personal goals
- g. Achieving the right Work-Life balance
- h. Leaving a Positive Impact on Society
- i. Possessing a positive self-image
- j. Identifying changes in the community, labour market, and business environment

2. The Professional Self

- a. Setting professional goals and objectives
- b. Capacity of professional resilience
- c. Continuous learning to meet set goals
- d. Developing a professional goals action plan
- e. Monitoring progress against the professional goals
- f. Building career enhancing relationships
- g. Creativity and innovation in decision making
- h. Managing finances and time in the most effective manner
- i. Ability to work in a cosmopolitan, global, and diverse work environment
- j. Ability to bounce back from setbacks

3. Digital Skills

- a. Basic digital research skills
- b. Ability to store and recover multimedia files on systems and clouds
- c. Knowing digital communication etiquette
- d. Environment scanning for opportunities online
- e. Ability to build and use social networking
- f. Ability to find the right resources for upskilling and reskilling
- g. Awareness of basic cybersecurity measures to safeguard data
- h. Ability to troubleshoot simple computer issues
- i. Ability to work with software to produce basic reports, presentations, and worksheets

The table below maps these KSAs for the four key consumers of CMS: the end users, policy makers, teacher trainers, and career managers in terms of the required levels for effective functioning of these roles.

Table 1

Learning Areas Blueprint

Key Area	KSA	End User	Policy Maker	Teacher Trainer	Career Manager
	Ability to take self-responsibility	✓		✓	✓
	Ability to self-introspect for	Require development		✓	✓

Personal Self	identifying strengths		Should be		
	Ability to self-introspect for identifying weaknesses	Require development	aware of the concepts to better understand	✓	✓
	Ability to self-introspect for identifying skills and achievements	Require development	the context of career management and development	✓	✓
	Setting of life priorities	✓	policies	Need training as career manager	✓
	Setting personal goals and objectives	✓		✓	✓
	Developing a personal goals action plan	Require development		Need training as career manager	✓
	Monitoring progress against the personal goals	Require development		Need training as career manager	✓
	Achieving the right work-life balance	Require development		✓	✓
	Leaving a positive impact on society	Require awareness		✓	✓

	Possessing a positive self-image	✓		✓	✓
	Identifying changes in the community, labour market, and business environment	Require development	✓	Need training as career manager	✓
The Professional Self	Setting professional goals and objectives	✓	Should be aware of the concepts to better understand the context of career management and development policies	✓	✓
	Capacity of professional resilience	Require development		✓	✓
	Continuous learning to meet set goals	✓		✓	✓
	Developing a professional goals action plan	Require development		Need training as career manager	✓
	Monitoring progress against the professional goals	Require development		Need training as career manager	✓
	Building career enhancing relationships	Require development		✓	✓
	Creativity and innovation in decision making	Require development		✓	✓
	Managing finances and time in the most effective manner	Require development		✓	✓
	Ability to work in a cosmopolitan, global, and	Require development		✓	✓

	diverse work environment				
	Ability to bounce back from setbacks	Require development		✓	✓
Digital Skills	Basic digital research skills	✓	Should be aware of the concepts to better understand the context of career management and development policies	✓	✓
	Ability to store and recover multimedia files on systems and clouds	✓		✓	✓
	Knowing digital communication etiquette	Require development		✓	✓
	Environment scanning for opportunities online	Require development		✓	✓
	Ability to build and use social networking	Require development		✓	✓
	Ability to find the right resources for upskilling and reskilling	Require development		✓	✓
	Awareness of basic cybersecurity measures to safeguard data	Require development		✓	
	Ability to troubleshoot simple computer issues	✓		✓	Not strictly in purview of career managers
	Ability to work with software to produce basic reports, presentations, and worksheets	✓		✓	

The learning areas blueprint in Table 1 has shown that the end users are not entirely oblivious of the criteria important for developing their personal and professional selves or in the use of digital skills. In fact, the Generation Z are digital natives who are familiar with online resources, research, and basic cybersecurity measures (Pérez-Escoda, Castro-Zubizarreta and

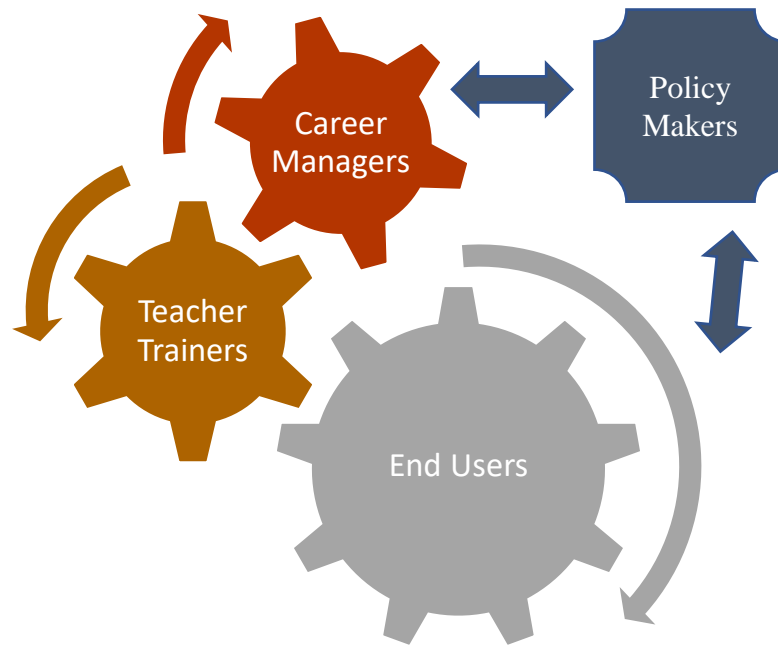
Fandos-Igado, 2016; Mohr and Mohr, 2017). However, the teacher trainers can make the end users more aware of certain areas like self-introspection to identify strengths, building career enhancing skills, and using social networking for improving their personality. However, career managers are the professionals who understand the right tools needed to help in introspection and mapping of KSA, ways through which end users can build a repertoire of in-demand skills, use their social networking skills to find the right resources and opportunities, and preparing the list of goals, actions plans to support them, and tools to evaluate their progress towards them. The policy makers are visualised as the decision-makers who may not have much to do with individual-level career management but they need to be made aware of it so that they can make informed decisions and build better policies for their states.

2 Learning Model for TechCMS

The learning areas blueprint for CMS has shown the specific KSA which are needed for the end users, policy makers, teacher trainers, and career managers. The learning model takes this blueprint further by showing how these KSA can be built in the four key stakeholders. Considering that the respondents of the WP2 have been Europeans, the chosen pedagogies of this learning model are suited to the cultural and learning preferences of this milieu, however, other consumers of research can adapt them to their cultural and pedagogic preferences and use them accordingly.

Figure 1 showcases the learning model for CMS moving from a level of expertise from the end user to the teacher trainer and thence, to the career manager and eventually to the policy makers who operate at the macro level.

Figure 1
Learning Model



As seen in the figure above, it is not only the policy makers who get briefed by the stakeholders like end users and career managers and teacher trainers, it is also the latter who are affected by the policies made for their CMS. The feedback towards state-initiated plans and programs and their utility, directly through word of mouth from the service users and indirectly from their impact on the labour skills available in the domestic market and the equilibrium between industry requirements and available human capital, also affect the CMS framework in a given region or country.

Table 2 showcases best suited training resources and methods as per the stakeholders and their required learning areas along with required resources by the career managers as identified in Table 1.

Table 2

Learning Model with training

Skills	End User	Policy Maker	Teacher Trainer	Career Manager
Ability to self-introspect for identifying strengths, weaknesses,	Self-assessment questionnaires, sensitivity training, critical reflection exercises	Briefing about preferences of human capital as per age, region, educational levels, institutions, and	Support end users to arrive at the right conclusions about their self-reflection	Use psychological testing and career assessments to identify end user preferences and self-assessments.

skills, and achievements		the persisting gap from industry expectations		
Setting personal and professional life priorities, goals, objectives, action plan, and a positive self-image,	<ul style="list-style-type: none"> • Workshops for intensive efforts and focus for creating life goals and career paths • Mentoring by teacher trainers and career managers 	Supporting educational institutions and career management labs with resources	<ul style="list-style-type: none"> • Mentoring end users to help them realise what they want • Guiding end users about how to create action plans 	<ul style="list-style-type: none"> • Conducting workshops for exposing end users to different life and career goals and how to reach them. • Supporting with different assessments and guidance to facilitate experiential learning and realisation. • Introduce users to Johari window, transaction analysis, SWOT analysis, and critical reflection to identify biases and prejudices
Monitoring progress against the personal and professional goals	Learning to assess self-progress by benchmarking performance, setting milestones, and identifying indicators of performance	Supporting career management labs and educational and training institutions through resources	<ul style="list-style-type: none"> • Mentoring end users through their journey of self-discovery and progress. • Helping them identify and establish objective, visible milestones 	<ul style="list-style-type: none"> • Building tools for self, peer, and career manager assessments which can help ascertain a better picture of progress made against set objectives. • Using a career portfolio to record goals, progress, and evaluate

			<p>to assess progress.</p>	<p>similar career paths for clients.</p> <ul style="list-style-type: none"> • Guide end users to formal examinations wherever possible to ascertain progress evaluations.
<p>Achieving work-life balance</p>	<ul style="list-style-type: none"> • Making end users more aware of their life priorities as explained in the last step • Extending opportunities for experiential learning and mentoring for better support and guidance 	<p>Creating policies that discourage overtime in businesses and encourage employers to allow their employees a decent status of living and quality of life</p>	<ul style="list-style-type: none"> • Time management activities • Wheel of life game that assesses satisfaction with each segment of life • Distinction between important and urgent tasks • Role plays to sensitize users about different roles they need to play in their lives apart from professional roles. 	<p>Similar exercises as the teacher trainer with an added priority for working towards career goals.</p>
<p>Positive impact on society</p>	<p>Identify life priorities and weave them with activities that can have a positive impact on community and society.</p>	<p>Ensure ample opportunities for engaging in community development citizens are available</p>	<ul style="list-style-type: none"> • Build awareness about ethical conduct and environment consciousness. • Use sensitivity training to make trainees 	<ul style="list-style-type: none"> • Include career opportunities that involve working with communities and environment protection. • Offer resources and opportunities for

<p>Identifying changes in the community, labour market, and business environment</p>	<ul style="list-style-type: none"> • Become more aware of labour market changes within and outside the domestic market. • Learn techniques to scan environment efficiently for chosen self-goals. • Pick up tools for finding the resources to reskill and upskill as per industry requirements. 	<p>Release reports that identify trends in labour market skills for the benefit of the professional population.</p>	<p>conscious of vulnerable people's feelings.</p> <ul style="list-style-type: none"> • Acquire information through university or training institution – industry partnership for identifying gaps in university graduates' KSA and industry requirements. • Share insights about industry requirements with curriculum developers and policy makers. 	<p>volunteering in social impact projects.</p> <ul style="list-style-type: none"> • Teach environment scanning techniques of PESTLE, SWOT analysis, and market research to identify trends in the labour market, chosen industries, community, and region.
<p>Building networking skills and relationships</p>	<ul style="list-style-type: none"> • Realise the importance of building good networking skills and contacts • Build a professional resume • Acquire membership of chosen profession's associations • Attend seminars and workshops to build more 	<p>Facilitate the formation and conduct of professional associations as they support career development and act as platforms for discussions with the state by representing a profession</p>	<ul style="list-style-type: none"> • Build networks with the industry by inviting professional speakers, building internship networks, and research ties with industry • Allow students to organize and interact with industry 	<ul style="list-style-type: none"> • Support end users with contacts for the professional associations in their field of interest. • Guide end users in creating professional social networking profiles and resumes. • Supply details of relevant

Creativity and innovation	<p>contacts and acquire industry knowledge</p>		<p>representatives in conferences and workshops.</p>	<p>seminars and workshops for continuing professional development.</p>
	<ul style="list-style-type: none"> • Become aware of the need to think out of the box for generating novel ideas. • Set up personal rewards to self-motivate oneself for being creative. • Solve case studies to generate several creative solutions. 	<ul style="list-style-type: none"> • Establish think tanks that spur creativity and innovation in the community. • Allocate funds for spearheading cutting edge research. • Protect creators through intellectual property rights protection. • Provide sufficient regulations to cover trademarks, copyrights, and trade secrets. 	<ul style="list-style-type: none"> • Build classroom activities and tasks that ensure students have to apply their imagination to find the results. • Foster creativity and innovation as default options in decision making. • Use techniques like brainstorming in classrooms to encourage creative solutions. 	<ul style="list-style-type: none"> • Make end users aware of the benefits of creativity for building careers. • Suggest innovative tools for looking for jobs and building skills.
Managing finances and time in the most effective manner	<ul style="list-style-type: none"> • Become aware of the need to manage personal finances. • Learn the optimum allocation of monthly salary into expenses and savings. • Allocate sufficiently 	<ul style="list-style-type: none"> • Include basic finance management concepts in all graduate programs. • Introduce incentives for personal finance management in taxation. • Work with the financial 	<ul style="list-style-type: none"> • Teach efficient time management techniques to students. • Teach basic financial management concepts to students. 	<ul style="list-style-type: none"> • Include financial management in the life priorities and action plans. • Ensure that measurement of progress includes financial goals and time management.

	<p>for short and longterm needs.</p> <ul style="list-style-type: none"> • Learn to manage time effectively. • Ensure enough time is allocated to both work and leisure activities. 	<p>institutions to ensure that sufficient tools are available for all budgets.</p>		<ul style="list-style-type: none"> • Offer simulation and management games training to learn personal finance management.
<p>Ability to work in a cosmopolitan , global, and diverse work environment</p>	<ul style="list-style-type: none"> • Build cultural awareness to work with diverse people domestically and internationall y. • Be open to International assignments as per life priorities. • Conduct environment scanning to look for resources and opportunities. • Address self-biases and prejudices to become more open. 	<ul style="list-style-type: none"> • Provide timely reports about labour market conditions and regulations for working abroad • Clarify conditions of work for expatriates. 	<ul style="list-style-type: none"> • Build global citizens who are aware of cultures, are open-minded, flexible, and adaptable • Learn and inculcate environment scanning in students 	<ul style="list-style-type: none"> • Teach environment scanning using PESTLE, SWOT, and other techniques to identify macro and micro trends. • Offer assignments which facilitate cross-cultural functioning.
<p>Ability to bounce back from setbacks</p>	<ul style="list-style-type: none"> • Become aware of stressors that affect self-functioning. • Learn basic stress management techniques. • Be open to ask for therapy or 	<ul style="list-style-type: none"> • Work towards removing the stigma against mental health 	<ul style="list-style-type: none"> • Include course modules on stress management for all graduates. • Make students sensitized about maintaining 	<ul style="list-style-type: none"> • Offer stress management training modules which describe stressors, their impact on people, and how they can be managed.

	<p>support if stress becomes too high.</p>		<p>their mental health</p>	<ul style="list-style-type: none"> • Mindfulness, meditation, exercise, biofeedback, counselling and other stress management techniques should be discussed to build awareness for future need
<p>Knowing digital communication etiquette</p>	<ul style="list-style-type: none"> • Become aware of the different etiquettes for digital communication. • Practise and employ the learnt etiquette while emailing, video-calling, and attending virtual meets. 	<ul style="list-style-type: none"> • Help build awareness about digital etiquette. • Ensure any activities that become online threats or harassment are brought under the purview of law. 	<ul style="list-style-type: none"> • Teach the basic of digital etiquette for all graduates. • Conduct labs for teaching digital etiquette in practice. 	<ul style="list-style-type: none"> • Inculcate digital etiquette in all professionals. • Build awareness of how well written emails and other digital communications can convey a good impression
<p>Awareness of basic cybersecurity measures to safeguard data</p>	<ul style="list-style-type: none"> • Become aware of the need to maintain cybersecurity • Adopt firewall and antivirus programs to safeguard personal details. • Maintain good practices that preserve personal privacy and 	<ul style="list-style-type: none"> • Adopt a comprehensive cybersecurity policy like European union's General Data Protection Regulations. • Ensure cyberattacks are prosecuted • Build awareness among general 	<ul style="list-style-type: none"> • Build awareness about basic cybersecurity measures 	<ul style="list-style-type: none"> • Offer modules on cybersecurity measures. • Build awareness among professionals. • Support professionals with different tools and measures for saving cybersecurity

	confidentiality	public about cyberthreats		
--	-----------------	---------------------------	--	--

Therefore, the learning model for CMS is complex in its needs but simple in its execution as it offers different modes of learning for the four levels of stakeholders identified as being important in career management. The policy makers support the other stakeholders through framework, policies, and regulations while the feedback from the teacher trainers and the career managers enable them to make required changes. The enablers in the form of teacher trainers and career managers have a duty to build awareness about CMS beginning at the schooling level and culminating at the specialised level of the career managers who have all the resources necessary to support professionals from varied fields. Ultimately, it is the end user who has to build resilience, a penchant for continuous learning, and effective management of time, finances, stress, and work-life balance to meet life priorities and goals.

3 Contextual Elements

The core elements of the learning model are connected to contextual elements of resources, the service delivery approach, and the community of practice which will build an entire framework for CMS in a region. The contextual elements build an interface between the four levels of CMS stakeholders, the end users, policy makers, enablers, and the resource developers.

3.1 Resources

The resources include the learning materials, assessments and a repertoire of tools and techniques that enable the delivery of the learning model. The resources included in this Catalogue fulfill the brief for career managers and resource developers while the other stakeholders like the policy makers, teacher trainers, and end users can benefit from them on an as and when required basis.

3.1.1 Learning Materials

The learning materials for CMS are described in steps which are relevant to all other resources.

- The first step is an awareness campaign which will create curiosity and understanding among the human capital in a region about the importance of assuming self-responsibility for steering their lives towards a well-planned career path and not merely

a series of jobs. This awareness campaign should be initiated at mid school level and must involve school counsellors, school administrators, career management practitioners, and industry representatives. This multi-disciplinary involvement will help create a community of practice which is elaborated in detail later.

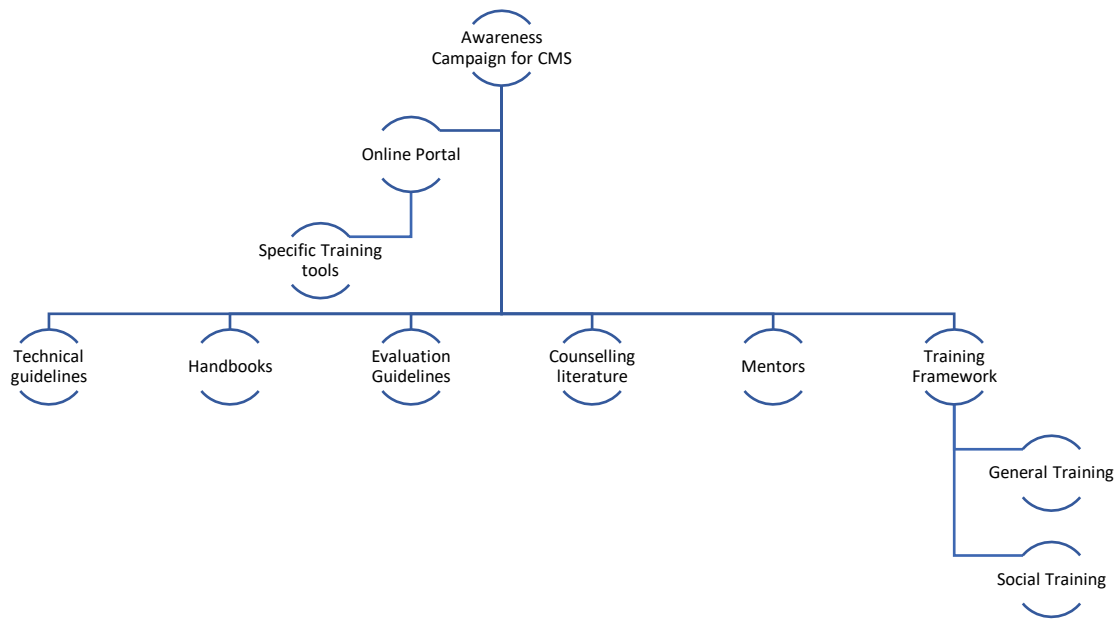
- The creation of an online portal can facilitate the work of the community of practice created for CMS. It can act as the center for collaboration of resources, assessment tools, feedback, and opportunities for candidates. It can be an invaluable resource for policy makers who are looking for trends and feedback, for teacher trainers who are looking for resources and tools, for end users who are looking for career managers, and for career managers who are looking to synergize and collaborate.
- Stakeholders can benefit by establishing technical guidelines for major careers so that Industry-University collaboration can ensure continuous evaluation of required changes in curriculum. Such consistent collaboration will make sure that gap between graduate KSA and industry demands are minimal.
- Career managers should build handbooks for popular careers choices that include qualifications, technical guidelines, names of educational institutions that offer the qualifications, required training, typical job descriptions, offered job roles, salary structures, promotional paths, and opportunities for jobs abroad.
- Training frameworks should be ready for required skills like creation of personal career paths, cybersecurity management, stress management, time management, social networking, digital skills, soft skills, and any other learning areas that can be of benefit to end users. These training frameworks should include a range of options to cater to beginner, middle, and advanced level of users.
- Evaluation guidelines should also be present so that the end users are aware of their progress through trainings or even in their career paths. Evaluations should offer a range of options from self, peer, expert, and 360-degree assessments, work assignments, interviews, examinations, and other evaluation modes.
- Counselling programs for guiding parents and college aspirants who have not yet settled on their career paths can offer a range of options and assessments to facilitate their choice. Basic information about career paths can be shared so that beginners are able to make an informed choice about their future, assess their personalities for a match, and have more realistic expectations from the career path.

- Mentor development programs should be set up making use of the community of practice with policy makers, educational and training institute administrators, industry representatives, and career managers coming together. Mentors can further help in bridging the gap between industry requirements and available KSA in the labor market. Moreover, the mentors can act as excellent sources of feedback about end users' expectations, satisfaction, and needs and share them with the policy makers and resource developers.
- Resources further include the training frameworks which may not have immediate demand in the market but they are needed for community development. These training programs include working for the upliftment and empowerment of the vulnerable sections of the society. Among the learning areas discussed in the Blueprint, building a positive self-image and working with the community can be fulfilled through such training programs. Further, the policy makers can an opportunity to further justify investment in CMS to investors and politicians.
- Among the specific tools needed by the stakeholders, training modules, assessments, evaluation criteria, software that allows career matching, online databases of careers with required qualifications and KSA, e-portfolios, and multimedia information about careers that provide a richer description of what to expect from different roles on the career path.

The resources follow a pathway which can make them easier to distribute and access as shown in Figure 2.

Figure 2

Distribution of resources in CMS



3.2 Service delivery approach

The service delivery approach embodies the actual delivery of the CMS framework and resources. The Learning model and blueprint defined above will be operationalized at different levels of schools, Universities, professional career management services, and the national programs and policies. For this purpose, inspiration can be taken from Greece’s National Organization for the Certification of Qualifications and Vocational Guidance (EOPPEP) (PROFI E-portfolio Eoppep Greece, 2020). The e-portfolio defines itself as being a document to, “collect, organize and document their educational, professional and personal achievements and experiences with main aim to highlight the skills they have gained through them”. It specifies the target group and shows how service users can benefit from it. The included areas are knowledge of the Greek language, foreign languages, numerical ability, digital competence, ability to learn continuously, flexibility, communication skills, problem solving, creativity, team work, entrepreneurial view, and professional abilities. Using this e-portfolio, end users can make record of their abilities, aimed level of expertise, and note progress made under each heading.

The teacher trainers and career managers can support end users through two primary modes. The first are personal meetings where personalized attention is paid to the needs of the end user and the enabler takes on the role of a coach and mentor. Such specialized attention will need more time from the enablers and will, therefore, cost more to the end user. The second mode of service delivery is through group sessions where a group of like-minded end users can

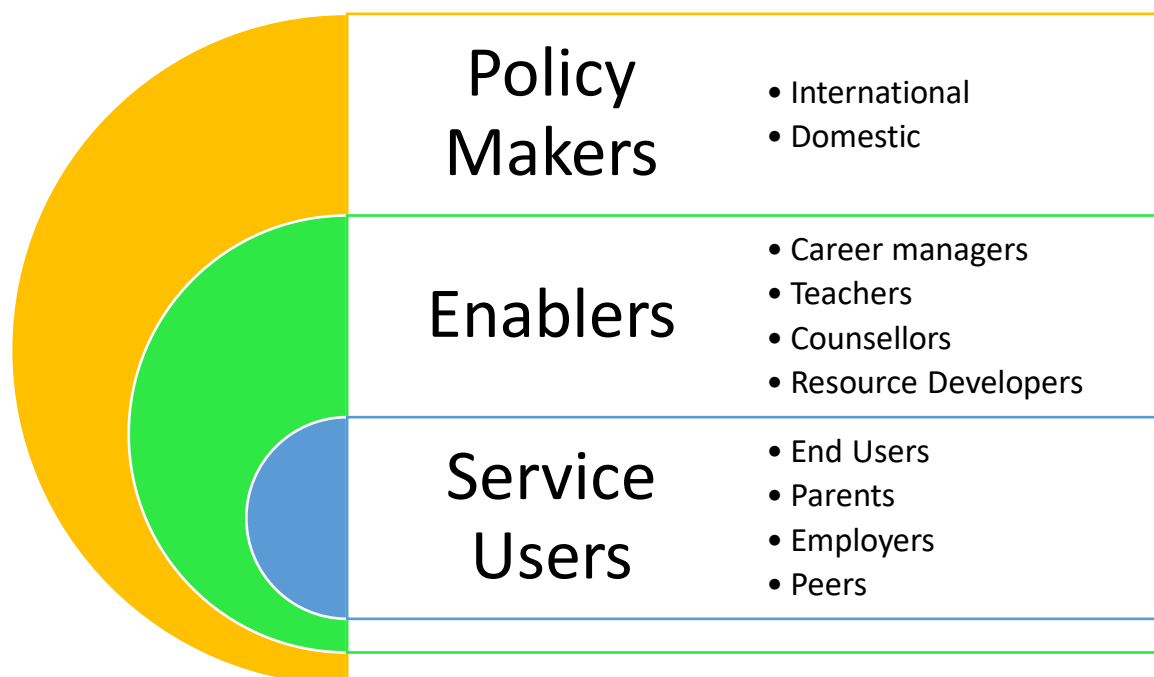
benefit from specialized modules to prepare them for careers. In such cases, the end users not only benefit from lower costs of the program, they can also learn from their peers. Both modules can be delivered through physical and online modes. The online portal, training frameworks, tools, and assessments can all be employed in both modes of service delivery. It is important to mention here that Community of Practice believes in extending the reach of CMS beyond specialized services offered by career managers. This is possible when schools, Universities, and employers all join hands to offer consistent opportunities to learn, train, and implement learning. In such cases, the service delivery centers are expanded to include the schools, colleges, universities, and organizations; in short, all such places which take conscious and planned steps to support end users in their career journeys. As a result, such a community of practice will include the parents, employers, teachers, and peers as active partners in the CMS.

3.3 Community of practice

As described in the last few sections, CMS can and should be delivered through a community of practice that involves all critical stakeholders in close relation to each other. Figure 3 shows how this Community of practice can be visualized.

Figure 3

Community of Practice in CMS



As depicted in figure 3, the community is all encompassing environment of support groups who share best practices, feedback, and resources and build a network of users, enablers, and their advocates. In this respect, the community of practice is not only a pool of resources, they are also critical in engaging the interest of the end users, providing them with needed infrastructure, resource, and opportunities to practice their newly acquired skills, and ensuring that these skills remain relevant in a time where technology is making both knowledge and skills quickly redundant.

It is important to reflect on how often and through which means will this community come together and interact. The first formal mechanism for this interaction are the formal learning media of seminars, workshops, discussions, focused group discussions, and conferences in which representatives of all key stakeholders will participate and share their insights. The occurrence and attendance in such learning opportunities is not possible without active intervention from the policy makers and administrators who have to invest resources and provide infrastructure to support such endeavors. The webinar mode of interaction is an emerging mode that allows a wider reach of attendants though it limits the level of discourse to a degree.

It should be noted that creating a community of practice is essential to the idea of a CMS as it keeps the system relevant, responsive, and inclusive of diverse opinions. When a number of stakeholders get involved in deciding the CMS, the result becomes better and more easily accepted. Moreover, it cuts across levels and is better able to manifest in individual implementation, be understood by all, and reflect in the existing social institutions.

3.4 Policy connection

The policy connection describes the way in which the CMS Catalogue can contribute to and be implemented in policy. The learning model identifies the learning areas that should be attended to, thereby, improving the quality of human capital. When the labor market is able to fulfill the needs of the industry, when individuals are better prepared with the required KSA, when they continue to update their KSA with requirements and external trends, when they are enjoying a higher quality of life and work life balance, and finally, when they are creative and innovative, the productivity of the nation rises and improves the prosperity of the people. Moreover, the people become more empowered as they have the means to take charge of their

lives, choose career paths that are no longer limited to the traditionally preferred routes, find their way to succeed, and take informed decisions. The sections on learning model, levels, and community of practice have stressed that the policy makers act as a two-way communicating source who create policies based on the needs of the public and the industry and revisit them as those needs change. When CMS becomes a part of policy and a community of practice is established to support it, it is much more likely that organizations are able to achieve high work performance and respond to the demands of technological development. Moreover, by adopting practices of supporting the vulnerable sections of society through training, the community supports all sections of the society and make the community more equitable and balanced. Considering the benefits of supporting CMS as a policy initiative, it is no wonder that several governments have adopted it as a national initiative.

The Canadian government created a Blueprint for CMS and operationalized it into policy through Human Resources Canada with Manitoba being one of the more successful states to implement it into its educational institutions (Education Department Manitoba, 2013). The Education department of the state involved a series of stakeholders from schools, employment centers, third party agencies, governmental agencies, and the industry to create a Blueprint for CMS, identify essential skills, and employability skills.

A policy that includes CMS framework should fulfil four key criteria (Gravina and Lovšin, 2012). It must first set clear policy goals which are mutually agreed and understood among key stakeholders. For instance, the emphasis on lifelong learning and resilience should be incorporated as key criteria. The second step should be a justification and reasons for the acceptance of the CMS framework in policy as without this the changed curriculum, pedagogy, and learning areas will not be accepted among the end users. Countries like Germany who have established a legislation for CMS have adopted the ultimate form of justification for its inclusion. Thirdly, the stakeholders must agree about the place of implementation of the policy and whether it applies only to educational institutions or also to employers and training centres. It is preferable to have a holistic policy that includes all involved institutions in its ambit, however, a crunch of resources may be better fulfilled through a stepwise, gradual implementation. Lastly, the pace of implementation has to be decided so that the scope of the policy is covered in the most efficient and effective manner. When change is required at different levels, it is preferable to move with a slow pace with several meetings between

stakeholders to build consensus and gain acceptance. On the other hand, once a beginning has been made, proceeding with expansion of the policy can happen at a faster pace than before.

Implementation of policy is akin to change management and should proceed with similar principles. After a shared vision and understanding of various drivers of the policy are decided, the change agents should decide which levels of the hierarchy should be included in the process. For instance, if schools are the primary place of implementation, then are the only the Principals included in consultations or are all teachers to be made a part of community discussions? The former choice would allow a swifter implementation; however, the latter will be lengthier, more expensive but offer more diverse opinions from the people working at the grass roots. Another critical change management principle is garnering drivers of change. In Germany, the National Guidance Forum has established a steering committee that allows it to take incremental, consistent steps to achieve the policy guidelines (Euro Guidance, 2020).

Apart from the policy changes, the actual content of the learning systems and the framework are also important. This content has to be relevant to the needs of the stakeholders and fulfil immediate demands of the industry and the end users. The content delivery should also aspire for the highest standards of service as without accurate and courteous service, the framework remains a theoretical content and does not get realised. The content delivery is dependent on the content and the level of professionalism of the staff whether they are the enablers or the career managers.

Finally, the policy as is the case with the CMS framework, have to be assessed for relevance and responsiveness frequently. This is where the steering committee and the stakeholders are of use again as they get back to the policy makers with the feedback about existing practices, persisting barriers, and emerging trends. With digital content, training, and feedback mechanisms emerging in most countries, the feedback loop is becoming faster but needs equally fast response from the policy makers.

4 Summary

This Catalogue has created a CMS Blueprint which matches the needs and insights identified from the WP2 survey and literature review. The Blueprint indicates the varying levels of CMS from the end users who need more awareness and training in CMS KSA and tools, the policy



makers who work at the macro level and need a bird's eye view of trends and feedback about existing policies, the teacher trainer or enablers who are in unique positions to make a lasting impact on CMS in the community through their regular contact with students at different levels of education, and lastly, the CMS professionals who operationalise the specialised field of CMS. These levels who also represent the key stakeholders can acquire the needed KSA through the learning model prescribed in this report. Further, the required resources, the service delivery approach, community of practice, and policy connections are also discussed to understand the context in which CMS should be practised in different regions. It is expected that this report will be employed in reflection on existing CMS framework and choices to improve it.

References

Education Department Manitoba (2013) *Career Management Skills*.

Euro Guidance (2020) *Guidance System in Germany*. Available at: <https://www.euroguidance.eu/guidance-system-in-germany> (Accessed: 11 October 2020).

Gravina, D. and Lovšin, M. (2012) *Career Management Skills: Factors in Implementing Policy Successfully*. Available at: http://www.elgpn.eu/publications/browse-by-language/english/Gravina_and_Lovsin_cms_concept_note_web.pdf/.

Mohr, K. A. J. and Mohr, E. S. (2017) 'Understanding generation Z students to promote a contemporary learning environment', in *Journal on Empowering Teaching Excellence*. doi: 10.15142/T3M05T.

Pérez-Escoda, A., Castro-Zubizarreta, A. and Fandos-Igado, M. (2016) 'Digital skills in the Z generation: Key questions for a curricular introduction in primary school', *Comunicar*. doi: 10.3916/C49-2016-07.

PROFI E-portfolio Eoppep Greece (2020) *Name of Portfolio/e-portfolio: personal career planning report– E-portfolio of EOPPEP*.