New economic and social business models to support young entrepreneurs

Evidence from MOSAIC

Centre of Vocational Excellence

MOSAIC
Mastering Job-Oriented Skills in Arts & crafts thanks to Inclusive Centres of vocational excellence

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PREFACE

The subject of new economic and social business models is almost as vast as the myriad of existing crafts. Specific to the corporate world, the concept of business models is part of a new research program. This has been gradually evolving over the past ten years in strategic management (Lecocq et al., 2010)[1] and over the five past years in strategic entrepreneurship (Demil et al., 2015)[2]. In this report, we build on the definitions and fundamental principles established in this program. As business models are a broad concept with multiple definitions depending on the context of application, the MOSAIC project frames the research around "new" and "economic and social" elements, appropriate to the situation of art and craft companies.

Around 85% of the craftsmen in Europe are self-employed (GEOCyL, 2022), so it makes sense to look in this report at European policies aimed at small and medium-sized enterprises (SME's). Within the European Commission, SME's are at the heart of the 2019-2024 priorities[3] , representing 99% of businesses in Europe. The EU aims to support these companies in their transition to sustainability, by mobilising around a climate-neutral, resource-efficient, and agile digital economy. The main levers[4] are by reducing the regulatory burden and improving access to markets and financing. The construction of these European strategies is based on the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME) program, set up between 2014 and 2020. Business strategy priorities are based on 14 ecosystems identified by the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs[5] . The arts and crafts sector is part of the "Creative and cultural industry" ecosystem: "There is also a role to play for the creative industries and their potential for contributing to transformation of the more traditional industrial ecosystems with their creative approach to processes and products and design-oriented thinking". In the specific "circular economy" objective of this strategic plan, certain points concern art and craft companies. Indeed, we identify the following axes: "a sustainable product policy framework", "key product value chains", "less waste more value". Another part of the objectives concerns the modernization of administrations, in particular: "human resource

[1] Lecocq, X., Demil, B. and Ventura, J. (2010). "Business models as a research program in strategic management: an appraisal based on Lakatos", M@n@gement, 13(4), 214-225.

[2] Demil, B., Lecocq, X., Ricart, J.E. and Zott, C. (2015). "Introduction to the SEJ Special Issue on Business Models: Business Models within the Domain of Strategic Entrepreneurship," Strategic Entrepreneurship Journal, 9(1), 1-11.

[3] Von der Leyen, U. (2019). POLITICAL GUIDELINES FOR THE NEXT EUROPEAN COMMISSION 2019-2024: A Union that strives for more. https://commission.europa.eu/system/files/2020-04/political-guidelines-next-commission_en_0.pdf

[4] European Commission. (2020). COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS: An SME Strategy for a sustainable and digital Europe. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0103

[5] European Commision. (2020). Strategic Plan 2020-2024: Directorate-General for Internal Market, Industry, Entrepreneurship and Small and Medium-sized Enterprises (DG GROW). Ref. Ares(2020)7470664. https://commission.europa.eu/system/files/2020-12/grow_sp_2020_2024_en.pdf

management", "sound financial management", "fraud risk management", "digital transformation and information management", "sound environmental management".

In this sense, the MOSAIC program's expectations regarding new economic and social models are in line with Europe's strategic development priorities. The studies carried out within this project and the specific conclusions should contribute to the following four priorities:

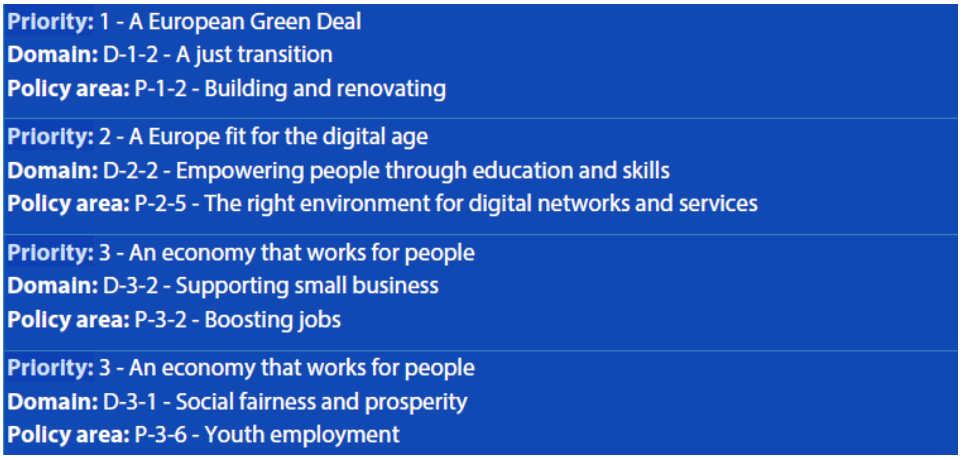

Figure 1. Screenshot of MOSAIC's full application document, p.3, 2021

Within the MOSAIC research program, the theme of "new economic and social business models" is introduced from different angles: social business models, digital and social entrepreneurship, digital revolution and sharing / social economy. The main focus is on digitalization (including marketing digital communication and social media) and cooperation / shared economy (including shared spaces, coworking, slow-made, circular economy)[6] . On the other hand, these investigations are aimed at young entrepreneurs. They are thus put into perspective with the current entrepreneurial context. The period of crisis following COVID-19 is significant for today's businesses, as demonstrated by the implementation of the NexGenerationEU plan[7] . This crisis "is a once in a lifetime chance to emerge stronger from the pandemic, transform our economies and societies, and design a Europe that works for everyone[8] " (European Union, 2020). This post-COVID period includes a number of challenges for the future development of small and medium-sized businesses. Creative and cultural professions are in a precarious situation, amplified by Covid-19[9] . As an instrument for rebuilding a "greener, more digital and more resilient" Europe, the NextGenerationEU plan proposes an enhanced youth guarantee system, including loans and grants for young

[6] Erasmus+ Programme (ERASMUS). (2021). MOSAIC - Application form : Call : [ERASMUS-EDU-2021-PEX-COVE] - [Centres of Vocational Excellence 2021] (Proposal ID 101055648). (ERASMUS BB and LS Type II): V1.0.

[7] European Commission. (2020). Europe's moment: Repair and Prepare for the Next Generation: COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS [Press release]. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0456

[8] European Union. (2020). NextGenerationEU. https://next-generation-eu.europa.eu/index_en

[9] Comunian, R., & England, L. (2020). Creative and cultural work without filters: COVID-19 and exposed precarity in the creative economy. Cultural Trends, 29(2), 112-128. https://doi.org/10.1080/09548963.2020.1770577

entrepreneurs. There is also Erasmus for young entrepreneurs[10] , for the exchange of business and management experience. Through the current EU Work Plan for Culture 2023-26, European Union and Member State's level recognised the proven social and economic impacts of artists and cultural and creative professionals, and also the working conditions described as irregular and having unpredictable incomes, with a lack of legal structures (European Commission, 2022)[11] . This plan provides support for craft businesses, based in part on the following recommendations: set up an EU framework for working conditions to adopt measures that are adapted to the specificities of these professions, with specific and coherent legislation, support skills development and lifelong learning. Overall, a number of European Union projects aim to improve conditions for craft businesses, whether SME's or professionals in the cultural and creative industries.

The economic crisis is a surprisingly propitious time to develop new business models, try out new initiatives and adopt new strategies. European financial support secures the risk-taking undertaken by companies in implementing new ideas in line with their development strategies (mentioned above). Indeed, "Changing a business model is a real challenge for management, and many companies have proved incapable of doing so."[12] Despite the growing number of failing companies[13], the entrepreneurial landscape is rich in proposals to meet current and future challenges. Arts and crafts become the forerunners of the EU's sustainable development strategy through their strong potential of social and cultural innovation. This means not only aligning to the broader vision established by policy measures and initiatives, but also demonstrating an active contribution to innovating environmental practices. Education plays a fundamental role here, through its ability to instil knowledge, skills, and values that promote responsible practices. Green practices, eco-design and responsible design put under the spotlight a new set of skills which are oriented at solving specific environmental problems. We need to keep up with the constant evolution and update of these skills and the knowledge they build on.

So how can we expand our thinking about business models and entrepreneurship in arts and crafts? What educational and connected practices enable us to do so and how can we map these in a comprehensive way? In reflecting upon these questions, the role of Vocational Education and Training centres (VET centres) as main institutions engaged in art and craft education emerges as fundamental, as well as collaboration with companies in the sector. The European Commission acknowledges Vocational education and training (VET) centres as providers of essential skills, which enhance learners' employability, supporting

[10] https://www.erasmus-entrepreneurs.eu/index.php?lan=fr

[11] European Commission. (2022). COUNCIL RESOLUTION ON THE EU WORK PLAN FOR CULTURE 2023-2026. Official Journal of the European Union. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022G1207(01)

[12] Loilier, T. & Tellier, A. (2016). XV. Henry Chesbrough. Rethinking the business model in the age of open innovation. In: Thierry Burger-Helmchen ed, Les Grands Auteurs en Management de l'innovation et de la créativité (pp. 297-321). Caen: EMS Editions. https://doi.org/10.3917/ems.burge.2016.01.0297

[13] Eurostat Statistics Explained (2023). Quarterly registrations of new businesses and declarations of bankruptcies - statistics.
https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Quarterly_registrations_of_new_businesses_and_declarations_of_bankruptcies_-_statistics

their personal development and encouraging active citizenship. VET boosts enterprise performance, competitiveness, research and innovation (European Commission, 2023)[14] .

In this report, we look at how arts and crafts progress our contemporary understanding of business models and entrepreneurship through specific initiatives and best practices inside arts and crafts companies, encouraged by vocational education (VET). Sustainability and social inclusion, the subjects addressed in parallel by the MOSAIC project, are part and parcel of the reflections carried out by companies in their business models. In this report we draw on the results of these studies. In doing so, we use a practice-led lens that links the macro context (legal), to the micro-perspective provided by actors such as VET centres and craft/design businesses, to grasp the way in which best practices emerge. We build on the results of MOSAIC - Mastering job-Oriented Skills in Arts & crafts thanks to Inclusive Centres of vocational excellence (MOSAIC, 2022) - an Erasmus+ project bringing together 15 partners from 7 countries to explore how the arts and crafts sectors can respond more accurately to new emerging needs and societal changes. One of the main results of this research is a framework that provides an organised manner of understanding best practices inside VET education, aligning it to contemporary needs and the wider European context. After chapter one which is a first approach on new business models applied to craftsmanship, chapter two details the methodology used in MOSAIC for mapping new business practices in arts and crafts. Chapter 3 presents the results of the mapping process and introduces a framework for an easier classification of best practices. The concluding section discusses how the aforementioned framework helps us to think about the future of entrepreneurship education and skill creation.

[14]European Commission, (2023), Vocational education and training initiatives, https://education.ec.europa.eu/education-levels/vocational-education-and-training/about-vocational-education-and-training , accessed on 01/06/2023

Introduction

I.1. Presentation of MOSAIC, missions, objectives and resources

MOSAIC (Mastering Job-Oriented Skills in Arts and craft thanks to Centres of vocational excellence) is a European ERASMUS plus project involving seven countries - Armenia, Belgium, Bulgaria, Canada, Finland, France, Italy - and 15 main partners - training centres (6), universities (2), companies (1), chambers of commerce and industry (3), mobility service provider (1), cultural industries expert (1), multiplier organisation (1) - plus a significant number of secondary partners (Figure 2).

In its declaration of intent, the European MOSAIC project defines itself as follows: "Through this project, we want to address certain key issues for vocational training schools and companies dealing with crafts, tradition and creativity, by providing concrete solutions in tune with the times, which will guarantee the full employability of learners and the competitiveness of the business sector" (MOSAIC, 2022). In other words, what unites the different partner countries and the different players in the project is this collective reflection on arts and crafts and, more specifically, their teaching. It is important to emphasise that MOSAIC is the first CoVE to focus entirely on the arts sector and crafts, as part of the cultural and creative industries.

MOSAIC's main objective is to improve the quality of vocational training in the arts and crafts in order to meet the challenges posed by digital, environmental and socio-economic developments, by proposing to generate innovations from three angles: technical, educational and social. To achieve this, MOSAIC has targeted specific craft sectors, namely: traditional and rare crafts, precious metals and jewellery, furniture and wood, design and industry, which correspond to the fields of expertise of the various partners as well as to the local and national specificities of the countries represented. In addition to the main objective, the project is further structured by five specific objectives:

Figure 2. Mosaic partners and consortium

1. Increase and improve collaboration between companies, VET centres and higher education institutions, in order to achieve a state of mutual fertilisation.

2. To update the range of initial and continuing vocational training courses in the arts and crafts by proposing new training modules.

3. Encourage internationalisation and transnational strategies in response to changes in VET and society.

4. Building a forward-looking VET by integrating digital methodologies and environmental sustainability.

5. Improve strategies for the inclusion of VET providers and facilitate the transition to the world of work in the arts and crafts for those with fewer opportunities.

The MOSAIC project is divided into 6 Work Packages (WP), 3 of which are operational - WP 3 (research), WP4 (training) and WP5 (internalisation and experimentation) - and are implemented at specific points in the project. The other three, known as functional work packages, WP1 (coordination and administration), WP2 (management and quality) and WP6 (dissemination and impact), are implemented on a regular basis throughout the duration of the project. The activities of these WPs (1,2,6) are in fact cyclical and will be repeated whatever the stage of the project. MOSAIC has opted for a classic "waterfall" methodology described by modern project management theories. The tasks are organised in a chronological sequence that will lead to the production of the final deliverables with stages that are consistent, meaning that each phase will start at the end of the previous one. The operational work packages (3, 4 and 5), for example, have been planned in chronological order in three stages.

Stage 1: this is represented by WP 3 "Research", which will be used to define the state of play, collect data from companies and VET providers on skills gaps and good practice in terms of digitization, inclusion, R&D, etc.

Stage 2: the second stage will consist of developing the training modules of WP4, based on the elements that emerged from the research carried out in stage 1. MOSAIC partners will use the information collected and combine it with their expertise to develop: a) sector-specific training modules in the professional fields of precious metals and jewellery, furniture and wood, design, arts and industry; b) an entrepreneurship training module focusing on digital marketing and the sharing economy which will be tested on courses concerning traditional and rare crafts; c) two training courses for school staff on digitisation and inclusion.

Stage 3: Once the training offer has been updated, the partners will focus on increasing the internationalisation process of VET schools in WP5, by offering transnational study programmes in Arts and Crafts and a training course on internationalisation for school staff.

MOSAIC has a substantial budget to carry out its mission, with an allocation of 3,986,119 euros over 4 years for a total budget of 6,000,000 euros. The Mosaic budget is made up of 4 main categories of costs: staff costs, purchasing costs related to mobility and the creation of project deliverables, and subcontracting. Each partner is allocated a specific budget in proportion to its mission, requirements, constraints and operations.

I.2. Presentation of Work Package 3. Research

The application file for the ERASMUS Plus project has precisely defined the operation of WP3 research. WP3 is the first operational WP of MOSAIC. It provides an opportunity to take stock of certain subjects relevant to developing excellence in VET. It creates the scientific knowledge base for the next two operational Work Packages (4 and 5). For these reasons, it is linked to all the specific objectives. More specifically, the research activity sought to answer the following questions about the future of the arts and crafts:

1. What skills do companies working in the traditional and rare crafts, precious metals and jewellery, furniture and wood, design and industrial sectors require? How do they see the future and the changes that will affect their sectors?

2. What are the characteristics that facilitate the creation of R&D centres or departments in a VET institution? What are the steps involved in setting up an R&D centre? How can companies get involved and carry out research in VET centres, especially those with limited capacity to invest in R&D and new technologies? How can R&D be financed?

3. How has digitisation been integrated into the normal processes of a VET school? What are the consequences of Covid-19? How can the digitisation process be improved so that it enriches rather than substitutes the activities that are essential for craftspeople?

4. What does the craft industry need in order to employ young people with fewer opportunities, such as special educational needs or disabilities?

5. How can we incorporate more content on environmental sustainability into our training courses?

6. What are the most innovative ways of doing business? How can online marketing and digitisation support start-ups? How can the sharing economy benefit young people who want to set up their own business?

In addition to the deliverables documenting the results of the research, WP 3 aims to create an online European Art Professions Observatory: an online platform where all the data collected by the research will be accessible by practitioners. This platform will also contain a virtual infrastructure enabling regular surveys to be sent out to companies in order to update the skills gap analysis, even after the project has ended, and to provide useful figures to vocational training centres and institutions dealing with arts and crafts. To ensure the long-term future of research into arts and crafts, the partners will develop a scientific journal to disseminate their findings and fuel academic debate on the future of the creative and cultural industries.

This work programme is particularly rich in activities and outcomes, as it aims to produce a coherent body of knowledge covering the most interesting drivers for the future development of arts and crafts VET. Each task presented below is linked to a single outcome.

However, several tasks are needed to produce a single outcome, so the tasks can be grouped as presented below.

- Analysis of skills gaps in the arts and crafts sector
- Publication on digital education in arts and crafts.
- Methodologies to promote social inclusion in the arts and crafts sector.
- Publication on methodologies for increasing environmental education in the crafts sector.
- Recommendations on how to encourage R&D in VET
- Production of a document on new economic and social business models to support young entrepreneurs.
- Tasks related to the production of the European Observatory

To carry out these various tasks, WP3, coordinated by UJM and CCI Dobrich, was organized around a team of 12 researchers (8/France/4 Finland), 1 project engineer (France), 1 sound and image technician (France) and 1 project manager (Bulgaria), combining and federating multidisciplinary skills: design, art history, marketing management and education sciences.

I.3. Defining the concept of crafts and artistic professions

To better understand MOSAIC, it is necessary to establish a few milestones on the notion of craftsmanship. The branch that interests us, arts and crafts, is directly linked to the more general branch of crafts. Both are not recent inventions, even if the terms took a long time to appear. Almost all civilisations have been built in part around these concepts. However, they have not always received the attention we give them today. While at certain times a few families of craftsmen were able to obtain significant privileges in various countries - glassmakers, for example - it has to be said that disdain and contempt have also accompanied these activities. This was the case in the Roman Empire, where, from Cicero to Appuleius, the words and comments could be acerbic (Kizaba, 2006): "The vile arts and those that masquerade as such, the purely manual trades, themselves contribute greatly to the comfort of existence; but they have nothing in common with virtue [...]. According to Posidonius, the arts fall into four categories: the vulgar and low arts (vulgares et sordidae), the educational arts and the liberal arts. The former are the business of the craftsman; purely manual, they aim only at the material arrangement of existence; neither moral propriety nor concern for honesty inspire them to any degree" (Seneca, Letters to Lucillius, XI, 88, 21-22, CUF ed.).

The remarkable thing about craftsmanship is its resilience. This is particularly true in the fields in which MOSAIC is directly involved. Woodworking, jewellery and ceramics have survived the centuries by adapting to demand, evolving with the times and incorporating major technical and technological innovations at every stage in their history. One of the most important moments in these transformations was undoubtedly the advent of industrial society in the 19th century, which overturned and called into question a whole part of the craft and old production methods. The rise of the machine, as well as advances in chemistry and other fields, radically changed the perception of these crafts and influenced production and creation (Frayling, 2012). Throughout the 19th century, a vast debate shook the political,

economic and artistic worlds on this issue. Two currents of thought emerged: on the one hand, the desire to return to craftsmanship and the development of the individual (the Arts and Craft movement, with W. Morris as its figurehead); on the other, the desire to reconcile art and industry, in other words the use of specific operating methods such as the machine and the division of labour. While these two currents may seem antagonistic and sometimes irreconcilable, things are not quite so simple and straightforward. The players oscillate between the two poles, and many discourses are contradictory to say the least, even ambiguous and paradoxical. What is clear, however, is that the craft model is gradually moving from the central model to the peripheral model of production, without losing its capacity for innovation or its attractiveness.

It was in the 20th century that more precise definitions of crafts and arts and crafts became necessary, both to define a finer economic and fiscal framework and to safeguard cultures and traditions that were sometimes under threat. With this in mind, UNESCO adopted the Convention for the Protection of the World Cultural and Natural Heritage (Gruber, 1972). Article 2 of this ground-breaking text stipulates that "intangible cultural heritage" means the practices, representations, expressions, knowledge and skills - as well as the instruments, objects, artefacts and cultural spaces associated therewith - that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus helping to promote respect for cultural diversity and human creativity: The "intangible cultural heritage", as defined in the paragraph above, manifests itself in particular in the following areas: (e) skills associated with traditional craftsmanship. With Sámi craftsmanship in Finland and First Nations craftsmanship in Quebec, it is the question of a specific know-how, in tune with a specific culture, that arises. In Quebec, for example, in the First Nations community, the creative process is as much about finding the right material - skin, bark, stone - as it is about making it, integrating and accompanying these rituals with a genuine spiritual approach to ancestral skills.

However, we were also able to measure certain constants in the craft sector. First of all, there is great heterogeneity between the players in this field, in terms of company size, production destination and training, among other things. But also, and this must be emphasised, because of its strong roots in a given region, where it forges or accompanies its identity, through its network of contacts throughout the territory, and through its interaction with other sectors, whether economic or cultural, to the benefit of the tourism sector in particular. Finally, through the resilience we have highlighted, which makes these sectors of activity open to the major changes taking shape in the areas explored by MOSAIC - sustainability, inclusion, digital.

1. First approach to new business models applied to craftsmanship

1.1. Fundamentals of new business models in Arts and Crafts

The practice of fine crafts in Europe is dependent on entrepreneurship, with the majority of craft structures being self-employed. The definition of "business models" and "economic and social business models" is fundamental to identify the new models adopted by companies. This distinction will be used to orient the content of training modules on entrepreneurship towards emerging practices, in line with current issues. First of all, "business models" is neither a strategy nor a discipline. It is a concept and "a well-specified system of interdependent structures, activities, and processes that serves as a firm's organising logic for value creation (for its customers) and value appropriation (for itself and its partners)" (Sorescu et al., 2011[15]). The performance of an organisation's activities is often linked to the way its business model is implemented. It describes how the company creates value. The business model supports the implementation of corporate strategies, i.e., the planning of actions to change the way the company operates. However, the way in which an organisation is structured varies according to the type of company and activity. We have drawn on the specific characteristics of the companies targeted by the MOSAIC project to define a business model.

Designing, changing or transforming a business model requires a long period of reflection, adaptation and projection. Indeed, it involves an iterative passage through different stages, including the experience and analysis of this new organisational system within the company, before the realisation of its change (Hummels et al., 2019)[16]. The social part is also important in implementing a new business model, as it involves changes in behaviour and routines. Implementing a new business model is a long-term commitment.

The perennity (Dumez, 2009)[17], performance and profit triangulation helps us to understand the process of changing a business model: perennity is the objective sought when changing a business model, performance an indicator triggering the change procedure, and profit the indicator estimating the performance achieved by the company. The "business models" research program (Lecocq et al., 2010)[18] is based on five postulates, articulated

[15] Sorescu, A., Frambach, R.T., Singh, J., Rangaswamy A. and Bridges C. (2011). "Innovations in retail business models", Journal of Retailing, 1, S3-S16.

[16] Hummels, C. C. M., Trotto, A., Peeters, J. P. A., Levy, P., Alves Lino, J., & Klooster, S. (2019). Design research and innovation framework for transformative practices. In Strategy for change (pp. 52-76). Glasgow: Glasgow Caledonian University.

[17] Dumez, H. (2009). Identity, performance and organizational sustainability. Revue française de gestion, 192, 91-94. https://www.cairn.info/revue--2009-2-page-91.htm.

[18] Lecocq, X., Demil, B. and Ventura, J. (2010). "Business models as a research program in strategic management: an appraisal based on Lakatos", M@n@gement, 13(4), 214-225.

around value creation (1) and value capture (2), the company's integration into its ecosystem (3), the dependency between products/services and company operations/activities (4), and the scope for decision-making on business management (5). In this way, various indicators enable performance to be considered, and several means are possible to achieve a perennial business model[19] (Demil et al., 2019). In this way, this program differs from managerial perspectives in which performance depends on the environment, focusing more on competitive advantage (Porter, 1985)[20] . Through the business model concept, performance is based on the choices made by the organisation in deploying its resources. It is essential to stress that the life of a company does not depend on a business model, no matter how ingenious it may be, but on a succession of business models.

The "newness" associated with a business model is subjective. In the context of our study, we need to know how young graduates from VET centres can practise their trade independently in a changing environment. In other words, there are two ways of identifying the "new" nature of business models. The first would be to list the changes in the environment and progressively associate case studies of practices responding to the challenges of these changes, leading us to identify new business models. The second would be to identify the dysfunctions and difficulties that craft businesses face today, and to associate case studies of companies that have overcome these difficulties. In this case, the focus would be on the evolution of business models through case studies. In this way, the "new" aspect is studied as much in the systems of recently created companies as in those with several years' experience. There is also the question of the number of years required to judge the "newness" of a business model. The changes in which business model issues are positioned are more or less recent, but the period of crisis following COVID-19 is significant for companies, and many organisational mechanisms have since been revised in order to survive. We propose to use the beginning of the crisis period to observe the "novelties" associated with these changes. However, even if the business model meets the criterion of "novelty", we must also observe the performance generated. This evaluation indicator needs to be constantly anchored in analyses of the real effectiveness of new business models.

In the entrepreneurial landscape, it seems that the term "business model" is more often associated with the industrial or start-up sectors. In the crafts sector, the use of "entrepreneurial logic" seems to be closer to the concept of business model. The different typologies of craftspeople "reveal different ways of conceiving business and different ways of making economic profits." (Jourdain, 2016, p.3)[21] These different typologies - the maker, the elite craftsman, the renowned artist, the designer - give rise to different entrepreneurial logics - the logic of quality, the logic of price, the diversification of revenue sources. In particular, they are deployed around the entrepreneurial strategy of "singularization" in the art professions (Jourdain, 2010)[22] . Anne Jourdain describes this strategy from the point of

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[19] Demil, B., Lecocq, X. & Warnier, V. (2019). 9. The business model in strategic management. In: Sébastien Liarte ed, Les grands courants en management stratégique (pp. 249-280). Caen: EMS Editions. https://doi.org/10.3917/ems.liar.2019.01.0249

[20] Porter, M. E. (1985). The Competitive Advantage: Creating and Sustaining Superior Performance. NY : Free Press.

[21] Jourdain, A. (2016). L'héritier, l'ancien ouvrier et la reconvertie : analyse des différents types de logiques entrepreneuriales parmi les artisans d'art. Revue de l'Entrepreneuriat / Review of Entrepreneurship, 15, 257-281. https://doi.org/10.3917/entre.153.0257

[22] Jourdain, A. (2010). The social construction of singularity. Une stratégie entrepreneuriale des artisans d'art. Revue Française de Socio-Économie, 6, 13-30. https://doi.org/10.3917/rfse.006.0013

view of the competitive situation of arts and crafts in relation to industry and hobbyists. Artisans' main asset is the "quality" of their products, enabling them to escape price competition. The concept of singularization leads to a process of qualification and persuasion. As the sociologist emphasises the importance of "staging quality" (Jourdain, 2016, p.28), issues arise on the marketing side, i.e., investment in the laborious work of communicating and constructing commercial discourse impacts the operating system of art and craft companies. In view of this principle, it seems appropriate to integrate singularization, through the "quality" indicator, into the MOSAIC study of business models.

As part of the MOSAIC project, we propose the following elements as specific to new business models for art and craft companies:

1. **Value creation:** refers to the mechanisms used to produce value.
2. **Value capture**: refers to the mechanisms implemented to capture revenue streams (profits, earnings).
3. **Artisanal uniqueness**: identify the element that guarantees product quality (its characteristic) / put it into perspective with the creation and capture of value.
4. **Performance / profit / sustainability: refers to** the impact of the results obtained by creating and capturing value on the company's operations.
5. **Sustainable transition**: putting the challenges of ecosystem change into perspective with the responses provided by corporate organisational systems.

1.2. Fundamentals of entrepreneurship in arts and crafts education

When identifying entrepreneurial practices in craft vocational education, one of the main challenges is to observe the relevance of talking about craft entrepreneurship. Indeed, entrepreneurial education on a global scale and aimed at large companies would seem inappropriate. Smaller, more recently-established companies, based on production activities and run by young people who have graduated from the school, require special provisions. Indeed, even though around three-quarters of craftspeople are self-employed, and therefore entrepreneurs, a distinction remains between those with a background in the trade and pure managers (Jaouen, 2010)[23] . In micro, small and medium-sized businesses, the central role of the manager in craft practice seems obvious. Integrating entrepreneurial principles into the education and skills acquisition process is fundamental. According to the European Center for the Development of Vocational Training (Cedefop), skills are connected to performing tasks and solving problems. They represent the ability, proficiency or dexterity to carry out tasks that come from education, training, practice or experience. As such, it can enable the practical application of theoretical knowledge to particular tasks or situations. Therefore, skills refer to behaviours, attitudes and personal attributes that make individuals more effective in particular contexts such as education and training, employment and social engagement.

[23] Jaouen, A. (2010). "Typology of very small business leaders". Journal of Small Business & Entrepreneurship. Vol. 3, n° 12, pp. 133-152.

To clarify what entrepreneurial skills are, we adopt the definition proposed by the European Center for the Development of Vocational Training: "Entrepreneurship competence generally supports a higher rate of start-ups, leads to a better employability and prevents social exclusion. It is not only about starting a business but also about creating value for others, innovation, inclusion and sustainable development; hence a must-have key competence for all.[24] " (Cedefop, 2022). In addition to mastering the basics of the craft, the young entrepreneur must also acquire knowledge related to social inclusion, sustainability, digitalization and research and development. But above all, they need to be able to put all these complementary skills into perspective with their trade and the running of their business. These related elements, which are also training modules within the MOSAIC project, are ingredients to be integrated into business models. New business models for craft businesses should be based on the following elements:

1. **Sustainability**: Sustainability or rather **Sustainable Development**. Sustainability is a complex concept that cannot be reduced to a single definition and thinking. As Franck Dominique Vivien reminds us: "This complex question concerns the general improvement of living conditions on earth for human beings without undermining the regulating and evolving capacities of the biosphere. It emerged explicitly some thirty years ago, if we take as our starting point the publication of the report of the World Commission on Environment and Development (WCED). It is in this work, better known as the Brundtland Report, that what is sometimes referred to as the "canonical" definition of sustainable development appears, along with many others, namely "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Cmed, 1987, p. 51)". This definition highlights the complexity of the notion of sustainable development, that addresses ecological, social, and cultural aspects at the same time. In MOSAIC sustainability refers first and foremost to the ecological component of the concept which includes making products that are eco-friendly by increasing the amount of reused materials, selecting supplies and suppliers that are less polluting, using materials that are produced locally, reducing waste and increasing energy efficiency, adopting principles of circular economy.

2. **Social inclusion**: Inclusion or rather social inclusion. For the record, the notion of social inclusion was used by the sociologist Niklas Luhmann (1927-1998) to characterise the relationship between individuals and social systems. This notion does not necessarily have the same definition in different countries. According to the European Commission's Charter of Fundamental Rights, social inclusion is a "process which ensures that people at risk of poverty and exclusion are given the opportunities and resources to participate fully in economic, social and cultural life, and that they enjoy a standard of living and well-being that is considered normal for the society in which they live. Social inclusion ensures that they have greater participation in the decision-making processes that affect their lives and greater access to their human rights".

[24] Cedefop. (2022). Entrepreneurship competence in vocational education and training. https://www.cedefop.europa.eu/en/events/entrepreneurship-competence-vocational-education-and-training

Furthermore, the European Commission uses the Erasmus+ guide to provide a list of potential barriers to inclusion: disabilities, health problems, aspects linked to education/training systems, cultural differences, social/economic barriers.

3. **Digitalisation**: Digitalisation is the incorporation of digital technologies into business/social processes, with the goal of improving them. Digitalisation is a major game-changer of almost all industries, including arts & crafts. Contrary to the idea that new technology replaces traditional practices, digitalisation is used to find ways to support creative craft practice and open new areas for future research. Digitalisation should thus offer numerous benefits in terms of work processes and management. In addition to rendering work more efficient, digitalisation also contributes to innovation, by transforming traditional practices. Levels of digitalisation of craft organisations differ based on the type of technologies adopted. Some types of technologies are more widespread such as hardware (tablets, computers) and digital applications (websites, software for administration/management of production workflows etc). Other technologies are more advanced and not commonly found in craft organisations, such as hardware (robots, 3D printers) and digital applications (Artificial Intelligence, Internet of Things, Big data, MOOCs, augmented, virtual and mixed reality, 3D printing software, simulation, gamification). All these technologies require a specific set of skills to operate them.

4. **Research and development**: Research and development (R&D) is defined as the creative and systematic work undertaken to increase knowledge - including knowledge of humankind, culture and society - and to devise new applications of economic, cultural and social value available (2015 OECD definition, updated by Nesta in 2017). More and more, arts & crafts companies which use invariable traditional skills, need to open up to modernity. R&D enables these companies to open up to new design and industrial processes and become more innovative. By design we refer to the discipline which is at the crossroads of art and industry and focuses on a combination of aesthetics and user-focused considerations. In the MOSAIC project we focus on R&D outlets for experimentation in the VET centers. These are spaces that integrate more and more the design dimension, which brings creativity, innovation and solutions to everyday life issues linked with economic, social and environmental challenges, in a user-centred approach.

The studies carried out as part of the MOSAIC project are designed to identify how craft companies incorporate the challenges of these themes into their business model (1) and how these interact with their craft (2). It is essential for young entrepreneurs to be able to create interactions between the competencies of these themes, as well as to be able to project them into their practice and the running of their business. The application of theory is essential in this context. In addition, there are four main characteristics to consider when discussing entrepreneurship with young people in craft training: the youth of the entrepreneur (1), the youth (2) and small size (3) of his or her business, and the productive

aspect of the activity (4). Several studies (Aldrich et al., 1986 ; Blanchflower et al., 2010[25] ; Eynaud, 2022[26]), highlight the positive and negative causes of each of these characteristics. The following synthesis of our state of the art offers a better visualization for knowing the strengths but also the challenges that young entrepreneurial craftsmen may encounter. Indeed, an early dissolution rate is very high when these characteristics accumulate.

Table 1. Challenges and difficulties encountered by young craft entrepreneurs

Company characteristics	***Benefits***	***Difficulties***
Young executive	. Emulation . Support from training center or former teachers . Responsive to new economic opportunities and trends . High need for achievement . Positive / creative attitude for change	. Lack of experience .Accumulation of errors/clumsiness . Feeling of illegitimacy . No savings . Less human capital ; unfamiliar with the "habits and customs", the implicit codes . Low social capital . The sector is increasingly made up of reconversions with experience in management
Recently created company	. Access to a wide range of financial assistance and subsidies (public, governmental, European organizations) . New equipment and materials . New operation, new organization	. Barriers to entry (e.g. regulations) . The need for notoriety and visibility to gain market acceptance for its products: significant communications expenditure . Period of search for solutions to lower operating costs and profitability . Low (or no) cash flow . Drawing up a business plan
Small business	. Adaptability	. Mobilizing resources

[25] Blanchflower, D., Oswald, A. (2010). What makes a young entrepreneur? Furlong, A., Handbook of Youth and Young Adulthood: New Perspectives and Agendas. Routledge

[26] Eynaud, S. (2022). Les étudiantes entrepreneures, une perception paradoxale des charg-es d'accompagnement. Entreprendre & Innover. N° 53 (2), pp.69-80. 10.3917/entin.053.0069. hal-04022911

	. Flexibility (it relates to an organisational agility) . Often mobilizes local resources	. Levée de fonds / high venture capital . Few human resources: the company often relies on manpower from internships, work-study programs or short-term contracts. . Dependence on external services or subcontractors
Processing and production	. Self-reliance . Design, manufacture and production all take place in the same place	. Significant discrepancies between the time of purchase of materials (investment) and the time of sale (profit), due to the intermediate stages of manufacturing, communication and marketing. . Non-usable tests and results, which may result in a loss (particularly in the case of custom orders with pre-established estimates).

To conclude on the subject of youth entrepreneurship, one of the findings of Aldrich Howard and Ellen Auster's research[27] shows that setting up an independent business in unstable times is not all bad news. Indeed, the repercussions of mistakes made are more likely to be felt over the long term in a stable environment. We could argue that the current period is (almost) the right time to test businesses that already carry a significant risk of dissolution.

[27] Aldrich, H., Auster, E. R. (1986). "Even Dwarfs Started Small: Liabilities of Age and Size and their Strategic Implications". B. M. Staw and L. L. Cummings (Eds.). Research in Organizational Behavior. Vol. 8, Greenwich, CT: JAI Press, pp. 165-198.

1.3. Definitions of economic and social business models

In the ever-evolving landscape of the business world, the emergence of new terminologies and concepts is a testament to the dynamism and adaptability of industries in response to changing paradigms and market forces. It is in this context that the terms in question have come into existence, reflecting the continuous evolution of business practices, strategies, and technologies. Those terms, while gaining traction in various sectors, are noteworthy for several reasons, as discussed below.

First and foremost, the majority of these terms are relatively recent within the business field. Their emergence can be attributed to the rapid pace of technological advancements, shifting consumer preferences, and global economic trends due to the need of companies to be more perennial. As businesses deals with disruptive forces like digital transformation, sustainability imperatives, and new laws in terms of social inclusion, new terminologies naturally arise to encapsulate and describe these new phenomenon. Those terms serve as linguistic bridges, helping professionals and stakeholders articulate complex ideas and adapt their strategies to the contemporary business landscape.

One significant aspect that distinguishes these terms is their lack of legal recognition within European entities. In the context of business terminology, the absence of legal acknowledgment implies that these terms have not yet been codified or regulated by governmental bodies or authoritative institutions. As such, they operate in what can be seen as semantic fluidity, where their definitions and implications are subject to interpretation and evolution. This situation raises pertinent questions about the need for standardization and official recognition to ensure a shared understanding among industry players.

Moreover, the definitions provided for these terms are not sourced from official, legally binding documents or recognized authorities. Instead, they are drawn from non-official sources, including industry publications, academic research, and expert opinions. This reflects the organic and evolving nature of these terms, which are defined by the insights and observations of professionals deeply entrenched in their respective fields. The reliance on non-official sources underscores the flexibility and adaptability of business terminology, which is shaped by the collective knowledge and experiences of practitioners.

Furthermore, these definitions are a reflection of the current thinking and understanding of these terms within the business community. As businesses continue to deal with unprecedented challenges and opportunities, the meanings and significance of these terms may evolve, requiring ongoing dialogue and adaptation within the business ecosystem.

However we tend to think that rather than looking at precise and scientific definitions of the terms gravitating around the notion of New business models, we could implement some specific notions developed in our first three reports: Skill Needs Assessment for the arts and crafts sector, Exploring the dimensions of social inclusion in vocational education in arts and crafts and Expanding sustainability thinking in vocational education in arts and crafts.

Social business

The term was created in the 90's by Professor Muhammad Yunus, Nobel Peace Prize laureate. To him, solving human problems is the main goal of a social business, and should be operated by a non-dividend-paying enterprise. Yunus wrote 7 principles on social business[28] :

- The company's objective will be to overcome poverty, or one or more problems (relating to education, health, technology, the environment...) that threaten individuals and/or society; not profit maximisation.
- Financially and economically sustainable.
- Investors only recoup their initial investment. No dividend is paid beyond the amount invested.
- When the investment is repaid, the profit remains in the company to be used for its development.
- Gender-sensitive and environmentally-friendly.
- Employees receive salaries equivalent to those on the market and work in better conditions.
- Do it with joy!

We also want to mention the term B corp, which is a certification elaborated in 2007. The companies certified B corp "are businesses that meet the highest standards of verified social and environmental performance, public transparency, and legal accountability to balance profit and purpose. B Corps are accelerating a global culture shift to redefine success in business and build a more inclusive and sustainable economy."[29] . As well as the Fair Trade certification, what we observe is that a few initiatives are taken to try and frame the businesses that want to be seen as "social businesses".

Social entrepreneurship

Refers to the practice of using entrepreneurial skills and principles to create and manage innovative businesses or initiatives that are primarily focused on addressing and solving social, environmental, or community challenges internally to the company. Examples of social entrepreneurship initiatives include microfinance organisations that provide financial services to impoverished individuals, even social enterprises that hire marginalised communities to create sustainable products.

Digital revolution/entrepreneurship

"A digital revolution is transforming the world as we know it at unprecedented speed. Digital technologies have changed the way businesses operate, how people connect and exchange information, and how they interact with the public and private sectors."[30] . This aspect of making business within the digital world was particularly noteworthy during the covid-19 pandemic. Indeed, establishments from all sectors had to experiment with online platforms to maintain an activity. If it had obviously impacted the educational system, craft

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[28] *Social business* (2020). Yunus Centre Paris. https://centreyunus.fr/social-business-fr/

[29] Definition from B Lab https://www.bcorporation.net/en-us/certification/

[30] BRIEFING EU policies - Delivering for citizens : Digital Transformation. (2019). *europa.eu.* https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633171/EPRS_BRI(2019)633171_EN.pdf

businesses also had to reinvent what it meant to be, to sell and to show a craft. By using social media platforms or even experimenting with virtual reality with digital workshops.
According to Adobe, "digital entrepreneurs are self employed with the addition of operating via digital platforms. They rely on Information Technology (IT) and digital media tools to find potential customers."[31] . Therefore, we think of digital entrepreneurship as a new form of business which only happens on digital platforms. The last 10 years, all social media have adopted new features allowing everyone to sell things. With the effervescence of ads, entrepreneurs can now sell their products or services without having to rent a physical business.

Circular business models

"A circular business model articulates the logic of how an organization creates, offers, and delivers value to its broader range of stakeholders while minimizing ecological and social costs"[32] . If this business model is deeply linked with sustainability, it is also a way to cut useless expenses by finding a way to use less material or, to recycle the excesses in the process of creating again. In addition, the circular business models tend to have a more local approach in their business by supporting other local businesses, in order to operate on their local scale. It allows entrepreneurs to support one another but also reduce costs of shipping for materials or products.

Social economy

The term “social economy” refers to an economic system that prioritizes social and community well-being. It is characterized by a focus on values such as social inclusion, solidarity, environmental sustainability, and democratic governance. For that matter, non-profit organizations adopt a social economy, but new hybrid models are emerging with companies making profit but also ensuring that their profit contributes to the local communities, encouraging solidarity and investing on what they believe will help make a better life for them and others.

Table 2. The classification of economic and social business models developed by MOSAIC.

Social business	Social entrepreneurship	Digital revolution / entrepreneurship	Circular business models	Social economy

1.4. The role of VET centres and companies in fostering new business models for young entrepreneurs

[31]What is a digital entrepreneur? (2022). *Adobe.com.*
https://www.adobe.com/acrobat/resources/digital-entrepreneurship-starting-a-business-online.html
[32]*Circular Business Models*. (2017).Sustainabilityguide.eu.
https://sustainabilityguide.eu/methods/circular-business-models/

Through its fundamental role of lifelong learning, vocational training in arts and crafts can provide concrete responses to the challenges of entrepreneurship. The main lever generally used by VET centres to promote discovery of the professional world is immersion in the workplace. This takes three forms: short-term internships, long-term internships and sandwich courses. However, the outreach of VET centres in terms of new practices goes beyond the revision of curricula. There is a wide range of initiatives and strategies which VET centres in arts and crafts can adopt to foster entrepreneurship thinking. As the providers of training, craft companies can contribute to the acquisition of experience in the professional world in other ways, such as coaching or monitoring. Other avenues can be explored for the development of entrepreneurial skills, such as the collaboration of VET centres with organisations in the craft business ecosystem: consular chambers, accounting firms, incubators, entrepreneurial associations. New avenues can be explored by networking schools in the entrepreneurial ecosystem. These initiatives should be complemented by constant evaluation and feedback, collected from students, instructors, and the community to make improvements and measure their impact. It's also worth inviting teachers into companies, so that they can gradually align their teaching and pedagogy with their own corporate experiences.

The link between VET centres, companies and the entrepreneurial ecosystem is essential if young learners are to develop the idea of creating their own trade and running their own business. Sharing experiences and testimonials directly from the field gives an insight into the many forms and applications that the trades learned at school can take. It can reinforce the quest for meaning, which influences young people's entrepreneurial commitment[33] (Toutain et al., 2017). Beyond reinforcing the quest for meaning, the collaboration of VET centres and companies offers young people the opportunity to consider the path to entrepreneurship, which is often unknown or inaccessible to them. As 85% of the craftsmen in Europe are self-employed (GEOCyL, 2022), there is a strong likelihood that craftsmen will have to take on entrepreneurial activities alongside their main profession. Familiarisation with this career path gives young people the opportunity to find outlets for their craft. This perspective is consistent with the realities of the craft sector; if opening a business is the main way for young people to practise the trade they want to achieve, the main mission of education is to give them the keys to this perspective.

On the other hand, an entrepreneurial attitude is sought after by companies recruiting staff; entrepreneurship training modules benefit both young people taking the path to independence and those going down the salaried route. VET centres use entrepreneurship education to train new generations of professionals who act as ambassadors of new ways to manage arts and crafts business. In doing so, they facilitate the reduction of inequality in relation to the integration of young people into the business world; they would follow in the footsteps of the "craft careerist"[34] , i.e. "committed to the idea of craft as a career, they move to start their business shortly after finishing their first (or second) degrees in craft related subjects" (Crafts Council et al., 2012, p. 5). However, mapping these approaches in a structured and holistic way is challenging. We divide them into the following skill sets:

[33] Toutain, O., Verzat, C. (2017). Entrepreneurship and youth, a topic in search of meaning, Entreprendre & Innover. Vol. 33, no. 2, p. 5-9.

[34] Crafts Council, Creative Scotland, Arts Council of Wales, & Craft Northern Ireland (2012). Craft in an Age of Change. ISBN-10 1903713315. https://www.craftscouncil.org.uk/documents/866/Craft_in_an_age_of_change_2012.pdf

- **Entrepreneurial attitude**: cooperation, collaboration, work-value, self-development, willness, curiosity, lifelong learning, flexibility, perseverance, proactive mindset, build a network, transversal capacity

- **Business management**: customer relation, finance, communication, marketing, administration, human resources, productivity management

- **Development perspective:** change management, strategic vision, planning new actions, investment, lowering initial cost, digitization / sustainability / social inclusion issues, research and development activity, thinking a new business model

The first set of skills is largely geared towards interpersonal skills, a characteristic that requires individual coaching. The personal development of each apprentice is part of the inclusive strategies that have to incorporate training. Developing an entrepreneurial attitude is a key foundation for the development of other skill sets: running a business and adopting a development outlook. It's ambitious to superimpose entrepreneurial skills onto those of the craftsman. The role of the VET centres is to instil an entrepreneurial spirit and give young people the keys to pursue this path once they have completed their schooling. In addition to training courses focusing on entrepreneurial attitudes, introducing young people to the other two skill sets can be done in parallel with training for willing students, or post-training. Partnerships with entrepreneurial support networks would enrich entrepreneurial education.

In France, for example, we are seeing a proliferation of organisations and associations offering independent training in the management of a craft enterprise. As a result, new resources are being published on craft entrepreneurship, through new books, webinars and podcasts. Specific themes are addressed in a way that is adapted to the context of small craft businesses, such as collection deployment strategy or intellectual protection. If apprentices already interact with these resources during their training, they will know where to look for information and continue to develop their entrepreneurial skills when they leave school.

Alternatively, one of the elements that VET centres can extract from the business models of craft companies is their project-based economic operation. The particularity of the craftsman's profession is to transform ideas into reality. They mobilise their technical, artistic and material knowledge, as well as their cultural background, to implement "proactive" actions. Simple in appearance, there are usually many challenges behind the sketch. Time for reflection, creativity in traditional technical processes, ingenuity in diverting inaccessible solutions, all call for an entrepreneurial spirit. Project-based learning within workshop training programs activates a number of entrepreneurial skills. Two types of projects seem worth distinguishing: projects arising from a customer request (fictitious or real) (1), where the first challenge is to draw up specifications and respect the limits imposed by the customer. Variables such as budget and deadline are realities that need to be instilled as early as possible in training courses. Projects based on an open-ended theme (2) call on other skills that are just as important in entrepreneurship: putting one's own ideas into practice. These two typologies impose different contexts in which creativity must, in the first

case, develop from constraints, and in the second case from a blank page. These learning conditions will provide young craftsmen with methodologies specific to a "project-based" economic activity. In particular, they will be able to mobilise the "synthesis" strategy[35] (England, 2021), i.e. sell products and carry out related creative work, thus linking passion to an economic logic by separating or combining them in different fields of activity.

Moreover, developing entrepreneurial skills requires specific logistics. On the one hand, young people need to acquire autonomy in the creation, management and realisation of their objects. Developing their creative approach, exploring their uniqueness and resolving technical details require workshop time dedicated to their entrepreneurial projects. The advantage of the VET centres framework is to benefit from the advice of the teachers in charge of the workshops, but it seems essential that young people have independent time in the workshop. Access to technical platforms outside the classroom encourages independent management of workshop time, as does exposure to machine maintenance and repair, technical challenges in manufacturing processes and the vagaries of materials. These conditions lead to the use of teamwork strategies, with young people ideally soliciting each other's help and finding solutions together. Each person's own skills and experience stand out in these situations, and contribute to the functioning of a collective space, a prerequisite for the creation of a collective strategy[36] . Identifying a place close to the workshops, such as a coworking space, is essential if students are to get together and develop their ideas for creating their own business. Compared with workshop cooperation times, this space is where the principles of entrepreneurial cooperation are tested. It must be able to provide the resources needed to build a business plan, and develop communication and marketing skills. These activities require equipment such as cameras and recording devices, as well as specific facilities such as a photographic studio to showcase the pieces. Providing space and equipment to help build the image of their business enables them to acquire skills that artisans often lack. Communicating and building brand awareness is the most important and costly first step. As a result, learners integrate good entrepreneurial practices and, with the ease acquired through experience, an organisational routine between the craftsman's trade and the entrepreneur's trade is established.

To this day, the acquisition of entrepreneurial skills is connected to the lack of adequate teaching and requires rethinking the training framework, spaces and resources available to young people. Gradual accompaniment in autonomy, combined with confrontation with conditions actually encountered in the workshop and in the management of an entrepreneurial activity, is a factor that triggers an entrepreneurial attitude. Professional immersion is also possible within VET centres, and requires adaptation to the specific provisions for developing entrepreneurial skills. By putting people in situations that make them aware of their personal shortcomings in achieving their goals, they give meaning to learning skills. The role of VET centres is to help people achieve their personal and individual goals.

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[35] England, L. (2021). Crafting professionals: entrepreneurial strategies for making a living through passionate work. Routledge, Innovation. Volume 0, Issue ahead-of-print: Ahead of Print. https://www.tandfonline.com/doi/epdf/10.1080/14479338.2021.2019043?needAccess=true&role=button

[36] Loup, S. (2003). Les petites entreprises des métiers d'art. Revue française de gestion, no<(sup> 144), 195-209. https://doi.org/10.3166/rfg.144.195-209

To conclude:

- VET centres engage with governmental bodies mainly to influence policy making through recommendations on educational aspects. In exchange, they receive funding from the government to implement their education plans. Sometimes VET centres can collaborate with public bodies to organise joint dissemination or public interest events. Advisory boards or public interest groups can be established to facilitate the communication between education ministries and VET institutions.

- VET centres also engage with local communities and craft associations through providing lifelong learning opportunities. In exchange these entities amplify the work of VET centres through dissemination and promotion initiatives. Different working groups can arise from this interaction as more permanent establishments.

- There is also an exchange between VET centres and crafts and design businesses. VET centres fuel the market with new professionals figures able to cover required roles in the industry. In exchange businesses provide internships and placements for students. Chambers of commerce provide market studies for VET centres, so that they can make informed decisions about their educational offer. In exchange, VET centres grant access to internal data on which these studies are built.

- VET centres can also engage in projects with other education institutions (universities, research centres, schools) from which they benefit through innovating their own activities. Figure 3 presents, in a non-exhaustive manner, the way in which VET centres generate value through their interaction with stakeholders from all 4 stakeholder groups.

Figure 3. Network of a VET centre

This model of value creation highlights the complex way in which initiatives, including entrepreneurial ones, emerge within VET education. It shows the multiple interactions taking place within VET ecosystems and supports the need to approach the idea of understanding entrepreneurial practices through an ecosystem lens, rather than through a perspective where we consider VET centres in isolation from other network actors.

1.5. The MOSAIC challenge: creating a fluid, context-specific approach to mapping entrepreneurial sustainability practices in VET

While the drafting of the MOSAIC project and its submission didn't really pose any problems, the initial meetings and its actual deployment through the research-focused WP3 in June 2022 showed the complexities involved in concretely defining terms which, at first sight, seem almost self-evident. The disparity and heterogeneity of the partners - training centres, universities, companies, chambers of commerce and industry - combined with the diversity of the countries - Armenia, Belgium, Bulgaria, Canada, Finland, France, Italy - quickly led us not necessarily to propose a universal definition, but rather to look for the common denominator between our cultures, our histories and our perceptions.

With the MOSAIC project, we have been able to see the differences in approaches and conceptions of arts and crafts. Some countries maintain a purely productive vision, emphasising know-how, while others also imagine a way of being, which is certainly specific to the craft sector, but which goes well beyond the professional sphere. France, for example, has its own definition of the craft industry: "The craft industry comprises natural or legal persons who employ no more than 10 people and who carry out, as their main or secondary occupation, an independent professional activity involving production, processing, repair or the provision of craft-related services" (INSEE, 2019). It makes a distinction with arts and crafts: "Arts and crafts are manual trades. They call on traditional, highly technical and often exceptional skills" while establishing, within this specific framework, a precise list (evolving over the years) and divided into 16 fields (Ministry of Culture, 2015). In Finland, while the question of the hand, know-how and production is also visible, it is increasingly moving away from simple production to consider craft not only as a manufacturing process, but also as a method for learning in itself (Luutonen, 2008). In Italy, 11 specific criteria have been defined by researchers to establish a common language describing the work of craftspeople: "those directly related to the skill of the craftsperson (competence, creativity, interpretation, talent, training); those concerning relational and territorial aspects (territory, tradition); and those concerning the product itself (authenticity, craftsmanship, innovation, originality)" (Cavalli et al. 2017). The Conseil des métiers d'art du Québec, for its part, proposes "an artistic creation that is realised as much in the original work, unique or in multiple copies, destined for a utilitarian, decorative or expressive function and expressed through the exercise of a craft linked to the transformation of matter. The work of craftsmen on the built heritage, i.e. reproductions, restorations, reconstitutions and rehabilitations, as well as the stages of their work, which are distinguished by an original conception or a realisation respecting a tradition as well as by the quality of the realisation, are also recognized as "artcrafts" without there being however this institutionalisation of arts and crafts in France.

This context shows that mapping entrepreneurial practices in these sectors is a complex undertaking. The levers used to encourage these practices may involve very tangible processes such as the development of new educational methods and their inclusion in curricula or the creation of collaborative projects to stimulate entrepreneurship. They may also include less tangible approaches that are reflected in the strategies and even mindsets

of teachers and staff. To respond to this complexity, the approach developed as part of MOSAIC had to be flexible enough to allow the choice of mapping tools to be adapted to the different stages of the project. It also had to be sufficiently context-specific to capture the nuances defining the state of the art of arts and crafts education in each partner country. The ecosystem approach therefore represents the specificity and uniqueness of the MOSAIC project, guiding the structure of the project and the methodological development, which is discussed in more detail in the next chapter.

2. A practice-based approach for mapping entrepreneurial practices in VET

One of the aims of MOSAIC is to explore ways of mapping entrepreneurial education initiatives in the field of arts and crafts. The whole design of the project is based on a waterfall structure (Parnas & Clements, 1986), which means that each phase depends on the previous one. Starting with WP3, the latter demonstrates its importance and strategic position in the project as a whole. Its particularity is that it is based on a strong participatory nature. The structure of the project has been designed to meet the main objective of the project, which is to examine the arts and crafts sector through the lens of specialist businesses and vocational training centres, in order to respond more accurately to new emerging needs and societal changes. The conceptual framework of practice theory has enabled us to question the nature of companies and training centres, their processes of emergence and integration into an established organisational model. We are interested in theories from both management sciences and design sciences in order to consider practices in three fields: those of the company, those of creation and those of training.

2.1. Research methodology

WP 3 (Research) was organised around 5 themes: Sustainability, Digitisation, Social Inclusion, New Economic and Social Models and Research and Development. These were analysed using methodologies in the fields of human sciences, design and management/economics. The mixed methods approach is not limited to WP3, but continues to inform project activities beyond the scope of the research. For example, design thinking and human-centred approaches are deployed beyond WP3 to inform activities and enable a cohesive approach to linking project activities. Data collection facilitated by the mixed method was carried out in collaboration with MOSAIC partners. Carefully tailored guidelines were provided to ensure partners acted as informed researchers. Milestones and deadlines were set for structuring and monitoring results. The two academic institutions constantly monitored the data collection process and intervened with additional research and adjustments where necessary. This silo structure (designed to address the 5 themes) enabled a large amount of data to be collected, allowing for both quantitative and qualitative studies. Quantitative data collection tools included a questionnaire for companies, followed by focus

groups in each country. Qualitative data collection included best practice mapping and desk research.

Documentary research or desk research is the process of collecting historical and contextual data on a specific subject. As part of MOSAIC, we collected over 250 documents on the legal, industrial and research contexts that affected the 5 themes in the project's partner countries.

A questionnaire is the tool used to collect structured responses from the target audience. As part of MOSAIC, we collected around 300 responses from companies on the skills gaps they perceive in relation to the project's five themes.

Focus groups are a form of group interview used to gather the informed opinion of target groups. As part of MOSAIC, we organised 6 focus groups (France, Italy, Canada, Armenia, Bulgaria, Finland) with representatives of arts and crafts companies to explore skill needs in relation to the 5 themes of the project.

Best practice refers to specific case studies representing models that are accepted/prescribed as being the most effective or correct. As part of MOSAIC, we collected examples of best practice from VET centers targeting the 5 themes of the project.

2.2. The theoretical framework

We decided that practice theory was best suited to discussing and understanding a practice through its characteristics: performance, dispersed practices (Schatzki, 1996), routine (Feldmand & Orlikowski, 2011), consumption (Desjeux, 1998; Warde, 2005), convention, need, temporality. The notions of behaviour, norms and evaluation indicators presuppose the integration of peers and therefore evolution within a community, not in isolation. This is why the concept of the community of practice (Wenger, 1991) enables us to understand how interdependent knowledge processes evolve within a community, structured in particular by the domain: "All groups of people [...] learn how to do things better by regularly interacting together" (Wenger, 2004). Since creation is part of a vision of evolution, creative craftspeople would be, in this sense, a community open to "how to do things better" and therefore, by definition, a learning organisation (B. Borja de Mozota, 2002), with the distinctive feature of being flexible.

Practices result from change or from the interrelationship of several phenomena. We have adopted an approach based on different scales of observation (Desjeux, 1998), specific to management sciences, to situate actions (micro-scale) within a system (meso-scale) and within an ecosystem (macro-scale). The factors favouring the development of a practice are complex and nonlinear. To understand this, we have drawn on the concept of practical meaning (Bourdieu, 1980) (actions / meanings / perpetuation / objective socio-economics conditions), where habitus (a structuring element that generates new practices) can respond immediately and without even thinking about it to the events they face. In his theory, the collision of different practices and their links are the main source of social change. The space for action and the possible meanings predisposes the field in which social life unfolds. The

main links involved in a practice are via understanding, explicit rules and *teleoaffective structures* (Schatzki, 2002, p.89). For the latter two, we prefer Warde's proposal, where explicit rules become 'procedures' and teleoaffective structures become 'commitments'. Schatzki's theory of social practices distinguishes between two types of practice: "dispersed practices (expressed understanding of practice) and integrative practices. The latter is a set of doing and saying linked (Schatzki, 2002, p.103) by the three main routes outlined above, presenting 'elaborate causal chains of action'. As integrative practices are causally connected and organised, processes like habituation, routine, practical consciousness, tacit knowledge, tradition and so forth". (Warde, 2005, p.140)

The analysis was therefore carried out using an ecosystem approach that links the macro-context (3.1. legal and research context) and the micro-context (3.3. VET center initiatives and business needs in terms of entrepreneurship skills) through the meso-context (3.2. new education models) in order to facilitate the interpretation of data that are highly contextualised and specific to each site:

1. Analysis of the literature search data provided legal documents, research articles/books and press releases that contextualise the emergence of entrepreneurial initiatives. The legal framework is important because VET centers and companies must comply with legal forms. The professional/industrial context also provides an overview of the main concepts used to talk about entrepreneurial issues in arts and crafts.
2. New educational models are shaping teaching strategies and therefore influencing the type of entrepreneurial initiatives planned by educational bodies. These models respect existing policies and laws, but are also guided by the needs of businesses in terms of entrepreneurial skills. In so doing, they represent the connecting element between the macro- and micro-contexts.
3. At the other end of the scale are practical cases of entrepreneurial initiatives undertaken by VET centers and driven by support and education initiatives aimed at developing entrepreneurial skills. In MOSAIC, we have mapped these cases by examining the best practices that VET centers and companies are implementing in this area and how these practices are being encouraged by the skill needs recorded by craft and design companies.

In conclusion, the cascade approach of the project facilitated a constant exchange of information between the different project activities. Similarly, the participatory nature of the data collection aimed to test working methods between researchers and non-researchers. While posing a number of challenges, this way of progressing through the project activities facilitated the construction of a solid foundation for the project, based on scientific findings, as well as the establishment of a comprehensive and multi-dimensional process for mapping approaches to entrepreneurial education in arts and crafts in the partner countries and at European level.

2.3. MOSAIC, a complex project

The MOSAIC project is ambitious and complex. The complexity of MOSAIC in the scientific field has several origins and responds to several criteria that we have tried to understand and analyse in order to respond to the different challenges in a relevant and concrete way. First and foremost, it seems necessary to emphasise that the term 'complex' does not have a negative connotation. Above all, it is seen as a powerful vector for reflection.

The complexity of MOSAIC can firstly be seen in the architecture of the project itself. By deciding to bring together seven countries - Armenia, Belgium, Bulgaria, Canada, Finland, France and Italy - and above all by anticipating a possible and relevant dialogue between very different partners: company directors, teachers, researchers, project managers, product designers, communication managers, technology advisors, craftsmen, designers and others, MOSAIC has built its foundation on the richness of exchanges and encounters. In WP3, which was entirely devoted to research, this was reflected in the need to collaborate with all the players involved, both in collecting data in the field - desk research - and in creating measurement tools - the questionnaire - and in applying specific measures - focus groups - or even self-analysis of practices - Selfie for Teachers tool. Drawing on the philosophical work of Bruno Latour, and extrapolating it to our own questioning, we agreed that there would be neither bad manners nor inconsistencies in a few specific tasks - such as delegating desk research and good practice - but on the contrary a source of valuable insights into the antagonisms at work - subject of the study/actor of the study (Latour, 2012). First of all, we had to make an effort, individually and collectively, to find a common language. This required the various researchers at the two universities (UJM and LAB) to deploy specific methodologies adapted both to the project and to the people responsible for applying them. This required a major educational effort to get all the partners on board. The interest of this phase was, for the UJM and LAB researchers, to analyse all the methodologies used and to reshape them to make them understandable and employable by as many people as possible.

On a strictly scientific level, the same problems and questions have arisen. To work on such a subject, it is very difficult, if not impossible, to reduce ourselves to a single approach. We therefore decided to put together a multi-disciplinary team, bringing together history, semiology, aesthetics, design, management sciences, education sciences and marketing. This team was joined by a sound and image technician and statisticians for the collection and analysis phases. Finally, we also chose to bring together a senior researcher (tenured and post-doctoral), a doctoral student, a project engineer, a research engineer and a technician. The advantage of such a team, in addition to the specific skills of each individual, was that we were able to work together on the same object - subject - to create a common language while ensuring its relevance and feasibility. This language has the particularity of no longer belonging to a specific disciplinary field, but rather of aggregating the most relevant characteristics of each and bringing new ones to the fore. With the idea that "the meaning of a word or concept is not measured by the idea it induces, but by 'the totality of its conceivable practical effects'". (Tiercellin, 2011). While each term and item - sustainability, inclusion, digital, research and development, new economic models - required precise semantic work on our part to arrive at a common definition satisfactory to all the partners, we have to admit that the central issue of arts and crafts is still as difficult to grasp as ever.

Without going back over what we have already written in this report, it is worth emphasising the complex relationship we have with artistic crafts. Talking about them is like entering a family. Craft has its own museums, its own critics, its own magazines, its own artists and its own particular vocabulary: "through their ideology, these approaches can form a metaphysics that constitutes practices [...]. What Bruno Latour calls reproduction and which is maintained by an effort of adaptation on the part of collectives, which reproduce certain practices by perpetually recreating them, giving the impression of universals or unchanging practices. They become like essences and therefore limits to practise. They sketch in hollows or categorical imperatives the boundaries between what is [...] and what is not". (Aucompte, 2022). What's more, these professions are at the crossroads of many sectors and fields - aesthetic, economic, sociological, political among others - as we have emphasised in our research. They involve and superimpose a multitude of players, situations and concepts that intersect, interfere, combine and sometimes contradict each other. The projects and achievements cover a very broad field of application and are destined for multiple uses and destinations. This diversity is the richness of the arts and crafts, but it also blurs our perception of them.

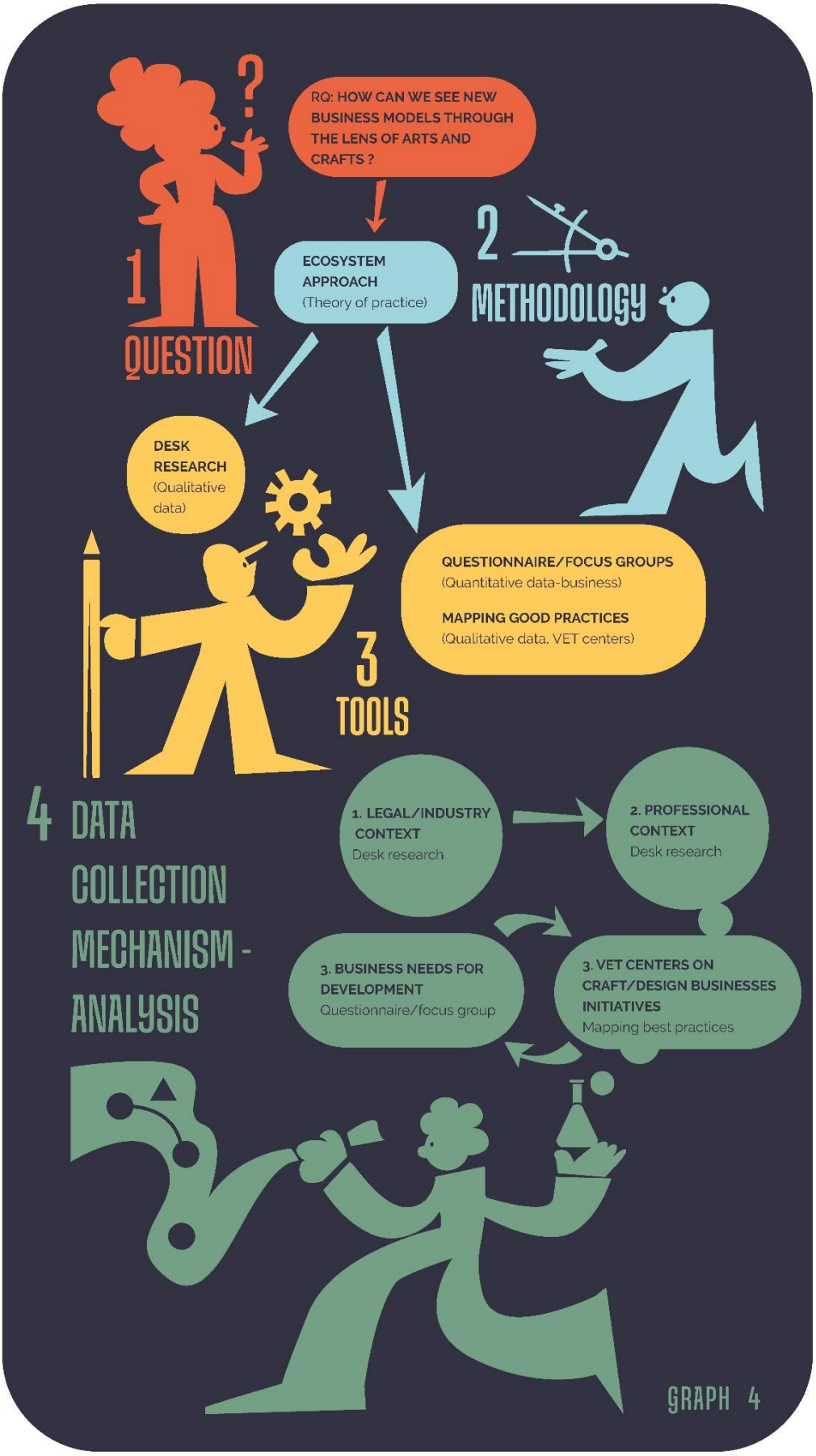

Figure 4. Methodologies used for the research on the MOSAIC project

3. Results

3.1 Concepts, ideas and mindsets defining business models

3.1.1. The legal framework

The laws and regulations relating to business models and entrepreneurship are extensive, incorporating the legal frameworks presented in the MOSAIC reports "Expanding sustainability thinking in vocational education in arts and crafts" and "Exploring the dimensions of social inclusion in vocational education in arts and crafts". The legal framework of this report is therefore based on the related reports, to which we invite you to refer.

3.1.2. The professional context

In this part, we look at the professional context surrounding new business models and entrepreneurship among young people in arts and crafts. To this purpose we collected, with the help of MOSAIC partners, over 250 documents representing research articles, books, press releases and media publications that address the topics analysed in MOSAIC countries. We used methods and tools from linguistics (e.g. lexicometry) and visual studies (e.g. image analysis) to analyse the themes and topics emerging in these documents. Lexicometry is the measurement of the frequency with which words appear in texts and enables us to evaluate the use of concepts related to environmental sustainability inside documents. Visual analysis is the interpretation of the visual content of images and enables us to assess the role of non-verbal methods to depict ideas around the topic of sustainability. After a first evaluation we could identify a weak representativity of documents falling within the topic of business models (Figure 5). "Business model" is a supporting, strategic notion for the organisation and is a concept that defines how the organisation is going to create value (and therefore earn money) for consumers. While digitalisation, social inclusion and sustainability are rather key elements of this business model, they represent (or could participate in) the value proposition of craft companies.

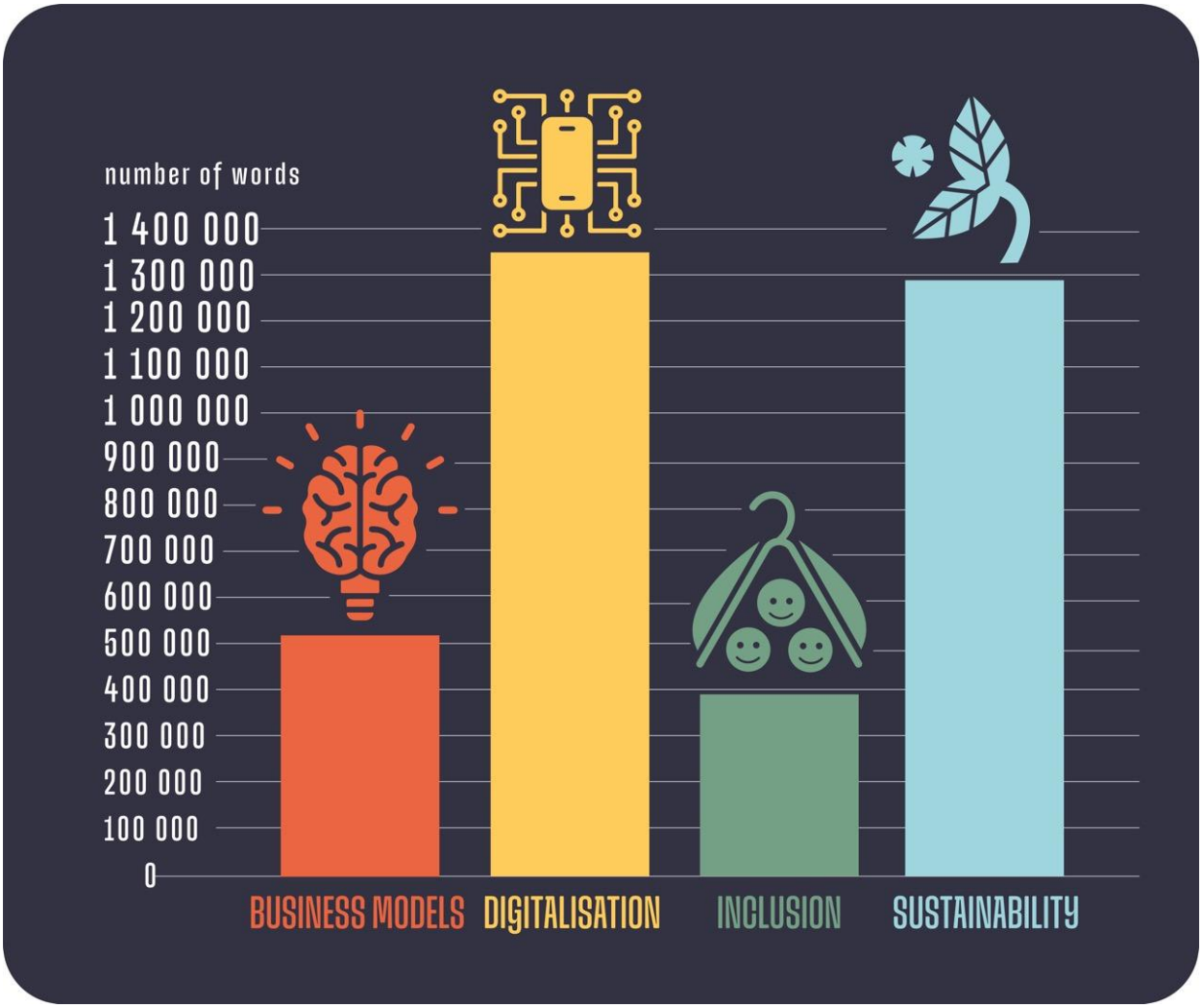

Figure 5. Number of words by themes on the Focus Groups

Documents falling within this topic include around 500.000 words, which is 2.5 times less than for documents falling within the area of sustainability. This could indicate the fact that business models might not be an easy topic to deal with and is therefore less discussed in official documentation. Concepts specific to business models, as presented in the first part of the report, are sometimes more present in the other themes. Scattered themes in this desk research corpus demonstrate a strong representativity with the themes of sustainability and digitalization. For example, "strategy" (and its variations) is more representative in documents dealing with sustainability than with the business model. Conversely, "model" is strongly more present in documents on digitalization. When assessing more closely the language used to describe business models aspects, we note that there is no well-defined vocabulary distinguishing this domain from others, which means a more general language is used to describe concepts of business models (Figure 5). Indeed, the more an element is located at the centre of the axes, the less it is identified; the vocabulary used inside these documents appears to be not very specific or nuanced. However, this graph reveals that the vertical axis, starting from the bottom to the top, may be consistent with corporate scales, from micro ("one", "both") to macro ("european", "national", "sector"). In the upper part, which correlates with the macro scale, words are related to the dimensions of our study

theme, business models: "economy", "development", "business", "management", or "value". If the theme itself seems difficult to grasp, it is present in an underlying way in all the desk research documents, with the exception of social inclusion. The positioning of the social inclusion theme appears to be independent of the business models in the axes. To take this observation further, we conducted an analysis where terms from the business model lexicon (value, business, development, management, project, sustainability, quality, etc.) were searched for in the social inclusion documents. The results show little relationship between business models and social inclusion.

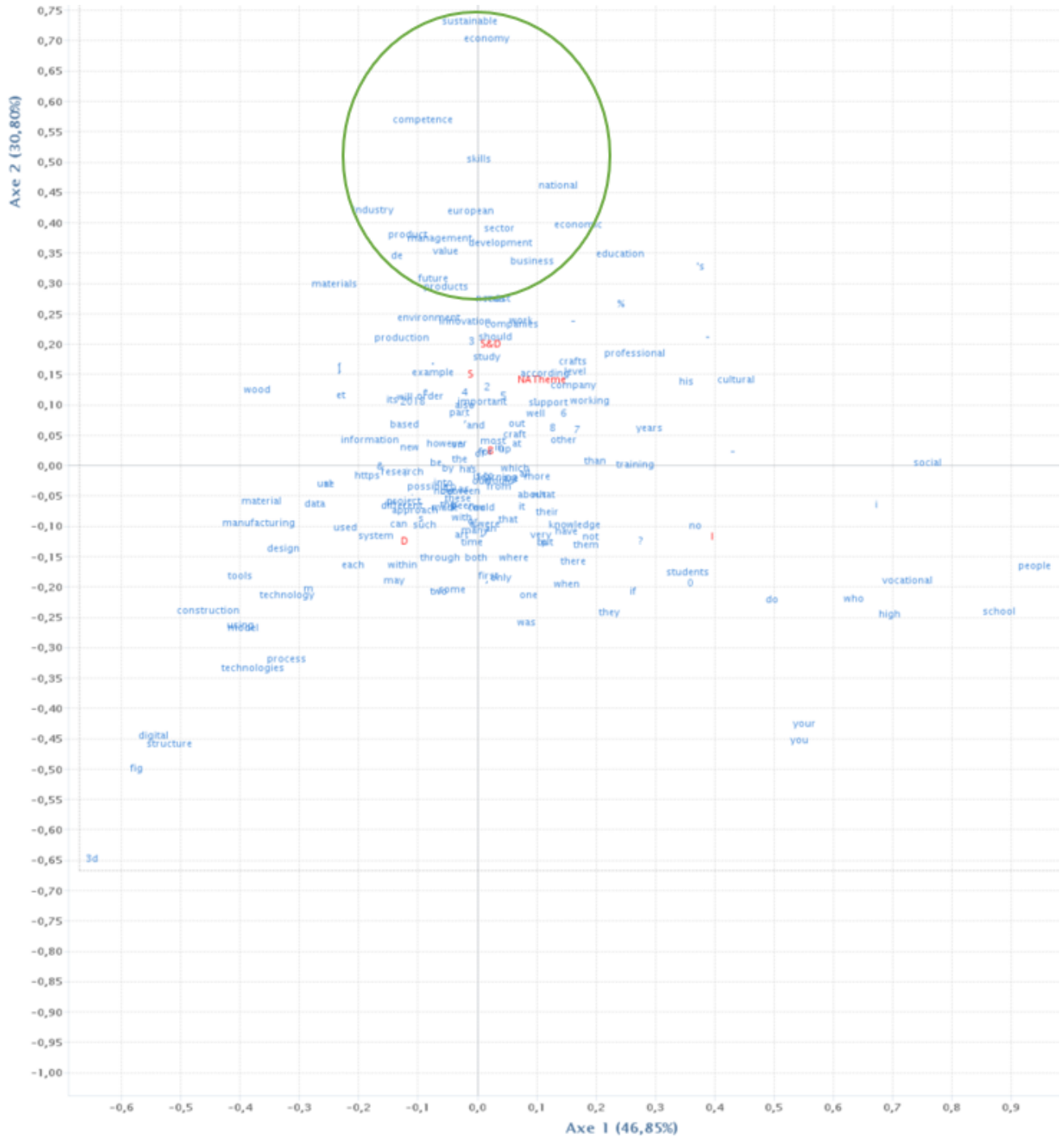

Figure 6. Lexical table based on desk research corpus

Inside documents about business models, it is interesting to note that the words "project", "value" and "development" appear most times - compared to "strategy", "benefits", "new models" and "singularity". The business model concept is based on the principle of creating and capturing value. The results clearly show that value is a preoccupation in the craft sector, and implicitly so are business models. But this is not directly linked to the principle of singularity, as we had assumed in the theoretical framework. The idea of the long-lasting nature of a company was difficult to discern under terms (like "continuity") other than "sustainability". However, we did note a potentially interesting co-occurrence between "continuity" and "tradition". The question of long-lasting, linked to the life of the company, would be more central in craft companies oriented towards traditional activities. Moreover, when it is a question of development, the sector uses the word "entrepreneurship". Entrepreneurship is closer to qualifiers such as "initiative", "emphasis" and "skills". This fact underlines the fact that entrepreneurship is linked to an attitude and aptitude in the crafts.

But surprisingly, SMEs and businesses seem to be least linked to entrepreneurship. We also note that the use of "new/novel organisation" and "new models" (and variations thereof) are poorly represented. However, there was a sharp increase in business start-ups during COVID-19 (+17% between 2021 and 2022) - an increase which has slowed down since 2022 (INSEE Première, 2023)[37] . The relationship with the term "system" in relation to the organisational system of business models doesn't seem relevant either. System" is more aptly associated with "education", "lecture" and "training". The term "business" is well represented in documents categorised under "business models", and is equally present in "sustainability" documents. Dealing with "business" and "management" is generally linked to sustainability issues. Business" is co-frequent with "model", "small", "circular", and "management" ("administration", "economy"). As for "management", the main occurrences are "waste" and "evaluation". These results show that talking about "business" and "management" in the arts and crafts sector involves different dimensions. It is also interesting to add that business is used in the following terms: "business-oriented", "business-related" and "business-to-business". When business is associated with "model", we also find expressions such as "business and consumption models", "business and financial models", "business and management models", "business and governance models". This fact underlines the fact that the use of "business model" may require contextualization (consumption, financial, management, governance). It seems pertinent to consider these distinctions as they reveal sub-categories implicitly present in the business models of artisanal companies.

As we identified in the first part of this report, business models in the arts and crafts sector involve major communication and marketing issues. Our analysis of desk research enables us to pinpoint the main marketing trends in the sector. Our first analysis focuses on "online marketing", which is poorly represented. The results of the study conducted by Crafting the Future can provide some answers: "The online channel is becoming increasingly widespread among the artisans surveyed, who admit to having an online store in almost 65% of the cases studied. The incipient stage of development of online sales is reflected in the

[37] INSEE Première. (2023). The pace of business start-ups slows in 2022 (n° 1936). IP231936 ISSN 0997 - 6252.

fact that 30.7% of the artisans sell less than 10% of their products online." (GEOCyL, 2022). However, sensory marketing is well represented. This specific marketing orientation is strongly linked to "experience". It would seem that the sensory aspect of craftsmanship is the sales argument most in tune with the manual aspect of working with materials. All the more so since, among the five entrepreneurial strategies most widely deployed in the Métiers d'Art sector (England, 2021), the synthesis strategy relies on revenue generated by introducing the public to its know-how. Sharing the craft experience and making it accessible is a commercial argument, consistent with consumer trends (Morewedge, 2021)[38] .

As we deal with business models from an economic and social angle, part of the literature search is oriented in this direction. When "social" is linked to "entrepreneurship", the word "transformation" is very close. Several interpretations are possible. We could put forward the idea that this reveals an evolution of entrepreneurship in the crafts towards the social, but the distance between the expressions "business models" and "social inclusion" tends to rule out this supposition. We can also ask whether entrepreneurship can take as many social forms as there are craft enterprises, and therefore whether social entrepreneurship deploys a range of possible forms to adapt to the specificities of craft enterprises. Otherwise, business transformation could be socially challenging, as if the social aspect holds a central place in entrepreneurial decisions on business transformation. In this same social theme, we note in the analyses that the dimensions of "corporate social responsibility" are poorly represented. As European regulations on corporate social responsibility apply to companies with over 500 employees, small craft businesses are not yet required by law to report on their strategies to address environmental, social, economic and ethical issues. The "corporate social responsibility" dimension does not concern the majority of companies in the Métiers d'Art sector. This does not mean, however, that the absence of reporting obligations indicates the success of craft companies in meeting these challenges. This tool, which reveals a company's position, is at the heart of the debate on the Corporate Sustainability Reporting Directive[39]: is it favourable or not to impose it on small craft companies?

The social aspect of the business model is also expressed through the terms "network" and "co-working space". It is linked to the size of companies: SME's. Around 85% of the craftsmen in Europe are self-employed (GEOCyL, 2022). It means that most of them are isolated, with their own workspace. Therefore, there are higher investments and expenses than in the asset pooling model. We can deduce that social and economic aspects are linked in this entrepreneurial dimension. Relationships with various networks are essential to the entrepreneurial craftsman, not only to obtain resources outside the scope of his profession, but also to consult with his peers on possible obstacles to production or marketing. This explains why we're seeing a strong deployment of "co-working spaces" in the documents. Sharing a space facilitates the exchange of knowledge and information, stimulates creativity, motivation, cooperation, mutual aid and a cost reduction. This is the most represented collaborative practice, while other existing collaborative practices such as hubs are poorly

[38] Morewedge, C., Monga, A., Palmatier, R., Shu, S., & Small, D. (2021). From Marketing Priorities to Research Agendas. In J. C. Moorman (Eds.), Evolution of Consumption: A Psychological Ownership Framework (pp. 196-218). American Marketing Association. https://doi.org/10.1177/0022242920957007

[39] Senat (2022). Making CSR an ambition and an asset for every company. Information report no. 89. https://www.senat.fr/rap/r22-089/r22-08910.html

represented. Avenues for other forms of collaborative initiatives adapted to the crafts sector could be explored, particularly for craftspeople who already have their own space.

The sharing economy is not a very frequent term despite its trending nature. But it is the term that occurs most frequently, along with "business model". Within the "sharing economy", we observe the importance of "skills" and "knowledge", as well as "distribution" and "adaptation". Linking up with the findings of the Skill needs assessment for the arts and crafts sector report, the need for change management skills echoes the "adaptation" outcome. The sharing economy is probably a lever used by/for craft businesses in the face of change and therefore in sustainable transition. Otherwise, going back to the variations of the term "economy" in the documents, the dimensions "development", "impacts", "opportunities", "transition" and "sustainable" occur. This result testifies to the potential economic importance of craft businesses in meeting the challenges of a sustainable transition. Their financial health would depend on their ability to adapt to change.

Having addressed the business, economic and social dimensions of our central theme, we propose an analysis of the relationship between craft practice and creativity with business models. Firstly, interdisciplinarity is well represented in the documents. We can relate this fact to a craftsman who is characterised by his specificity, mastery of one or more specific techniques and a particular material (or even a particular state of the material). By way of explanation, we come back to the potential limits of self-employed people we noted earlier with "network". The results of the analysis also link "interdisciplinarity" with "research" and "skills". Interdisciplinarity is probably a way of opening up new horizons in creativity, management and business development. Also, the results of the desk research analyses demonstrate a close relationship between R&D and projects, which underlines the operating model of R&D-based craft companies. They live by the rhythm of projects, indicating an underlying rhythm rather than periodicity. This operating model, which meets an essential need for the long-term survival of craft-based companies, is synonymous with an organisational agility.

Creative issues influence the way in which craft practice, matter transformation, techniques and processes integrate into today's challenges. The value of craft activity depends on creative and artisanal operations, which in turn has an impact on the way the company operates and the strategies it adopts. The question of value, represented in the documents, appears in different forms: "value-added", "value-belief-norm", "value-based", "value-creating", "value-chain". They provide some insight into its most significant dimensions in the context of artistic craftsmanship. The question of quality was also important in the specificities of Métiers d'Art business models, identified in the scientific studies presented in the first part of the report. In the documents, quality was not strongly present, but it was as much in the documents on sustainability as in the business models. Nevertheless, we note the significant occurrence between "quality" and "goals", "achieve" and "products". Quality would indeed be a lever for achieving long-lasting success for art and craft companies.

We also note a particular attention given to creativity through the theme of sustainability, in particular with eco-design - associated with products, materials, cycle and awareness - and biomimicry - associated with architecture and woodwork. On the other hand, we have a weak representation of "co-creation" and "innovative materials", the latter in relation to "automation". The collaborative dimension of co-creation prompts us to correlate it with results linked to "network" and "interdisciplinarity". Its occurrences are

"open source" and "communities". Otherwise said, research and development has various collaborative aspects. The analysis of "research and development" also highlights an occurrence of an economic nature. This issue places innovation and creativity at the heart of entrepreneurial strategies. In this sense, they have an impact on creative practices and the use of innovation, just as creative practices and innovation have an impact on the performance of business models.

In conclusion, the literature review reveals several points about the relationship between art and craft companies and business models. The summary below summarises the main findings of our analysis:

- ➔ **Dependence on other topics:** the business model for craft businesses only makes sense when sustainability, digitalization and social inclusion are addressed together. Discussing them in silo would decontextualize business models. Their relational frequency reflects the integration of business models in the challenges of sustainable transition. The strong representation of sustainability shows that sustainability issues are already embedded in the organisational thinking of craft businesses. However, a significant lack of social inclusion underlines the importance of exploring the potential responses of business models to this issue. The main social dimension we have identified is collaborative.

- ➔ **Weak identity of the term "business model" (or rather: "business model", a diffuse concept?):** the lack of precision in the dimensions of the business model, a concept which is strongly present in all the documents, reflects the difficulties encountered by the sector in positioning itself with regard to this term. Given its trendy nature, it would seem that the term "business model" is a "business buzzword". In other words, it has lost its substance by often being used in a decontextualized way, resulting in a progressive loss of meaning. Its rapid international development since 2010 and its strength as a multi-disciplinary object used in different fields is leading to a profusion of representations (Demil et al, 2019). The absence of an academic definition, justified by its restrictive nature (p.51), may explain the "diffuse" aspect we perceive in the results.

- ➔ **Contextualizing business models:** when business models appear in documents, they are often contextualised by adding the following terms: consumption, financial, management, governance. The need to specify the dimension of the business model reveals that the term "business model" is more meaningful when it is oriented.

- ➔ **The social dimensions of the business model:** its relationship with entrepreneurship needs to be explored in greater depth. The "social" aspect can take so many forms that it is difficult to identify its nuances in a decontextualized way.

- ➔ **Good implementation of collaborative strategies:** the dimensions of sharing, networking, community and knowledge sharing seem to be well deployed within the sector. Coworking spaces are also well represented, which means that collaborative dynamics are important to the sustainability of companies. They are also conducive to skills research and development, and creative capacity seems to depend on them.

➔ **Financial health, a determining factor in transition:** the economic situation of companies seems to be central to implementing new initiatives that meet the challenges of transition. Making changes within craft businesses represents an investment that they are generally unable to finance on their own. The role of research and development is also central to the economic challenges facing art and craft businesses.

➔ **Organisational agility:** bringing together all the constraints faced by entrepreneurial craftspeople, organisational agility seems to be the skill that best enables them to manage the different rhythms of their activity, as well as the evolution of their business. A closer look at how this flexibility operates on a day-to-day basis could reveal some interesting elements for teaching entrepreneurship to young people in VET centres.

3.2 Immersive learning: how new education models foster entrepreneurial practices in arts and crafts

In the current economic and job-related uncertainty, passing from a discipline-based education to a competence-based education (Lauwick, 2019) is seen as a potential step towards a lifelong education model. Vocational training, by definition, provides the hands-on approach that is necessary to achieve this vision. However, despite the launch of the recent European learning model (EU, 2023), which aims to harmonise educational systems, national differences still persist. Within these systems, local influences and trends determine the formation of new education models. For example, interdisciplinary approaches give rise to new ways of educating at the intersections of tech, arts and sciences. Digitization and movements (e.g. maker movement) drive models towards digital, project-based and collaborative approaches. Shifting market conditions such as increased competitiveness and innovation foreground the need for entrepreneurial skills and cross-cultural collaboration. Similarly, sustainability matters introduce sustainable design principles and practices in arts and crafts. For the purpose of this project, we define new education models in VET as systems that are influenced by specific trends and directions. On the one hand these are determined top-down: e.g. the implementation of environmental laws that calls for systems that are prepared to teach green skills. On the other hand, they are driven from the bottom-up: e.g. increasing levels of innovation. This double perspective (top-down and bottom-up) render new education models interesting for the purposes of exploring further how environmental education initiatives are shaped.

Through the MOSAIC desk research activities, we collected a few examples of new education models in crafts, as these have clear implications for the educational pilots being developed further on in the project (e.g. WP4 - Innovative educational modules and teaching methods). Because of the low number of documents, we had to find additional material from project partners. In particular, we sought documents describing the transition from

individual and exclusive learning to collaborative, knowledge-creative learning. For example, we asked for topics from the institution or country of the project partners such as:

- Non-linear teaching
- Author-centred pedagogy
- Collaborative learning
- Case studies - business collaboration
- Incubators (entrepreneurship, etc.)
- Internships

An additional 25 documents were received following our requests. The documents were searched and received between April and May 2023 and examined and reported on between May and June 2023. The documents described topics in the partner organisations (about 2/3 of the papers) and elsewhere (about 1/3). The articles, writings and messages received from project partners were stored, read and then catalogued according to the MOSAIC project themes: sustainability, new business models, digitalisation, research and development, and social inclusion. The assigned topic corresponded to the area in which the new education model is expected to have the most impact. Some of the material seemed to fall under more than one theme. In those cases, a central theme was selected, and the item was then grouped under this theme. For example, in Finland, social sustainability falls under the theme of overall sustainability, which has caused some positioning difficulties when rethinking the categories. In Finland, sustainability, in general, is divided into environmental, economic and social sustainability, including cultural sustainability. Several education and training models were searched for and found in the data. Some models were given names in the documents. The researchers gave names to others, based on the data, to facilitate cataloguing. The models have been created and implemented in the project partners' training courses and cooperation across Europe and elsewhere. Some models put a greater emphasis on local conditions than others. However, all found models were examined from the general perspective of the MOSAIC project.

The education models with implications for the theme of new business models are presented in Table 3. The first column of the table summarises the training models; the second column shows what can be considered positive for MOSAIC, and the third column what can be considered challenging for MOSAIC.

Table 3. Education models and their strengths and challenges

AREA OF IMPACT	NAME/DESCRIPTION OF THE MODEL	STRENGTHS	CHALLENGES

New business model	Polish-Italian **cooperation in the fabrics commercialization**
	
	Unioncamere Emilia-Romagna
	
	(S. Lenzi, personal communication, 10 May 2023)
		• a stable collaboration
		• improving
		  ◦ the products quality
		  ◦ the clients satisfaction
		• new markets
		• company find a new
		  ◦ business partner
		  ◦ reliable supplier
		• co-operation
			• how to get students involved into whole process

New business model	**National student entrepreneur status** at the National School of Glass - France This is a national scheme to help students become entrepreneurs. Since 2019, students studying for the national diploma in art and design, with a specialization in glass creator, have had access to increasingly specific support. This system encourages the practical application of the theory it can provide, entirely or partialy free of entrepreneurial development charge. Content • training courses : communication, commercialisation, intellectual property, business plan, negociation, elevator pitch, market research, accounting management, legal status • test and prototype of the commercial offer • access to technical platforms to develop their business • regular one-to-one meetings to discuss the progress of entrepreneurial projects • regular one-to-one meetings to discuss about technical/technological objects development Pedagogy • hybrid courses • co-development sessions • regular meeting one-to-one • coworking space reserved from student entrepreneur, where they can welcome customers and display their products • bootcamp with role playing • workshop, seminar, conferences • incubator programm • call for proposals: mobility, prototyping • group events: group lunches, induction days • local, regional and national competitions • collaboration with student classes with complementary skills: e-marketing, entrepreneurship, communications, marketing • individual tutoring by professional coaches • internship substitution for r entrepreneurial project with remuneration (P. Kuntz, personal communication, 2023)	• collaboration, co-operation, professional network • variety of teaching methodes • financial support • the opportunity to move from the idea to the development of an entrepreneurial project • testing students products on the market • the option of joining the scheme a year after graduation and obtaining a student-entrepreneur diploma • the involvement of professionals allows students to gather experience in the field • access to various tangible and intangible resources through alliances between different institutions • strong moral support	• student involvement: graduating is their priority • limited availability of students: this program is in addition to their studies • students consumerism

Research and Development	• **The three-headed lecturer:** Perspectives on the lecturer's role in co-activity in design, art, and craft education: As artists, teachers, and researchers by equal measure. • **Didactic teaching** (Kvellestad & Vatn, 2022)	• Perspectives on the lecturer's role in co-activity in design, art, and craft education: As artists, teachers, and researchers by equal measure. • fosters an understanding of real life • brings a broader perspective through research • keeping the teacher's head in the clouds and feet on the ground (research vs. practical doing)	• resourses • resilience
Research and Development	**Co-activity** • english teacher and the trade teacher work closely together on specific thematic topics • develop targeted lesson plans and prepare resources • focused learning and differentiated teaching for learners. (C. Challande, personal communication, 3 May 2023)	• different areas teachers work closely together on specific thematic topics • develop targeted lesson plans and prepare resources • focused learning and differentiated teaching	• cross-sectoral cooperation • reources
Research and Development	OMNIA **Environmental art in public spaces by art students** • walls of omnia college • several other places is Espoo (private, public) negotiated by teachers (Omnia, 2023)	• motivating concept for students, teachers and customers • co-operation with companies and society	• finding suitable public places • authorization process with city/town/municipality and companies • schedules
Research and Development	**OMNIA – SEPR MOBILITY 2 WEEKS PERIOD** • learning how to use lathes and CNC machines to produce a small chair • student-student contacts (networking) (Omnia, 2023)	• student-student networking • technical skills with macines	• scheduling • facilitation
Research and Development	**Design sprint** A tool to test products and services Sprint : how to solve big problems and test new ideas in just five days (Knapp et al., 2016)	• solving big problems in short time • testing new ideas in short time	• facilitation • tools and methods has to be exact for problem/challenge to be solved

Research and Development	**Project pedagogy (IfNC)**
	• Project-based learning, authentic learning environment
	• Combining cultures, practices and competencies of institutions, teachers and students
	• learning as part of a project involving different institutions and other communities
	• Project pedagogy applies learning by doing, experiential learning and problem-based learning.
	• Cross-border development requires the organisation of project activities – not only between educational institutions but also in cooperation with students and working and cultural life.
	
	(Honka et al., 2013)
		• different levels of education working together
		• practicality and relevance to working life
		• more extensive student projects
		• every student has a place in the projects
		• peer learning
		• credits are earned through projects (not in a classroom)
			• challenging
			  • project planning and coordination
			  • to get staff and students working at the same time
			• different
			  • objectives for different levels of education
			  • timetables for different levels of education
			• large physical, cultural or other distances between partners
			• coordination of timetables
			• constraints on project activities
			• keeping in schedule (new project, new challenges, different education levels ect.)

Inclusion Research and Development	**The TUMO Studios Education model / Design principles** Functionality is about innovation and **usefulness** in product design • encourage products that push the boundaries of existing crafts and technologies • solving real-world problems • The product's structure should be clear and self-explanatory, aiding the user in attaining their goals, and leaving room for self-expression Emotional Impact focuses on the aesthetic and emotional aspects of product design. The product's aesthetic quality should be integral to its usefulness reflect the local culture Have an emotional impact on the user The product should also have a story appeal to the user's self-image and pride. Functionality is about innovation and usefulness in product design. The product's structure should be clear and self-explanatory, iding the user in attaining their goals leaving room for self-expression (TUMO Studios, 2023)	• encourage products that push the boundaries of existing crafts and technologies • solving real-world problems • product design • user centered • local culture considered • usefullness and functionality considered • self expression • aesthetics • emotional aspects • story telling	• The product's structure should be clear and self-explanatory, aiding the user in attaining their goals, and leaving room for self-expression • resources • understanding design principles

Digitalisation	**Maker pedagogy**
	• based on nonlinear pedagogy
	  • emerge interactively through repeated personal and collaborative efforts
	  • **Co-teaching**, Curriculum change, Digital skills, Non-linear maker pedagogy
	  • Development of transversal/21stcentury skills
	  • co-evaluation
	  • maker pedagogy
	  • **maker space** learning together
	
	• **co-valiating**
	• **co-teaching**
	• **maker space**
	• **maker pedagogy**
	
	(Seitamaa-Hakkarainen, Riikonen, Mehto 2021)
	(Härkki et al., 2023)
		• shift from individual learning to collaborative activity
		• multiple methods of knowing
		• extending school subject boundaries
		• development of transversal/21st century skills
		• work sharing
			• cultural differences between trade teacher - language teacher
			• requires a run-in with a model
			• requires resources

Digitalisation	**Microlearning environments in the DUTE project** – began from SME's and adult learners' needs to learn new digital skills • target group: entrepreneurs (also in culture and crafts) (LAB University of Applied Sciences 2023)	• quick learning • concise themes / subjects • company/customer based • UX – user centered • local business needs • sharing knowledge & skills	• technologial challeges • maintaining system • operating system

Inclusion	• **Italia Artigianelli: Ekosystem**
	• Instead, the tested model proposes to organise teaching in "courses", which are study blocks that develop specific skills. In this way, the dimension of the classroom group as a reference framework for learning is eliminated. Students take several courses, divided into compulsory and optional courses, organised in areas that contribute to the development of all dimensions of personality:
	• - the logical-mathematical dimension and computational thinking;
	• - the linguistic dimension.
	• - the intercultural dimension;
	• - the creative dimension, the ability to innovate and to master complex problem-solving;
	• - the technical and professional dimensions.
	• "the reorganisation of school premises and curricula can become strategic tools for promoting inclusion".
	  • This educational model is currently being studied by MIUR, which has proposed its inclusion in the European network of "knowledge ecosystems" for innovation.
	
	(G. Rodriguez & L. Filippi, personal communication, 25 May 2023)
		• contribute to the development of all dimensions of personality:
		  • the logical-mathematical dimension, computational thinking, the linguistic dimension
		  • the intercultural dimension
		  • the creative dimension: the ability to innovate and to master complex problem-solving
		  • the technical and professional dimension
		• the reorganisation of school premises and curricula as strategic tools for promoting inclusion
			• requires careful and long-term curriculum planning and good cooperation
			• resources
			• the reorganisation of school premises and curricula as strategic tools for promoting inclusion

Digitalisation Inclusion	**CEGEP** **flipped classroom – flipped teaching or** • course content and activities available online during the course weeks **Collaboration** • extra-curricular projects • participation in exhibitions at the end of the year • participation in the school's health and safety programme committee • participation in the reserve committee: use of surplus wood and sheet – scrap for own projects • participation in conferences to increase personal knowledge • visits to trade fairs • events outside school • synthesis project – students make a personal piece of furniture combining all the skills learnt during the course, materials research, equipment research and manufacture for presentation to the public at the end of the course – a kind of maker-centred learning experience (É. Allard, personal communication, 24 April 2023)	• course content and activities available online during the course weeks • collaboration • maker-centered learning experience: all the skills learnt during the course, materials research, equipment research and manufacturing are presented to the public at the end of the course • real world experiences • out from the school	• resources • schedules • operating • management

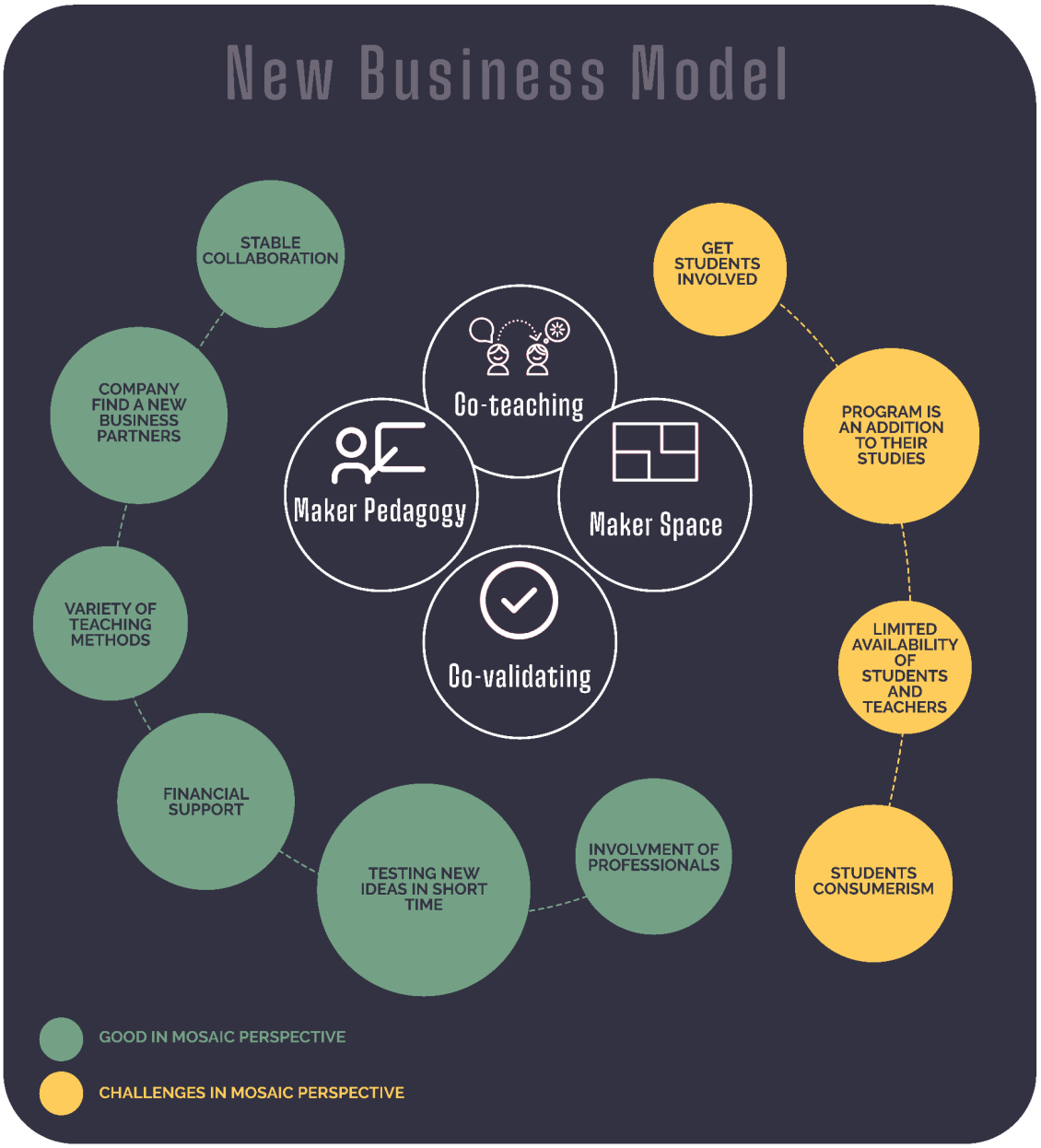

Figure 7. Summary of *Table 3.*

We identified 13 education models with core implications for the topic of new business models. We grouped the models into three categories: commercialization, interdisciplinarity and the development of entrepreneurial attitudes. Cross-referencing with the professional context derived from the literature review (macro scale) indicates the gaps between the issues addressed in existing educational models and those encountered by the sector and companies.

On the one hand, exposing trainees to real-life situations is a way of confronting them with current issues. On the other hand, integrating companies into training programs encourages young people to immerse themselves in the professional and entrepreneurial world. This is why we have selected models from themes other than business models, due to an educational strategy rooted in real life or connected with companies. Related themes

include research and development, digitalization and social inclusion. Sustainability is an important gap, as the literature review (part 3.1.2.) shows a strong connection between craft businesses and this theme. Its absence from VET centre training courses reveals a gap between the reality of the professional context and the world of education.

Six education models focus on commercialization (Unioncamere fabrics commercialisation, national entrepreneurs status, three headed lecturer, OMNIA environmental art, TUMO Studios design principles, DUTE project). In these examples, the design and manufacture of an object is developed and tested according to the needs of a market or consumers/customers. In this way, young people in training are able to integrate their thoughts on the design and commercial viability of their products as early as possible. As we saw in the literature review, corporate R&D is linked to business model performance. Marketing is decisive to the sustainability of companies.

Four education models operate through interdisciplinary learning (national student entrepreneurs status, co-activity, project pedagogy IfNC, maker pedagogy). It encourages pragmatic cooperation between different levels of education. The different strengths of this learning are building a professional network, cross-sectoral cooperation, interaction with different stakeholders, collaborative mindset, extending school boundaries, multiple methods of knowing. Responds to the collaborative strategies identified in the literature review,

Eight education models contribute to the development of an entrepreneurial and self-development attitude (Unioncamere fabrics commercialisation, national student entrepreneurs status, OMNIA environmental art, OMNIA-SEPR mobility, design sprint, project pedagogy IfNC, Italia Artigianelli, CEGEP flipped classroom). Students involved in the whole process, learning by professional experience, proactive mindset, work-value, motivation, solving problems in short times, organisation, keeping a schedule, co-development,building a network, cooperation.

We note that some educational models combine several skill sets, such as the IfNC project pedagogy, favouring the development of an entrepreneurial attitude and interdisciplinary learning, or entrepreneurial and marketing attitudes. In part 1.4. The role of VET centres and companies, we divided competencies into three groups:

- **Entrepreneurial attitude**: cooperation, collaboration, work-value, self-development, willness, curiosity, lifelong learning, flexibility, perseverance, proactive mindset, build a network, transversal capacity

- **Business management**: customer relation, finance, communication, marketing, administration, human resources, productivity management

- **Development perspective:** change management, strategic vision, planning new actions, investment, lowering initial cost, digitization / sustainability / social inclusion issues, research and development activity, thinking a new business model

The development of entrepreneurial skills seems to be well deployed in educational models. Business management skills are partly covered (marketing, communication,

customer relations, productivity management). But it would seem that skills related to finance, administration and human resources could also be developed. As for the last set, development perspective, it would seem that it is implicitly addressed in the models, but few models encourage the development of skills related to change management, investment or even thinking of a new business model. In France, the national status of student-entrepreneur, a scheme that complements training courses, provides resources and support for the construction of a business plan, which brings together all the "development perspective" skills. It would be interesting, however, to explore other possible avenues to encourage its implementation in VET centres.

The analysis of education models through the MOSAIC lens highlights the importance of business, interdisciplinarity and collaborative skills in different professional dimensions. Support for special education and the reorganisation of schools to promote entrepreneurship emerged. Online courses, extra-curricular projects, divided and optional courses for developing specific skills according to dimensions of personality, co-teaching, project-based learning, targeted lesson plans, one-to-one meeting, co-development and hands-on learning were mentioned. Consideration of real-world experiences, user-centred design, real-life situations and problems and storytelling is important. Adaptation to individual experiences, self-learning styles and immersive methods is encouraged. The results underline the importance of creating opportunities for young people in the arts and crafts sector, marketing the sector, increasing understanding of the arts and crafts sector, promoting development perspectives and interdisciplinary cooperation at different levels of education.

On the other hand, challenges were also identified. Students from different professional backgrounds have sector-specific skill requirements that are crucial for problem solving and project management in craft and industry. Developing these skills requires careful curriculum design, collaboration, and adequate resources. Resources are needed for effective scheduling, operations, and management. Understanding the design principles, finding appropriate partners, and promoting multi-level cooperation require appropriate allocation of resources. Another challenge is the supervision and coordination of immersive teaching methods. Professional contexts impose constraints such as scheduling, resources and the involvement of young people.

3.3 Mapping new economic and social business models in arts, crafts and design

3.3.1. Best practices with companies in VET centers and consular chambers

Best practices provide a good picture of the modes and approaches used by VET centers to implement entrepreneurial practices. There are different ways to define the concept of best practices, also referred to as good practices. No matter the definition used, there is a red thread connecting them all. The European Commission defined this red thread as those "strategies, approaches and/or activities that have been shown through research and evaluation to be effective, efficient, sustainable and/or transferable, and to reliably lead to a desired result" (European Commission, 2023). Put in more simple terms, good practices are those things that really work on the field. For the purposes of this study, we adopt the definition of best practice provided by the European Commission. We complement this definition with the 6 main characteristics of best practices identified in the CRAFTS CODE project (Crafts Code, 2022) (Figure 8)

Figure 8. The ATOMIC method

In line with this definition, we collected MOSAIC VET partners' best practices around the concept of business models, by asking project partners to document and send us a description of their projects, initiatives and strategies that fall within this topic. We collected all good practices relating to this topic, including those indirectly connected to teaching, as these can very often encourage more subtle forms of educating towards entrepreneurship. The analysis of case studies uncovered several dimensions of business models.

1. **Support for the development of student entrepreneurial projects**

Internal initiatives inside VET centres can encourage entrepreneurial skill development of young people in training. Among the methods deployed, SEPR in France offers an intensive incubation program over a short period of time (six months).

Case study: student incubator in VET centers (France)

The SEPR incubator, specifically the ICEO program, creates optimal conditions for the development of start-up projects. It offers tailored support, group workshops, networking, and work and prototyping areas. The incubation path lasts for six months and is renewable, targeting learners, former learners, and individuals with start-up projects in various fields. Additionally, the SEPR incubator raises awareness of entrepreneurship through information, guidance, thematic workshops, co-orientation, and the development of entrepreneurial skills. Weekly meetings or appointments are available for individuals seeking support or guidance in their entrepreneurial endeavours.

There are also government measures, as in France, to support students in developing entrepreneurial projects. In contrast to the previous example, these measures are external to the VET centres, and are added as a complement to the training courses.

Case study: government support for student entrepreneurship (France)

The Student Clusters for Innovation, Transfer and Entrepreneurship (PEPITE) is a national program set up by the French Ministry of Higher Education and Research. It grants a national status of student-entrepreneur to students wishing to develop an entrepreneurial project, in co-construction with their institution. In parallel with the initial academic program, this scheme provides access to resources, personalised support, learning-by-doing, a variety of teaching methods and a strong network of partnerships. Students can go from idea to prototyping, with access to a range of financial assistance. A special glassmaking branch has been set up to adapt this entrepreneurial approach to the specific needs of glassmaking.

2. Support for the marketability of students' products

Another way of acting in an entrepreneurial way in school is by promoting students' work, to guarantee their visibility on the market. Access to the market is an important component of VET support systems for students. A good example is the strategy adopted by Tumo Studios in Armenia, who offer tailored support to students across the entire professional pathway, beginning with education and through to the marketability of students' work.

Case study: a shop for student's products (Armenia)

TUMO Studios provides free design and craft education to university-aged students. The students' unique designs are developed and sold globally. Students are employed to iterate and produce the concepts. TUMO Studios offers free access to maker spaces for students' personal projects and also charges a fee for public access. They undertake contractual design projects and craft custom pieces for clients. In the future, TUMO Studios plans to offer manufacturing services as well.

A second example is the case study provided by the VET centres OMNIA in Finland, oriented towards sustainable development. In this case, product sales are not limited to the school's own student projects, but also include companies and students from other backgrounds. This approach not only helps to integrate students into the professional world through sales, but also by integrating the network of exhibiting companies into the boutique.

Case study: a shop for student's products (Finland)

In Finland, Omniashop is a sustainable development shop that supports small companies. It sells products made from recycled materials or produced according to circular economy principles. Each year, around 20-25 companies have their products for sale at Omniashop, paying a 15% commission for the selling service and rent of the space. Additionally, Omniashop collaborates with Omnia youth workshops, where various workshops such as fashion and design, woodwork, audiovisual, social and healthcare, car mechanic, and arts are conducted. Student works from Omnia, involving approximately 200 students annually, are also showcased and sold at Omniashop. The shop acts as a hosting partner for around 10 students, both national and international, each year.

3. Immersive education programs

One of the core dimensions of discovering the world of work is immersion in companies. These apprenticeship methods enable companies to train young people in their own techniques, gestures, machines and tools. The host company makes room for special training arrangements. This employment situation confronts the apprentice with the realities of the working world, while ensuring - in the case of CMA ARA and the Afest program - targeted learning.

Case study: on-the-job training (France)

In France, the CMA ARA promotes a new business model that includes on-the-job training (Afest) as a teaching method for VET students. Work situations are adapted to be formative, mobilising resources and encouraging skill improvement and organizational development. Afest serves as a lever for company transformations, enhancing attractiveness, employee loyalty, and risk prevention. It involves a trainer and an employee being trained on the job, with the main teaching material provided by work. The Afest consists of situational settings and reflective phases, repeated as needed for targeted learning.

Another example of hosting students is the approach taken by the Artigianelli Institute, where companies are not only a place for training, but also for collaboration. Students contribute to solving real applied research problems by networking with professionals.

Case study: companies as training places (Italy)

The teaching approach at the Artigianelli Institute emphasizes a modular and holistic method based on design methodologies. They focus on overcoming traditional classroom structures, monitoring skills, and gathering initial data for improvement. The ecosystem also supports the development of new entrepreneurial realities, where companies become training places and opportunities for collaboration with the institute's students.

4. Business support

Providing support to companies is a fundamental concern for VET centres in arts and crafts. The Artigianelli Institute illustrates how VET centres adapt their learning methods to the professional world.

Case study: business innovation projects with students (Italy)

In Italy, the Artigianelli Institute for Graphic Arts in Trento implements new business models through various initiatives. They include open innovation projects involving high school students, university students, and researchers; innovation labs located in strategic places for economic value creation; and services for businesses in employee training and research. The institute follows a personalised curriculum for each student, similar to the university model.

As in Italy, the ENME training centre collaborates on business innovation projects, with student participation. This study case shows how a VET centre can collaborate with other stakeholders, and adapt their support to the needs of businesses.

Case study: business model of a canadian innovation center with a school and companies (Canada)

Inovem is a college technology transfer centre attached to the École Nationale du Meuble et de l'Ébénisterie (ENME) in Victoriaville (Canada). This transfer centre has 2 very specific functions: to support the woodworking industry through technical assistance and research, and to have a significant impact on woodworking education. To this end, Inovem employs not only researchers, but also teachers and students from the ENME on various research projects. This partnership has led to technological advances for both industry and the school, while introducing students to research equipment and processes.

5. Collaborations & partnerships

VET centres can establish partnerships with organisations in the company's ecosystem, like the consular chamber. These collaborations can be targeted at providing expertise, resources, and support in developing educational or non-educational programs that highlight the intersection of arts and crafts with entrepreneurial reality.

Innovative projects are supported by consular chambers, such as the EU4Business project in Bulgaria. Access to business-to-business exchanges by young entrepreneurs would help them to understand current issues and challenges, and to learn about best practices.

Case study: exchanges between companies of different nationalities (Bulgaria)

The EU4Business: Connecting Companies initiative, managed by EUROCHAMBRES, aimed to support Bulgarian and Moldovan SMEs in the creative industries sector. The project focused on facilitating partnerships, expanding markets, increasing competitiveness and productivity, and introducing innovations. It achieved these objectives through the exchange of experience, sharing good practices, and providing consulting services.

These mapped case studies show the implementation of various initiatives to promote entrepreneurship among young trainees. These take place at different levels: from discovering the world of work, to working with companies, to raising awareness of entrepreneurship, right through to the possibility of developing one's own business project. VET centres employ a variety of levers, for example, by mobilising a network of companies, gearing the internal training program towards business, or creating access to internal or external entrepreneurship schemes. These initiatives contribute to personal and group development, increase young people's chances of practising their trade, and equal opportunities in entrepreneurship.

In terms of the relationship to public authorities, VET centres collaborate with local administrations to propose projects for implementation in the professional world or provide specific input (legal aspects, steps involved in registering a company, etc.) that can influence policy making. These offer in exchange support with projects with a broader community scope. VET centres also have a close relation with chambers of crafts to which they provide collaborative partnerships on specific projects. VET centres benefit in exchange from the solutions emerging from these joint projects. A similar relationship on innovative projects is established with crafts businesses (sometimes also jointly with chambers of crafts). On the other hand, businesses specialised in entrepreneurial matters are very important partners for VET centres. They implement specific projects designed to increase the chances of sustaining a business model. Last but not least, the relation with education and academic structures is also important. Joint projects with higher education bodies fall within this area and revolve mainly around aspects of entrepreneurial skills and further mapping of new economic and social business models. VET centres can improve their activities through the findings emerging from these projects. Partnerships to implement innovation projects enabling VET students to acquire cross-disciplinary and entrepreneurial skills.

3.3.2. Specific needs of arts and crafts companies

Among these four groups of stakeholders, we further investigated the industry context, to better assess how businesses fuel these practices, for example through the demand for entrepreneurial skills. This latter aspect was addressed in MOSAIC using two approaches: a questionnaire that collected 290 responses from crafts businesses in relation to perceived skill needs; six focus groups organised in MOSAIC partner countries and involving local crafts and design businesses aiming to further deepen among others the perception of sustainability. Two distinct and parallel processes of data analysis were conducted on the questionnaire and focus group results, each characterised by specific methodological approaches. The findings obtained this way were compared and integrated for consistency.

Questionnaire

Methodological framework

The Excelsior survey represented the point of departure for the construction of the MOSAIC questionnaire. The Excelsior Information System[40] is one of the most important sources of information available in Italy on the labour market that scopes training needs. It is included among the mandatory surveys sent to Italian companies which are part of the

[40] Excelsior feeds a database on the professional needs of businesses, which can be used through search and query methods. The data can be browsed by: professional figures, levels of classification, educational qualifications, age groups, sectors of activity, company size and territorial levels. Excelsior is a primary source of information on the Italian labour market and a useful tool for facilitating: the matching of labour supply and demand, career guidance and dialogue between the world of work and the training system. This important tool has been developed in Italy by the national Unioncamere and it has been co-financed by the European Social Fund. See https://excelsior.unioncamere.net/

National Statistical Programme. The Excelsior questionnaire comprises of the following sections in 2022[41]

- Estimated employment as 31 December 2021 and production performance forecast

- Activations of contracts and/or possible terminations in forecast quarter

- Incoming professional figures from Month 1 to Month 3 in 2022

- Information on personnel recruitment channels

- Staff training in 2021 and outlook for 2022

- Workers with an apprenticeship/stage contract

- Other information

The first version of the MOSAIC questionnaire for crafts companies was finalised in autumn 2022. Chambers of crafts and commerce had the important role of translating companies' vision into the questionnaire structure. In the next phase, the questionnaire was submitted to all partners. Received comments and feedback contributed to the final design of the questionnaire that reflects all partners' opinions and answers to the project's needs.

During the design phase we noticed that the questionnaire reached 71 questions, which means it was too elaborate to be filled in by companies that typically have quite limited time to reply to surveys. Therefore the questionnaire was focussed on skills gaps, and the questionnaire was re-designed to encompass 16 questions. Questions that repeated the same aspects were combined and elucidated. Also, many questions were reformulated to achieve consistency, comprehension and ethical principles.

The final MOSAIC questionnaire for companies consisted of a three-fold structure. Sustainability, entrepreneurship, digitalisation and inclusion formed a first level of enquiry, where the purpose was to assess the specific needs determined by these 4 core impact factors. The second level of analysis enquired about the knowhow needed at the moment in terms of types of skills (we developed a classification of skills about which we talk more in the next section). Finally, we looked at the micro-level of the enterprise to evaluate working life skills across production/design, production management, marketing and administration. For more details, the final Survey for Companies is available in Appendix 1.

Skills classification

The MOSAIC questionnaire relies on a specific classification of skills that differs from existing frameworks. For example, the Eurofund's Job Monitor provides a mechanism to

[41]Translated from Italian:
https://excelsior.unioncamere.net/sites/default/files/documenti/Schema_questionario_Excelsior_2022.pdf

determine skill gaps that identified 4 abilities required in the handicrafts and printing sector: routine, creativity, resolution and autonomy[42] . These were defined based on a new set of task indices, meant to measure task content (what people do at work) and task methods/tools (how work is organised). Over 30 indicators were developed to measure task contents across three dimensions (physical, intellectual and social). On the other hand, methods/tools were divided in two areas - work organisation and technology (Table 4). In addition to identifying specific skill needs, the study highlighted the necessity for a deeper understanding of the distribution of tasks in occupations and industries in order to set policy priorities for skills and training needs.

Table 4: A classification of tasks according to content and methods. Source: Eurofund

Content	Tools and methods
Physical tasks (physical manipulation and transformation of material things): *Strength* *Dexterity*	Methods (forms of work organization): *Autonomy* *Teamwork* *Routine*
Intellectual tasks (manipulating and transforming information and the active resolution of complex problems): *Information processing: literacy, numeracy* *Problem solving: information gathering and evaluation, creativity and resolution*	Tools (type of technology used at work): *Machines* *Information and communication technologies*
Social tasks (interaction with other people): *Serving/attending* *Teaching* *Selling/influencing* *Managing/coordinating*	

Based on the identified research needs, we have built the MOSAIC questionnaire in a focussed way, paying attention to the distribution of tasks performed across core business areas (e.g. production, management, administration and marketing). More specifically, through the questionnaire we investigated the skill gaps resulting from the mismatch between vocational education and real working life conditions. In doing so, we developed an approach to skills classification that met the needs of MOSAIC partners, instead of adopting pre-existing categories such as physical, intellectual and social skills. As a result, we differentiated between: manual/craft skills, planning/design, entrepreneurial attitude, digital skills, automation/robotic skills, social and working life skills and skills facilitating the understanding of sustainable production. This decision was taken based on the

[42] https://www.cedefop.europa.eu/en/blog-articles/same-job-different-tasks

acknowledgement that professionals increasingly face the need to perform complex tasks, where it is not easy to separate physical, intellectual and social skills from one another, because they all contribute to performing necessary phases of work. The same holds true for methods and tools, which are being increasingly embedded in work processes and form complex ranges of abilities. The distinction we made among skills is thus based on their provisional outcome or functionality, rather than on the level at which they are taking place (physical, cognitive or social). The set of skills was tested against core company domains (Figure 1). In addition, we also tested the specific needs fostered by contemporary factors and trends such as: digitalisation, sustainability and entrepreneurship.

Table 5: The classification of skills developed by MOSAIC

TYPE OF SKILL	Manual skills	Planning & design skills	Entrepreneurial attitude	Digital skills	Automation & robotic skills	Social & working life skills	Skills for understanding sustainable production
BUSINESS AREA	Marketing Production Administration Management						

Methodological challenges

290 replies were collected from MOSAIC partner countries between November 2022 and February 2023. The questionnaire structure was designed to meet the real needs of MOSAIC partner countries, instead of adopting an existing template/format. However, this created several challenges:

1. Methodological bias. Some respondents, such as freelancers and sole traders could not identify themselves with all of the questions. To this purpose focus groups were much more targeted at addressing the identified issue, by interrogating respondents only about those areas which are relevant for them and not all of them.
2. Representativity and statistical challenges. Representativity of results in statistical terms was a challenge during the analysis, because of the considerable size difference between MOSAIC countries. If for countries like Bulgaria and Armenia, a sample size of 40 respondents could be valued as sufficient, for countries like France and Italy this is not the case.

3. Non-homogenous vision of explored topics and concepts. The questionnaire was difficult to implement because it gathered different partner visions, which by no means represented equivalent understandings of core concepts and ideas.
4. Length & format. The structured questionnaire enabled the collection of quantitative data that could not provide clear explanations or motivations behind specific perceptions of skill needs.

Results

59% of questionnaire respondents reported a high need for entrepreneurial skills. An in-depth analysis shows that within entrepreneurial abilities, an equal importance is being assigned to hard and soft skills, with a slightly stronger acknowledgement that soft skills are fundamental for entrepreneurship. Moreover, the smaller the company is, the more it seems to value soft skills over hard skills. Also in terms of sub-sector, wood and traditional crafts are the most invested ones when it comes to the importance of hard and soft skills. This shows that although the concept of new business models is not much deployed within arts & crafts, it remains fundamental for the thriving of businesses. However, the acquisition of entrepreneurial skills is connected to the lack of adequate teaching, which underlines the fact that future skill needs in this area cannot be limited to understanding the fundamentals of running a business.

After the questionnaire, 6 focus groups were organised in MOSAIC partner countries. This form of investigation enabled the collection of qualitative data that complemented and integrated the findings of the questionnaire. Notwithstanding existing biases, the study obtained scientifically sound results.

Focus Groups

The study context

The focus group study is an in-depth of the previous MOSAIC study: the questionnaire (quantitative study). The aim was not to confirm or clarify certain aspects of the questionnaire, but to study the variety of opinions and impressions on the subject of skills (Moreau et al., 2004[43]). This is a qualitative study, whose data are derived from a group dynamic, involving the emulation of opinions and the sharing of experiences. It encourages the gathering of needs, expectations, difficulties, motivations or behaviours, in confrontation with certain precise subjects around a predefined theme. New ideas can also enrich the content of a focus group. However, the main limitation of this methodology is the

[43] Moreau, A., Le Goaziou, M.-F., Dedianne, M.-C., Labarère, J., Letrilliart, L., & Terra, J. L. (2004). Appropriating the focus group method. La revue du praticien - Médecine générale, Tome 18(n° 645).

representativeness of the study sample group, which cannot be generalised. On the other hand, just as the time required to collect data is economical, so is the time required to analyse it.

The procedure pre-established by the MOSAIC program was collaborative work between partners for data collection. The indicator and objective for measuring the expected results of this study were as follows: "20 companies participating in focus groups for the skills gap analysis". As the data was collected by the partners, focus group framing tools had to be put in place. Scientific rigour requires that guidelines be set so that focus group data can be analysed together. The Work Package 3 scientific team has thus defined a document, bringing together the study definition, point of vigilance, deliverables, preparations steps, conducting modalities, transcription expectations. To complete this document, an appendix includes a database of companies contacted by the partners, a consent form for company participation and focus group recording, and maps projected during the focus group. The deliverable expected by the scientific team in order to exploit the data was the transcription of the focus group recordings. A sample transcript with annotations was edited and shared with the partners. An online session with the focus group moderators from each country provided an opportunity to present how the study was carried out, its objectives, precautions and expectations. The researchers recommended that the focus group be led by a moderator (the partner responsible for the study in his or her country), accompanied by an assistant moderator (responsible for distributing speaking time among each participant and ensuring that the time dedicated to the study was respected). The study lasted half a day.

The focus group study came at the end of a series of studies (questionnaire, desk research, mapping good practice). Each country carried out a focus group, in the following chronological order: France (05/16/2023), Bulgaria (05/22/2023), Italy (05/24/2023), Finland (05/25/2023), Armenia (05/26/2023), Canada (06/01/2023). The focus groups took place over two weeks (16 days). The same six questions punctuated the study, around the theme of "companies' skills needs". Thus, the participants in the study were mainly companies (only one association was represented in Finland). To answer the first three questions, participating companies had to consider the "implicit" and "explicit" parameters of skills. For the last three questions, they had to interact with the thematic axes guiding the project, i.e. "sustainability", "social inclusion", "digitalization", "research and development", "new business models". The questions were as follows:

1. What does the word "competences" mean to you and your company?

2. In a world which is constantly changing, in what way are you making those competences evolve. Could you describe one in particular ?

3. What is the share of informal education skills and competences coming from implicit knowledge that you need inside your business?

4. We are proposing 5 themes which induce specific needs of competences; which ones seem most important for the future?
Themes: sustainability, social inclusion, digitalisation, research and development, new business models

5. Imagine your company in 5 years; are you capable of anticipating the difficulties to come and the competences to implement to face those difficulties.

6. By looking at those themes, is there a domain where the competences seem to you more difficult to put together ? And what are those difficulties ?

Several modalities varied from one focus group to another. Firstly, the choice of videoconference format (Canada, Italy, Finland) or face-to-face format (Armenia, Bulgaria, France). According to various hazards and constraints, some focus groups took place with four participants (Armenia and Canada), while others grouped eight participants (Finland). In all, 36 companies took part in the focus groups.

In selecting the study sample, variations in three parameters were desired in order to explore as many points of view as possible, as the craft sector is characterised by the diversity of its companies and practitioners: field of activity, company size, and age. Age corresponds to the number of years of seniority, which we have defined in three categories: less than 10 years, between 10 and 30 years, more than 30 years. Company size corresponds to the number of employees involved in running the business. Four categories have been defined, according to the European Commission's "company size" glossary[44] : "micro" between 1 and 10 employees, "small" between 10 and 49 employees, "medium" between 50 and 249 employees, "large" for more than 250 employees. For the field of activity, we suggested to our partners that they open up to professions other than those listed in the MOSAIC project.

[44] European Commission. (2016). Glossary:Enterprise size. Eurostat Statistics Explained. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Enterprise_size ISSN2443-8219

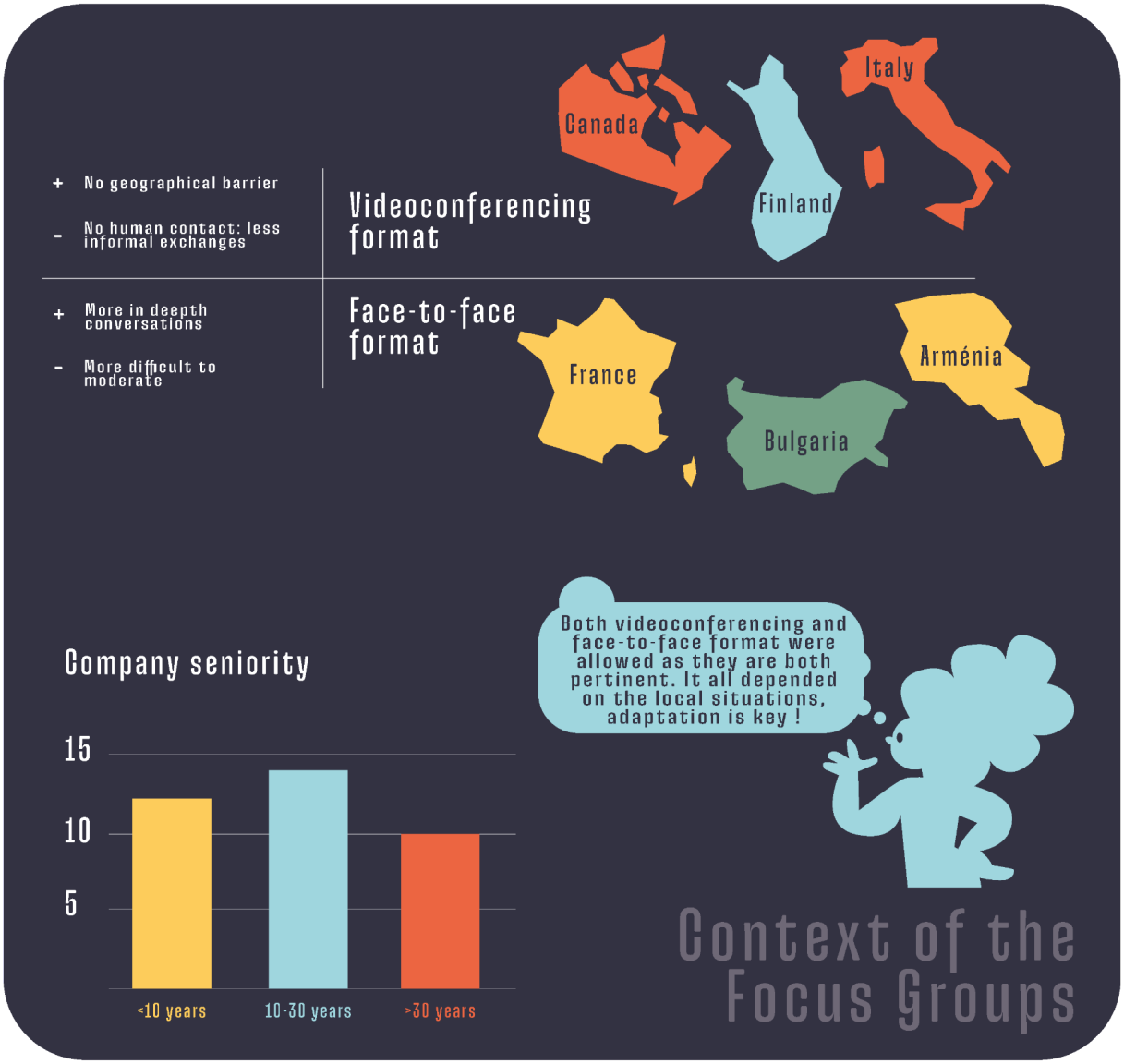

Figure 9. Context of the Focus Groups

Figure 10. Context of the Focus Groups (2)

The focus group conducted has held valuable insights into the working environment of a diverse set of companies, despite certain limitations. This analysis examines the company size, sector diversity, and the alignment of the focus group with the objectives of the MOSAIC project. However, we need to keep in mind that the panel we had at hand for the Focus Groups is only a fraction of the general reality of companies throughout Europe. Therefore, we needed to make sure that our panel is still relevant with the European context.

The focus group encompassed a range of company sizes, from micro-companies to small and medium-sized enterprises. Notably, it lacked representation from large companies, with

the majority of data collected aligning with micro-companies, which constitute more than 60% of the total panel. But, this under-representation of large companies (more than 200 employees) is also something that we observe in all Europe. In all countries within the european union, the small companies represent at least 95% of the total number of enterprises[45] . In France for example, 38,4% of employees are working within a small company[46] , moreover, small companies contribute to 46% of the GVA in Italy when large enterprises only contribute to 36,2%[47] . While the limited diversity in company size could be seen as a constraint, it also provides valuable insights into the challenges and opportunities faced by the majority of Arts & Crafts enterprises. Within the focus group, the wood sector dominated with 30% of participants. This prevalence could be attributed to regional trends but, even globally, in Europe, the wood sector employs 1093 million people for 184 thousand companies[48] . These numbers are incomparable to any other craft sectors. Additionally, the presence of 6 companies in the graphics sector and 5 in ceramics underscores their significance within the Arts & Crafts landscape.

The coding method

The Focus Group is a qualitative study requiring the use of appropriate analytical methodologies. We have borrowed a method specific to the management sciences: coding using a deductive approach, known as top-down (Miles and Huberman, 1994). The data is textual, derived from written focus group transcripts, organized by country. Coding is based on categorization and interpretation operations, and the data are broken down into analysis units that we call "extracts". This methodology leads us to retain the meaning of the data (Dumez, 2005).

Different categories, which we call "codes", were defined beforehand to classify the different extracts. These codes are of different nature: they are of a theoretical nature and of an "in vivo" nature, i.e. derived from collected data. We have identified two types of category: "topics", i.e. the main themes of the project, i.e. sustainability, social inclusion, research and development, digitalization and business models; and "in vivo codes", also divided into different themes (part 2.b).

We also assumed that it would be useful to compare data between these categories, according to the different characteristics of the companies: their country of origin, their age, their size and their field of activity (part 2.c.).

When defining the unit analysis, we came to the conclusion that it was impossible to associate a sentence or a short segment of text with a single code. Isolation by single code leads to decontextualization of the meaning of the data, and adds difficulties of interpretation. The analysis units are therefore made up of a set of sentences (paragraphs) of varying lengths, grouping together several codes. They preserve key ideas and are a function

[45] Number of enterprises by enterprise size class, 2019, Eurostat https://ec.europa.eu/eurostat/cache/infographs/sbs_2022/

[46] Number of persons employed, 2019, Eurostat https://ec.europa.eu/eurostat/cache/infographs/sbs_2022/

[47] Gross value added, 2019, Eurostat https://ec.europa.eu/eurostat/cache/infographs/sbs_2022/

[48] Woodworking in the EU https://single-market-economy.ec.europa.eu/sectors/raw-materials/related-industries/forest-based-industries/woodworking_en

of meaning (Point & Fourboul, 2006); they are therefore not systematised, the six transcriptions were manually analysed. We therefore felt it appropriate to analyse the links between the categories (part 2.d.) to facilitate our orientation towards the extracts from the subjects we are interested in.

These coding methodologies contribute to developing the nature, dimension and relationships of concepts in the form of "codes" (the principle of "open coding"), like skills.

Key numbers:

- After the treatment of 511 683 characters : 288 554 characters retained
- Coding of 360 extracts
- Definition of 37 codes divided into 9 categories
- Attribution of 1663 codes for the 360 extracts

Table 6. Categories of words used in the analysis of the Focus Groups

Topics	● Sustainability ● Social inclusion ● Digitization ● Research and development ● New business models
Knowledge	● Skills ● Experience ● Techniques ● Versatility ● Learning ● Certification
Business	● Trade ● Communication ● Investment ● Customer
Society	● Tourism ● Symposium ● Culture
Management	● Difficulties ● Objectives ● Strategies ● Risks
Legislation	● Laws ● Standards / Regulations
Trainees	● Young people

	• Apprentice • Internship
Ways of seeing work	• Passion • Work values • Interests • Experiment • Creation
Evolution	• Traditional • Machines / Technologies • Collaborations • Networking • New market

For the below comments, we cross between analysis per codes and analysis related codes with the companies features presented in the first part of this document. This point is important because we may, for example, have results with a larger number of data for one sector than for others, but if that sector is already over-represented in the number of participating companies, there is no significant proportional difference. As we can see from this graphic, topic and knowledge are the main discussed subjects of the focus group, because of the six question orientation (3 about skills, 3 about topics). Management is also the other main discussed subject. These categories concern the difficulties, the strategies, the objectives and the risks of the participant companies. These last expressed a lot of their field experience related to skills and topics, we have the expected data, the study has met its primary objectives.

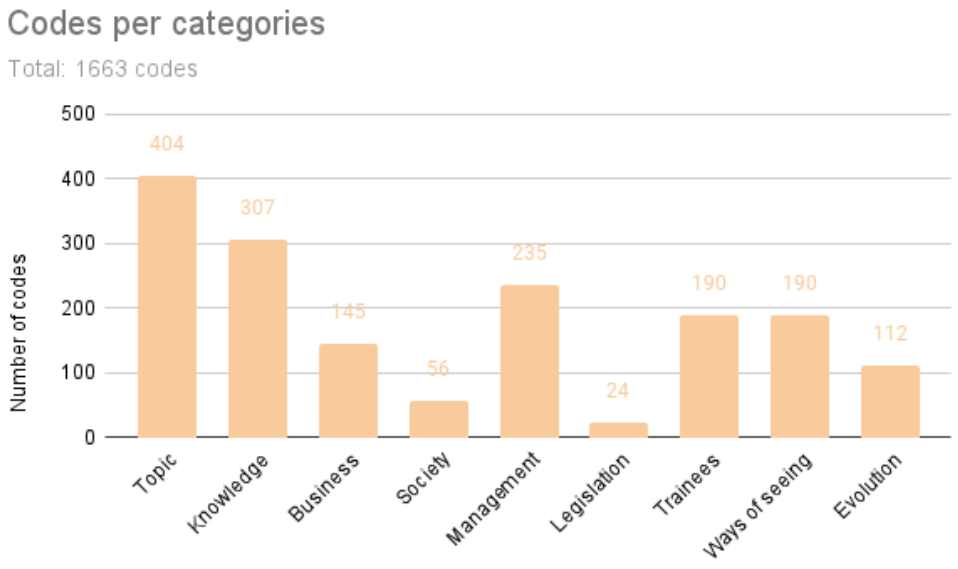

Figure 11. Number of codes per categories of words

The differences in needs are not due to company characteristics. In fact, their size, length of service or field of activity are major factors. Some expectations about some subjects are not similar per company's features. We also propose for training modules these short observations about common expectations. So, through this study, we have gathered information on the health of the companies, the difficulties they are currently facing, and the levers they intend to implement to sustain their business: information about their business model are not formally expressed or directly related to it, but we can nonetheless enhance our scientific knowledge on this topic.

- Companies have a real interest in social inclusion, digitalisation and sustainability topics. They expressed the difficulties they face today with them.

- Many skills expectations are oriented toward social inclusion. Companies are particularly aware that skills are at the heart of their operating and development strategies. We can set high expectations for versatile qualities in recruitment. Versatile quality expectations in recruitment are identified as important for the running of their business. However, we have observed paradoxes in this respect: the versatility expected can clash with the conditions required for singular professions, which are therefore characterized by specialisation.

- One of the keys to a company's long-term survival is trade. This concern of entrepreneurs is strongly present in discussions, and needs to be understood by those who contribute to the running of the business, especially young apprentices. Competence in the world of commerce can make a valuable contribution to business.

- There are expectations from companies about apprentice skills: they must be able to accommodate both technological and traditional developments. In other words, the expectations placed on skills do not relate to the tradition and technology of today's trades, but to the changing traditions and technologies of tomorrow's companies. Young apprentices need to learn how to adapt to, and even take part in, potential changes in these two areas.

- Research and development and business model topics are rarely associated with young people's skills needs. In addition, they are more closely associated with the challenges faced by the company in relation to its environment (sustainability, social inclusion) than with internal factors.

- Thinking about business models is an integral part of companies' strategic visions. In the focus group, many companies expressed difficulties in sharing their experiences and strategic visions. We can deduce that, despite the lack of discussion of business models in this study, despite its presence in the questions and instructions, craft companies have tacit needs in this area. Perhaps the term "business model" didn't mean much to them, or they're not used to discussing their business model, or it's more intuitively constructed than studied and planned in detail.

The lexicometry method

We have tried to exploit this method, which is less tedious to implement than coding, to cross-check the results. We have used the extracts from the country coding to remove questions asked by the moderators or exchanges that could not be used for the study (e.g. requests for clarification of questions by companies). The expected results were to highlight the words most frequently used by focus group, and therefore by country, and to observe the relationships between these words. For example, if "skills" is often used, is it often linked to "social" or "learning", as we observed in the coding analysis?

However, too many "parasitic" words blur the coherence of the results and prevent us from highlighting the main meaning of the study (see example below). This lexicometric analysis has not proved useful in relation to our initial expectations.

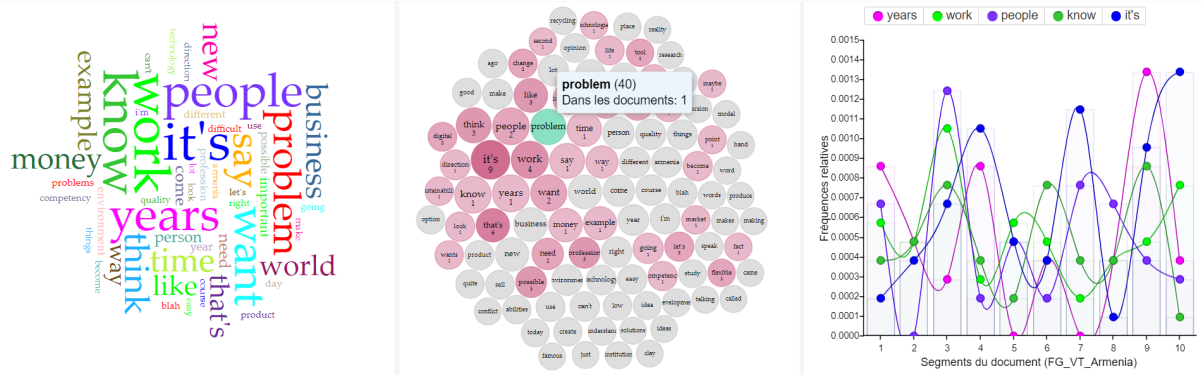

Figure 12. Results proposed by Voyant Tool for the armenian focus group

Nevertheless, we have identified a potential use for lexicometric analysis. Histograms can be generated by selecting the most frequent words proposed by the software. The researcher can then decide to associate "skills", "learning" and "experience" to observe the distance between these words; for example, if the histogram of "learning" is concordant with that of "skills", companies consider that skills are independently linked to learning. If, on the other hand, their histograms are discordant, then our hypotheses of proximity between these two notions are wrong. These Voyant Tool analyses are a verification tool for researchers, as well as a research aid in the event of further investigation. In fact, if we want to know in which part of the transcript the most difficulties are expressed by the companies, the histogram provides us with this information. The tool is also a guide and can be used as a benchmark.

We therefore propose three types of analysis using this method:

- For skills, around words "skills", "learning", "education", "knowledge", "experience", "competence"
- For new business models, around words "new", "business", "models", "development", "change", "company".
- To know the state of the business, around words "difficulties", "problems", "different", "important", "need".

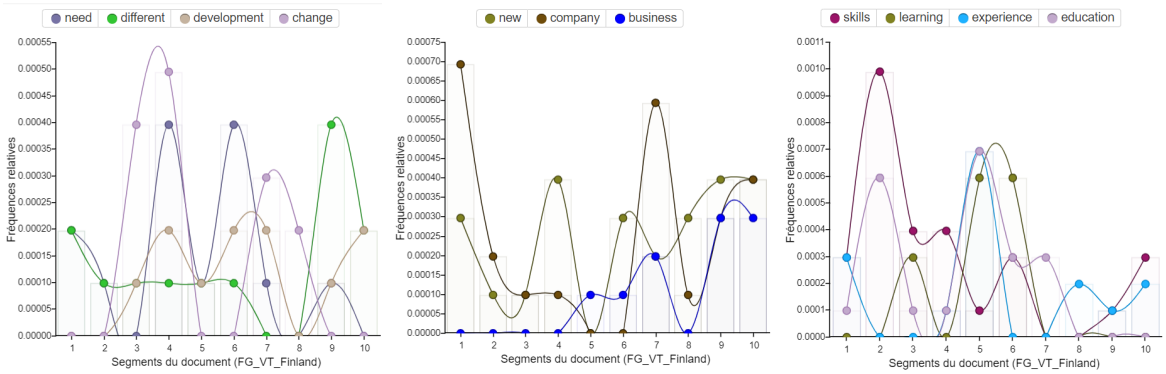

Figure 13. Example of the Finnish focus group results

Business models analysing methodology

Based on the focus group coding, we carried out a more in-depth analysis of the skills discussed by the companies, using the codes in the categories "business" (commerce, communication, investment, customer) and "management" (difficulties, objectives, strategies, risks). The codes in the "management" category are indicators of the state of the participating companies' business models, both in terms of performance and development. We analysed 93 extracts, representing the selection from the "business" and "management" categories (out of a total of 360). The desk research study (macro) in section "3.1.2. Professional context" highlighted the presence of business models in all themes (sustainability, social inclusion, digitalization, research and development). In the Focus Group's analysis for this report, we have therefore taken all themes into account. The extracts from these codes were classified according to the economic and social business models classification according to the theoretical elements in the first part of the report:

Table 8. Categories of business models features developed by MOSAIC.

Value creation	Value capture	Singularity / quality	Performance / profit / sustainability	Environmental change

Table 9. Categories of economic and social business models developed by MOSAIC.

Social business	Social entrepreneurship	Digital revolution / entrepreneurship	Circular business models	Social economy

Table 10. Categories of entrepreneurial skills' set developed by MOSAIC.

Entrepreneurial attitude	*Business management*	*Development perspective*

Results

We began by identifying the codes that represented the greatest challenges for the companies participating in the six focus groups. As we had little data on the "risks" code, it is not included in our analyses. Generally speaking, the commercial dimension of activities is the most challenging. Market issues and sales techniques generally entail the most inconvenience or hindrance. This is the most challenging branch of activity for small and medium-sized craft businesses. However, we observe that the confrontations encountered are half-controlled, and by way of reaction and anticipation, strategies and objectives have been developed. Difficulties are also encountered in the areas of communication, investment and clientele, but they seem to be 2.5 times less worrying. The difficulties encountered with customers seem to be under control. However, companies seem to be left to their own devices when it comes to communication. They feel they need assistance to make up for this uncontrolled shortcoming.

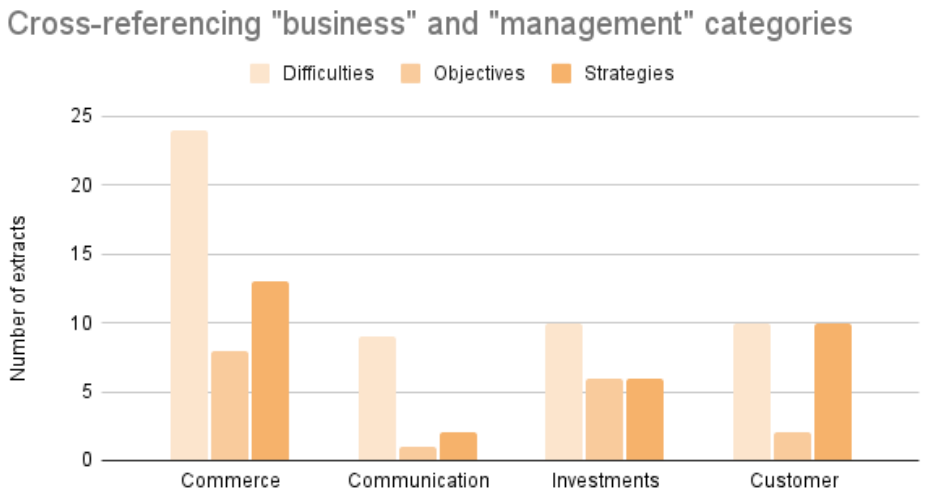

Figure 14. The business' state of the focus group' companies

To organise the list of competencies obtained in each category, we used a heuristic diagram. This visualisation tool deploys the features / components / skills around each

category. Elements expressed repeatedly and with the same meaning are highlighted by the indicator "x2", "x3", "x6" (depending on the number of times they appear) and underlined by the word's font size. Please note that the notes in the italicised white bubbles are generally elements that relate to the topic in question. For example, below, "specialist" was twice expressed as an obstacle to the company's sustainability.

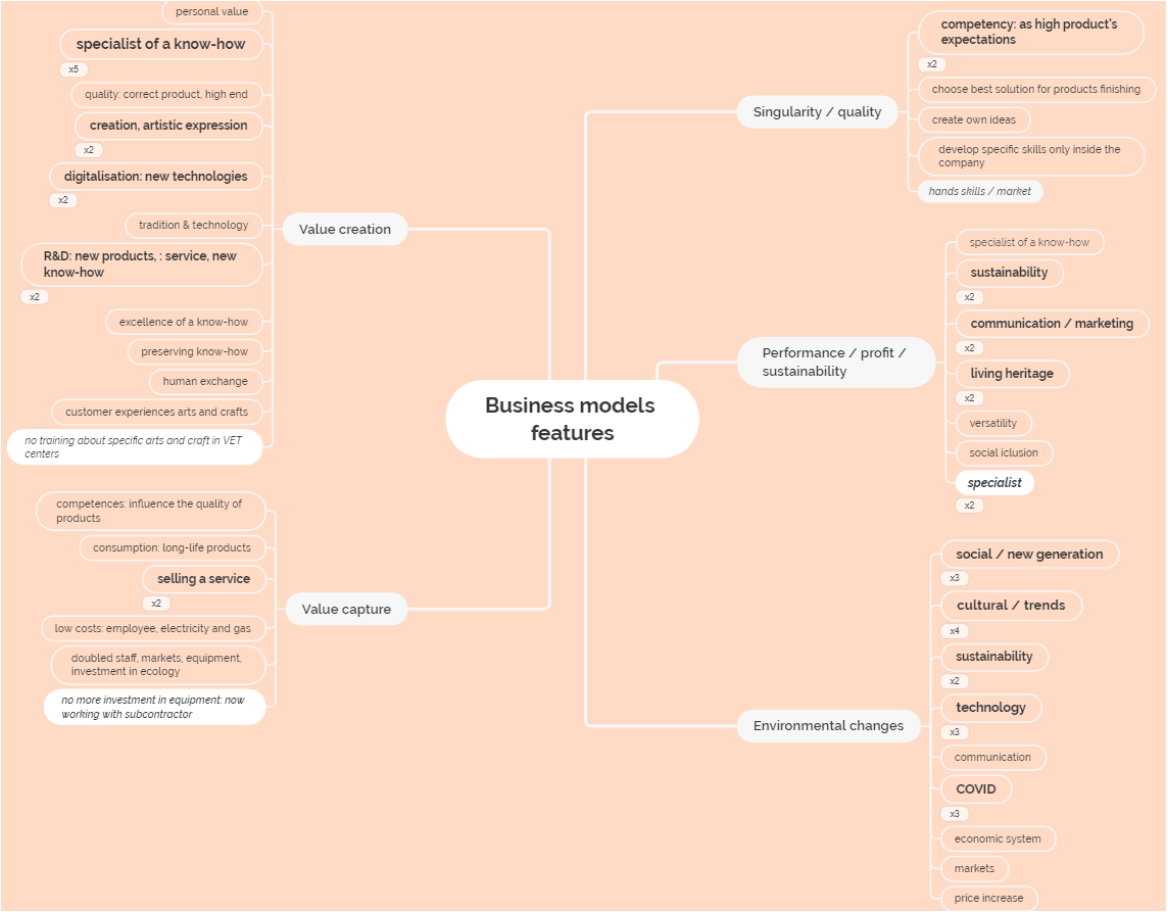

Figure 15. Features of business models evoques in the focus groups

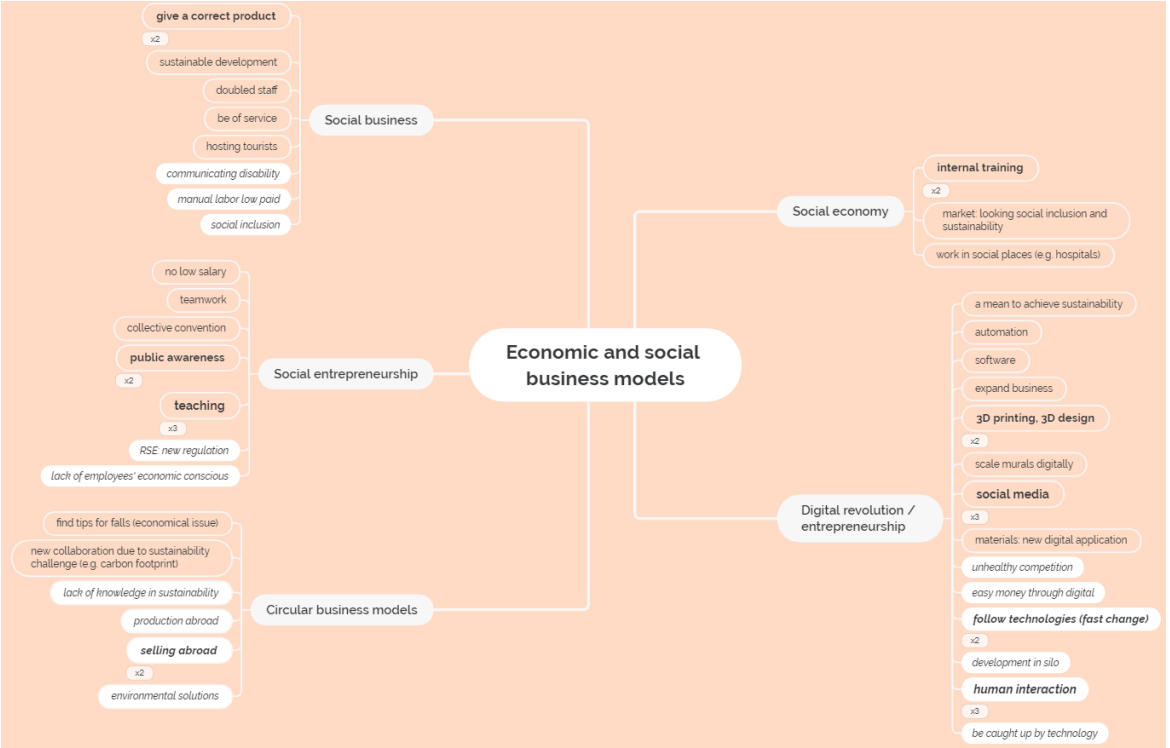

Figure 16. Economic and social business models evoques in the focus groups

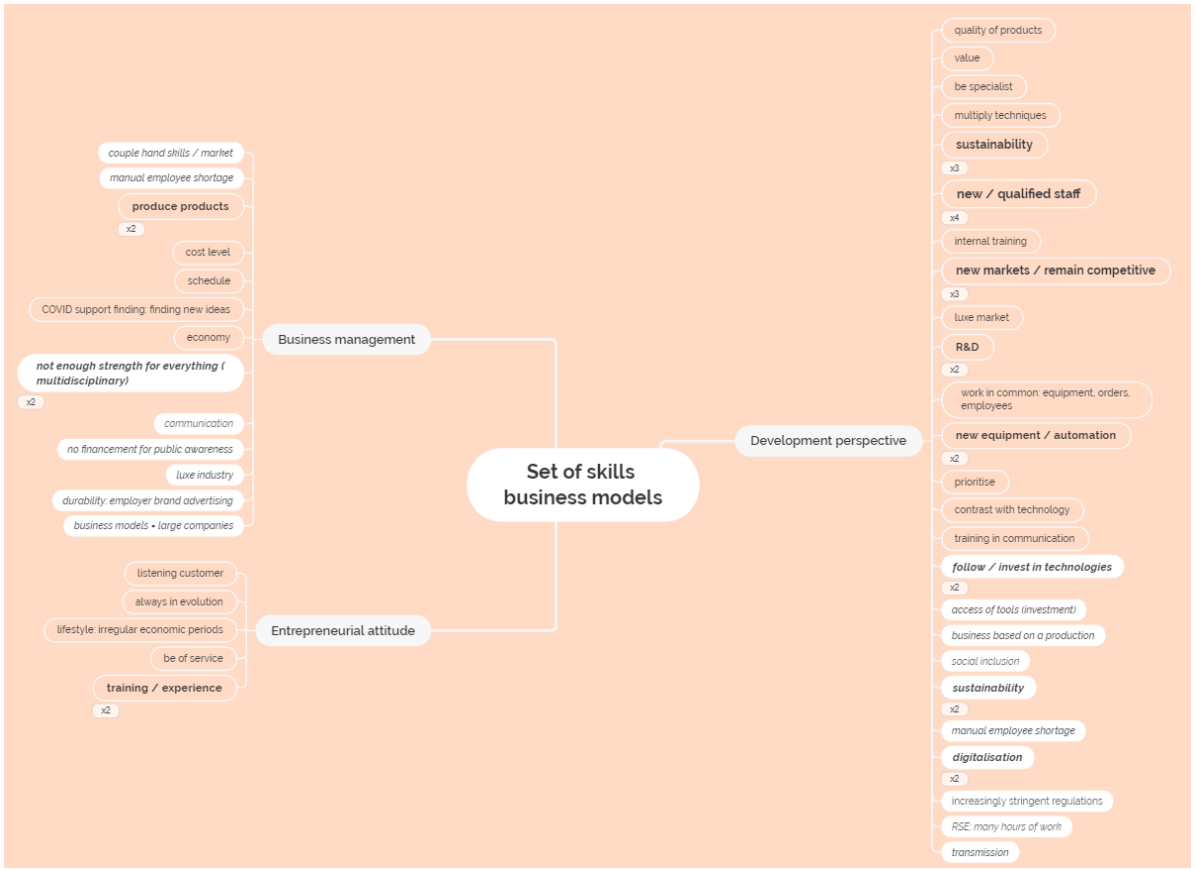

Figure 17. Set of skills for business models evoques in the focus groups

The Figure 15 presents the different elements that compose a business model, i.e. value creation, value capture, the uniqueness of artisanal activities, performance/profit/sustainability, and ecosystem changes linked to sustainable business transition. First of all, these changes were strongly represented in the focus group discussions. New cultural trends, as well as social trends and the new generation, are central to the changes that companies are feeling, and to which they must now adapt. The COVID aftermath is still very much with us. Another subject at the heart of concerns is technological change. Then, the creation of value is particularly expressed through the specialisation of know-how. Creativity, digitalization and research and development are also important. Offering services seems an essential means of capturing value. Current practices also tend to prefer subcontracting to individual investment in specialised equipment. To capture value, interpersonal skills, collaboration and network building seem more than essential. It's also interesting to note that quality, which makes up the principle of singularity specific to the arts and crafts, is based on the degree of skill. One indication, however, points to a confrontation between market and manual skills, certainly based on the place of manual trades in markets.

In Figure 16, we identify the difficulties in the economic and social dimensions of the business models of arts and crafts companies. These are divided into the entrepreneurial dimension of digitalisation, which is often envisaged in the form of subcontracting in order to integrate it into their practices. The shared fears about digitisation relate to the lack of human interaction. Human interaction is one of the results relating to the creation of value. The dimensions of dialogue, materiality and movement in their profession are confronted with a lack of existence, immateriality and a stance of immobility imposed by digitalisation. All the more so because rapid change, which requires time to update and continually adapt to new technological developments, takes up too much energy and time dedicated to activities that are not the core business. Adapting to the various changes listed by participants is increasingly accentuating the dilemma between being a craftsman and being self-employed. However, entrepreneurship, as demonstrated in the theoretical framework, is the main career path for practising arts and crafts. How can a balance be found between the status of a craftsperson and the status of a self-employed person? On the other hand, few good examples linked to a circular business model have been shared. Yet it seems natural that the business models of craft companies should fit into circular business models. One possible explanation relates to the study method, which was based on the discourse of craft entrepreneurs rather than on an observation of their practices. It is possible that a gap remains between what is said and what is done. Finally, the participants also expressed a need for clarification on the subject of sustainability in the operation of art and craft businesses.

In the final analysis of skill sets, Figure 17, the ability to produce objects remains central to business management. But the craftsmen report difficulties in carrying out all the activities necessary for performance, profit generation and the long-term survival of the

business. All the more so as each of these activities generally requires thinking and strategies for the short, medium and long term. It was also interesting to discover that the support funds during the COVID period were beneficial to craft businesses, which took advantage of them to come up with new ideas and find more time to develop new ranges, while other businesses took advantage of them to train and gain in skills. Participants also shared a number of development prospects. The most recurrent was the employment of new staff, particularly skilled staff. Other recurring themes were the integration of new markets, competitiveness and alignment with sustainability issues. Developments towards automation, technology and digital technology are controversial: some plan to move in this direction, while others claim not to be following these changes and to be investing in other activities. Once again, sustainability is a difficult prospect for some companies.

- ➔ **Communication support:** our results show a strong need for support. Given the multiplicity of entrepreneurial activities, in many cases the need for such support seems overwhelming. The solution of training in communications would not be the most strategic. Exploring other solutions would be beneficial, such as identifying various outsourcing solutions that are affordable based on companies' budgets, or learning how to delegate communication.

- ➔ **Dichotomy between specialised practice and generalist expectations:** the need to ensure the long-term viability of craft businesses seems to come up against the very essence of their profession, i.e. their specialisation (in a particular material, technique or know-how). What constitutes their added value - quality - is only possible through specialisation. The dilemma of adapting to change through the generalisation of these professions threatens these trades: even if craft businesses survive, this outcome imposes a metamorphosis of the trade that was distinguished by its specialisation, and thus craft activity will lose its original vocation. This reflection raises the question of the place of specialisation in society.

- ➔ **Artisanal singularity and excellence:** artisanal entrepreneurs see their singularity intimately linked to the main lever for creating value, as dependent on the level of skill they have acquired. Experience and perfection in the manual and finishing stages are more than decisive to their longevity. Expectations and demands are high, and meeting them in order to enter the market calls for extreme rigour and determination on the part of young

entrepreneurs. It's impossible to compete with master craftsmen when you're just starting out. To increase the chances of young entrepreneurs, who develop their uniqueness all the more with experience, it would be interesting, for example, to explore other avenues or strategies than those requiring optimum quality in the first years of entrepreneurship.

➔ **How can sustainability be integrated into the operations of art and craft businesses?** How can this specific type of company respond to environmental challenges? What contribution can it make, and what challenges does it face? It remains to be seen how this issue can be incorporated into the operations of artisanal companies, and entrepreneurs would benefit from some guidance on the "how". We would like to highlight the interest shown by craftspeople in this issue of sustainable transition.

➔ **Subcontracting:** a solution in case of investment difficulties and multiple business activities. The search for additional skills needed to ensure a company's long-term viability involves delegating the tasks that require them. As much as this practice seems established when it comes to skills linked to digitalization, it doesn't seem to be implemented when it comes to the lack of communication skills. And yet, difficulties and shortcomings are clearly evident in this area of development. It would be interesting to find out more about the cause of the stalemate between outsourcing and communication activities.

➔ **Related activities that are as essential to the long-term survival of the business as the craft of art:** communication and digitisation are now activities that are necessary to the long-term survival of their business, but they are dependent on the core business, which no longer has much of a place in day-to-day activity. The growing importance of these obligations is perceived as a challenge. This trend calls for rethinking the strategies that can be put in place to continue to practise and develop a craft and manual activity, despite essential related activities, the values of which may seem to challenge those of the original profession.

The multiplicity of activities is the biggest challenge facing craftspeople. These are constantly growing in response to changes in the environment and to ensure the long-term survival of their business. This "slow-made" profession finds itself in a decadent rhythm to which it struggles to respond. The strength and energy of the entrepreneur cannot withstand an eternal battle against time, speed and multiplication. Facing up to new challenges calls for specific arrangements, the difficulty being all the greater for companies established in a fixed location and unable to join collective spaces, for example. This observation goes some way to explaining the difficulty that craft businesses have in meeting new challenges and adopting new "economic and social" business models. Exploring the various possibilities for collaborative strategies, reducing the number of ancillary activities while maintaining the same level of performance, and putting the core creative and production activities back at the heart of the business models will make a major contribution to their long-term survival and to restoring a sense of serenity.

3.4. A tailored framework for mapping entrepreneurial practices in vocational education in arts and crafts

The results show that entrepreneurial practices in vocational education and training take different forms, involve different stakeholders and are determined by changes in the environment. The needs of businesses stem from difficulties encountered, in particular a lack of solutions adapted to their activity, giving rise to several new business models. To navigate this complex field, we need frameworks and models for a systematic mapping of these practices in the arts and crafts. The models should draw on the very characteristics of entrepreneurial craft as foundational elements for the emergence of best practices.

To this purpose, our analysis has evidenced a series of characteristics of entrepreneurial arts and crafts practices. First of all, entrepreneurial arts and crafts are framed by multiple legal directions (section 3.1.1): one that requires the alignment to green, inclusive and digital standards (e.g. eco-friendly project), and the other, immersive one, that allows young to get to grips with today's issues as early as possible (section 3.2). Together, they define a first set of characteristics that fall within strategies and the topics of sustainability, social inclusion, digitalisation, research and development.

A second category of characteristics is given by the contextual analysis (section 3.1.2). Findings show that the specificity of arts and crafts businesses (e.g. technicity), the agility of business management, the connection to a network, dependance to other topics emerge as points of interest. This reflects a vision of materiality that acknowledges the multitude of

links that craft practice establishes to the environment (i.e. systemic approach). The educational models discussed in section 3.2. also point in this direction.

A third category of characteristics is determined by the market and the need to find solutions that can reconcile entrepreneurial matters with financial robustness and pace of activity focused on crafts. In fact, most arts and craft businesses are small and thus have a hard time balancing the care for the sustainable transition. Marketing strategies, collaborations and other practices can offer levers for finding new pathways towards long-lasting economic and social business models.

These characteristics define structured ways to think about the nature and form of best practices that emerge in the area of entrepreneurship in arts and crafts (Graph 9). Different examples of these practices were provided in section 3.3.

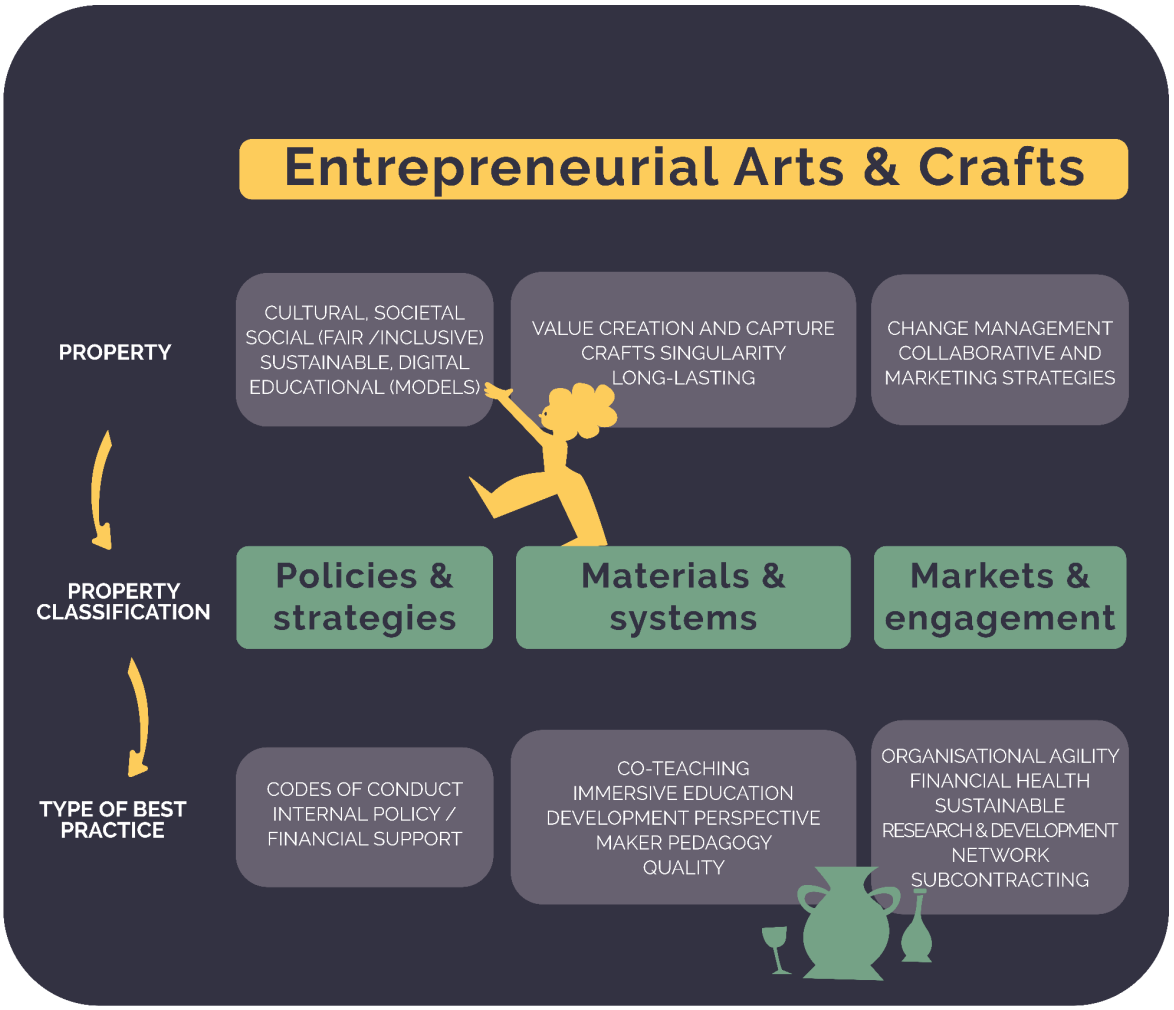

Figure 18. Framework for mapping entrepreneurial practices in VET centres

Inside policies and strategies, we can find for example internal codes of conduct, policy and strategy documents that VET centres as well as businesses can establish to define their long-term vision for entrepreneurial practices. Materials and systems include the development of education methods (e.g. co-teaching), further training of teachers on aspects of business models, as well as the organisation of immersive projects dealing with business matters. Market and engagement on the other hand can include best practices such as the organisation of network events, working collaboratively and adopting agility, sustainable and economic consciousness for aligning to company issues and a long-lasting vision. This way of organising entrepreneurial initiatives provides a systematic and organised manner for mapping best practices.

4. Conclusion

The development of entrepreneurial best practices in vocational training is likely to evolve in the future due to growing global awareness of economic and social business models issues and the need for sustainable practices in various industries. The arts and crafts sectors, through their heterogeneous structure - predominated by micro and small businesses - and the intangible value assigned to products - deriving from the intersection of tradition with culture and innovation - foster specific conditions within which entrepreneurial education practices develop.

The aim of this study was to better understand how a systematic mapping of entrepreneurial practices inside arts and crafts vocational education can expand our thinking to support young entrepreneurship. In doing so, we drew on the research conducted in the MOSAIC project, involving more than 15 partners from 7 countries, each possessing a different understanding and application of entrepreneurial sustainability inside vocational arts and crafts education. The contextualisation was fundamental within the MOSAIC research, as it enabled us not only to list the variety of strategies, methods, initiatives and projects rolled out as examples of entrepreneurial best practices, but first and foremost to understand on which characteristics of sustainable business models they build. The three identified groups of characteristics emerged through our research surrounding the legal context, the professional context and the pedagogical directions inside which entrepreneurial approaches circulate. These characteristics enabled us to establish categories for mapping best practices, based on their reflected understanding of entrepreneurial sustainability. The resulting framework can be used as a tool for the systematic mapping of entrepreneurial best practices in vocational arts and crafts education.

The findings of the MOSAIC research show that sustainability, social inclusion and digitalisation laws and legislation are expected to continue to have a strong impact on shaping stronger entrepreneurial practices and VET education will have to keep up the pace and align with these. The industry is also expected to continue to develop their value and to create long-lasting new ways to tackle environmental, inclusive and digital matters. VET centres will have to consider increasingly complex ways of addressing entrepreneurial approaches in their activity. As these two forces continue to drive the development of entrepreneurial vocational education in arts and crafts, we are expected to see shifting best practices that can accommodate new visions. This leads to an expanded conceptualisation of entrepreneurial sustainability, in which social, sustainable and economic factors intersect. Put more simply, creating informative content on economic and social business models matters is not sufficient anymore, but needs to be expanded into other, more complex and systemic forms of conceptualising entrepreneurship, that often call for engagement with a variety of stakeholders, also from outside the industry. As a result, we are already perceiving the gradual shift from what are considered to be traditional practices in education and more interdisciplinary and complex ones. These findings point to the following potential directions

in which entrepreneurial best practices are expected to evolve in the future. They also raise important questions about how these can be best built into vocational learning. How effective are formal approaches compared to informal ones, when establishing this type of initiatives and best practices? To which new understandings and use of the concept of economic and social business models do these new approaches lead?

This report has provided some insights into these important questions. It has shown for example that legislation operates on multiple societal dimensions. It has also shown that material aspects of entrepreneurship involving practices of collaborating, developing a business and managing changes are being complemented by an ecosystem way of thinking, where both tangible and intangible aspects of business models sustainability come into play. Findings draw attention to how ideas of sustainable business, circular economy and subcontracting are sustaining a long-term vision of entrepreneurship. However, some questions require further investigation, especially those revolving around the interaction between formal and informal approaches within VET education, and the way in which this increases the experimental nature of implemented business practices. With the rising complexity of managing a just and regenerative economy that brings together multiple aspects to solve complex societal issues, we need to think more about business best practices and strategies as being part of a complex system of value creation.

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Appendices

Appendix 1.Survey for Companies

General Information about the Company

1. **Sector of your company** *

Select all that apply

□ Furniture and wood processing (e.g., cabinet making, furniture production, wood working, artistic and industrial upholstery, etc.).)

□ Precious metals and jewelry (e.g., jewelry making, gemstones, precious metals working, etc.)

□ Traditional and rare crafts and others (e.g., shoemaking, footwear components, artistic ceramics, ceramics, sculpture, blacksmithing, metal processing, restoration, musical instrument making, watchmaking, pottery)

□ Design & arts industry (e.g., graphic and industrial design, packaging, digital design)

2. **Year of foundation:**

3. **Size of your company?** *

Select only one answer

□ self-employed

□ 1-9 employees - Micro

□ 10-49 employees - Small

□ 50-249 employees - Medium

□ 250 employees - Large

4. Location (country)? *

Select only one answer

□ Armenia

□ Bulgaria

□ Canada

□ Finland

□ France

□ Italy

□ In more than one of the above

□ other:

5. Market of your company? * More than one answer is possible Check all that apply

□ Local

□ National

□ International

6. Your position in your company? *

Select only one answer

□ owner

□ Executive Manager

□ HR Director/Manager

□ other:

WORKING LIFE NEEDS IN PRODUCTION TASKS

7. Evaluate to what extent does today's vocational education and know-how of the recently graduated employees respond to the working life needs in the following production tasks?

Self-employed can refer to the vocational education they received (1 = not at all, 3 = moderately, 5 = accurately)

Select one per row

	1	2	3	4	5
Manual and craft skills	☐	☐	☐	☐	☐
Planning and designing	☐	☐	☐	☐	☐
Entrepreneurial attitude/mindset	☐	☐	☐	☐	☐
Digital skills	☐	☐	☐	☐	☐
Automation and robotic skills	☐	☐	☐	☐	☐
Social and working life skills	☐	☐	☐	☐	☐
Understanding the principles of sustainable production	☐	☐	☐	☐	☐

WORKING LIFE NEEDS IN MANAGERIAL LEVEL IN PRODUCTION

8. Evaluate to what extent does today's vocational education and know-how of the recently graduated employees respond to the working life needs in managerial level in production tasks?

Self-employed can refer to the vocational education they received. (1 = not at all, 3 = moderately, 5 = accurately)

Select one per row

	1	2	3	4	5
Manual and craft skills	☐	☐	☐	☐	☐
Planning and designing	☐	☐	☐	☐	☐
Entrepreneurial attitude/mindset	☐	☐	☐	☐	☐
Digital skills	☐	☐	☐	☐	☐

Automation and robotic skills	☐	☐	☐	☐	☐
Social and working life skills	☐	☐	☐	☐	☐
Understanding the principles of sustainable production	☐	☐	☐	☐	☐

WORKING LIFE NEEDS AMONG ADMINISTRATIVE PERSONNEL

9. Evaluate to what extent does today's vocational education and know-how of the recently graduated employees respond to the working life needs among administrative

personnel? *Self-employed can refer to the vocational education they received* (1 = not at all, 3 = moderately, 5 = accurately)

Select one per row

	1	**2**	**3**	**4**	**5**
Manual and craft skills	☐	☐	☐	☐	☐
Planning and designing	☐	☐	☐	☐	☐
Entrepreneurial attitude/mindset	☐	☐	☐	☐	☐
Digital skills	☐	☐	☐	☐	☐

Automation and robotic skills	☐	☐	☐	☐	☐
Social and working life skills	☐	☐	☐	☐	☐
Understanding the principles of sustainable production	☐	☐	☐	☐	☐

	1	2	3	4	5
Business administration skills (e.g. business and financial management, leadership, pricing, marketing)	☐	☐	☐	☐	☐

WORKING LIFE NEEDS AMONG MARKETING AND SALES PERSONNEL

10. Evaluate to what extent does today's vocational education and know-how of the recently graduated employees respond to the working life needs among marketing and sales personnel? *Self-employed can refer to the vocational education they received* (1 = not at all, 3 = moderately, 5 = accurately)

Select one per row

	1	2	3	4	5
Manual and craft skills	☐	☐	☐	☐	☐
Planning and designing	☐	☐	☐	☐	☐
Entrepreneurial attitude/mindset	☐	☐	☐	☐	☐
Digital skills	☐	☐	☐	☐	☐
Automation and robotic skills	☐	☐	☐	☐	☐
Social and working life skills	☐	☐	☐	☐	☐
Understanding the principles of sustainable production	☐	☐	☐	☐	☐

SUSTAINABILITY

11. Evaluate the importance of the following skills regarding **sustainability** (environmental, social and economic) in your company. (1 = not at all, 3 = moderately, 5 = accurately)

Select one per row

	1	2	3	4	5
Design and planning (e.g. circular design knowledge, design for reuse/upscaling, selection of materials, knowledge of relevant ISO standards)	☐	☐	☐	☐	☐
Production and manufacturing (e.g. circular economy knowledge, material use, waste management)	☐	☐	☐	☐	☐
Administration and management (e.g. company's social business policy, well-being at work)	☐	☐	☐	☐	☐
Marketing and sales (e.g. communication of sustainability policies in marketing and sales practices)	☐	☐	☐	☐	☐

ENTREPRENEURSHIP

12. Evaluate the importance of the following skills regarding **entrepreneurship** in your company. (1 = not at all, 3 = moderately, 5 = accurately)

Soft skills (e.g. teamwork, creativity, stress tolerance, resilience, inclusion)	☐	☐	☐	☐	☐

	1	2	3	4	5
Manual and craft skills	☐	☐	☐	☐	☐
Planning and designing	☐	☐	☐	☐	☐
Entrepreneurial attitude/mindset	☐	☐	☐	☐	☐

DIGITALIZATION

13. Evaluate the importance of the following skills regarding **digitalization** in your company. (1 = not at all, 3 = moderately, 5 = accurately)

Select one per row

	1	2	3	4	5
Administration (e.g. software (office, communication, financial and monitoring), information management, digital security)	☐	☐	☐	☐	☐
Planning and design (e.g. technical problem-solving skills, software, image design and creation, 3D modeling, survey, project management)	☐	☐	☐	☐	☐
Production and manufacturing (e.g. production, project and process management, immaterial design workflows)	☐	☐	☐	☐	☐

Marketing and sales (e.g. social media management, selection and use of various media channels, online shop management, content creation)	☐	☐	☐	☐	☐

KNOW-HOW NEEDED AT THE MOMENT

14. What kind of know-how would you need the most among your employees **at the moment**? (1 = not at all, 3 = moderately, 5 = very much)

Select one per row

	1	**2**	**3**	**4**	**5**
Manual and craft skills	☐	☐	☐	☐	☐
Planning and designing	☐	☐	☐	☐	☐
Entrepreneurial attitude/mindset	☐	☐	☐	☐	☐
Digital skills	☐	☐	☐	☐	☐
Automation and robotic skills	☐	☐	☐	☐	☐
Social and working life skills	☐	☐	☐	☐	☐
Understanding the principles of sustainable production	☐	☐	☐	☐	☐
A combination of above-mentioned skills and/or other skills (e.g necessary for workers specializing in more than one role)	☐	☐	☐	☐	☐

KNOW-HOW NEEDED IN THE FUTURE

15. What kind of know-how and skills would benefit your company the most **in the future**? (1 = not at all, 3 = moderately, 5 = very much)

Digital skills	☐	☐	☐	☐	☐
Automation and robotic skills	☐	☐	☐	☐	☐
Social and working life skills	☐	☐	☐	☐	☐
Understanding the principles of sustainable production	☐	☐	☐	☐	☐
A combination of above-mentioned skills and/or other skills (e.g necessary for workers specialising in more than one role)	☐	☐	☐	☐	☐

16. What skills or knowledge should your company's staff possess to be more inclusive?

Check all that apply

□ Awareness about the importance of inclusive topics

□ Knowledge about legal regulations on inclusive topics

□ Knowledge about human rights

□ Intercultural skills

□ Willingness / can-do attitude

□ open-mindedness / tolerance

□ Communication skills

MOSAIC NEWS COMMUNICATION

If you want to join our communication list, please enter your name and email below. This is not compulsory.

Data Protection information:

(Personal data and/or images provided will be processed in accordance with the DPRG (EU Regulation 2016/679) to record the data of the participants in this survey, send communications and promote the MOSAIC project activities, communicate other events promoted by the partners of the MOSAIC project, to report on the meetings and report on the activities carried out within the MOSAIC project - Erasmus + programme. The data controller is..... The aforementioned data may be communicated for the aforementioned purposes to the partners of

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Your name:

Your company:

Your email:

Many thanks for your replies! The MOSAIC Team

Appendix 2. Focus group structure

The focus group was divided into two parts, each composed of 3 questions:

1. What does the word "competences" mean to you and your company?

2. In a world which is constantly changing, in what way are you making those competences evolve. Could you describe one in particular ?

3. What is the share of informal education skills and competences coming from implicit knowledge that you need inside your business?

4. We are proposing 5 themes which induce specific needs of competences; which ones seem most important for the future?

➔ *sustainability, social inclusion, digitization, research and development, new business models*

5. Imagine your company in 5 years; are you capable of anticipating the difficulties to come and the competences to implement to face those difficulties.

6. By looking at those themes, is there a domain where the competences seem to you more difficult to put together ? And what are those difficulties ?

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