:: Market Makers

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Developing the market for non-formal education provision in Bosnia & Herzegovina

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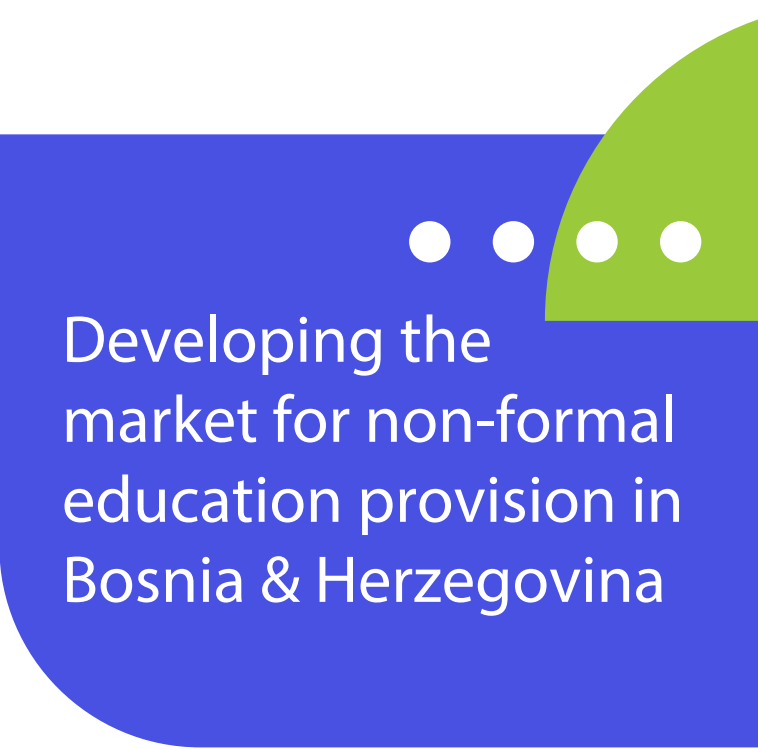
Developing the market for non-formal education provision in Bosnia & Herzegovina

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This case study takes a closer look at an intervention to develop the non-formal education market for professional training and adult re-training in Bosnia & Herzegovina implemented by the project, MarketMakers. Set midway through the intervention project cycle, it begins by telling the story of what MarketMakers did and with whom throughout the piloting phase of the intervention, followed by a description of the process of exiting the piloting phase and its preliminary results. It continues by offering a glimpse of what MarketMakers intends to do in its final 18 to 24 months as the intervention approach necessarily evolves in the project's quest to generate a greater market response and social impact on a larger scale. It represents a 'live' case study at the time of its publication and is purposefully designed and structured to be revisited and concluded when the intervention comes to an end in mid-2023. As well as describing what the project did, it also presents the rationale, shining a light on how and why certain decisions were made from the perspective of the implementer.

Section 1: Background

Who is this case study for?

The case study is for donors and practitioners engaged in developing solutions that contribute to achieving the UN's Sustainable Development Goal for Decent Work and Economic Growth (SDG-8), and also those involved in promoting lifelong learning opportunities relevant to SDG-4. Those more generally engaged in designing and implementing employment and income initiatives, be they locally- or internationally- financed, and those more specifically tasked with improving and reforming education systems to be responsive to the skill needs and work types of the future will also find points of interest here. The case study also adds to the literature in the development methods community, specifically the application of the market system development (MSD) approach (or generically, "systemic approaches") to address different forms of social and economic disadvantage.

Tell me about MarketMakers?

MarketMakers is a Swiss government-financed youth employment and job creation project under the Swiss Embassy in Bosnia & Herzegovina. It uses a market systems development (MSD) approach to resolve deep-rooted constraints that impede the growth and success of private sector companies, creating new job opportunities for young people across the country. As a result of youth career preferences, the project chose to specialize in creating attractive entry-level jobs within international-oriented service industry sub-sectors. In this way, the project concentrated its efforts on a broad and diverse range of technical, creative, and professional services professions and sought to benefit companies looking to expand their export market business and enter into new strategic sourcing arrangements with service importers.

Why non-formal education? Why does the non-formal education market need development? What was the intervention rationale?

In contexts where the formal education system and related investments – including in dual, vocational education – display shortcomings, quality, non-formal education, which complements or sometimes compensates for educational outcomes delivered by the formal education system, gains importance. In Bosnia & Herzegovina, where youth unemployment rates are among the highest globally, sub-optimal formal education system governance has given rise to stagnating curricula and under-resourced, lackluster curricula delivery. Whilst there are a small number of positive outlier examples to the contrary, gulfs in cooperation between education providers and the business sector have not been bridged. These gulfs are especially felt in the services industries and those industries reliant on technology – the sector where MarketMakers elected to focus most of its efforts. This has exacerbated the now well-known nationwide structural unemployment phenomenon. Nearly three-quarters of local businesses that report unfilled vacancies point to widespread skills mismatches as the primary cause. Until formal education system governance demonstrates dramatic improvement, non-formal education stands to have a vital role in filling the gap between what is taught in secondary schools and universities and what is needed in workplaces across the country.

Even in countries where formal education systems yield academic or vocational educational outcomes far above the average, non-formal education remains vital for professions in industries where routine innovation and frequent technological and process advancements increase the incidence and regularity of skills obsolescence. Indeed, experts studying the future of skills, learning, and work have been for some time recommending countries to adopt more sophisticated and comprehensive policies in support of lifelong learning (or adult education), continuing professional development, and re-skilling. The same experts also suggest that companies and employers are more proactive in ensuring they have the present and future labor force they need. In this regard, and whichever country you find yourself in, both non-formal and formal education providers will have important roles in educating the working age population before and throughout their working lives, and both types of providers will need to have high adaptive capacities to meet the now faster-evolving needs of employers. In the here and now, in Bosnia & Herzegovina, there has been an apparent need to support nascent non-formal education providers and create the necessary conditions for their success. Such action would encourage newcomers on the supply side and raise the bar to offer more sophisticated, professional, and perhaps above all, applied and practical educational services over time. Apart from demanding more from their governments concerning longer-term improvements in formal education system governance and delivery, employers must begin to see themselves as a more significant part of the solution to the structural unemployment malaise, rather than passive and expectant commentators on it.

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Section 2: Piloting phase

How did you arrive at the intervention concept?

As confirmed through employer interviews, skills demanded by companies for entry-level positions in modern service industry sectors, particularly those targeting export market success, were often not at all taught within the formal education system *(see Box 1, below)*.

Box 1: Employer perspectives on post-education knowledge gaps in their sub-sectors	
Employer	Quotes
DVC Solutions (IT)	*"The problem begins in primary and secondary education, where the curriculum does not cover any modern technologies, IT, or digital trends. As far as university faculties are concerned, the situation is somewhat better, but again there is a lot of room for improvement. Modern programming languages are not in the curricula, UX/UI design is a total unknown, and software engineering within the context of business and economics faculties is also unknown."* (Branko Vasiljevic)
Lilium (Digital marketing)	*"Within the formal education system, there is a lack of the specialized knowledge needed to work in the marketing of the digital age in which we live, and this (knowledge) is advancing day-by-day without the education system responding to it."* (Haris Husejnovic)
Walter (Architecture)	*"There is a huge difference in the technologies and software used in universities and the real needs of the market. Walter AEC, as a company primarily using BIM, has a need for employees with knowledge that is simply not fully available through university education. Students are rather forced to acquire this knowledge through work or additional education."* (Elma Krasny)

Intervening to effect immediate changes in the formal education system was deemed unfeasible for a myriad of external and internal reasons, including widespread institutional ineffectiveness and a sluggish track record of (evidence-informed) policy reforms and implementation. Instead, the project elected to focus on developing quality non-formal education courses with the employers themselves, initially independently of formal education providers. Company-developed and -delivered education emerged as the preferred design concept, and this was boosted further by the project's receipt of a speculative business case from a successful exporter of architectural, engineering, and construction (AEC) industry services requesting co-investment for the establishment of a new educational unit within their company. During the piloting phase of this intervention, these would come to be known as *"company academies"*. They were internally defined by the project as being training, re-training, or educational services that an employer launches, either as a unit of its existing business or a separate legal/business entity, that is linked to the employer's core business and the industry at large. The idea was for company academies to offer profession- or industry-specific curricula (or both) that would be developed and taught, at least in part, by the practitioners who sell those skills daily for their employers. The practical applicability of the "skills-first" syllabus and taught content would be high, and the concept would also bring students face-to-face contact with employers as they were learning. This would allow company academy students to determine better what hard and soft skills employers find essential and thus pave the way for students to get their foot in the industry door.

Were there any downsides to this concept?

Compared to working with formal education providers or even private independent training providers, there were drawbacks to this concept and also some risks to navigate. Firstly, the pedagogic capabilities and consistency in instruction were assumed to be lower in company academies (a good employee doesn't necessarily translate into a good educator!). The concept also risked under-prioritizing the importance to students of educators offering a "qualification" as compared to "developing skillsets" and sharing "applied knowledge." Importantly, in terms of the approach, the project would also need to identify and create the incentives to minimize the likelihood of the young talent emerging from the academies being solely captured (and therefore fully "privatized") by the employer offering the company academy services. While catalyzing new company-level traineeship schemes was by no means a negative result (rather this would be a positive spillover or side-effect of the intervention concept, providing no project funds were used to create these schemes), the ambition was to use project funds to initiate a new wave of training, re-training, or educational services that would benefit industries at large and not only a small handful of individual firms.

What was the project's strategy in the piloting phase of this intervention?

With leading AEC company, Walter, indicating that there may be a latent willingness among top service sector employers to get into education, the project set out to create an expansive pilot. Indeed, the ideas that emerged during the investment negotiation with Walter, MarketMakers' first investment under this intervention, helped finetune the intervention concept and the design of the piloting phase. The piloting phase intended to invest in establishing several company academies across non-competing, preferably complementary, service industry sub-sectors and learn the lessons from the range of experiments generated by what the project assumed would be a diverse array of company academy models. The project wanted to avoid falling into the trap of over-engineering or dictating one specific company academy model, so the strategy would be implemented in such a way as to allow each company to discover what works best in its particular circumstance. While MarketMakers could better advise each subsequent investee iteratively – as the project also learned on the go – the general notion was to take stock of the various markers and attributes of company academy success (or otherwise!) from across the different experiments over a 24-month period. The learned lessons would then feed into developing the post-piloting phase intervention strategy. At the same time, MarketMakers gave each company academy investee full license to adapt to market circumstances, adjust their company academy model, and re-calibrate their educational offers from cycle to cycle, or even add/remove courses as per consumer demand.

How did the project find its partners?

At an early stage, and after the Walter agreement was signed, MarketMakers opted to actively source its partners, headhunting investees with whom to trial a company academy service rather than taking a more passive route via application rounds or open public calls. Indeed, only one of this intervention's piloting phase investees was sourced via a public call process. The reasons for this were many and varied, but can be summed up by two main factors.

Firstly, it was seen as critical that the companies offering educational courses had a strong reputation for core business quality, professionalism, and good networks among peers in their industry, such that i) talent produced by the companies' academies would be attractive to employers in the same industry (and beyond), and ii) it would be more straightforward for the company academy coordinators to arrange post-course employment opportunities for their graduates, in response to the "career pathway conditionality" that MarketMakers placed upon investees (to maximize students' prospects for employment after completing academy courses). The argument was that company academies would need to demonstrate to prospective service buyers their 'transition-into-employment' success rates and therefore needed to have "off-takers" for the young talent at the ready. However, there would be no guarantee that such companies would see the project's public call or wish to engage in submitting applications, even if there was a reasonable way in which such selection criteria could have been captured in the public call's publication. Secondly, and relatedly, development projects, to the best of their abilities, must be aware of each investee's capabilities and motives to implement and uphold a change financed by donor investment. Public calls are 'arms-length' in design and execution and rarely result in the type of 'partner-like' relationship that the project wished to have with its investees. In contrast to the

grant-awarding process emerging from public calls, partnerships are centered on trust, allow space for empathy when plans cannot be adhered to, and tend to generate a sense of ownership from both parties to make the investment work. The headhunting process, when done well, allowed the project to do its research in terms of talent under-supply and industry needs, approach relevant companies with the suspected resources and incentives to be part of a solution for generating talent, and get to know their prospective partners over a three- to six- month conversation, fact-finding, and negotiation period. At this point, each party can decide whether or not they have enough in common and sufficient mutual trust to conclude negotiations with an investment.

Though more time-intensive on the project's side, headhunting was the preferred partner identification and selection tactic. On balance, it was the view of the project team that proposals do not always allow proposal evaluators to best understand, in this case, whether applicants could and wanted to run a successful company academy sustained by market demand over the long term, as opposed to receive a grant that subsidizes one new cohort of trainees in the short term. The competitive element of the public call process could also be partially-simulated by shortlisting employers in the same field and ruling them in or out based on the quality of and interest in the project's initial interactions with them. The significant downside to this approach from the perspective of the project was the sheer number of human resource hours that went into lining-up each investment and the risk that the human resource time invested would not result in a partnership of any kind. This happened on six out of sixteen occasions during the piloting phase. In the case of this intervention, an average of 154 combined staff hours (across intervention, impact measurement, management, and administrative support staff) went into preparing each investment, whether it was concluded as a partnership or otherwise. Many more hours were invested into the company scoping and shortlisting processes. Combined, this was presumed significantly greater than the time that would have been spent advertising a public call, filtering-out proposals and selecting and agreeing terms with awardees. To clarify for readers from different country contexts, it is important to note that these conclusions have been reached in Bosnia & Herzegovina, a small and highly donor- and public call-saturated market. The same might not hold true in other contexts.

What were the partners' motivations to become education providers?

Companies are generally motivated to open an educational unit as part of, or in addition to, their core business for a variety of reasons – the major one being that the survival and growth of their core business was reliant on a healthy talent pipeline that was somehow jeopardized by the under-supply of relevant, credible educational offerings from existing formal education institutions and other providers. In many cases, however, this pure access to talent and recruitment motivation was augmented by one or two other factors, ascertained through conversations with the company owners. For example, owners believed that company academies: i) served as a differentiator and signifier of quality among prospective clients of the company's core business services, potentially helping them to win more business (or relatedly, the courses or the graduates themselves can be offered as an additional value-added service to existing customers); ii) could become profitable business units of the company in their own right, opening-up new revenue streams; iii) presented their companies publicly in a strategic leadership role as proactive problem-solvers, serving a general market positioning and company promotion purpose; iv) offered different experiences for company employees searching for new challenges (e.g. as educators) within their organizations; and, v) fulfilled and delivered upon their corporate responsibility wishes.

What about their ability to become education providers?

In terms of the companies' capabilities to offer educational services, the project tended to seek companies who were either leaders in their fields or respective market niches, had a solid and stable core business with a healthy year-on-year revenue, and those with a number of senior and mid-level employees who could be available as instructors, coaches, or mentors. The project's preference – and a risk to be mitigated in part through partner selection – was to find partners who would not de-prioritize the academy with each minor shock to the core business, for example, due to labor turnover, or more positively, due to a surge in their core business demand. Whether or not companies had the human (and financial) resources to re-invest into the academy throughout the years, both to make improvements and expand the service offering, was also important. The project team would search for companies that had a modest head start in setting-up training, re-training, or educational services too, as several companies already offered training services for their clients or had some semi-structured employee induction, internship, or traineeship program that they could simply build upon, deepen, or make more accessible with only small investments necessary to improve, upgrade, or "re-package" and re-structure it. On some occasions, those interested in launching a company academy were not necessarily experienced teachers nor trainers, and would have to develop such skills on the job, learn-by-doing, or seek to engage in contracting-in educators or pedagogy experts to build and deliver "training-the-trainers" courses. It was not always possible for the project to tick all of these boxes for each new piloting phase partner. Still, during the "get to know you" period, the project team had to pay attention to these matters. And depending on the case, it could take a more stringent or relaxed approach, balancing risk with the desire to widen the diversity of company academy models being piloted.

How did MarketMakers work with partners and stakeholders?

While a lot of freedom was envisaged for pipeline investees (i.e. companies with whom an academy investment was discussed), a number of parameters needed to be fulfilled by the prospective company academy before the project invested. These parameters were purposely set in the name of inclusivity, financial sustainability, and stakeholder collaboration. The investee could only negotiate them out with a significant rationale for doing so. At the same time, the project made it clear that academy financial performance and institutional sustainability were of paramount importance, indeed, more so than any short-term measure of success regarding trainee numbers or jobs created. In keeping with this, companies were encouraged to engineer a business model for their academies that they believed would stand the test of time. While the project was indifferent as to whether the academy was to be set up as a cost-recovery or commercial business unit (in line with the companies' own needs and incentives), it was preferred but not a "deal-breaker" that academies were not designed to be purposely loss-making business units that were cross-subsidized by other business units in the long term. In line with the project's prioritization of academy longevity, in most cases, the project refrained from obliging investees to have a minimum number of participants in each cycle and avoided over-specifying and obliging particular demographic profiles of participants. The project only maintained that academy investees needed to offer at least one course each year for a few consecutive years to become a recognized and predictable service offering in the eyes of the consumer. MarketMakers also chose not to interfere with companies' pricing, only requesting that the companies create grounds for the participation of motivated participants from lower-income backgrounds. In reply, companies often proposed limited scholarships/discounts for each course cycle or offered participants to pay in installments or defer payments. Lastly, MarketMakers would accept all requests from companies to adapt their academy "business model," as well as the curricula and how it was taught, and elected not to refuse the reallocation of project investment (note, pre-agreed cost items were agreed in the contracts) in order to give investees the maximum flexibility to adapt to what they were facing. The process of negotiation terms and agreeing partner freedoms included more elements besides *(see Box 2, below)*.

Box 2: Additional partnership terms		
Area	Requested or preferred	Freedom given
Curricula	Prospective investees needed to i) offer a course that was otherwise not available elsewhere in the territory of Bosnia & Herzegovina within the formal education system, or by independent/private training providers, ii) develop a course that provided skills relevant for one or more professions in their industry, rather than specifically for the company itself, iii) minimize the pre-requisite knowledge required among participants, or also offer a beginner's/introductory course to facilitate re-training/re-skilling from scratch.	Companies were otherwise free to decide on the exact syllabus and curricula content, the mixture of taught, self-learned, and on-the-job content, and also the depth that the course went into (difficulty, number of teaching hours, and so on).
Teaching and Delivery	Courses should preferably be delivered, in the majority, by company employees in order to maximize the transfer of applied skills. The establishment of a team of teachers was strongly preferred so as to offset the likelihood of training discontinuity due to teacher absence, departure, and competing core business demands. Courses should, where possible, also be offered online or as a blended classroom and online option in order to limit exclusion to skills acquisition based on geographic and physical access criteria.	Companies were free to allocate employees of their choosing to the academy teaching team. A teacher's level in the hierarchy, nor their qualifications were important. They were also free to hire education center managers or coordinators or assign this task to their existing HR function. Companies were also free to experiment with their own teacher compensation arrangements, recognizing the added responsibilities of teaching cycles in and among existing core business responsibilities.
Qualifications	It was requested that companies prioritized knowledge and skills transfer and that they put plans in place to assist their graduates/alumni to apply their learning through arranging traineeships or employment with their peers and companies in their wider professional networks if they would not be taken on by the company running the academy itself. It was optional, though preferred if the company academy curricula would prepare participants for an industry – or professional qualification – so as to make graduates/alumni's learning more portable.	Companies were not required to register as a licensed (adult) education provider with the local government's educational authorities, nor offer a recognized qualification (e.g. as an accredited adult education establishment), or otherwise. However, as per the law, companies had to be legally permitted to offer educational or training services (commercially), as per their company registration documentation, or otherwise open a new legal entity that could.

In financial terms, what was the size of investments made?

In addition to supporting the development of academy business models, the project would typically invest between EUR 10,000 and EUR 45,000 into academy establishment in the form of non-repayable grants set in installments. The piloting phase average was approximately EUR 20,300 per partner. All investments were intended as seed capital, contributing towards academy-related research, preparations, setup, and launch. On occasion, MarketMakers bent its own rules and also made smaller contributions to support the financing of recurrent expenditures or operational costs such as the marketing of the academy or the purchasing of renewable software licenses. Nevertheless, the project was careful not to cover the costs of teaching delivery and student participation, thus avoiding paying for or subsidizing the education itself.

Section 3: Exiting the piloting phase

When did you know it was time to draw the piloting phase to a close?

The initial idea of the piloting phase was to generate several different case studies, and champions, of company-led education. Throughout the phase, a natural diversity emerged in terms of sectoral coverage, academy business model, academy size, course structure, delivery methods, and many other characteristics. This was to avoid producing only one company academy blueprint in the piloting phase, and therefore minimize the risk that the vast majority of employers with whom the project planned to engage in the next phase of the intervention would view the company academy concept as being somehow not representative of their situation and context. In essence, the project wanted to generate a lot of learning to share with later adopters. By implication, the so-called early adopters were likely to be more risk-loving and perhaps even better-resourced than the later adopters. In any case, the project was undoubtedly aware that, beyond the intervention's piloting phase, it would not make sense to keep investing in individual academies as large-scale social impact was deemed to rarely result from such a strategy. The project's money would run out long before scale had been reached and it was resource- and time-intensive in terms of the project's personnel. Also, to some extent, it was never-ending as there was always likely to be one more pipeline investee on the horizon who had become aware of the project's support. After a certain point in time, the marginal increase in company academy model diversity that the project wished to generate was also less and less.

By mid-2020, approximately two years after the project's first company academy investment into Walter, the project had made eight investments into different company academies and had determined that this group of investees provided both a sufficient diversity of non-formal education champions with whom to socialize and promote various company academy models. They could also form the nucleus of a more collaborative peer-to-peer activity in the subsequent intervention phase: the so-called "crowding-in" phase. A final sign heralding the end of the piloting phase arrived as more and more resource-rich companies began to approach the project team with requests for investment, citing the investments that the project had made into competitor companies in their sectors. At this point, project concerns about displacing private sector investment also came to the fore, and the writing was on the wall to strategically steer the intervention away from its narrower "academy-testing" piloting phase and towards a broader and deeper "system building" endeavor that would characterize the intervention's "crowding-in" phase. Notwithstanding this, and at the same time, the project's implementation contract was entering into its final twelve months and the funder had yet to decide whether the project itself would be extended and receive a new implementation phase contract. While the project was aware that it should concentrate on strategically shifting the intervention, it became unsure of the most meaningful way to do so, given the uncertainties as to the exact time it had within which to execute the remainder of the intervention. In this period, the project invested into two further company academies (Mistral/Paragon and Purple Key), bringing the total for the piloting phase to ten. Meanwhile, a somewhat imperfect and hastily conducted partner identification process was completed, resulting in the project identifying its first "crowding-in" phase partner for the intervention; research institute and policy analysis think tank, CREDI.

You mentioned "system building". What does "system building" mean to you in the context of this intervention?

In the project's market assessment, there remained somewhat of a vacuum where actors with a "public good" perspective, coordinating remit, club, network, or supporting role would typically be. Aside from a few individuals and experts, no institution nor organization appeared to have the knowledge, capabilities, recognition nor bandwidth to be classified as champions of the non-formal education cause. This is to say that there was no real system to speak of, rather a small number of individual non-formal education providers – both company academies from the intervention's piloting phase and independent private training providers with whom the project had not collaborated – rightly pursuing their own interests as employers or organizations independently of one another. Early adopters were destined to succeed or fail despite not having benefitted from any kind of "support system" around them. In turn, "system building" would come to mean working to reduce the barriers that other employers would face in taking up variants of the company academy model, or more generally, engaging in and investing in new talent training or educational partnerships. The thinking was that this could occur if local organizations and institutions, or even individuals, were willing and able to provide services that could facilitate either the creation of new supply-side offers or quantitative and qualitative improvements in the outcomes of existing non-formal education providers. Beyond moves that would simply accelerate uptake, however, "system building" also meant deeper and more profound intervention. For example, the identification and energizing of local organizations and institutions that had the appetite and knowledge to challenge the policy-related and regulatory disincentives that inadvertently sustain horizontal mismatches, exacerbate skills deficits, and entrench the structural unemployment phenomenon over the long run. "System building" would also invariably mean influencing and collaborating with the formal education system – e.g., private universities with perhaps more freedom to innovate and invest in new offers – and beginning to bridge the gaps between the developing, emergent non-formal education system and the well-established but sub-optimal formal education system. These ambitions were all fully understood to be very tall orders. It was unlikely that a single project, let alone one intervention of a single project, would be able to realize these ambitions in their entirety and certainly not if only one or two years remained on the project clock. Instead, the project team decided that MarketMakers should work towards producing sustainable and resilient outputs and only attempt to trial new services "in the system" upon which other motivated stakeholders (funders, government) could later build, further enriching the system in the future.

How did CREDI fit into this? What was their piece in the "system building" jigsaw?

MarketMakers worked with CREDI to launch a small number of new services, branded under the name "InLearn," which were conceived with complementary objectives: (i) to provide employers with training and insights on the topics of company academy setup and the offering of, or participation in, educational service delivery, (ii) to provide industry skills gap-related services to civil servants and relevant government departments responsible for the formal education sector and adult education, and (iii) for InLearn to slowly start to position itself as an ally to stakeholders in the skills, training, and employment space. It was the project's first and experimental attempt to test the demand for a "supporting actor" role amid the cast of main actors (i.e., the providers themselves). The general idea behind InLearn was to trial different offerings to identify whether there was an unexpressed demand for quasi-B2B services in the non-formal education space and then to pursue the services where the responsiveness (from the private and public sector "customers", or both) was the greatest. As part of this, InLearn committed to exploring an array of both informational and consultancy-style services: business models for designing and delivering company education; best practices in pedagogy for company-delivered education in different sectors; matters of registration, accreditation, and eliciting public sector support for non-formal education ventures; understanding and using labor market information and market research tools for developing non-formal education courses; and others. Conscious that InLearn would be a new player in this space and that there was no real precedent for such a service to commercially sustain itself given the immature status of the specific market, particularly with respect to B2B services, CREDI had imagined that InLearn should complement its core business by aiding its strategic positioning, and to do this, if possible, in a cost-neutral manner. It was not planned for InLearn to be a profit-center for CREDI. For the project, the InLearn venture constituted a testing of the waters. If nothing else, and whether it succeeds or fails in sustaining as a venture, it was to provide a visible sign to the early adopter company academies that there were other organizational allies out

there with whom to build a community of both common interest and common cause. It would also signal to later adopters that their pathways may be somewhat easier.

Section 4: Initial results

The intervention is far from finished, but what are the results to date?

The most important result from the piloting phase is that the majority of partners are encouraged to continue to operate as non-formal education providers, or to engage to some degree in solutions for structural unemployment of young people for the long term. Given the attention paid to partner selection concerning both employer motivation and capabilities, the details of each investment, as well as the time that both partners and the project team invested into demand-side analyses, the project was hopeful that a healthy proportion of piloting phase company academies would stand up to scrutiny, yet it was also aware of the riskier choices that it had made in the name of company academy model diversity. As assessed in June 2021, six out of ten company academies from the piloting phase demonstrated good signs of their services sustaining (and possibly growing). It was too early to measure results for two academies given the recency of their launches, though both had first cycles of courses that were well-received. Meanwhile, the project estimated that there was a risk of discontinuation/ceasing of regular activities for the other two academies in the near future. One of these two was identified through the project's preferred headhunting approach to partner selection, while the other came via a public call exercise *(see Box 3, below)*.

Photo by: InMotion

Box 3: Prospects of piloting phase academies sustaining						
Key information				Signs of output sustainability		
Company	Industry	Original courses offered *(immediately after investment)*	First cycle(s) launched *(as from Jun 2021)*	Continued original course(s) beyond the first cycle?	Invested into curricula adaptations?	New courses added to the Academy's educational offer?
Atia	IT	– Certified penetration tester – Certified expert in source code analysis	<12mths	Yes; though fewer cycles	No	No
Dizart	Engineering services	– Solidworks & Solidcam (joint)	<18mths	Yes	Yes	Yes
DVC Solutions (HUBL)	IT	– UX/UI design – Quality assurance (QA)	<12mths	Yes	Yes	No; though concrete plans
InMotion	Business process outsourcing	– Transport/logistics coordination (sales and customer services)	>18mths	Yes	Yes	Yes
JS Guru (Q - Station)	IT	– Data science – Cloud computing / AWS – Video editing/design – IoT engineering	<12mths	Yes	Yes	Yes
Lilium	IT & Digital marketing services	– Digital marketing specialist	<18mths	Yes	No; though concrete plans	No; though concrete plans
Mementia	IT	– E-commerce specialist	<12mths	No	No	No
Mistral (Paragon)	IT	– Full stack web developer (9 months online school)	<6mths	Yes	Yes	No
Purple Key	IT & Digital marketing services	– Graphic design & photo editing (one course)	<6mths	Yes	Yes	No
Walter	Engineering services	– Revit/BIM courses (various) at basic and advanced levels	>18mths	Yes	Yes	Yes

What about social impact and other higher-level metrics?

At this point, at least 160 unemployed young people and school/university-leavers have entered into employment very soon after completing courses in one of the piloting phase company academies, with the academies themselves assessed as significant contributors to these transitions-into-employment. However, this number is assumed to be highly under-reported due to the absence of functional alumni tracking activities among piloting phase partners, especially as the time gap grows after course completion. The figure is also a positive signal in the context of the COVID-19 pandemic, where country-wide net job loss in Bosnia & Herzegovina stood in the tens of thousands, and hiring activity was highly suppressed, especially for entry-level/junior positions. The figure should also have a "job multiplier" of somewhere in the region of 2.1 to 2.5 attached to estimate the total economic effects of the social impact from the piloting phase partners at the time of writing. Moreover, it is worth highlighting that at least another 560-plus unemployed young people and school/university-leavers have gained new skills that, theoretically, make them more employable jobseekers than may have been the case in the counterfactual. However, in line with the above, this is presumed to be over-reported as a reasonable proportion of these young people would have increasingly entered into employment arrangements in the months after completing their courses (without academies necessarily being aware). This is still a valuable social impact since company academy graduates will be more employable, especially in a post-pandemic economic recovery context. It is also more customary to measure employment-after-training effects six months after cycle completion, which the project's partners are not doing (or not able to do) at this present time. On top of this, the piloting phase company academies had also educated over 375 young people who already had a job and either wanted to re-train and into a higher-value profession, or continue their professional growth and gain promotion with their current company. These people are not counted in Box 4, below. Logically, the movements of such people within the labor market, promotions or otherwise, create vacancies and, therefore, a demand-for-labor in their vacated positions. By extension, this creates new labor market opportunities for entry- and mid-level positions. Unfortunately, in this regard, the project does not possess accurate data for all company academy alumni, though at least 50 people (out of the 375) are known to have been promoted since completing their courses.

Box 4: Piloting phase partner results (*up to Jun 2021 only)		
Total number of students or unemployed people completing courses at piloting phase company academies	Total number of students or unemployed people now known to be employed (attributed to company academy participation)	Total number of students or unemployed people with improved employability scores but still looking for a job
725	161	564

Significantly, it is crucial to note that the numbers will continue to grow as the months pass as each of the aforementioned six (possibly eight) academies with the stronger sustainability prospects routinely repeat cycles of their original training courses. A sub-set of them re-invest in and expand academy activities to offer new courses in adjacent disciplines or different levels of courses in the same thematic area *(see Box 5, below)*.

Box 5: Company academy perspectives prioritization vis-à-vis 'core' business and continuation	
Company Academy	**Quotes**
Dizart (Engineering)	*"We will continue to invest in the academy. It is now a priority part of our business, and we will always try to make every cycle better and to provide our candidates with as much as possible."* (Emina Ahmic)
DVC Solutions / HUBL (IT)	*"This is not our main priority in business… but investing resources in HUBL (the name of their company academy) is definitely an important link in our chain."* (Branko Vasiljevic)
InMotion (Logistics)	*"We are still planning to take further steps (with the academy). Enthusiasm is certainly not lacking." (Ajla Klico)*
JS Guru / Q Station (IT)	*"Although the academy is not the main priority of our business, it is certainly a significant part of it, and the plan is to continue investing in its further development and growth. In this cycle, the offer and variety of courses has been expanded, which has resulted in an increase in the number of participants. Enthusiasm for the academy is stronger than at the beginning because significant progress and results can be seen."* (Mirjana Galic)
Lilium (Digital marketing)	*"Although it is designed primarily as a commercial product, we realized that our Digital Academy can offer young people the opportunity to gain knowledge and practice that will make it easier for them to find work and enable them to acquire knowledge not covered by the formal education system. Our academy will surely change and be enriched with new contents, in accordance with the development of new technologies as well as the development of our agency."* (Haris Husejnovic)
Mistral / Paragon (IT)	*"Over 6,000 hours of time from our IT experts at Mistral were invested into the creation of the program… The second cycle is currently in the candidate selection phase, and the results stand to be excellent according to our current indicators… Our strategic plan is that we will continue to offer the program and to monitor the market and the needs of the IT industry, and, if necessary, adjust the program to them. The program is supported by the IT industry, BIT Alliance (national IT association) and its members… All of the above is a great motivation for us to continue the program… and to expand it to other countries in the region."* (Ajla Fijuljanin)
Purple Key (IT)	*"Investing in education is something that should never stop. The speed of technology development forces us to do so. The new creative solutions we want to offer our clients, the desire for development, originality and ecognizability, are the goals we aspire to as a company, and the enthusiasm for learning is always present and equally intense throughout time. The results we achieve are an additional motivation for us."* (Mahira Hadzic)
Walter (Architecture)	*"Further investment into the academy is the only logical sequence. We are very proud of the work of the academy, and the opportunity to provide individuals with access to the necessary materials, but also to help them to gain knowledge relevant to working in Walter AEC, as well as working with BIM technologies in general. We are currently working on developing the concept of BIM school, which would aim to offer comprehensive education of students on the technologies used, but also additional knowledge related to communication with clients, project work, and other skills needed to produce future BIM consultants and BIM managers."* (Elma Krasny)

Finally, while the project does not robustly measure the satisfaction of company academy trainees, it does measure decency of employment among academy graduates who are known to have found a job attributed to their participation in company academy-delivered education. In this regard, self-assessed scores for job decency are very high (averaging over 8 out of 10) across several different indicators of job satisfaction, suggesting academies are also supportin-g young people to find entry-level positions that meet, or are somewhat above, their expectations.

Section 5: Next steps

The project was extended for a further two-year phase. What now? What is your new vision for how the non-formal education system will look when MarketMakers closes?

The project will continue with the "system building" strategy that evolved out of the intervention's piloting phase. The critical premise remains making the conditions of entry and success somewhat more accessible for those that follow the early adopters. This will be done by testing the waters and probing stakeholder responsiveness. Thirty-six months provides far more scope than twelve months, so the vision for the end of the "crowding-in" phase can be more ambitious, while the strategy can be somewhat more multi-dimensional. The additional time allowed the project team to better reflect on the critical success factors and the lessons from the piloting phase company academies and investigate why some employers withdrew or postponed their interest in educational services. Part of this has been the realization that employers' knowledge and networking barriers impede academy creation (and success) to a greater extent than academy seed capital and financial investment issues. The most significant investment is opportunity cost, both in the initial prioritization of academy-related research and preparations for academy launch, but also in the ongoing delivery or participation in the delivery of the courses themselves. Making know-how available for getting prioritization and opportunity cost right can be invaluable. Moreover, most company academies and would-be company academies do not have senior managers experienced in starting an educational endeavor, nor running an educational service 'side-business'. They are, of course, most knowledgeable in overseeing their own companies' core business affairs, many coming from technical rather than business administration backgrounds themselves. This creates a latent demand for networking, peer-to-peer learning, club goods, and all sorts of different aspects of collaboration more generally, as there is unlikely to be a vast and sustained demand for commercial (or even semi-commercial) consultancy or advisory services responding to these knowledge and networking gaps in the medium-term. Instead, tips and tricks, lessons learned, and shortcuts that a community of peers could exchange with one another, under a more collaborative ecosystem ethos, are ripe for nurturing. And so, the general vision is one where the non-formal education system is characterized by collaborative behaviors and common responses to shared problems by a diverse set of stakeholders, rather than a small number of individual non-formal education providers hard at work with their heads down. Specifically, MarketMakers would like to see a greater degree of coordinated action, most likely among and between academies that complement rather than compete with one another, in overcoming common challenges faced by all non-formal education providers.

What are these common challenges that you mention?

A few signs point to a latent or yet-to-be expressed demand for greater collaboration among non-formal education providers. Firstly, there remains a generally mixed perception of non-formal and non-accredited education among education consumers in an education consumption market that tends to value qualifications, and qualification type or level, over the possession of applied skills. This appears to be the case even if the skills would be a better passport to getting on the job ladder than an accredited qualification would. The perception issue that suppresses demand, but also acts as a demotivator for public sector reforms in this space, is not able to be tackled by one or two company academies but will require a more concerted and better-resourced effort, preferably shouldered by many employers with a stake in industry-specific and non-industry specific skills shortages, over time. Another illustration of where collaboration is likely to yield more fruitful results than solo action concerns the addressing of policy and regulatory reforms. For example, reforms that would facilitate and expedite different kinds of course-specific or institutional partnerships – between formal education providers, such as universities, and employers or non-formal providers such as company academies – are necessary to jumpstart educational sector innovations and make possible what many other European countries are doing as standard in the tertiary education domain through vocational degree programs, student "sandwich years" (or years/semesters-in-industry), and alike. Such partnerships could also see company academies becoming co-providers of courses offered by formal education providers, or even providers of teacher training. Employers could be built into processes that keep formal sector curricula content current and applied. More modest reforms may encompass revisiting applicant selection criteria for training-and-employment related active labor market measures (ALMMs) and similar business support measures (BSMs). This may mean fewer restrictions on the types of organizations that are eligible to apply, on who can deliver which training, and whether the

end employer can differ from the training provider. There are many other examples. So, the project foresees that a more collaborative ecosystem, actively working on challenges of this nature, would more effectively overcome the various system-level constraints that impede the growth of the non-formal education market and, more deeply, impede the untangling of the structural unemployment knot.

What will be the strategy for doing this?

At the time of publication, this is still a work in progress. With no apparent singular membership organization, thematic cluster, or representative body that specializes in, or at the forefront of, non-formal education development in Bosnia & Herzegovina, the project has recently set about identifying prospective partners who may be motivated and capacitated in the long run to play a more significant coordinating role. Ultimately, more than one willing counterpart is needed to kickstart a new era of collaboration in this space. If no credible candidates emerge, then one thought has been to assess the extent to which the piloting phase partners have sufficient shared visions, challenges, and motivation to start working side-by-side in a low-level, informal way. While principally for their benefit, in so doing, there will be natural positive spillover effects that improve the playing field for non-formal education providers generally. This would have its limitations, as for some piloting phase partners, their academies are not as critical or fundamental to the long-term success of their core business as for others. Collaborating with companies outside of their industry may be one distraction too many or too many degrees removed from their priorities in any given moment. As such, the benefits of different forms and intensities of collaboration are being explored and valued in order to find the best fit for the functions that could and should be addressed. Persuasive arguments will need to be made in order for any individual non-formal education provider to invest time into collaborative actions. For example, any type of collaboration that would reduce or avoid significant long-term opportunity costs for companies that run academies or for other employers that are motivated to somehow play a more substantial role in lessening the structural unemployment problem is more likely to be bought into. Such opportunity costs – on employee time, real estate space, equipment – are strong disincentives for employers to leap from mere commentators on the country's learning crisis to actively providing solutions to it.

An update to this 'live' case study can be anticipated in the first half of 2023. Many thanks for your interest in this intervention.

Photo by: QStation

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