Smart Learning @ the School of Management of Politecnico di Milano

The Project in Brief

The project described in this document regarded the design, implementation and deployment of a new approach to teaching and learning in post-graduate management education that the School of Management of Politecnico di Milano (SoM - http://www.som.polimi.it/), and in particular MIP (the Graduate School of Business within SoM - http://www.mip.polimi.it/it/), initiated back in 2013 and has now widely adopted in its portfolio of learning programs.

This new approach was called Smart Learning and it combined an intense use of digital technologies with personal, face-to-face activities to increase the flexibility and the effectiveness of the post-graduate programs offered by SoM.

This approach was first applied in a new Executive MBA program - called Flex EMBA - which was launched in its first intake in October 2014, and it is now in the fifth intake. The Flex EMBA represents the main focus of this submission.

Afterwards, Smart Learning started to be applied – to different degrees and with different approaches – in other MBAs and Executive MBAs and in other programs offered by SoM.

Smart Learning is now an integral part of the strategy of SoM, especially in the area of post-graduate education, and has produced impressive results in terms of number of students enrolled in Smart Learning programs and of effectiveness of the learning process. This is having important consequences on the impact of SoM's training activities, which are now serving a growing population of young and more experienced managers.

Proponents: FEDERICO FRATTINI and MARGHERITA PERO

Team

The team that was in charge of the Smart Learning project at SoM included Federico Frattini and Margherita Pero (please see their CVs in Annex A). They were responsible for the design of the Smart Learning approach and, in particular, for the development of the first intake of the Flex EMBA and for the scientific direction of the following intakes of the program.

Federico Frattini and Margherita Pero has led a larger team which included also Stefano Cirella (a former post-doc student of SoM), Marco Vezzoli (Head of ICT at MIP), Brenno Arculeo (Vice-Head of Digital Learning at MIP), Michela Orsi (Project Manager at MIP) and Greta Maiocchi (Head of Marketing & Recruitment at MIP).

The Smart Learning project was strongly supported and championed by Prof. Gianluca Spina, the Dean of MIP, who believed that digital technologies could and should be used to respond to changes in the needs and requirements of managers and management students, without sacrificing teaching quality and learning effectiveness. Prof. Spina played a critical role in promoting the Smart Learning project inside SoM and in gaining the support of SoM Faculty Professors, a particular critical aspect for the success of this project. To put it shortly, without Prof. Spina the Smart Learning project would never be started and would not be successfully completed.

Background

In 2011-2012 a growing number of managers and executives showed interest for our Executive MBA programs, offered in the Evening and Week-End formats, and taught in Italian. However, many of them were unable to attend our traditional, face-to-face Executive MBAs because they had more and more frequent business trips and less predictable schedules, as well as the complications in combining family and work commitments. They all asked for more flexibility as a critical requirement for attending an Executive MBA. Moreover, they were in search for more personal, high-touch activities focused on their personal and professional development and tailored to their particular experiences, needs, attitudes and expectations.

At MIP we soon realized we were confronted with a big challenge: how could we increase the flexibility of our EMBAs and - by doing so - open the doors of executive education to a growing population of extremely busy managers, who could not afford to attend the traditional formats and where at the same time in search for more customized assistance to develop their career? In 2012 we started to investigate the opportunities offered by digital technologies applied to post-graduate education. At that time anyone was looking with interest at the booming MOOCs (Massive Online Open Courses) phenomenon. We also benchmarked a number of online MBA and Executive MBA programs offered by other international business schools, studied the functionalities of several distance learning platforms, and conducted a number of focus groups with our Alumni, current students, prospective students and Faculty Professors.

Proponents: FEDERICO FRATTINI and MARGHERITA PERO

This analysis suggested that digital technologies could be used to increase the flexibility of post-graduate learning programs. However, the formats and distance learning platforms that we benchmarked had - in our opinion - a critical drawback for executive education: they did not allow interaction, discussion, and team-working among managers and with the faculty. Interaction and learning from peers lie at the very heart of SoM values and methodology in the executive education. If we had to increase the use of digital technologies in our EMBA programs without sacrificing quality and learning effectiveness, we had to safeguard these aspects.

<u>The Flex EMBA</u>

Notwithstanding these concerns, in 2013 we decided to launch a new Executive MBA format that heavily used digital technologies and was taught in Italian. We called it Flex EMBA. It was designed to provide the same set of skills, build the same relationship networks and award the same diploma as traditional (Evening and Week-End) EMBA programs, but with the added benefit of greater flexibility, while the balance between work and family is made possible through the use of the most up-to-date technologies. At the same time, the Flex EMBA included a set of newly-designed, integrated activities created to ensure personalized career development to our students.

The Flex EMBA uses - for 80% of the total effort - a radically new digital learning platform that we developed from scratch in collaboration with Microsoft. By integrating Skype for Business, the new platform allows the organization of synchronous sessions when students work in virtual teams on real-world problems and business cases, and discuss them with our professors. Besides this, the platform was designed to allow discussions – moderated by our Flex EMBA staff – focused on real-time, hot business topics. Using Yammer, the Flex EMBA candidates can exchange their views and discuss with our faculty in real time. By doing so, they apply what they have learned week after week to interpret and address timely business challenges.

This professional social collaboration tool allows also bringing the EMBA program closer to everyday business life. In fact, the Flex EMBA candidates can post on Yammer real problems that they are facing in their business. They receive feedbacks and practical suggestions from their peers and the faculty on how these issues should be addressed. We signed a new agreement with the faculty, whereby they have to answer to the questions posted on Yammer within a very short timeframe of three hours. Of course the new digital platform was designed to host a vast library of asynchronous multimedia videos registered by our faculty, for more than one hundred hours of SCORM material.

The Flex EMBA format is not purely digital. In fact, for 20% of the overall effort, it features traditional, face-to-face classes. We decided to focus these classes on those topics that cannot be only taught, but have to be lived and experienced by the EMBA candidates, if they want to gain the most value out of them. They include soft skills, leadership, team-working, and

negotiation classes, besides the electives – advanced courses scheduled at the end of the Flex EMBA program.

On top of the flexibility offered through the use of the digital learning platform and the deep experience of our candidates in the soft skill classes, we decided to increase the number of one-to-one activities (to be held face-to-face, or using our synchronous interaction tool) in order to provide a high-quality personalized, professional development service. We introduced advanced career management tools, personal development activities, mentoring and advisory sessions to support the project work.

By doing so, we implemented our new strategy for digital education, called Smart Learning: it combines the flexibility of advanced and interactive digital learning, the rich group experience of face-to-face traditional classes, and the personalized mentoring activities on project work and other individual tasks.

Please find at this link detailed information about our Flex EMBA:
http://www.mip.polimi.it/en/academics/people-and-careers/mba-and-executive-mba/flex-emba/

The Flex EMBA required large investments in designing and implementing the innovative platform based on Microsoft technology and – for the largest part – in recording the multimedia material from our faculty. Besides these issues, we faced other quite serious risks, such as cannibalizing traditional face-to-face EMBA programs, changing the rules for the engagement of our faculty (we started to pay them a royalty for each time their multimedia asynchronous classed were watched), training the staff and coordinators to use new tools to interact with students. We also had very contrasting views about the pricing of the Flex EMBA. At the end, we decided to keep it at the same level of other, traditional formats, as it conveyed the same quality and service level as the Evening and Part-Time EMBAs.

The Results of the Flex EMBA

Amidst these concerns, the first edition of the Flex EMBA was successfully launched in October 2014. The results of the market were incredible and unpredictable. We received more than 800 requests and well before a month prior the kick-off, we had to close the application process as we had more request than the actual class capacity. We were then forced to launch a second intake in April 2015, six months before what was planned. The third, fourth, and fifth intakes started in October 2015, April 2016 and April 2017, for a total of more than 170 people who have been attending the Flex EMBA up to Agust 2017. Interestingly, the candidates of these first editions of the Flex EMBA are more experienced – on average – compared with traditional EMBA programs and have roles with higher responsibilities. Asked about the reasons why they participated in the Flex EMBA, they say that it was the only EMBA format that they could choose, due to working and family commitments.

We have seen no signs of cannibalization with other traditional EMBAs so far, and explaining our faculty how they should record a multimedia class and teach a case study discussion

4

session in a digital environment was easier than what we could foresee. Moreover, the good response from the market has made the initial investments more sustainable from an economic point of view. What is surprising us most is the incredible level of interaction between candidates and our faculty during the courses of the Flex EMBA. Especially the synchronous sessions usually have similar - and sometimes stronger - interaction and discussion than what we are used to have in a traditional, face-to-face environment.

We took a risk and pioneered a new concept in executive education, but we are now very glad because we have opened the doors of Executive MBA programs to a vast population of managers and executives who would not be able to attend them without the Flex EMBA.

Moreover, the value and quality of our Smart Learning approach is testified by the fact that the Flex EMBA received a prestigious award from AMBA, the international Association of MBAs, which – in 2016 – shortlisted it among the six most innovative MBAs globally, and among the top three that used digital technologies to innovate MBA education. The AMBA accreditation review which followed the award in 2016 also recognized the Flex EMBA as an impressive strategic innovation for our school and one of the reasons why we received the highest accreditation result, i.e. the 5-year accreditation.

Adopting Smart Learning in Other Programs

After the successful launch of the first intakes of the Flex EMBA, we decided to implement our Smart Learning approach to other post-graduate programs that SoM offers.

In particular, we were confident about the effectiveness of the learning approach we have pioneered and we believed it can add value for a vast population of foreign managers and executives. We have entered a partnership with WOBI (World Of Business Ideas - http://www.wobi.com/) and launched – in October 2016 – the first edition of the International Flex EMBA (www.mip.polimi.it/iflex). It is an Executive MBA program targeted mostly to managers from Latin America, but it will be open also to prospects from other

Proponents: FEDERICO FRATTINI and MARGHERITA PERO

countries. The International Flex EMBA includes a huge library of inspirational speeches from leaders who regularly participate in WOBI events worldwide. They are used to enrich the library of multimedia asynchronous material hosted on our platform. Moderated discussions with Yammer and interactive, synchronous live sessions will remain as a backbone of our Smart Leaning method, together with face-to-face classes on soft skills, leadership and other personal development activities. The first intake of the International Flex EMBA was very successful (with 5 students enrolled above our target), and we are now in the process of launching the second intake, in October 2017.

The Smart Learning approach was applied also in the redesign of our International Full Time MBA. Please see the details of the program here: http://www.mip.polimi.it/en/academics/people-and-careers/mba-and-executive-mba/international-full-time-mba/.

The radically innovated version of the program was launched in September 2016 with an incredible success in terms of number of students enrolled, which grew from 37 (in 2015) to 58 (in 2016). The 2017 intake of the International Full Time MBA starting in September 2017 will have 63 people enrolled from everywhere in the world. This new Full Time MBA format intensely uses our Smart Learning approach in the first two-month term, during which students can learn the basics of the different management courses the MBA is built around, from wherever they are, with the highest level of flexibility and interactivity, as it happens in the Flex EMBA.

Moreover, all the other traditional face-to-face MBAs and EMBAs were innovated and transformed in a blended format, in which around 30% of the activities are held through the support of our digital learning platform and following the rationale of the Smart Learning approach described before. These changes in the MBA and Executive MBA portfolio contributed to raise the number of total students enrolled per year from around 180 to more than 290 in less than five years.

The Smart Learning approach then started to be applied in other areas of the post-graduate program portfolio of SoM. In particular, the digital learning platform developed with Microsoft is now used to teach a number of Specializing Masters, a stronger level of digitalization lies at the basis of the redesign of our portfolio of short courses for executives (called Management Academy) and, most importantly, Smart Learning has started to be applied intensively in our custom, corporate programs. We have run programs with companies like BTicino, Edison, Leonardo, Luxottica, Saipem, SACE, Nestlè, Sorgenia, and others, based on our Smart Learning approach and using our digital learning platform.

The Flex EMBA project and the results ensuing from the application of the Smart Learning approach in post-graduate management education at SoM witness the passion of our school for technology, innovation and change. A highly risky endeavour, which helped fulfil one of the pillars of our mission - serve the community and design new programs that enlarge the participation of managers and executives to post-graduate education.

Proponents: FEDERICO FRATTINI and MARGHERITA PERO

<u>Ensuring High Quality Teaching and Effective Learning</u>

Since the beginning of the Flex EMBA project, we have taken very seriously the implications in terms of quality of teaching and learning of our Smart Learning approach. This is why we decided to start a project in collaboration with the LISP Laboratory of Bicocca University (http://www.lisp.formazione.unimib.it/), which specializes in digital learning. The project was aimed at designing an integrated system of indicators for monitoring the quality of our Smart Learning approach (in particular, as it regards its application in the Flex EMBA) and to apply it to verify the quality of the teaching approach of the Flex EMBA, vis-à-vis other more traditional, face-to-face programs in our portfolio.

This project pointed to the existence of no tangible differences in terms of the profile of students attending the Flex EMBA, the level of interaction they experience during the program, their satisfaction about the quality of the learning process, the competences and skills they learn by attending the program, and their employability - compared with traditional, face-to-face Executive MBAs. You can find in Annex B a synthesis of the results of the project, which should be kept confidential for privacy reasons.

To improve quality of teaching in a digital environment across different courses, taught by different Faculty Professors (each having different experience, skills, and attitude toward teaching in a digital environment), we have also decided to prepare a set of guidelines about how the most important digital learning tools embedded in our platform should be used to maximize students' learning. In Annex C you can find extracts from these guidelines. More recently, we have organized an interactive workshop to which all the Faculty and Staff were invited, designed with the aim to share best practices about digital learning, gather ideas and suggestions about how our Smart Learning approach can be developed further, and raise awareness about the value and effectiveness of this approach.

<u>Conclusions</u>

To summarize, the design of our Smart Learning approach, its application to the Flex EMBA, and afterwards its implementation into a larger portion of post-graduate programs that the School of Management of Politecnico di Milano offers, is in our opinion a notable example of commitment and dedication to training and education as a primary mission of the Professors of the AiIG community, testifies how technology can be used to better serve the needs of a changing population of managers and younger professionals, and points to the importance of carefully considering the quality of teaching and the effectiveness of the learning program when innovating educational programs.

Proponents: FEDERICO FRATTINI and MARGHERITA PERO