A to Z about MOOCS
Driving the new change inlearning

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What is MOOCs?

Massive Open Online Courses or the more commonly used term MOOCs have taken the world of Learning, Training, Coaching and Teaching by storm.

MOOCs are a means of providing learning and development to virtually everyone, anytime, anywhere in the world with internet access. In this information overload age, where continuous learning is the norm, it has changed the game for Higher Education, Executive Education and Employee Learning & Development.

MOOCs have gained momentum in the past 2 years especially in United States and constantly developing and evolving almost on a weekly basis. This white paper attempts to put together key information and facts about MOOCs with special emphasis on the impact of MOOCs on the Learning & Development in Corporate World.

Background

Thomas Friedman, the renowned Op-Ed Columnist for the New York Times wrote three years ago in his forward looking column about college education revolution as "Big breakthroughs happen when what is suddenly possible meets what is desperately necessary". The genesis of MOOCs can be traced to academic research in early 1960s, during the second generation of computers. The basic idea was that a series of computers can be used to link people at various places to listen, discuss and learn about a particular topic. Since then, technological growth has become an enabler and has made it possible for virtually everybody in the world to access a broad and diverse range of education and learning topics.

MOOCs started as a form of collaborative online learning with people across the world interacting and learning from each other and being exposed to different perspectives, views and ideas. Over the past 2 years, MOOCs has been rapidly moving to the mainstream. This is primarily due to three factors (Triple As):

Availability: Ready availability of courses conducted by well-qualified professors and lecturers from world class universities.

Accessibility: Easily accessible from anywhere and anytime for anyone with internet connection.

Affordability: Significantly reduced costs or even free of costs in many cases, when compared to traditional courses.

The Triple A factors that is behind the rising popularity of MOOCs is due to the positive power of digital technology in acting as a levelling force in society. MOOCs are the internet equivalent of distance education with virtually no limit to the number of participants in a single course. MOOCs if harnessed to its full potential has unlimited possibilities in the field of education especially in developing countries.

Apart from the field of Education, the potential of MOOCs to redefine the way we approach business education, training, and recruitment and consumer engagement is immense.

How do MOOCs work?

Flipped Class Room (Course Design)

Since MOOCs is designed in the digital age, its defining feature is "**Flipped Classroom**". In a flipped classroom, unlike traditional classrooms, the course materials and home assignments are provided by the lecturer before the start of class. This approach enables a student to be prepared for the class on a topic with information and facts through research. Class hours are used to hone such preparations with conceptual knowledge through group discussions, interactive exercises and case studies. This Flipping the Classroom or 'Swapping Classwork with Homework" feature was made popular by Khan Academy

Though, learners are distributed far and wide, MOOCs provide a way for users to collaborate and connect so that they are engaged together as a group in the process of learning. Discussion Forums are an important tool in MOOCs where major chunk of assignments get done after discussions, exchange of ideas and sharing of experiences. In fact, the learning process happens more in the discussion forms and classrooms (virtual or real) are more to reinforce or validate the learning done in the discussion forums.

Semi Synchronicity

MOOCs enjoy the structural advantage of online and mobile mode enabling resources to be instantly accessible by users at the same time. Learners can choose their own speed of learning as per their own comfort and pace. This semi-synchronicity leads to individual freedom and flexibility for completion of courses.

Credentials

Though for all the conveniences and advantages of online learning, the reason traditional modes of education & learning are scores ahead in acceptability is due to inadequate credits or ranking by Universities, Corporates. Sensing the market potential, MOOCs have started collaborating with many top universities, learning institutes for certifications and credit points for their courses. In addition, some of their credit points are eligible to be used to pursue traditional courses from universities.

MOOCs are a natural and logical fit in gamification given the demographics of the learners and their intense online engagement in the process of learning. Hence, the training content and course materials generated are in a variety of formats that utilizes all the compelling features of digital game design techniques. The content for course materials are in videos, presentations, Brainshark videos, flash or HTML 5 based e-learning thus rendering a stimulated and motivated learning experience to the users.

Impact on Higher Education

The commonly over-used phrase "Game Changer" is the right word to describe the impact of MOOCs in the field of Education and its explosion into academic institutions like schools, colleges and universities. Some have even described MOOCs as the biggest development that has happened in education for 200 years. Institutions of higher learning, shapers of education policy, and investors expect MOOCs to change the economics of higher education and make elite educational experiences available to an unlimited number of students. Below is a brief overview on the implications and impact of MOOCs on Learners and Higher Education Providers in the Education domain:

Learners

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The biggest impact will be on the learners or students for whom MOOCs have provided a WIN WIN proposition in their educational pursuits:

- Opportunity to pursue higher education or attain specialization at reduced costs or mostly free of cost.
- Opportunity to learn through interacting with other participants from diverse backgrounds, experiences and countries. Participants interact with other people with a shared interest and ideas that can stimulate reflection and further interest in a topic.
- Opportunity to learn something new or completely different from their normal discipline.
- Opportunity to design and pursue customized term courses in alternative disciplines with correspondingly graded credentials.
- Opportunity to a world of learning possibilities and promote lifelong learning for all those who are interested, able, and motivated to participate.

- Equal opportunity to interact with lecturers, experts of the field.
- Equal availability and accessibility to course materials and supplements leading to opening up of education to non-traditional students who otherwise would not be considered for course enrolment.
- Apart from free courses online, MOOCs offers a completely different system of testing, grading, peer-to-peer learning and certificates for completion that opens up higher education to the masses.

Higher Education Providers

- Higher Education Providers can no more regard lectures, course materials and other resources as their intellectual property and make it accessible to only fee paying students.
- Except for some genuinely niche courses which involve significant investments and have a solid case for restricting it to fee paying students, universities will have to showcase some of their courses and use MOOCs as a means of attracting new learners' participation to undertake their programs.
- The potential to change the way Higher Education is imparted, accredited and recognized can undergo a revolutionary change beyond recognition from the traditional class room learning.
- A mix or series of MOOCs courses as an initiation or foundation for first two years of a graduation / post-graduation program and then follow it up with attending a brick and mortar university for last two years. This two plus two future of higher education can create path-breaking implications and has the potential to disrupt both public and private universities/institutes. Such immense potential for tailoring courses to each individual's specific need and profile can positively change the education sector in developing countries suffering from skewed demand and supply of quality education.
- Immense research and development possibilities due to tapping of brightest talent from disparate and diversified background.
- Focus brought back to "Teaching / Learning" by students rather than physical listening of lectures. This has led to dramatic change in the quality and practice of teaching.
- Above all, the stigma of looking down on "online learning" or degrees acquired has been challenged by MOOCs through partnering with world renowned universities.

Much more work need to be done by MOOCs in collaboration with Education Service Providers (Universities and Institutes) to promote an environment of "Value of Education". This means develop a universally acceptable system of grading, awarding credit points, eligible credit points for applying for higher education programs.

Impact of MOOCs on Corporates

The impact of MOOCs has not been confinedto only higher education. To establish sustainable business models, MOOC providers are developing offerings aimed at the corporate sector. And Organizations are beginning to embrace MOOCs for a range of purposes, including corporate training, recruiting, and event marketing.

As Companies are grappling with skills shortages on one hand and straining their bottom line to meet the increasingly cost-conscious but value seeking customers, utilizing the potential advantages of MOOCs might prove irresistible.

Corporate Training

Human Resource professionals who oversee training and development for their companies are familiar with lukewarm utilization of online learning, inadequate budget, and resources resulting in skill gap in their talent pool.

Employers, who are early adapters of MOOCs find that employee skill development and lifelong learning efforts can be achieved at a transformational level. Earlier corporate efforts involving online learning did not result in the desirable levels of narrowing the skills gaps. The three key features of MOOCs (Semi-Synchronicity, Flip the Classroom and Credentials) are particularly well suited to achieve skill gap reduction and continuous learning culture of organizations. Millennial employees, who are projected to be about 50% of the global workforce by 2020, are demanding learning opportunities provided by MOOCs to enhance their personal skills and recognized credentials.

A recent Future Workplace survey of 195 HR and learning professionals indicated that 72% of them see the value of integrating MOOCs into their learning programs along with six specific recommendations as reported in Table 1 below.

TABLE 1

SIX RECOMMENDATIONS FOR ADAPTING MOOCS

To Gain Greater Traction In Corporate Learning
MOOCs Should Be Adapted To
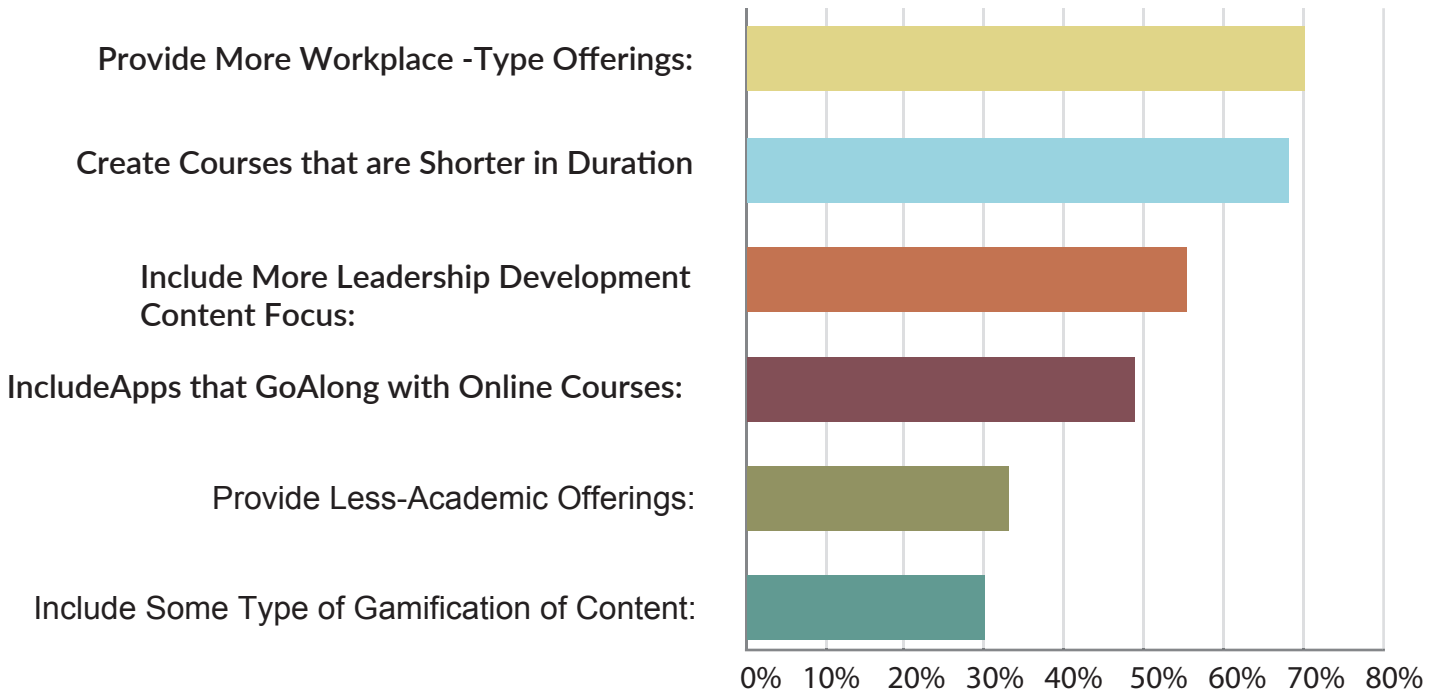
Taken from forbes, August 13, 2013, Jeanne Meister

Needless to say, using MOOCs for training and development require investment for adapting technical, instructional capabilities into their LMS platforms and providing technical support. The possibilities of many companies to develop their own custom designed courses (Curated range of Open Learning Assets) for their employees through MOOCs are not inconceivable, since the RoI on the rinvestments made can make it a viable proposition.

Employee Development Potential

MOOCs provide employers with the opportunity to develop an integrated organisation development plan that links to the tailored learning and development plan for each employee. This integrated approach to employee learning and skills development could apply to all employees across different levels from frontline, through supervisor and middle management, up to senior managers and executives.

- One or a bundle of MOOCs on topics relevant to each employee's development needs.
- Business driven projects that enable employees to learn and immediately apply their learning, which promotes greater understanding of concepts and better retention of the learning.

- Some organisations and industries could use a series of MOOCs, selecting the most appropriate courses from a number of MOOC aggre gators, as a pre-qualification for people applying to work in a particular industry, in addition to or instead of a university degree.
- Skilling, Re-Skilling of employees in response to demands and changes from market, business and technology.
- Work groups, peer groups and expert groups stimulating and discussing ideas where gamification features can be extensively used to motivate learning.
- A mentor for each employee to discuss their work-based projects, workplace issues and career development options.
- MOOCs open up capabilities that can be utilized by organizations to enable a unified gateway that will integrate with their internal LMS and employee's various disparate Learning processes and credentials. This will enable the organization (and manager) to get an oversight of all the learning credits of an employee and availability of business-attuned analytics that can be culled out from the real time talent data of its employees.

Some of the Early Adapters of MOOCs

Yahoo is reimbursing employees for the cost of verified course-completion certificates from Coursera.

Online retailer 1-800-Flowers announced it will create an online education portal on the Udemy platform for its network of independent florists. The portal will offers a mix of general business courses and custom developed courses on opics specific to the floral industry .

Tenaris, a global manufacturer of steel, has licensed edX 's software platform and course materials for its employee learning program.

Recruitment

AT&T, Intuit, Google, and others are working with Udacity to develop courses to teach college students and recent graduates the skills demanded by clients and build a pipeline of qualified talent. Facebook, Twitter, and other employers are working with Coursera to reach out to students who perform well on certain courses

Branding, Marketing and Event Management

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SAP developed the openSAP MOOC platform to educate its ecosystem of developers and partners on SAP technologies.

Bank of America partnered with Khan Academy to create BetterMoneyHabits.com, a cobranded MOOC to educate consumers on personal finance.

Personal genetic analysis company 23andMe, in collaboration with Udacity, developed a college-level online class on genetics which incidentally increases awareness of 23andMe, and perhaps demand for genetic analysis services.

Major Players of MOOCs

The phenomenal growth of MOOCs since 2013 can be explained by this one player called Coursera. During the three months from mid-October to mid-January (note it includes the lean period for learning and development over Christmas-New Year) this player continued to grow at the rate of 6,900 new participants PER DAY. Increasing number of MOOC providers bringing together a diverse and expanding range of open online courses.

In spite of the obvious question "If MOOCs are mostly free content, how do they make money", significant number of players have entered into this terrain. At this stage, the players (Universities, Learning Institutes) who are launching MOOCs almost uncannily are following Google's approach of digital age – i.e. "Google banks users, not money. When Google rolls-out a new product they worry about whether they will have users. If they have users, the money will follow" (Jarvis, Jeff, (2009) What Would Google Do?, HarperCollins, New York) Below is a comprehensive snapshot of the major players published by chronicle.com (The Chronicle for Higher Education, one of the largest source of news, information for college and university).

Coursera for-profit MOOC was established by two Stanford University professors. This is currently the biggest MOOC platform providing 212 different courses in such diverse areas like economics and business, computer sciences, biology, social sciences, music and film, medicine, health, food and nutrition, physical and earth sciences. Coursera has a consortium of 33 of the most well-known and highly regarded universities in the world delivering free online courses including Harvard, Stanford, Pennsylvania, Washington, London, Edinburgh, Toronto and Melbourne.

Udacity for-profit MOOC almost exclusively focuses on computer science courses and provides a range of topics from beginner courses to intermediate and advanced courses.

EdX non-profit MOOC owned by prestigious academic institutions Harvard University and Massachusetts Institute of Technology, draws content from a selection of their highly regarded courses.

Khan Academy non-profit MOOC platform provides courses for learners from kindergarten to Year 12 centred on mathematics and science: biology, chemistry and physics, as well as some elements of economics and history. Apart from these major players, upcoming players like MOOC2Degree, Canvas Network, Course Sites (Blackboard), Udemy and Thinkful have attracted quite significant chunk of investments through venture capital.

Drawbacks in MOOCs

Despite dozens of top universities and a great number of business organizations have adapted to MOOCs in a big way, there still seems to be a great deal of apprehension and lack of confidence and hence is still not seen as "main stream" option for academic and corporate learning.

The biggest concern is the learning outcomes and effectiveness (Marcus, 2013). The idea that a "flipped classroom" using video lectures is really better than a traditional course is in dispute (Oremus, 2013).

Also, the traditional class room advantages viz., bonding as a community, social groupings are pitted against MOOCs where the interactions are virtual. Some believe that reliance on virtual interactions will lead to isolation and disengagement leading to widespread poor performance or dropping out of the course altogether. In fact, MOOCs providers are cognisant to the fact that 90% of those who register for courses fail to complete them (Marcus, 2013). According to Ferriman (2013) educators and corporate leaders are getting too excited about a phenomenon that needs to mature a little more. Many of the common concerns that have been voiced are found below:

Is free is good or not?	The fear that no one really understands MOOCs yet.	Grades and/or feedback have no weight.	Digital badge qualifications will never replace diplomas.	Support LMS infrastructure is not mature enough at this point.
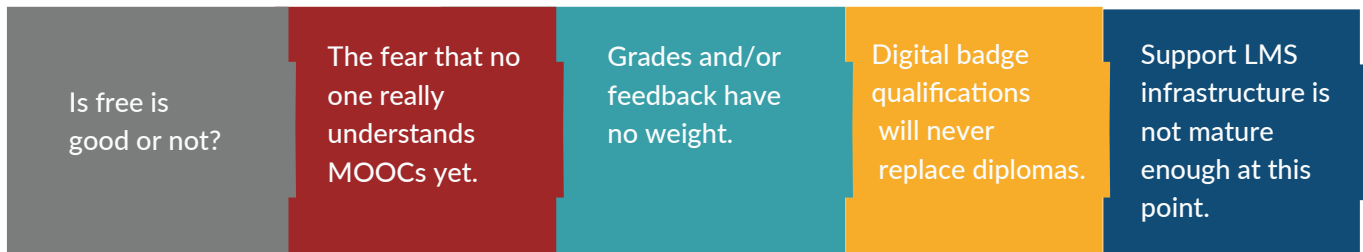
Despite the dire warning and concerns, large majorities of academic leaders see real value in online education and see it as essential to their long term. Regardless, many universities, and most likely many business organizations, are hoping to develop MOOCs that occupy a specialized niche that caters to a specific kind of learner (DiMeglio, 2013).

Conclusion

As leading colleges and universities and some of the industry early movers continue to get into the MOOC game, it's reasonable to assume that sooner or later companies and hiring managers will start regarding MOOC certifications as equivalent to college course credits and diplomas, especially as digital natives start taking over as hiring managers.

The corporate sector is just starting to feel the impact of MOOCs. It is not possible to know for sure how MOOC business models will evolve and which providers will thrive. But MOOCs clearly fill a need for learners and employers and are likely to become an important element of the corporate learning and development and recruiting landscape.

Though an outlier now, corporate-sponsored MOOC initiatives like that of BOA and Khan Academy may become more prevalent as means of consumer-targeted native advertising and employee-targeted recruitment and training.

Presently though, most of the early adapters are from North American Region. However, once the initial hesitancy to adapt changes is overcome and benefits are visible, it is certain that rest of the world too will follow.

References

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About Hexaware

Hexaware is the fastest growing next-generation provider of IT, BPO and consulting services. Our focus lies on taking a leadership position in helping our clients attain customer intimacy as their competitive advantage. Our digital offerings have helped our clients achieve operational excellence and customer delight by 'Powering Man Machine Collaboration.' We are now on a journey of metamorphosing the experiences of our customer's customers by leveraging our industry-leading delivery and execution model, built around the strategy— 'Automate Everything, Cloudify Everything, Transform Customer Experiences.'

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