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## **Content Analysis of responses to E-learning advertisements**

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Learners today are influenced by a digital world, which is connected, accessible and interactive (Pirker et al., 2016). With strategic and economic advantage of digital learning both corporate and academic organizations have been advocating and implementing sophisticated and upgraded technology-based learning. The year 1999 witnessed USA spending USD 62.5 billion on training and educating their employees with about USD 3 billion exclusively spent on technology delivered learning. (Zhang & Nunamaker, 2003). The USA experienced a phenomenal leap of 5% to 15% with respect to demand for online learning in higher education, within a matter of four years (1998 to 2002). Malik (2010) and Allen & Seaman (2010) state that as per a recent study by the Sloan Consortium, the demand for online courses has been rising in the year 2009, with 73% of institutions demanding for existing courses, 66% of the institutions have been reported to demand for new courses. In 1995, IDP Education Australia modeled the global demand for higher education and observed that with the growing per capita income the demand for education is also expected to rise globally. The study also projected the worldwide rate of growth for higher education at 3.5% for the next forty years (1995-2025). The demand for Asia alone estimated to rise from 17 million to 87 million enrollments, highest among all other continents (Olsen, 2003).

Digital learning is experiencing a sporadic acceptance across global organizations (Karakirios & Kekkeris, 2014), subsequently the demand for online courses are growing at a massive rate (Saunders & Wiebel, 1999). E-courses are arguably the future of higher education in India surpassing the traditional classroom courses. With about 50 crore people in India falling in the age group of 5-24 years and the Gross Enrollment Ratio (GER) estimated to be 30% (currently 23%) by 2030, the only pragmatic and cost effective measure to meet the rising demand of educating the mass is going online. Ubiquity of e learning and the enormous opportunities and risk associated to it is intimidating more so for a country like India where the number of internet users in India is estimated to be 75 crores by 2021, exhibiting a 2x growth (“The Future of Internet in India “a report by NASSCOM and Akamai technologies) and in turn compels the need for more than a fragmented approach to learning as a concept.

The Industry today seeks highly qualified, experienced and aptly equipped individuals to tackle global issues. The ubiquity of e-courses and flexibility of time and place primarily drives learners especially working professionals for taking up digitally integrated degree and certification courses. This rising demand across the globe is the breeding ground for sporadic increase in the e-course enrollments. A sporadic increase is subsequently evident in the online education market with the number of paid online education users projected to rise from 1.57 million in 2016 to 9.5 million in 2021. The premier Indian Institutes are continuously working towards face-lifting their course offerings simultaneously adhering to the demand of the online learners. This trend is expected to rise as the premier Institutes in India are looking to deliver education feasible to the day-to-day life of the learner, meeting the Industry needs and simultaneously delivering better career opportunities. In 2020, IIM Calcutta is set to launch two MasterTrack Certificates programs on Coursera, in management science and supply chain analytics - becoming the first top-ranked Indian institution to launch two of the offerings from the institute, to be delivered completely online accessible to learners globally (Gupta, 2019). Also, a premium Indian Institute like IIT Kanpur has delved into delivering completely online e-masters in cyber security and data science, targeting learners who are

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already a part of the workforce. With an intention to address the scarcity of professionals in “Advanced Business Analytics”, IIM Ahmedabad is offering a blended postgraduate program in the field. This is to equip the busy working professionals with the desired critical skills to meet industry needs by simultaneously offering them flexibility of space and time.

In context to this it is important that the right course gets delivered to the right people at the right time. Contemporary research highlights the need for effective marketing of these online management courses and advertisement of these courses is deemed to be influential in the success of the course. It is observed that the word of mouth from alumni and current students on online portals are also decisive to the prospective student enrollment. Getting specifications from the prospective client is also observed to be imperative to a successful marketing of an e-course (Khan & Joshi, 2006). Hence, we attempted to understand the sentiments of alumni’s and current students on the advertisement for one-year online management courses in India offered by five premiere Indian Institutes on online platforms like LinkedIn and Facebook and their impact on the number of enrollments in the e-course. For this purpose we considered the official posts advertising their one-year online management course and gathered the comments by alumni’s and prospective students (as deduced from the comments & queries) below the thread. These advertisements’ were posted in the year 2018, and we considered the comments till 30th July 2019, in order to observe their influence on the final enrollments. A total of 573 comments were found of which, 378 comments were queries raised by prospective students and the rest 195 were alumni responses to the queries. A content analysis of the queries and responses were done individually to understand are these responses had any impact on the final increase or decrease in the number of enrollments in the course.

Further we tried to understand if these contents have any impact on the overall enrollment for the course. The best way to target behavior is to measure the Behavioral Intention, as established by Theory of Planned Behavior, which depends on the Attitude, Subjective Norm and Perceived Control. We therefore coded the responses measuring the indirect belief based measured of all constructs (Giles et al., 2007) of Theory of Planned Behavior categorized;

- i) Attitudinal belief
- ii) Control belief
- iii) Normative belief

The responses were further content analyzed into the above themes, and labeled. The comments were re-read to refine the code structure. Each set of beliefs was further converted into statements. The attitudinal beliefs dealt with the behavioral outcomes of enrolling into the course. The normative beliefs dealt with the social pressure for enrolling and control beliefs were regarding the statements that might make it difficult to enroll in the course. A second researcher also repeated these activities to validate the analysis.

### ***Results from Content Analysis***

#### ***i) Attitudinal Belief (Advantages and Disadvantages of Enrolling)***

Attitudinal beliefs were highly discussed among prospective learners. The respondents seemed to be aware of the benefits of the course. Various aspects like flexibility, high faculty standards and future employments were discussed. Some respondents even mentioned traditional executive program from the same institutes to the online programs. The return on investment aspect of the course vis-à-vis other similar courses were also discussed. Perceived benefits were also observed like increase in salary and promotion.

#### ***ii) Control Beliefs (factors that would increase/decrease the chances of enrollment)***

Factors that made enrollment to the course difficult were primarily the expense. Classes on Saturdays also seemed to be a major concern for people employed in private sectors. Prospective learners also found the absence of digital studios in nearby locations to be a major issue. Dilemma if an online degree counts was also observed to be a concern. Not being able to give time to family due to weekend classes and increased assignments was also discussed. However, flexibility of access to digital studios in any of the major cities was a roaring advantage.

#### ***iii) Normative Belief (Approval and Disapproval from people)***

Certain references to relatives, friends and acquaintances who have graduated through online courses, and its effect on their expectations from the course have also been observed. Prior experience of known people seemed to influence the enrollments in online management courses with special references to boss, cousins and close friends.

It seemed that the alumni profiles responding to the queries seemed influential as suggested by the chain of queries towards the internationally placed and well-established alumni.

Table 1 below suggests a few comments (as posted) belonging various beliefs based on the *Theory of Planned Behavior*.

**Table 1: Sample of comments in social media**

Belief	Comments	Keyword
Attitudinal	<i>The flexibility of time and space is certainly an edge</i>	Flexibility
	<i>Online programs from premium Institutes only are advisable Professors from IIMs are well experienced in studio teaching</i>	Brand Image
	<i>Does E-MBA from a premium institute guarantee pay hike."</i>	Pay Hike
Normative	<i>One of my closest friends was enrolled in the batch of 2016, and he thinks very highly of the teaching faculty."</i>	Close Friend
	<i>My boss had undertaken a similar course and was elevated up the ladder too soon.</i>	Boss
Control	<i>"If I could ask, how many years post your degree did you manage to become the Vice President."</i>	Growth
	<i>"Accessibility to digital studios in any of the metro cities, makes office tours and holiday planning feasible</i>	Accessibility
	<i>Hyderabad is the nearest location, but it's two hours drive from my place."</i>	

It is observed that prospective students for various courses are actively engaged on online portals like LinkedIn and Facebook, where the advertisements for various online management courses are posted. The content analysis of the queries and comments on these posts are learned to be a reliable source to predict the behavioral intention and therefore the actual behavior of enrolling into the course. The theory of planned behavior is used as the theoretical base to conduct the content analysis. It is observed that the comments and queries reflect all of attitudinal, normative and control beliefs of the prospective learners. While prospective learners reflect more normative beliefs, the alumni responses focus more on attitudinal beliefs. Such content analysis of comments for various advertisements can be used to predict the number of enrollments. Also, engaging mentor alumnus for influential portals may improve course enrollments for the institutes. We may also consider correlating the number of enrollments to the various beliefs in our further study.

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