Imparting Digital Pedagogy Driven ICT solution in CBSE Schools of India & Middle East:A Case Study on DSDIGITAL PVT. LTD

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Abstract: - The case examines how India based DS Digital Solutions Limited (DS Digital), grew in a short span of time to emerge as a leader in the ICT market for e-learning and m-learning. It explains DS Digital's strategy of developing product portfolios unique pedagogy and expanding its variety of digital content presence in CBSE schools of India and Middle East. The company is the pioneer in providing IT-enabled education solutions for the K-12 segment as a digital arm of a publishing company. DS Digital created a wide base of customers including government and private schools. The company expanded into foreign countries mostly through inorganic route which saved it costs related to market research and marketing. DS Digital even diversified into running pre and formal schools which were viewed as its way of forward integration and risk diversification by industry observers.

Keywords: - ICT ,M-Learning and E-Laerning.

I. INTRODUCTION

Last 75 years, S. Chand Group has achieved landmark success in publishing of innovative and progressive content from school books to competitive books. S. Chand holds dominant position among the CBSE and ICSE schools with 7500 titles and 1000+authors along with footprints across the nation with 20 branches, 5 marketing offices and state of the art printing and publishing facilities. S. Chand Group has used its expertise to provide digital teaching-learning solutions to provide digital learning solutions which enhances level of teaching and impact learning outcomes positively. S. Chand Group has launched number of pioneering products under the umbrella of DS Digital Pvt. Ltd. to empower the teachers by using technology to its fullest potential. DS digital provides educational technology solutions to support this next-generation learning environment and drive successful student outcomes. All our products reflect our core values i.e." Knowledge, Innovation and Learning". With 9 national and 4 international awards, we have created a niche in educational technology and e-learning solutions.

DESTINATION SUCCESS
Destination Success is a technology empowered interactive educational solution to engage the entire classroom with the pen or finger touch. It provides a productive K-12 content which is designed to cater to the needs of learners of every level. It includes mapped curriculum, case-studies, BBC videos, interactive games, and stories from every corner of the world, activities, worksheets, and practice plus assessment session. It enables teachers to create lesson plans and assess children while they learn, i.e. formative assessment as to reduce their burden. Content showcases meaningful progression of every subject to empower the teachers. It offers a platform to share ideas and concepts through a unique feature called 'Forum'.

AIM AND OBJECTIVES OF THE CASE STUDY
The present study explains the Unique Pedagogy design of DS Digital solutions the key ingredient for the success of DS Knowledge portal. Following objectives of the study is outlined:
1. How they come up with the unique pedagogy?

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2. What parameters taken into consideration using e-learning and m-learning solutions ?

3. Knowledge portal –a complete LMS for CBSE affiliated of DS Clients in India and Middle East for e-learning based solution.

4. What strategy in expanding DS Digital Solution for the Integration of ICT tools for CBSE evaluation system?

5. What are the challenges and future scope?

COMPANY PROFILE

DS is a digital arm of S.Chand , India's leading educational and technical publisher has for 3 generation being 'Empowering the Minds' of learners. It is a PAN Indian name in publishing. A reputation that has been carefully built on the twin bases of unmatched quality and rich content.DS is a global K-12 educational publisher, leaders the deployment and integration of digital learning technology and content in education. With an unmatched heritage in educational technology, industry analysts have long recognised DS leadership in educational technology and its transformation of the traditional classroom education model to a vibrant modern learning space. Destination Success offers a technology enabled educational solution, Destination Success for different subjects for schools.

FIG.1

• imparting knowledge more effectively
• engaging students
• improving student scores
• motivating them to learn
• positively complementing current textbook teaching methods
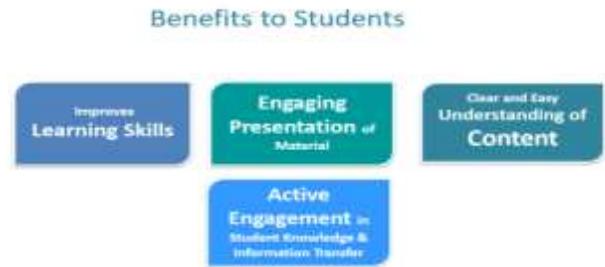
Fig2.
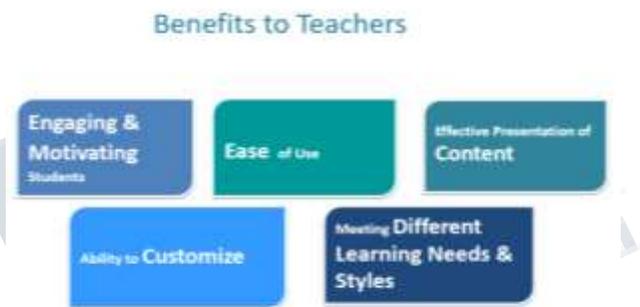
Fig3.

Through this educational Programme, the school will be uniquely positioned in India to take advantage of one of the most up-to-date interactive educational learning technologies and to assist in identifying how technology can be best adapted to school systems. This Programme will position the school, as a leader in the 21st century education in India.

ITS VISION:-

• Utilising a common technology platform
• Enhancing the role of educators and teachers
• Empowering the learning community to collaborate and innovate
• Building knowledge and skills which will promote learning and intellectual independence
• Aiding learning with cutting edge technology tools and solutions
• Improving the process of learning and acquisition of knowledge
• Delivering curriculum and tools that enable the learning community to maximise their knowledge and skills

DS LEARNING APPROACH

• DS "blended approach" to teaching. In this approach,

conventional teaching using standard textbooks is "blended" with teaching that uses forms of technology, specifically software and an interactive whiteboard. The interactive whiteboard enables teachers and students to individually and collectively attempt activities in an interactive way. It also provides tools for instruction and practice. As we move further into the new millennium, it becomes clear that the 21st Century teaching is very different from those of the 20th Century teaching. In the 21st Century teaching, teachers are facilitators of student learning and creators of productive classroom environments in which students can develop the requisite skills.

• The 21st Century classroom is student centered, not teacher centered. Teachers no longer function as lecturers but as facilitators of learning.

• The students learn by doing, and the teacher acts as a facilitator, Students learn to use the inquiry method and to collaborate with their peers.

• Students no longer study each subject in isolation. Instead, they work on interdisciplinary projects that use information and skills from a variety of subjects and address a number of essential academic standards.

• Textbooks are no longer the major source of information. Students use multiple sources, including technology, to find and gather the information they need. In this new classroom, flexible student groupings, based on individual needs, is the norm.

• The teacher still uses whole group instruction, but it is no longer the primary instructional method used. Teachers assess student instructional needs and learning styles and then draw on a variety of instructional and learning methods to meet the needs of all the students in the classroom.

• Teachers know that they must engage their students in learning and provide effective instruction using a variety of instructional methods as well as technology. To do this, teachers keep abreast of what is happening in the field. As lifelong learners, they are active participants in their own learning. They seek out professional development that helps them to improve both student learning and their own performance.

FIG 4.

I. DS PEDAGOGICAL APPROACH

Learning and development teams around the world are implementing engaging digital learning content that ensures efficient skill development and timely information update.

1. A progressive Instructional approach
2. Multimedia Management
3. Mastery Of Concept
4. Problem Solving Narration
5. Interactive Learning
6. Dynamic Modeling

FIG5

The Destination Success solution provides a complete platform covering:

• Destination Success is a ground breaking technology enabled education solution using world leading K-12 content.

• Destination Success is designed to meet the dynamic needs of the teachers and students in today's schools.

• Destination Success is based on the most up-to-date educational research and leading global educational practices.

• Destination Success helps make teaching more Engaging, Effective and Efficient while meeting CBSE, ICSE and the NCF requirements.

• With Destination Success our vision is to constantly deliver improvements in education and learning.

It is designed to accommodate the individual needs of each student in any grade and at any level of understanding. New concepts and skills are introduced in a systematic and coherent way, allowing students to connect ideas, collaborate and demonstrate and apply the understanding of these.

E-LEARNING PRODUCTS: DIGITAL CLASSROOMS

Destination Success, a digital classroom solution

provides a rich portfolio of interactive K–12 curriculum based technology products and services in all subject areas. Based on modern educational research and established educational practices, it uses the latest and easy-to-use technological framework for an enriching teaching learning environment. The solution presents a holistic educational program with digital and print materials, student tracking and report generating facilities, professional development services and technical maintenance provisions.

M-LEARNING PRODUCTS: INTELLITAB

Intellitab is an interactive tablet solution which engages students with learning material through multi-sensory activities and lessens a teacher's burden. Students are able to see hear and interact with various concepts anytime, anywhere. Its content caters to CBSE and other boards, includes practice material with tests to assess the difficulty faced by students in learning any concept. It enables teachers to carry out assessments easily and quickly, along with analytics on students' performance. SWOT Analysis of DS Digital

IMPLEMENTING DIGITAL LEARNING SOLUTION FOR CBSE CURRICULUM AND ITS EVALUATION SYSTEM:

The aim of DS to implement tablets in schoolroom was to implement this as a supporting system to not replace the normal teaching methodology. There square measure variety of advantages of mistreatment tablets for e-learning. The expected edges that DS planned to implement tablets in schoolroom for e-learning square measure as follows:

INTERACTIVE CLASSROOM ACTIVITIES:

Teacher will use tablets for one to 1 interactive activities with the scholars by having a fast survey, quiz or web-based science and mathematical simulations creating this an honest option to deliver the data in a way that's a lot of enjoying and straightforward to know for the scholars. Shows while delivering shows, lecturers will give students the desired data electronically. Students will then take notes within the variety of interactive annotations and facet notes to raised perceive the subject and review them later.

CHALLENGES

The author has been associated as a Senior Academic Consultant for DS Digital Pvt Ltd. Training after implementing Digital Solutions at DS Clients of India and Gulf countries schools International faculty, Dubai-UAE. The author had been concerned in many conferences and discussions with the teachers,

coordinator and principal, IT staff, and high management as well as Director and vice principal of the school for this Digital Learning solutions. Many challenges and problems were known as a results of group action, stakeholders 'views and empirical evidences. The problems and challenges known were being classified into following categories:

SOCIAL CHALLENGE:

One of the foremost vital challenge in implementing e-learning or use of technology for education is that most if not all code / applications' program (UI) square measure developed in English. Though majority population of Gulf countries and Indian locals speaks English and most of them are Indian teachers. Creating a mind-set to adopt and include digital learning solution in their traditional teaching learning process or in choc and talk method was an initial challenge for first phase of implementation.

DIGITAL PEDAGOGY PROBLEMS

Therefore one in all the most important problems was implementing the digital pedagogy in the classroom for digital natives. Many teachers are digital immigrants and adopting the E-learning and M-learning with Digital pedagogy driven DS Unique pedagogy framework and incorporate in their daily lesson plan was little difficult in first three months of DS Digital solutions in their daily teaching learning transaction. Later most of the teachers opted and implemented very well in their DS Classrooms.

TECHNOLOGICAL PROBLEMS

The main issue in implementing for e-learning in a very schoolroom setting is that the implementation of a reliable, property and expandable wireless network infrastructure. The previous infrastructure of the school legitimate solely wired native space network (LAN). however so as to implement tablets and server based Digital Setup in lecture rooms,there was a desire of a wireless LAN therefore on get the particular have the benefit of this DS Solutions. The School had to rent a dedicated team of technology professionals intimate with in network style and implementation to setup wireless lan. Another challenge was to create compliance and governance policy for battery charging and maintenance of IWB and Tablets. Students are going to be carrying their e-books in their tablets, the college had to create certain that each one the students get their tablets absolutely charged before getting in schoolroom as a result of having no charge in tablets is that the same factor as if student had left his textbook reception.

NEXT ACTION PLAN:
• To identify an innovative edtech market and how to engage digital natives.
• To understand blended learning model in the present scenario.
• To explore medium as much as possible, to cater more learners.
• To integrate both traditional and modern teaching platforms.
• To minimize the cost of all modes of ICT tools purchase and sale.
• To evolve new ideas for engaging and enabling
• Learners.

KEY LEARNING POINTS/TAKE-AWAY
Recognition of Niche market
Flip model
Blended Learning model
Educational technology ICT Tools

IDENTIFICATION OF INTENDED COURSES
M-learning adaptive model,Blended learning based course, Edtech strategy, ICT integration

SUGGESTED ASSIGNMENT
The case should be given to Edtech professionals, academicians for reading and analysis purposes.

SUGGESTED TIME PLAN
The case can be discussed in 100 minutes with these proceedings:
1. What is the understanding of learners regarding niche e learning market of Edtech products?
2. What are the strategies used to build success path for the Ed tech company?
3. Give your analysis on flip model?
4. Do you agree with the approach of company's e-learning to m-learning model?
5. Any other suggestion can be given for growth of the company?

II. CONCLUSION

"CHANGE IS THE ONLY CONSTANT "This is all about to say for an innovative idea generation, incubation and incorporation of DS Digital. Only a risk taker will be a beginner, which stands proved in Edtech product like a niche market. The emergence of knowledge portals was ringing for ICT interventions .The present learning environment is having all digital learning aid at his/her place 'from searching digital pedagogy based tools. There is a saying ''Schools are everywhere'', so market coverage of a ICT product company is vast. Captioning of all types of learning aids has given DS Digital a wide

recognition and revenue growth.

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