

Dell Technologies' Innovative Learning Strategy Makes Training More Accessible, Cost-Effective

Dell Technologies Education Services

Best Advance in Creating a Learning Strategy

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Company Background



Company-at-a-Glance	Dell Technologies is an U.S. multinational company that offers a wide range of IT products (hardware and software) and services for enterprise, government, small business and consumer markets.
Headquarters	Round Rock, TX
Year Founded	1984
Revenue	\$90.621 billion
Employees	More than 146,000 (2019)
Global Scale (Regions that you operate in or provide services to)	Across globe
Customers/Output, etc. (Key customers and services offered)	Dell's products include personal computers, servers, smartphones, televisions, computer software, computer security and network security, as well as information security services.
Industry	Computer Hardware and Software
Stock Symbol	DELL
Website	www.dell.com

Business Conditions and Business Needs

An increased focus on Return on Investment, content reusability and necessity for creating a compelling learner experience led to developing an effective learning strategy for an Information Storage and Management (ISM) course for Dell Technologies Education Services.

Ideally, learning and development is often shaped by technological advances. So, it is not surprising that there is an increased concentration on delivery and eLearning strategies. Strategic alignment between learning and Dell's business goals is a key focus in the learning strategy discussed below.

A detailed learner needs analysis was carried out for this ISM course to identify skill gaps and set learning objectives, which act as input for developing the learning strategy. Learning objectives were then aligned with business objectives to create elaborate learning interventions to address the objectives and thereby, advance key business priorities.

Information Storage and Management is a unique course that provides a comprehensive understanding of the various storage infrastructure components in modern data-center environments. It enables participants to make informed decisions about storage-related technologies in an increasingly complex and fast-changing IT environment, which includes the adoption of new technologies in a digital transformation era (cloud, Big Data, IoT, Machine Learning and AI). The course provides a strong understanding of storage technologies and prepares participants for advanced concepts, technologies and processes.

The tremendous consumption of the course and change in audience taste paved the way for the adoption of a new, innovative learning strategy for ISM, based on personalized and transformative techniques. This learning strategy focuses on:

- Aligning to business priorities
- Prioritizing the individual learner needs
- Prioritizing retention of learning
- Increasing the learner base
- Assessment through certification

Viewing learning as a strategic function improves the ability to position it as an innovation driver and point of competitive advantage.

Overview

The following are the organizational objectives for educational content and how ISM is developed around them:

Learning Objective No. 1: Align Learning Outcomes with Business and Stakeholder Success

- The new learning strategy for the ISM course mainly focused on enabling business success/value. It has integrated business unit success measures and business revenue metrics, and customer satisfaction as part of education Return on Investment(ROI).

Learning Objective No. 2: Elevate Understanding and Support of the Learner Experience

- The new strategy for ISM aims to optimize meaningful experience versus learning material (pull versus push), to increase engagement and retention. It emphasizes that an immersive training and convenient access leads to a happy learner.
- This strategy considers that all learners have unique learning needs which are better met by a range of engagement and adaptive learning methods. For example, including multiple access points via multiple channels such as formal and informal learning.

Learning Objective No. 3: Process and Tools to Respond Quickly to New Conditions with Modular Content

- The LCMS employed for developing the ISM course is Xyleme, which eases the pace of content development and reduces the development time and effort. It is the most effective tool to create sharable, reusable, dynamic and measurable content. Moreover, it supports a modular development style and facilitates the conversion of content into multiple-modality output requirements.

Learning Objective No. 4: Expand Analysis Skills and Tools to Baseline and Trend Strategy Improvement

- By adopting this new strategy for ISM, curriculum consumption metrics are frequently collected and analyzed. Feedback from course consumers is collected at regular intervals on all modalities and as a result, changes are incorporated into the course in an incremental fashion.

Design and Deployment of the Program

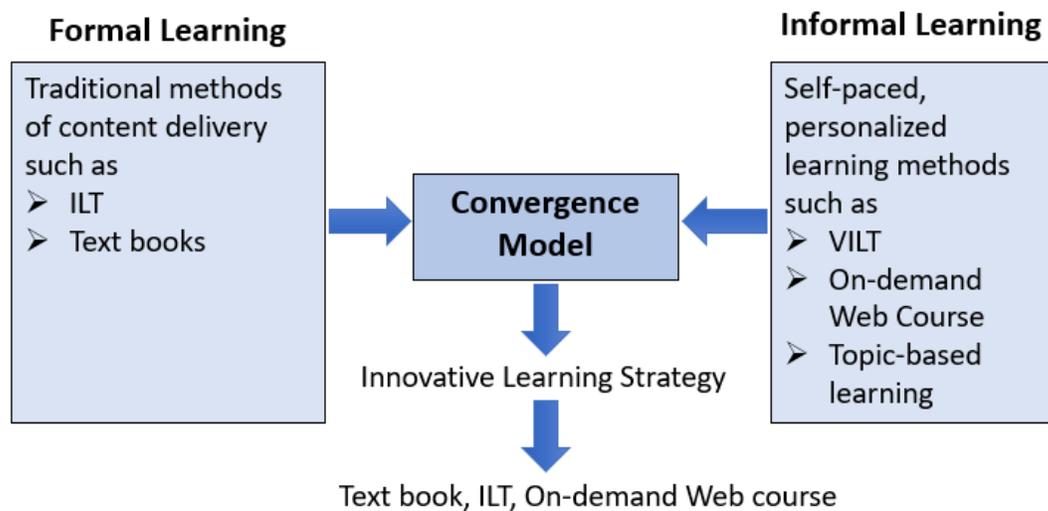
In the current ISM course, learning and skills/competences acquisition will be more learner/worker and demand-driven (“pull model”) rather than the more traditional approach (“push model”). As a result, in this learning strategy, Dell can see the emerging model as a convergence of changes that are occurring at two opposite ends of the learning spectrum:

1. The formal, corporate learning and training where most learning has typically been highly managed and instructor-led.
2. The more informal, unstructured, and more personal learning environment.

Convergence-based Learning Model Adopted in ISM

The figure below illustrates the convergence process:

Figure 1: Convergence-based Learning Model Adopted in ISM



All illustrations provided by Dell Technologies Education Services

The convergence model adopted in ISM is a high-level model, which impacts the various execution modalities of the course. Using this model (on all modalities), an innovative learning strategy is applied.

Innovative Learning Strategy

The innovative learning strategy applied throughout the ISM course resulted in a well-defined learning ecosystem. In the ISM course, the modules are designed to present knowledge in a structured fashion, with an interface facilitating the choice of content and activities. The goal was to give the learner more control over their learning experience and customize lessons based on their needs, so it would be more personalized. Also, the

use of technology in the course has transformed the entire learning and delivering experience.

Innovative Learning = Personalized + Transformative Learning

- **Personalized Learning:** Learning designs that are personalized and competency based are enabled by the deeply integrated use of technology. The ISM Personalized learning (self-paced) program looks different for every learner, but common features include allowing the learner to set their own goals, study the curriculum online at their own pace or decide when to take tests. Many learners prefer learning on their own this way.
- **Transformative Learning:** The transformative learning applied in the ISM course allows learners to develop knowledge and skills for a rapidly changing workplace. The use of technology in learning (digital learning) has transformed the entire learning process. It has also provided flexibility by allowing learners to learn anywhere and at any time. The technologies used have also supported learning executions in different learning modalities to address specific needs.

Learning Principles

The innovative learning strategy is designed to cater to the following learning objectives:

- **Adapting to Individual Learning Styles:** Not everyone likes to learn in the same way. Some people prefer going to offsite classroom training, while others prefer to take training at their own pace from the comfort of their office or home. Some may prefer to learn from videos, while others prefer to learn from books. Providing access to multiple ways of learning will help ensure that everyone can learn the skills they need in the way that feels most comfortable for them. This, in turn, increases the learner base and revenue.
- **Reinforcing Learning:** The best way to learn is to study and then reinforce that learning. For instance, before sending someone to an ILT course, one might want to have them take some introductory eLearning courses or read a book so they can get the most value out of the ILT class. Another example is to create a learning program that consists of short videos, sections of books, eLearning courses, assessments and provide access to a practice environment where the learner can practice the skills they are learning. The various learning types all work together to reinforce the learning. This increases learner experience and retention.

- Assessment of Learned Skills:** Courses, videos, books, mentors and other modalities are all great tools, but eventually the learner is going to need to put the skills they are learning to the test in a real-work scenario. Providing access to a practice environment where the learner can practice the skills needed to pass a certification exam can solidify their learning and prove that the learner has learned the required skills. Dell Technologies Proven Professional certification for ISM provides an elaborate practice test and access to numerous certification aids.
- Creating a Scalable Learning Environment:** Most IT departments do not have an unlimited training budget. Sending people out to offsite instructor-led training can be very expensive. For the same cost as one multi-day boot camp for one person, a corporation could provide many people access to a one-year subscription to unlimited eLearning.

The learning strategy also addresses the following questions:

- How can course development best address new learner expectations?
- How can learning be built to optimize learner and instructor time constraints?
- How can new tools be integrated to improve development?

Learning Strategy Deployment in ISM Course

Based on the above discussed learning strategy, the ISM course is developed using following learning elements:

Figure 2: Learning Strategy Development in ISM Course

Element	Detail	Example
• Adaptive learning	• Benchmark learner knowledge and progress to adjust learning approach or learning path	• Job performance metrics determine lesson path
• Blended learning	• Mix of self-study and instructor interaction points; flipped learning is a strong trend	• Workshop model as with OILT (flipped)
• Short video, podcasts	• Video and audio comprises the majority of learning content delivered via mobile devices	• TED talks, Webinars, Edu Tube videos
• External, open source	• Leverage large quantity of free, often higher quality content; best when combined with formal learning	• LinkedIn learning, Youtube content
• Accelerated curriculums	• Content narrowed for specific skill set or roles to reduce time and financial investment	• ISM course
• Reusable content	• Small learning events leveraging single source authoring	• Using LCMS tool (Xyleme)

The ISM course is currently available in the following formats:

- **Textbook:** Information Storage and Management, 2nd Edition, Wiley publishers.
- **MR-1CP-ISMv3:** Instructor-Led — includes exercises and concepts in practice that reinforce the concepts covered in lectures.
- **MR-1LP-ISMv3:** Online ILT — Live course delivered via the internet where participants attend virtual classroom interacting with instructors and other participants. A headset with microphone is *required* to speak with the instructor and the rest of the class. Text communication is also available through the virtual classroom.
- **MR-1VP-ISMv3:** Video ILT — USB Flash Drive video provides a recording of an instructor-delivered course along with the online quizzes and additional content.
- **MR-1TP-ISMv3:** Video ILT-Stream — Streaming video provides a recording of an instructor-delivered course along with the online quizzes and additional content.
- **eLearning-ISMv4:** Web based asynchronous course available at your convenience via the internet.

Change Management Efforts

During the process of deploying the learning strategy on multiple modalities of the ISM course, some of the challenges faced were:

Challenge No. 1: Content on ILT and Textbook Versions were Text-Heavy

The existing version of the ISM course consisted of modules that relied far too heavily on text. Large amounts of text will only serve to overload or bore the learners in other modalities.

Solution: The solution was to focus only on the information that is relevant and be concise while creating the content. More graphics and images were included to reinforce the content, to boost the aesthetic appeal. The visual elements illustrated the point in a meaningful way and served to break up large blocks of text. Integrating ample videos and audio narratives also made the ISM training course more easily consumable.

Challenge No. 2: Lack of Use Cases

An overall lack of real-life examples in the earlier versions of ISM content posed a major challenge. The learners were not able to see how it related to the world outside of the training module. As such, they would not be motivated to learn or to engage in the training itself.

Solution: The solution was aimed at giving the learners an idea of how they will be using their newly acquired information or skills by providing real world examples. They need to be able to see the practical use of the acquired knowledge; as a result, Concepts in Practice for products with links to videos, articles and reference are included at the end of each module.

Challenge No. 3: Redundant use of Graphics or Images

Going overboard when using graphics and images was one of the most common challenges during the conversion of the ISM course into multiple modalities. Using graphics just for the sake of using graphics would just distract the learners rather than drawing attention to important information.

Solution: Select only those images and videos that are relevant and are in-line with the overall look, feel and pace of the deliverable.

Challenge No. 4: Technology and Trend Updates

One of the biggest challenges was content that was either outdated or obsolete.

Solution: As a solution measure, the entire design document was re-evaluated for content flow and new technology updates so that the learner is provided with data that is current and relevant.

Measurable Benefits

The results of applying a new learning strategy on the overall ISM course development and execution modalities was measured on the following:

Figure 3: Measurement

Element	Detail	Example
• Work performance	• Include metrics on job task or process execution that can be linked back to learning events	• Number of configurations an SE can produce/week
• Competency	• Mastery of a topic deemed important to job execution	• SE technical knowledge of storage for customer talks
• Retention	• Measure how long that learning has been maintained	• Retake a course assessment 3 mos. later
• Business revenue impact	• Correlate business unit revenue metrics to learning events metrics (or other measures of business success)	• Product revenue change linked to course launch
• Digital badges	• Recognition for accomplishing specific skill or demonstrated knowledge level, ability or competence	• Include badge in digital signature
• Certificates	• Certificates demonstrate a level of competence	• Multiple certs = higher level certification

Figure 4: Total Numbers of Hours

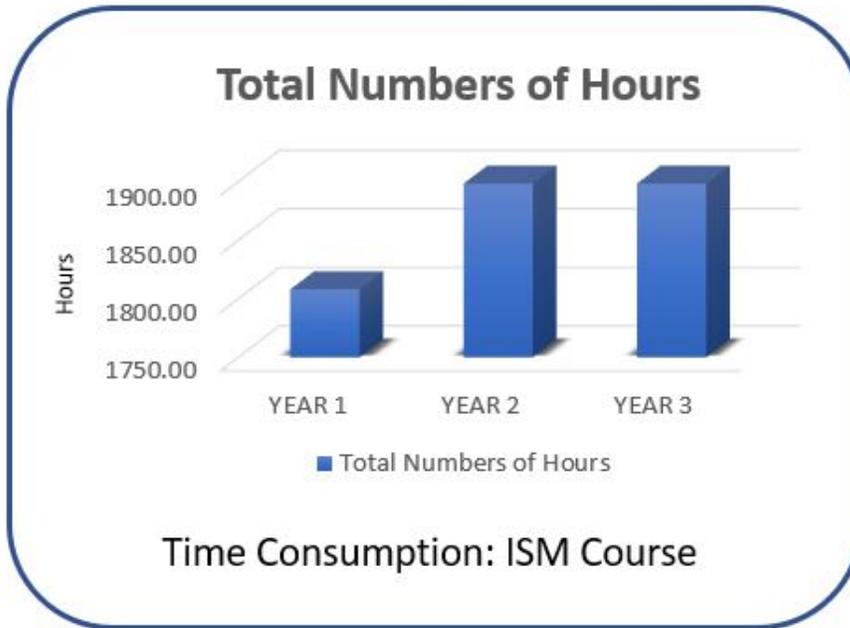


Figure 5: Profit Margin



Overall

In ISM, all aspects of learning, ranging from pedagogy and learning environments to learning tools and course curricula, are tailored to motivate, engage and inspire learners to achieve better results in a shorter time frame. The learning strategy of ISM is more about developing a personalized approach to learning by adjusting the pace of instruction, leveraging student interests and letting learners choose their own learning path based on their learning style.

Innovative learning strategy has made training more accountable, cost-effective and less time-consuming. Throughout the development and execution of the ISM course, it is ensured that learning is pragmatic, results- and skills-focused and addresses the learner's need. It creates an environment that welcomes new methods, including home-grown or audience-driven content.

The ability to innovate and transform around all things is the model for future learning, which is critical for learning innovations and providing a vehicle for transformation.

About Brandon Hall Group

Brandon Hall Group is an HCM research and advisory services firm that provides insights around key performance areas, including Learning and Development, Talent Management, Leadership Development, Talent Acquisition, and HR/Workforce Management. With more than 10,000 clients globally and more than 25 years of delivering world-class research and advisory services, Brandon Hall Group is focused on developing research that drives performance in emerging and large organizations, and provides strategic insights for executives and practitioners responsible for growth and business results.

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