

Overcoming the challenges of  
advanced topics and Millennial,  
Gen Z needs

# Transform High-tech Curriculum with Sify eLearning Experts

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# Executive Summary

For high-tech curriculums, Training Directors (TD) need to address Millennial and Gen-Z (MGZ) workforce's need for self-paced content in addition to the traditional instructor-led, in-person courses. "Meeting the learner" has become a term reflecting a corporate necessity. In a perfect world, SME's could easily transform their knowledge and the classroom instruction to engaging, effective self-paced content. Often, organizations do not have the bandwidth to keep instructors out of the classrooms for long periods to support content creation.

The solution is to outsource content to eLearning content creators and providers. However, such providers generally do not have the internal technical content expertise to handle technology content meaningfully. The added overhead of teaching high-tech concepts and skills to course developers is too costly (in terms of time and other resources).

A partner who can successfully provide both the subject-matter expertise and the instructional design capability is very valuable. Such capability greatly streamlines the organization's effort to transform technology content. It empowers training directors with the ability to provide engaging and effective content to their users rapidly and with less management overhead.

Inside, learn how Sify eLearning's solution offers streamlined technology learning design and development. The company brings two substantial market advantages to clients:

1. Highly qualified in-house/partner technology experts and
2. Instructional designers using modern user engagement (UX) modalities.



# Younger generations have vastly different needs for progressive learning

Learning environmental factors introduced to people born after 1985 dramatically changed the educational landscape. Teachers are still looking for ways to maintain effectiveness with the younger demographic. Unlike prior generations in today's workforce, people in their mid-20's to early 40's grew up using computers. They had computers in school and at home before college. (Since 1990 and with the advent of "Common Core Standards," cursive handwriting in particular, and handwriting in general, is not stressed in classrooms.) They have long since put away computers that tie them to a desk. They are very mobile, consuming content, gathering information, and engaging in communication for longer periods throughout the day via small-screen, connected devices. In terms of learning and instruction, what can't be seen or used on a smart phone – at any time throughout the day – doesn't exist or is no longer relevant. Even laptops are ceding ground to small touch-screen devices. Little wonder then, that paper-based or traditional classroom modalities are increasingly ineffective.

By any measure, but particularly by the all-important Kirkpatrick 4-Level measure<sup>1</sup>, traditional courses struggle, if not fail. Often tied to in-house subject matter experts using PowerPoint and computer labs, MGZ's simply do not engage (Level 1) which causes other levels of evaluation to suffer, too.

DEVELOPING MILLENNIAL  
& GEN-Z EMPLOYEE SKILLS  
DEMANDS ENGAGEMENT  
THROUGH MODERN  
TECHNOLOGY & TECHNIQUES

**The attrition rates of prior generations make this a big problem for organizations.** For organizations seeking to develop and retain their people for long-term benefit, they must find a way to teach the Millennial and Generation Z staff. To effectively teach Millennial and Generation Z population, technology must be seamlessly embedded in the process. Curriculums must include collaborative functionality; short bursts of information must be communicated in a variety of ways. The problem isn't with the content, the problem is in delivering that content that will engage, teach, and improve MGZ employees.

The modalities should adapt to the needs of the student.

# It's not just the younger demographic who challenges the learning method

The flow of work, and the time available to get it done, has changed dramatically from just a decade ago. As Josh Bersin writes, employees are overwhelmed, the pace of work is accelerating, and people are "way too busy." The average employee has only 24 minutes each week to learn.

## Transform the workforce to 'meet the worker where they are'

With the constraints on workplace productivity and learning, workforce curriculum transformation is as important to the corporate balance sheet as low fixed asset costs. It must "meet the learner" on their terms to successfully transfer important knowledge.

- Instructional courses should be convenient, readily accessible: wherever the staff is located, no matter their device, and no matter the time of day (or night).
- And more than that, the learning program must engage the user despite the distractions or external claims of their attention.

## Half-Solution: Transform Good Curriculum to Standard Platforms

The modern user experience (UX) is table-stakes for organizations' ID/TD. Learning programs must be accessible via a platform that supports any connected device.

A recognized expert in developing corporate leadership skills and operational talent from their Millennial and Gen-Z workforce recommends the course content have six fundamental characteristics<sup>2</sup>:

1. **Brief and beautiful.** Make the content bite-sized and visually appealing.
2. **Agile and accessible.** Make the content available on mobile devices, untethered from a classroom.
3. **Instant and intelligent.** Design the course so that helpful information is readily available.
4. **Collaborative and communal.** Create a community where peers, experts, managers can contribute their expertise and experience.



5. Relevant and relatable. A process suited to continuous learning, where content can be quickly created or modified maintains learning awareness, and thus effectiveness.
6. Blend and Bind. The younger workforce will need to merge their training and learning with real-world experience. Off-line learning remains effective but blending the online with the offline will dramatically improve the effectiveness.

The challenge comes not in knowing, but in responding to that new imperative. Re-casting curriculums, especially those involving advanced technology topics, is particularly difficult. The goal is not simply to redistribute course content, but rather to make that content delivery engaging and effective. The user experience (UX) must compel new behavior for maximum results.

## Challenges in Course Content Transformation

If it were easy, everybody would be converting course PowerPoints to interactive modules and computer labs. There are big challenges. High-tech content in the form of lectures and simple labs can not simply be exported to animations and interactive quizzes. Just as having a word processor does not a good novelist make, having a LMS does not a modern UX course developer make. Great UX course developers disassemble content to reconstruct it.

- They use existing content to build customized, interactive modules
- They have a “designed for thinking” approach
- They conceive ways of illustrating core concepts through new ways using modern media

Re-purposing high-tech teaching content requires hundreds of man hours and expensive software. For example, converting lab routines to large-scale deployment on mobile devices requires not just high-tech SME, it requires experienced mobile developers. Yet, with all that overhead, doing this work to transform high-tech course instruction is only a partial solution. In most cases, high-tech courses are taught by internal subject matter experts. Asking them to turn their attention to overseeing even one new multi-modality course design project is asking too much.

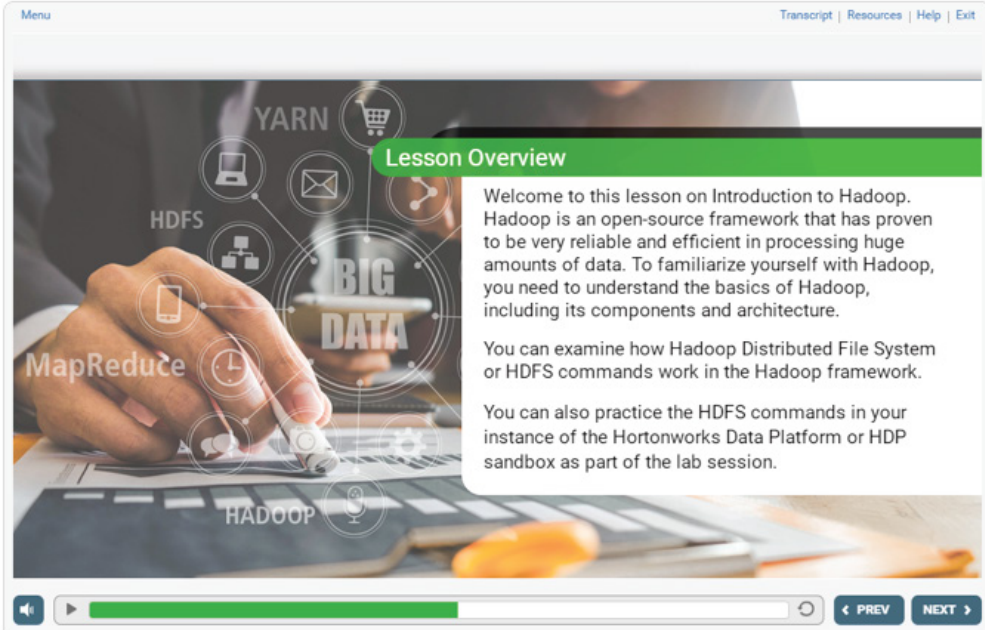
Course development for highly advanced technical courses such as big-data, cloud-based or Artificial Intelligence applications depend on a “deep bench” of subject matter experts and UX developers.

No organization can afford to hire and retain a team of such professionals solely for the purpose of training a segment of the workforce.

# A Description of **Solution Components**

## Overview

The overview states the key content coverage of the course, the purpose of the course, and the WIIFM (What's in it for me?) factor for learners. The duration of the course is also specified to help learners plan for the time to allocate for learning. Any course prerequisite information is presented.



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### Lesson Overview

Welcome to this lesson on Introduction to Hadoop. Hadoop is an open-source framework that has proven to be very reliable and efficient in processing huge amounts of data. To familiarize yourself with Hadoop, you need to understand the basics of Hadoop, including its components and architecture.

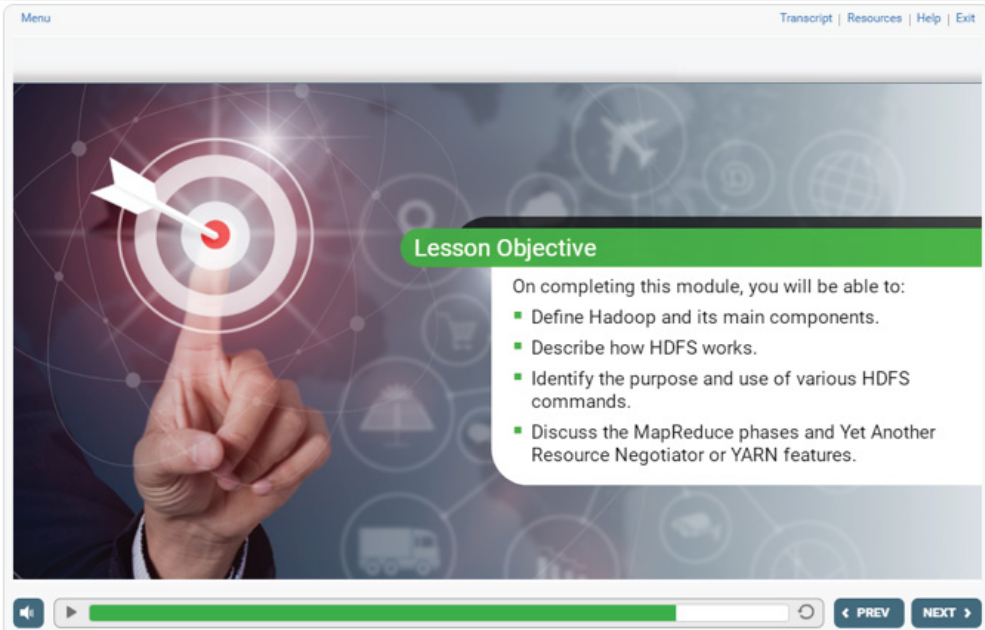
You can examine how Hadoop Distributed File System or HDFS commands work in the Hadoop framework.

You can also practice the HDFS commands in your instance of the Hortonworks Data Platform or HDP sandbox as part of the lab session.

PREV NEXT

## Course Objectives

A set of course objectives informs learners about the goals they will achieve at the end of the course.



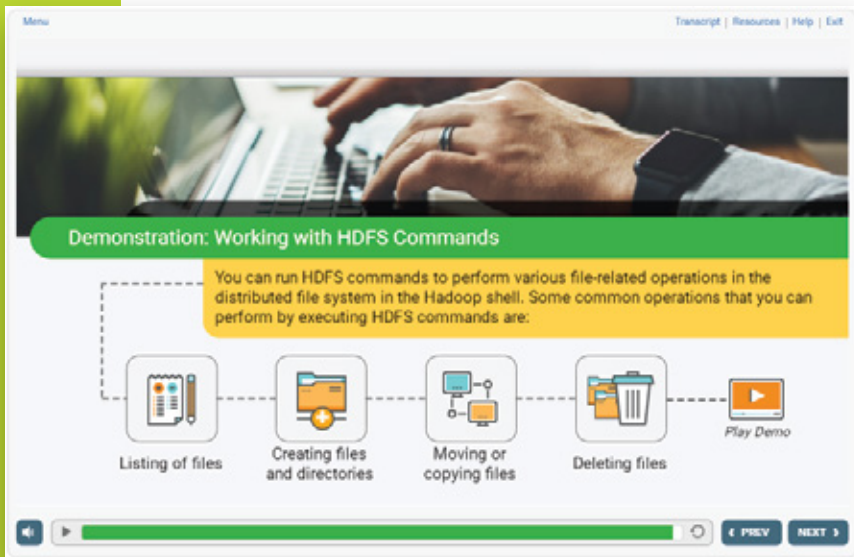
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### Lesson Objective

On completing this module, you will be able to:

- Define Hadoop and its main components.
- Describe how HDFS works.
- Identify the purpose and use of various HDFS commands.
- Discuss the MapReduce phases and Yet Another Resource Negotiator or YARN features.

PREV NEXT



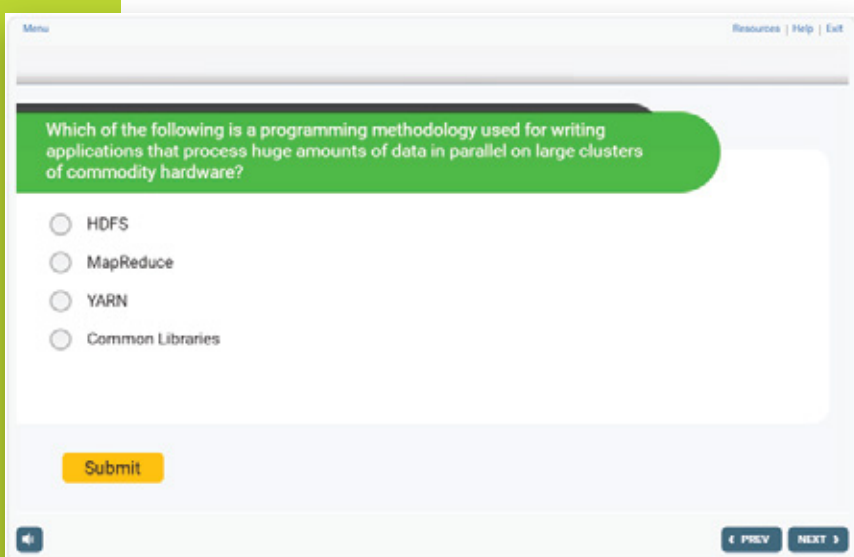
## 1.1 Demonstrations

Demonstrations explain the steps on how to perform a task.



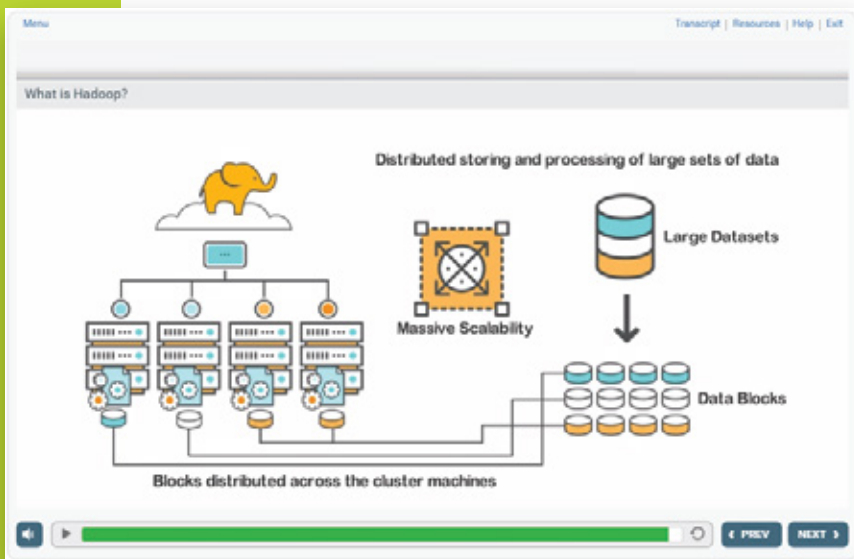
## 1.2 Hands-On Lab Activities

Hands-on lab activities provide the learners an opportunity to practice what they have learned through application screen-based demonstrations in the course.



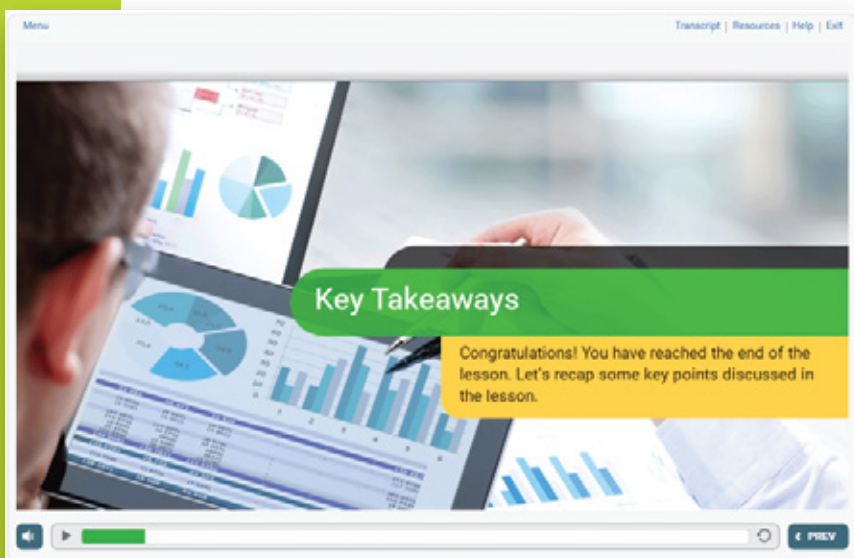
## 1.3 Interactivity and Quizzes

To ensure that the learners are engaged, interactivities and quizzes are interspersed at logical points in content. Interactivities in the form of quizzes help learners recall content and serve as formative assessment.



## 1.4 Animations

Technical concepts and overview are presented as animations using graphics, images, and diagrams where required.



## 1.5 Key Takeaways

Each course ends with a summary of the key takeaways from the course. Summarizing the key learning points is an effective method to recapitulate the most important aspects of the course.



# Craft Collaborative, **Interactive Modules with High-tech SME Partner**

Sify's internal resources add significant value to eLearning clients for advanced or high-tech course development. Its team of experts can professionally analyze curriculum content to determine the most effective and efficient way for transformation.

Its parent company, Sify Technologies is one of the world's largest and advanced technology corporations. From its early days as India's communications company, Sify is now a leading global Information and Communications Technology (ICT) company. More than 3,500 employees on several continents support advanced technological deployments and eLearning projects for the largest global organizations. From multi-tenant data centers with redundant database repositories, to multi-national cloud-based application hosting, Sify has instant access to credentialed subject matter experts across multiple technology disciplines.

In addition to its many ISO recognitions, Sify is also a certified partner for Amazon's AWS, Microsoft, Oracle, and SAP enterprise application and development. Putting even complicated curriculum on mobile devices is a particular strength of Sify eLearning.

**Clients receive valuable self-paced and role-based content!**

For example, for a big data project, Sify eLearning presented a self-paced interface to a cloud-based demonstration lab using role-based authentication.

## **Sify Bringing Augmented and Virtual Reality to eLearning**

Because continued engagement is helped by advancing the user experience (UX), Sify introduces highly advanced technology to their instructional design clients.

Immersive, engaging content is the key to unlocking the potential inside employees.

Combining new technology with back-end IT expertise, Sify brings heightened performance to eLearning, accessible where the learner is. The recent innovations in AR/VR are making such applications affordable for instructional designers. These new applications are particularly well-suited for the younger workforce.



# The Strategic Path Forward

Protecting your organization's future depends largely on its ability to engage and teach the increasing segment of the Millennial and Generation Z workforce. Bring customized classroom learning, through advanced digital technology, to your workforce.

Talk to Sify eLearning about how to transform your current high-tech course content to a modern user experience without the hassle.

Browse [www.sifyelearning.com](http://www.sifyelearning.com)  
or email us at [learning.sales@sifycorp.com](mailto:learning.sales@sifycorp.com)



## About Sify eLearning



Sify eLearning is a global best-practice courseware design and UX solution provider. It delivers interactive user engagement via proven modalities such as AR / VR technology and delivers it solutions to mobile and desktop computers. Sify's internal high-tech know-how means clients spend less time explaining content foundation concepts and application to get their deliverables faster.

Sify is a high-technology company with a large pool of cross-application experts among 3,500 employees, recognized tech partners with Cisco, Microsoft, Oracle, and SAP. Headquartered in San Jose, California, US, Sify employees work in offices and data centers located in India and Europe.