Sarbani Mukherjee investigates the empowering qualities of tools that enables learners to get personal.

Picture this: A classroom full of students... a teacher at a podium... hands writing a dozen words a minute.

Now this: A training room full of professionals... a trainer at a podium... hands writing notes or typing furiously on a laptop.

Barring the years that separate those two scenarios, there’s not much difference in the basic teaching model – learning driven by a teacher/trainer, content presented in a standard format, learning ‘pushed’ to the audience and a one-size-fits-all philosophy. The result: Lower motivation, low retention and, at least in a corporate environment, low return on investment; whether tangible investment like dollars spent – or intangibles like the opportunity cost of having participants doing things outside of revenue-generating work.

In addressing some of the drawbacks of the traditional teacher-centric model, the trend now is towards a student-centric model that leverages technology. While a student-centric model may not be the panacea for all things wrong with the teacher-centric approach, it is a response to an increasing call to give the power to the people. Power that allows the use of technology to have diversity in formats of content presentation, make content more accessible to learners, allow learners to determine their learning path and account for different skill/competence levels. And we have a case for personalising learning!

Years ago, technology gave the training industry the learning management system (LMS). The world rejoiced as people logged-on to an LMS and took their training, in digital format, while an administrator kept tabs and assigned additional modules.
Now, with technology offering a world of many possibilities, the industry is looking beyond an LMS to an adaptive learning system (ALS).

We started by establishing a case for personalising learning; here is a tool to facilitate that.

**ALS EXPLAINED**

An ALS assigns content based on the learner’s preferences and pre-defined needs. Unlike a traditional LMS, which acts as a repository of information and a tool for the training administrator to assign modules and track progress, an ALS assigns learning units based on the individual’s needs/styles/competence level. It has the ability to assess learner progress and account for this while assigning the learning units.

An ALS is based on adaptive learning theory that recommends use of the following dimensions to ensure an effective and personalised learning path:

**ALS COMPONENTS**

An ALS can be the sum of many parts: An expert model, a student model and an instructional model. These models determine the logic for assigning content, tracking progress and personalising the learning path. The learner, though, experiences all of this through the ALS user interface – usually a portal listing options available to the learner.

The expert model stores tutorials, lessons, answers to questions, etc.

The student model determines the learner’s skill level through adaptive testing. Students are presented with questions based on levels of difficulty, as determined by their progress. As the test proceeds, the system adjusts the score based on the answers, refining the score by selecting questions from a narrower range of difficulty.

The instructional model incorporates tools like multimedia elements. In an adaptive testing-style student model, the instructional model maps lessons to the question pool. When the student’s level of competence has been determined, the instructional model assigns the appropriate lesson.

**PERSONALISING EXPERIENCES**

Whether for the corporate or education domain, the stages involved in the design of an ALS are not much different from a traditional approach to learning systems design, at least at first glance.

The objective here is to create a vast repository of content for the learner to choose from. It’s all about making learning personal.

Once the formats of content per concept/topic/performance objective have been determined in Step 3, these modules are packaged based on a logic of assignment. Step 4, thus, involves two critical tasks:

- Determining the logic to assign modules based on learner performance, choice of learning format and required competence
- Deciding which modules to assign, beyond those that support development of the core competence

The features of an ALS that improve learning experiences are:

- Availability of several e-learning modules, which together form a learning eco-system
- Modules in formats like case studies, simulation, games, etc. Learners have the option to select the format they prefer. As they progress through the curriculum, the system assigns modules based on preferences
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PERSONAL LEARNING ENVIRONMENT

One format of ALS that has become popular is the personal learning environment (PLE). PLE allows learners to create their own experience by selecting modules geared to their job role, curriculum requirements or professional development. Learners can define their learning tracks and evaluate their competency in a subject by attempting a quiz before beginning a course.

PLE is a gateway to a repository of content that includes e-learning, videos, virtual classes, mobile-compatible courses, etc. Learners can choose as well as be recommended individual learning objects or aggregates composed of multiple objects.

PLE typically comes with a search function. The cloud-based solution makes it easy for learners to access learning objects any time and collaborate with a larger group by leveraging social networking features.

All of these make PLE a robust system for corporations and organisations to invest in and take learning experiences to the next level.

We started by building a case for personalising learning, on the premise that it shifts focus from the teacher to the student. Though this came with a disclaimer that the approach isn’t a panacea for the drawbacks of a teacher-centric model, we did offer a framework for personalising learning experience leveraging technology – an ALS or a PLE.

This approach is all about giving power to the people for learning. The case for investing in a new system may thus have to go beyond immediate economic benefits.

The argument should circle back to the possibility of empowerment and motivation. And like the proverbial pot of gold at the end of the rainbow, there are cash benefits from investing in a system that allows personalisation of learning – performance improvement leads to organisational development. This, in turn, is bound to have a positive impact on business.

### Due diligence

When making a decision on an adaptive system, it’s best to carry out a due diligence by seeking answers to the following questions:

- What are my objectives for investing in a new system?
- Can I leverage existing knowledge assets to provide a vast repository of content to the learner?
- How important are learning styles for my audience?
- Where can I source additional content modules from?
- How do I want my learning system to evolve in the years to come?
- What is my budget and preferred timeline for creating a robust system?

The business case for investing in an ALS or a PLE to personalise learning experiences will be at its strongest if it is possible to leverage existing assets and minimise initial cost.