Early in May 2012, Harvard and MIT announced that they would invest $60 million in the development of an online education platform. At the same time, they would make the teaching processes of the two schools free to the world and the platform would be accessible free of charge to other universities and educational institutions.

One of the reasons that it was designed to be free of charge was because of the technical background of Big Data. More learners around the world can study using the platform because it is openly available. Additionally, the platform designers can collect data from these learners and study their behavioral patterns in order to create an ever-improving online platform. For example, by recording mouse clicks, they can research learners' trajectory, observe and record the reactions of different people on to knowledge, examine which points might need to be repeated or stressed, and which information or learning tools are the most effective. In a manner similar to Flyontime.us, their behavior produces observable patterns and order which can be observed to a certain extent through the data accumulation. By analyzing these data, the online learning platform can make up for the lack of face-to-face with a teacher by improving the operation of the platform.

Moreover, learners' study behavior can be evaluated and guided via an online education platform. By tracking the learning process in real time through recording the video for each slide, tips and advice are given and mistakes can be pointed out to help them form a more customized and scientific learning method and habit. By judging whether the learner reviews the material or not and calculating the question number, the learner's behavior can be assessed. In addition, learners can also build supporting groups to correct and evaluate assignments and reports reciprocally.

Applications of Big Data in education build an effective environment without school for learners. It makes people step out of school and choose the learning method by themselves. Predictably, the responsibility for education will fall once more to the individual in the apprenticeship era from government in the school period, and the educational method goes back to being customized for each student. People will be able to enjoy more freedom and take more responsibility for their own learning and education, and at the same time this represents a huge liberation in the field of education.

CONCLUSIONS

In this chapter, we have presented the architecture of a smart service system based on Big Data. We have also included summaries of some examples of smart service systems based on Big Data.

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