

# SkyDesk Mixed Learning

## Work style revolution "ICT x Education"

### Challenge

With the progress of ICT, AI and Robotics, enterprises can not survive with existing business models. Fuji Xerox has been providing services focusing on creation and sharing of knowledge through paper documents. Now, we are changing our business model in order to provide new values that paper documents cannot deliver. Along with the change in our business model, it's essential to efficiently clarify and strengthen the skills required for human resources. Since 2002, we have developed the "outcome oriented" human resources to pursue our corporate strategy and efficient human resource development (HRD) through ICT. "SkyDesk Mixed Learning (SDML)", which has developed based on practical knowledge of our experiences in HRD, serves as a platform for customers' work style revolution.

### Solution

We started the outcome oriented education in response to problems presented by our top management. The problem was that the employee training programs were not contributing to practical problem solving. We developed a scientific method of "Grand Design" that makes it possible to clarify "HRD strategy," "career path," "skills" and "outcomes of the training programs." In particular, we established the evaluation indices for skill assessment to make employee's skills viewable as numerical data. Up until now, customers including automakers, electronic equipment manufacturers, and pharmaceutical manufacturers have implemented the Grand Design.

SDML was developed with the aim of enabling customers to utilize ICT to implement the Grand Design more efficiently. First, an organizer can create a competency dictionary by imputing skills required for employees into the system. Using this dictionary, users can easily select and register their skills into the system. Based on the results of the skill assessment, users can efficiently develop their lacking skills by using e-learning and learning management system (LMS). The "skill analysis" function allows users to see how much progress they have made in the skill development.

We have conducted a joint research with a university on the theme of improving the quality of education. As a trial, we implemented flipped blended learning in order to improve both students' university grades and debating ability.

- Mistcode: Through the research, we found that the integration of e-learning and use of paper documents is very effective. Therefore, we newly developed a "Mistcode" technology. Using Mistcode, various information can be embedded in a paper document. The embedded information can be easily shared once hand written documents with Mistcodes are scanned and converted into electronic documents.
- Easy Authoring Tool : We found that it is very important that users can review the learning materials many times in a stress free manner. We developed a tool that allows teachers to easily and quickly create e-learning contents in which power point slides and audios are synchronized while keeping the data size of the contents small.

### Return on Investment

-SDML is a cloud-based system which requires only a small initial investment. Monthly costs are only incurred over the duration of the contract.

-SDML was used in flipped blended learning programs targeted at Fuji Xerox salespeople. By employing this system, employees were able to participate in the programs from anywhere. As a result of increased efficiency, they succeeded in reducing their total working hours (11% reduction).

-A private company, one of our customers, uses the SDML to train its staff in over 500 sales branches. The e-learning lecture, which is less than five minutes long, is delivered to them twice a week. Before using SDML, they had to prepare copies of DVDs and deliver them to the 500 locations. Most employees did not take the DVD lectures and the organizers were not able to manage the DVD viewing records. The SDML solved the company's problem.

### Learning impact outcomes

- Implementation of flipped blended learning in a university

As a result of implementing the SDML prototype, which includes the use of Mistcode and the easy authoring tool, in a university, we saw significant improvement in both students' grades and debating ability. By having students study 15-minute e-learning lecture before the classes, it was revealed that, in some classes, the time required for one class was reduced to two thirds. Over a span of three years, we witnessed a large and continual increase in the number of students receiving high marks.

- Implementation of the Grand design in Fuji Xerox

The results of the skill analysis demonstrated that employees' "problem solving skills," which were vital to change the business model of the company, were poor. After providing training courses for all employees, the average score of employees on the problem-solving skill increased from 2.4 to 3.1. Changes in behaviors of employees also became visible. (73% of all employees answered that their behaviors became more solution-oriented.)

