

Topics

IT Solution for Campus Supporting System-wide Optimization and Faster University Reform

The issues associated with achieving the Ministry of Education, Culture, Sports, Science and Technology's policy for stronger and more extensive university governance include recruiting students while seeking to improve the quality of university services, education, and research, and, beyond this, providing stable management. Hitachi is working toward strengthening governance through the comprehensive optimization of university systems, with activities that include providing systems that are appropriate to all levels of education. Hitachi also supports the provision of environments for putting appropriate governance measures into practice by proposing IR that supports the analysis of university information and strategy formulation for shifting IT to the cloud and increasing the value of universities. This article describes Hitachi's IT Solution for Campus, which is based on this basic concept.

INTRODUCTION

IN response to societal trends such as the aging population, declining birth rate, and globalization, the Ministry of Education, Culture, Sports, Science and Technology formulated the University Reform Action Plan in 2012 that specified the direction that these reforms were to take in order to achieve a new type of university development, involving two main pillars “to reconstruct universities to be capable of handling drastic societal changes,” and “to enrich and strengthen university governance.” Universities, meanwhile, are seeking to improve services, education, and research as they deal with issues such as student recruitment and management stability.

To address these issues, Hitachi is developing and marketing a variety of solutions aimed at the next generation of university information systems in order to create an attractive model for universities that enables their ongoing development in step with the modern world.

WORKING TOWARD SYSTEM-WIDE OPTIMIZATION

In the past, each university department installed its own information systems, and upgraded its own systems to improve functions and performance, resulting in systems that are only partly optimized at the department level. The problems that have arisen as a result include a large amount of duplication, with little progress having been made on improving systems from a university-wide perspective that encompasses multiple departments.

Hitachi offers comprehensive optimization for university information systems from the perspective of the entire university. Universities have large numbers of systems to meet the diverse needs of individual departments. From a system perspective, there is a need to provide integrated platforms that can support the operation of these systems. In addition to making effective use of resources and reducing administration work by making good use of public clouds and other integrated platforms to achieve optimal positioning of systems on and off campus, this also means that physical location is no longer a consideration for systems. In terms of functions, Hitachi offers system integration achieved by a service-oriented architecture (SOA) using the simple object access protocol (SOAP). This encourages system interoperation by making the data and other functions used by each system available without duplication of effort. In this way, the comprehensive optimization of university systems in terms of both systems and functions enables stronger governance, including the reallocation of resources from the perspective of the entire university.

FASTER UNIVERSITY REFORM

With the decline in the number of 18-year-olds, recruiting new entrants and minimizing dropouts will be important to the survival of universities. Achieving this will require universities to become more distinctive and attractive, improving the quality of education so that they can turn out graduates who can contribute to society.

Given this need to reform universities to make them

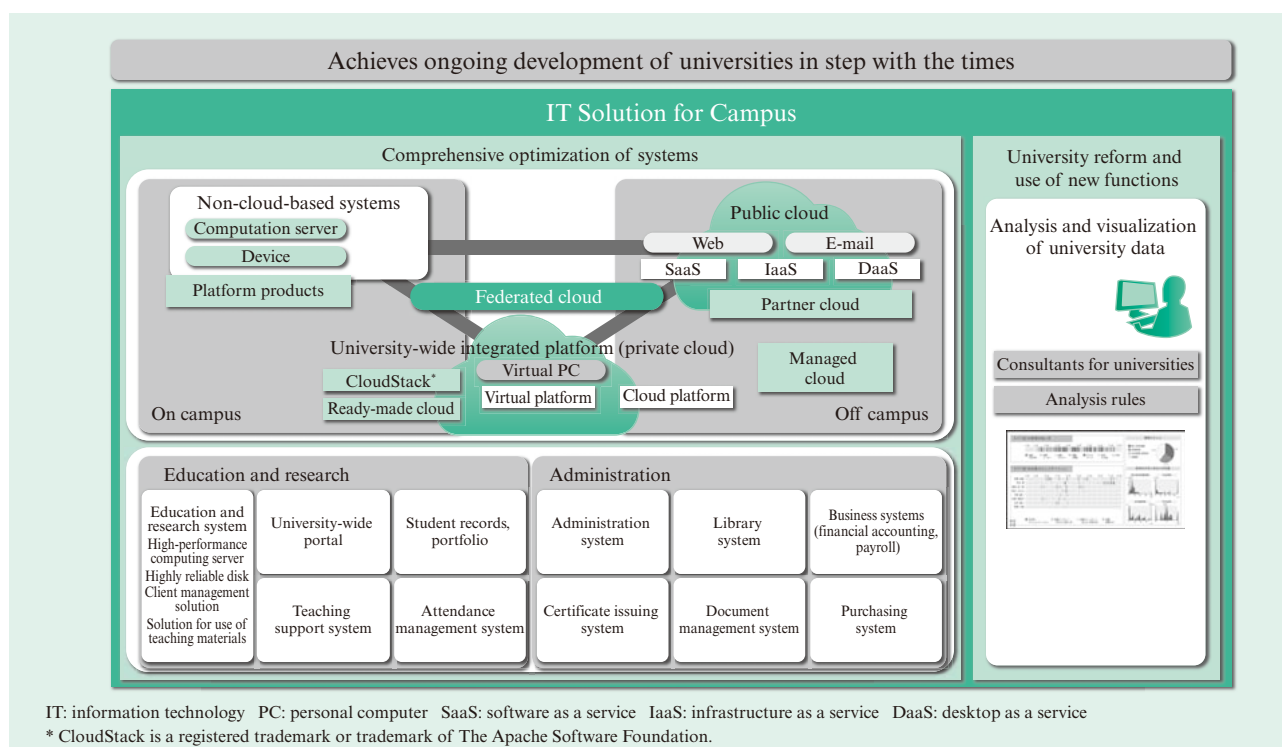


Fig. 1—Overview of IT Solution for Campus.

The IT Solution for Campus achieves university reform and comprehensive optimization of university systems by providing Hitachi's information system packages for universities and various cloud environments.

more distinctive, one aspect of university reform that has attracted attention is institutional research (IR) for supporting decision making through the collection and analysis of different forms of data from the campus.

Utilizing systems that have been optimized at the campus level to achieve interoperation, Hitachi is offering to identify the data required for IR and to build databases (DBs) for its collection and analysis. Hitachi is proceeding with proposals for solutions that perform analyses from a variety of perspectives by combining various different forms of campus data based around the student data that is held as part of the basic university information managed by Hitachi's academic information system packages for universities. Hitachi is also offering IR environments that use business intelligence (BI) tools for performing analysis in conjunction with other data from campus and related sources. This includes working on support

for decision making in order to take advantage of the distinctive characteristics of each university by extracting data from multiple systems and performing multifaceted analysis on restructured and integrated information. This practice of undertaking IR for the objective circumstances in which universities find themselves is important for putting appropriate governance measures into practice.

TYPE OF SYSTEM THAT IT SOLUTION FOR CAMPUS AIMS TO CREATE

Hitachi believes that its concept for the next generation of university information systems should be structured around the idea of comprehensive optimization that can make effective use of the required information by providing systems that are appropriate from the viewpoint of the entire university

and that take the needs of each department into consideration, as noted above. The objective for the IT Solution for Campus is to achieve this. Hitachi is also seeking to establish an information environment that facilitates the fulfillment of a clear vision under the leadership of the people at each university responsible for managing information.

Based on the concept behind its IT Solution for Campus, Hitachi is supplying a variety of cloud environments and offering its information system packages for universities (see Fig. 1).

CHALLENGES FOR THE FUTURE

Hitachi is considering two major approaches to adapting its information system packages for universities for the global market. The first is its plan to include support for quota systems and the addition of a multilingual capability to its information system packages for universities to support the globalization of universities. As stated in its University Reform Action Plan, the Ministry of Education, Culture, Sports, Science and Technology is promoting the globalization of universities, which includes calling for the provision of environments that accept overseas students. In response, Hitachi intends to expand functions that support overseas students at Japanese universities.

The second approach is to look at the global deployment of Hitachi's information system packages for universities, targeting overseas markets. Currently, FPT University in Da Nang, Vietnam is installing Hitachi's information system packages for universities, using a version that has been localized in Vietnamese. Hitachi hopes to utilize this know-how to deploy the system overseas.

CONCLUSIONS

This article has described Hitachi's IT Solution for Campus, which is marketed as a solution for universities struggling to survive amid intensifying competition.

In the future, Hitachi intends to continue expanding and marketing its IT Solution for Campus and information system packages for universities, which contribute to reforms aimed at creating attractive universities that will continue to develop in step with the times.

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