



Universiti Putra Malaysia (UPM) Case Study

Introduction

Universiti Putra Malaysia (UPM) formerly known as Universiti Pertanian Malaysia was founded in 1971 through the merger of Faculty of Agriculture, University Malaya and Agriculture College in Serdang. The first three founder faculties were Faculty of Agriculture, Faculty of Forestry and Faculty of Veterinary Medicine and Animal Science. UPM maintains its traditional role of education in focussing its tertiary level research on agriculture and its relevant areas.

In early 80's, UPM has expanded its scope by including science and technology into its areas of studies. In 1994, UPM aspired to be the University of the Next Millennium and in line with its vision, the name of Universiti Pertanian Malaysia was changed to Universiti Putra Malaysia by Malaysia's Prime Minister, Dato' Seri Dr. Mahathir Mohamed on April 3, 1997. This is looked upon as a strategic move in preparing UPM as a versatile, higher learning institution that is in tandem with Malaysia's dynamic technology.

Challenge and Solutions

As one of the largest Universities in Malaysia, UPM faced the challenge of efficiently maintaining the accounting information pertaining to the students. This requirement raised the demand for a performance - oriented solution with rich functionalities to maintain diverse requirements.

The solution had to be capable of maintaining crucial information with the flexibility to adapt to the dynamic business requirements of related third parties like commercial banks and student funding agencies like Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN) in the education environment.

The Finance Department at Universiti Putra Malaysia (UPM) used to employ a large number of administrative and clerical personnel to manage their accounting transactions involving more than 116,000 students. With the implementation of Student Accounting System, lesser clerical personnel were required, students were able to login at the special information kiosks provided at the payment counters to check their outstanding balances. All administrative and operational tasks were streamlined and the entire process was automated with better fee collection mechanism in place leading to improved administrative efficiency and operational excellence.

The Student Accounting System n-tier architecture with object-oriented components and .NET framework are designed to the complexities of dynamic business requirements. The Student Accounting System for UPM included the Fee Management and Sponsor Management Systems which resulted in optimizing UPM's resources, capacity planning and a marked improvement in fee collection - a perennial problem in all public and private universities.

The Student Accounting System empowers UPM to manage their financial accounting operations, which forms the bulk of the administrative and operational work. The system is currently been implemented at the following schools with a total enrollment of well over 116,000 students.

Faculty / School	Number of Students
Undergraduate School	65,071
Pusat Program Luar	23,321
Pembelajaran Jarak Jauh	16,539
Graduate School Office	9,531
Kampus Bintulu	1,657
Total Number of Students	116,119

Technology

D' Top Software had leveraged on Microsoft Technology, with n-tier architecture where the solutions are highly scalable catering to business growth and expansion. The solution's application layer is developed in VB .NET technologies. It's database layer runs on SQL Server 2000 and Oracle 9i.

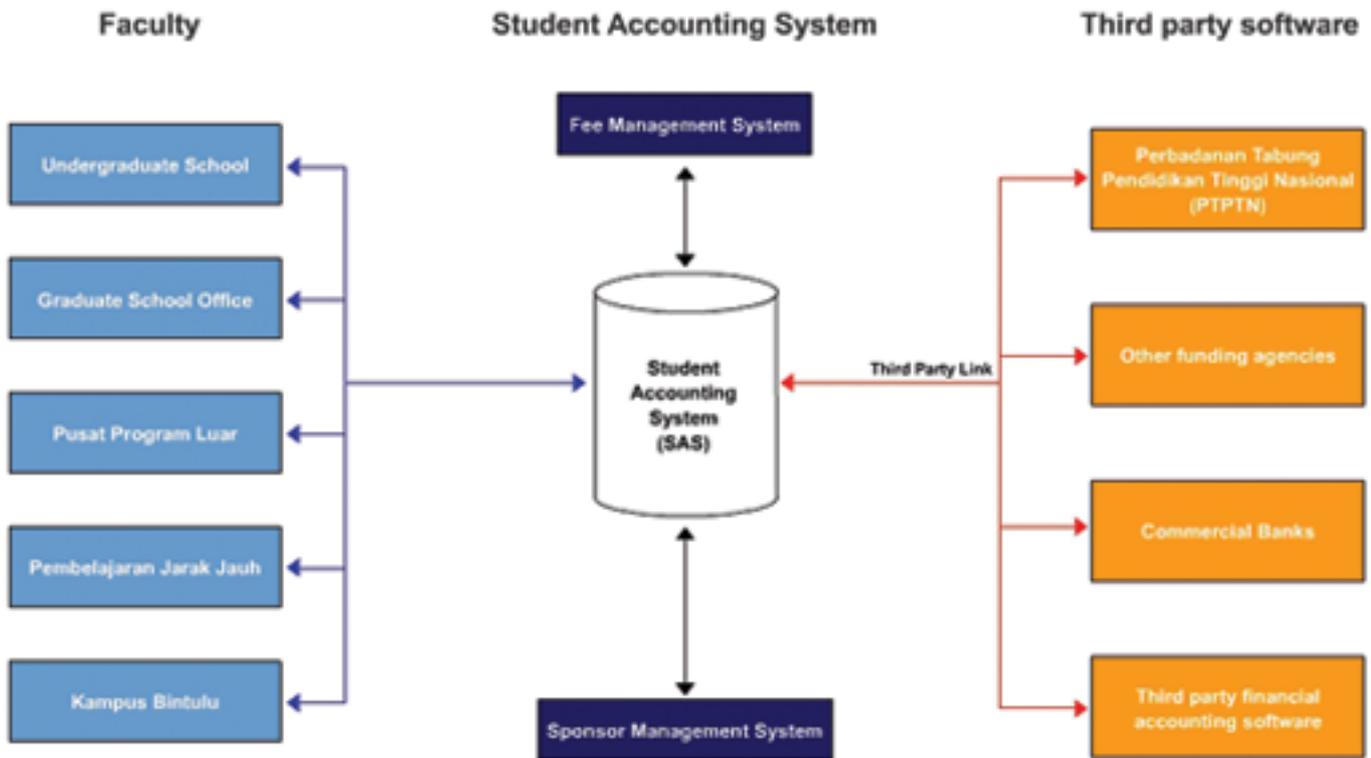
The utilization of a .NET object-oriented framework accelerated the product development cycle allowing developed components to be reused. This component-based concept needed to be highly flexible to meet dynamic business requirements.

Benefits

The implementation of the Student Accounting System brought unparalleled benefits to critical operations in UPM:

- Accelerates mission critical operations and accounting functions to increase overall functionality.
- Enables the processing of real-time student transactions to eliminate complex accounting work.
- Integrates data mining capabilities that provide the accessibility of real time key performances indexes for strategic decision-making.
- Maximizes technology investment by reducing Total Cost of ownership and improving Information Technology Investment per capita.
- Designed ready for rapid integration with existing third party financial applications.

Solution Overview



About D'Top



D'Top Software Sdn. Bhd. (Co No. 593684-T) is an Information and Communications Technology (ICT) company incorporated in Malaysia to develop a comprehensive suite of software products in management and business. The company has been accorded the MSC Status for its innovative ICT products for the education and training industry.

The company has always been in the forefront of technology and has adopted Microsoft's .NET technology to design and develop the next generation of Internet business applications for the digital age.

We have a trained pool of engineers and business experts in computer sciences, electronic/electrical engineering, accounting and finance and other related management sciences who can group and function as a cohesive project team to undertake complex ICT projects. Our team of dedicated professionals are experienced in project management and are capable of meeting stringent time frames, quality and cost parameters set by our discerning clients in Malaysia and abroad.