

THE STUDY AND DESIGN OF CRM SYSTEM IN ADMISSIONS COUNSELING AND SUPPORT FOR STUDENTS

-CASE OF INTERNATIONAL COLLEGE OF HO CHI MINH CITY

Nguyen Quynh Lam¹, Do Doan Trang², Vo Trong Cang³

Tang Minh Huong⁴, Nguyen Thi My Le⁵

¹Binh Duong University, Binh Duong, Viet Nam, nqlam@bdu.edu.vn

²Binh Duong University, Binh Duong, Viet Nam, doantrang.bolt@bdu.edu.vn

³Binh Duong University, Binh Duong, Viet Nam, vtcang@bdu.edu.vn

⁴Dai Viet My English Center, Dak Nong, Viet Nam, minhhuongtang@gmail.com

⁵International College Of Ho Chi Minh City, Ho Chi Minh, Viet Nam, lentm@ich.edu.vn

Abstract. Nowadays, admissions counseling and support for students are the most important elements at college. Parents and students have been considered as clients are experiencing training service at college, so the care and support for parents and students are a necessity. The study and design of CRM system has introduced more efficient methods in case of communication with clients and support admissions counselor department to improve productivity. On the other hand, CRM system helps the interaction between admissions counselor department and others in order to reduce students drop out in the middle of course. In addition to CRM system also help students have experienced free course and have got information before entering the course at college. The conclusion for application the CRM system in admissions counseling and support for students has increased the number of incoming students by 35% in (2018 -2019) and reduced the dropout rate by 10% in the same period last year.

Keywords: CRM; Customer Relationship Management; admissions counseling; support for students

1. Introduction

CRM has been described as “a customer-focused business strategy that aims to increase customer satisfaction and customer loyalty by offering a more responsive and customized service to each customer” (Croteau et al., 2003). Students, students' parents, short-term students, businesses, school staff (employees and lecturers), and school partners are all examples of "customers" in the education sector. Thus, the customer relationship in colleges and vocational schools includes many other relationships besides student and school, such as school - parent, school - lectures, school - high school teachers, schools

employees, employees-students, lecturers-students, and schools-enterprises. However, the primary relationship that the CMR system in education must develop and constantly update is. Because the system collects information at all stages of interaction with customers (parent/potential student/main student), the educational CRM system assists the school in having a comprehensive understanding of the "customer" needs (Abubakar et al., 2015). As a result, good relationship management will provide the following benefits:

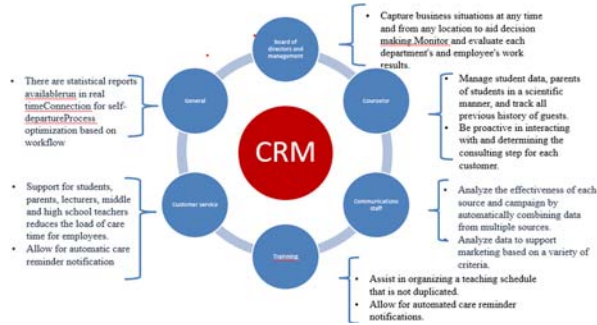


Figure 1: Benefits of CRM

The focus of marketing today is not so much on attracting "buyers" as it is on customer satisfaction, getting them what they want, and cultivating a relationship with them that is more than just commercial. As a result, the CRM system of educational institutions is an appropriate tool for the school to grasp the needs of students in terms of training, allowing the school to offer courses and services that are appropriate to the students' characteristics and requirements, allowing the school to improve and achieve better outcomes to reduce dropouts (Rigo et al., 2016; Adikram, 2016; Abubakae et al., 2015; Wahab et al., 2011).

Because CRM systems are industry-specific (Stair et al., 2010), organizations from various industries will develop distinct CRM models. In the same field, but the CRM system is not used equally, so developing a CRM system that is aligned with business strategies is a prerequisite for success. As a result, in order to implement a CRM system in education in accordance with the enrollment counseling and student support process at Vietnam's colleges and intermediate schools, a thorough understanding of the current enrollment and survey process is required. status of colleges and intermediate schools, from which the appropriate CRM system for

the school's strategy can be applied. Understanding the realities of admissions counseling and student support at colleges and intermediate schools, my partner and I designed a CRM system for use in admissions and support departments. Help students at International College Of Ho Chi Minh City (ICH) to achieve transformative results.

Based on the analysis of the preceding studies and information, the following structure will be used to present the research contents and design of a CRM system in enrollment counseling and student support: Part 2: Objectives; Part 3: Research methods; Part 4: CRM research and education application; Part 5: Current status of crm application in International College Of Ho Chi Minh City (ICH); Part 6: At International College Of Ho Chi Minh City, the CRM process is proposed for improvement; Part 7: CRM solutions and achievements contents; Part 8: Conclusion.

2. Objectives

Conduct research on the concept of CRM, the state of CRM application around the world, and the current state of customer relationship management at the ICH's admissions and customer support departments.

Evaluate and apply the necessary and appropriate business processes to the International College Of Ho Chi Minh City (ICH)¹

Create a CRM system that is compatible with social networking applications

Expanding deployment and operation at private colleges and intermediate schools.

3. Research methods

Qualitative research method: The research collects and selects published documents, articles in

¹ Ho Chi Minh City International College (ICH) was established on October 2, 2008 Head office address: 460D Kinh Duong Vuong, An Lac A Ward, Binh Tan District, Ho Chi Minh City, Vietnam;

Faculties: IT, Economics - Tourism, Foreign Languages, Engineering-Construction, Medicine and Pharmacy.

scientific journals, and official documents on reputable websites related to the research issue, as well as surveys the current status of CRM application at some universities around the world and some educational institutions in Vietnam.

System development method: Using the system development method (SDM - System Development Method (Nunamake et al., 1991) and the findings of qualitative research, the study will continue to conduct surveys about the current status and needs at the International College in order to determine the requirements for the CRM system.

4. CRM research and education application

Overseas: According to research conducted by the AACRAO organization on US universities (AACRAO, 2014). According to the findings of this report, 64% of universities have implemented CRM. The remaining 42 percent are not currently using CRM but are considering it. Another study conducted in Indonesia on the relationship between loyalty, satisfaction, and CRM systems (Zani et al., 2013) discovered that good customer relationship management increases satisfaction. Not only that, but student satisfaction makes students feel proud, piques their interest, and encourages them to study.

In Vietnam: The CRM system has been widely used in industries such as tourism, telecommunications, and sales, and CRM has demonstrated its role in "Finding, Closing, and Keeping" customers. CRM, on the other hand, is not widely used in the field of education, and is primarily used by English centers, international schools, and overseas study companies such as Apollo², Wellspring³, and Instulink⁴.The system can promote

²Apollo Language Center was founded in 1995. Apollo Language Center had the first branch in Ho Chi Minh City, Vietnam in 2002.
³ Wellspring Saigon Bilingual High School belongs to SSG Group; Head office address: 92 Nguyen Huu Canh, Binh Thanh District, Ho Chi Minh City, Vietnam.

customer closure and manage and evaluate the working capacity of consultants for Apollo English Center. The system assists Wellspring School in better managing students, connecting functional departments, synchronizing data, and saving time. In short, CRM in education in Vietnam is underutilized and has few features.

5. Current status of CRM application in International College Of Ho Chi Minh City (ICH)

According to Abdullah's research scale on the HEDPERF scale (Abdullah, F, 2006), it includes the necessary factors to help students be satisfied, including factors related to employees' customer service duties. (by non-academic staff) such as: staff service capacity, how to solve departmental staff problems, and dedicated advice to students. This scale is also used to test the reality of student satisfaction at the International College Of Ho Chi Minh City (ICH) (Lam, 2015). This scale is also used at the International College Of Ho Chi Minh City (ICH); to assess the reality of student satisfaction. According to the findings of a 500-student sample study, the factor "Student support services" (the factor about student care) is an important factor influencing the satisfaction of International College students (Figure 2)

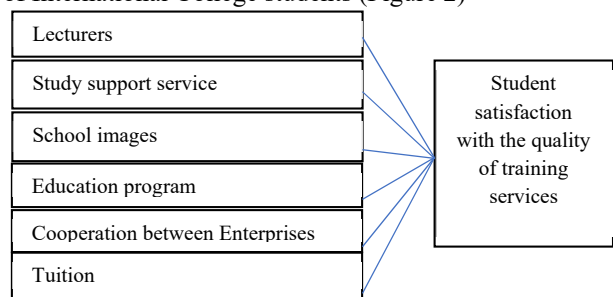


Figure 2: Model for assessing the quality of training services provided by ICH

⁴Instulink International Company was established in 2014; overseas study, working visa, settlement. Head office address: 24 Truong Son, Ward 2, Tan Binh, Ho Chi Minh City, Vietnam.

With this level of interest, we can see that developing a CRM system to manage customer relationships is critical. As a result, the International College has used CRM in student management since the 2016-2017 school year, and it includes the following CRM components:

Student management: This is the profession of the training department and the student affairs department that is used to manage grades, attendance, and personal information.

Management of lecturers and staff: The administrative and human resources department is used to manage information about the lecturer's profile, employee information, schedule scheduling, and teaching schedule.

With such a simple CRM system as described above, only managing basic problems rather than using Excel software did not promote the CRM system's effectiveness. CRM does not include marketing activities, enrollment consulting, customer care (potential, official), or general reports. As a result, the author proposes a number of constraints that must be overcome, specifically as follows:

Marketing activities: No specific marketing strategy has been demonstrated, no potential and official data sources of potential students have been gathered and analyzed, no students have been classified by industry, and no potential student needs have been identified.

Recruitment consulting activities: Ineffective data management, inability to track customer history, inability to synchronize data, resulting in duplicate or incorrect data, inability to control the frequency of potential customer care (forgetting customers or unintentionally disturbing customers).

Supportive care activities: There is no process in place to care for "customers" during the school day;

the care is uneven, time-consuming, and ineffective, and it cannot result in customer satisfaction.

Reporting activities: Because there is no timely and detailed reporting mechanism, management is slow to grasp the business situation, cannot monitor and evaluate employee work results, and cannot evaluate employee effectiveness. strategies for marketing

Because the benefits of the CRM system used in the previous year (2016-2017) did not meet the needs of the College of Economics, the College of Economics implemented an upgraded CRM system in the current academic year (2018-2019) and achieved positive results.

6. Current status of CRM application in International College Of Ho Chi Minh City (ICH)

CRM systems are unique to each industry, and even within the same industry, system characteristics will differ. Employee management program, employee recruitment and retention system, student care system, program marketing and enrollment, campaign management program, lead tracking and consulting process, student information system, and social network management system are among the ten supporting functions provided by EliNext's CRM system solution (EliNext Group, 2021).

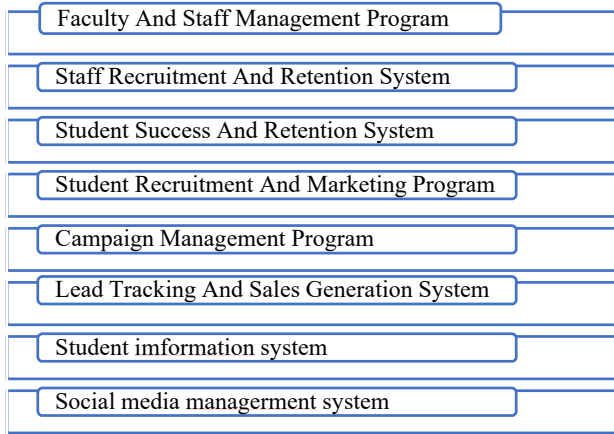


Figure 3: EliNext's CRM system solution

The author developed a process for a CRM system solution for students based on the ten features of EliNext (EliNext Group, 2021) and the admissions consulting and customer support process at the ICH is structured as follows (Figure 4):

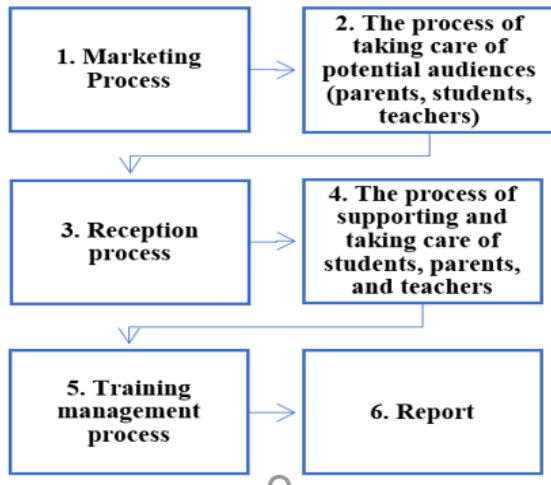


Figure 4: The proposed CRM system process at the ICH

Environment settings	
Framework:	Laravel
Server:	Linux (Shared / VPS / Dedicated)
PHP:	version 7.0 and above
MySQL Version	8.0 and above
Web server:	Nginx or Apache
Extension:	BCMath PHP Extension CType PHP Extension Fileinfo PHP extension JSON PHP Extension Mbstring PHP Extension OpenSSL PHP Extension PDO PHP Extension Tokenizer PHP Extension XML PHP Extension Fileinfo PHP Extensio

Figure 5: Environment settings

6.1. Marketing Process

- 6.1.1. Internet Communication: SEO, GG keyword, facebook add, zalo page..., Press activities (source 1).
- 6.1.2. Career teaching in middle and high schools (source 2)
 - Management of training programs
 - Manage and organize classes
 - Manage class schedule and teaching schedule
 - Manage teachers and experts
 - Design forms to collect reasonable information(students, parents of your students, teacher)

6.2. Process of caring for potential audiences (parents, students, teachers)

- 6.2.1. Aggregate data from sources by sending SMS, zalo, facebook, messenger,

calling, scheduling meetings, and sending emails.

- Send e-cards for birthdays and holidays to teachers, parents, and students.
- Distribute enrollment notices to teachers, parents, and prospective students.
- Preferential vouchers for short-term and skills-based programs

6.2.2. Organize the list of prospective students.

- Private information
- Interesting topics
- Course of study (short term, long term)
- Economic circumstances
- Previous level academic results
- Do you get information from any source?
- Which of the branches is the most convenient for admission?
- Who is the consultant?

6.2.3. What stage of the process has been consulted: Consulting status; Contact count; Evaluate potential.; The reason for the consultation's failure.

6.3. Reception process

- Register
- Examination and admission in accordance with regulations during the reception process. Plan a reception for admissions reviews → Obtain valid admission and testing records→ Disseminate the admission notice and announce the results → After paying tuition fees, transfer potential student data to official students

6.4. The process of supporting and taking care of students, parents, and teachers

- Receiving one-time requests
- Send birthday and holiday cards to teachers, parents, and students using Zalo, the messenger app.
- Tuition fee notice to parents and students
- Send vouchers for preferential tuition fee programs for University courses and topics to lecturers, parents, and students. Báo cáo

7. CRM solutions and achievements contents

As previously stated, the International College's previous CRM system lacked the functionality required for effective customer relationship management. The CRM system provided by the author provides more effective methods for communicating with customers and assisting the admissions consulting department in improving work efficiency. On the other hand, the CRM system facilitates communication between the admissions department and other departments in order to reduce the number of students who drop out of the ICH.

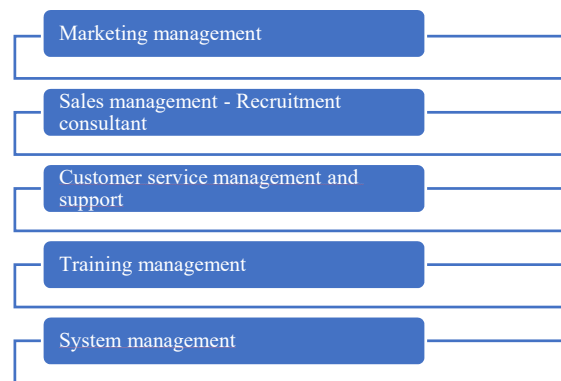


Figure 6: Contents of CRM solution

7.1. Marketing Management:

The system offers marketing campaign management, career guidance, newspaper enrollment

advice, and internet communication to collect potential leads and self-assimilate the receiving and analyzing process. To send information to customers in a proactive manner, categorize their needs. Marketing management entails the following tasks:

Campaign Management: The Campaigns module manages outbound marketing campaigns and sends email, SMS, and Zalo marketing campaigns to customers (Figure 7)

Marketing and integration across multiple channels: Providing information to customers through multiple channels: Zalo..... Determine Lead revenue details, and support detailed marketing performance reports by: source, campaign, and Ni dung.

Report on Marketing Effectiveness Analysis: Create a campaign budget report based on the analysis and export the excell file (Figure 8).



Figure 7: Module Campaign Management

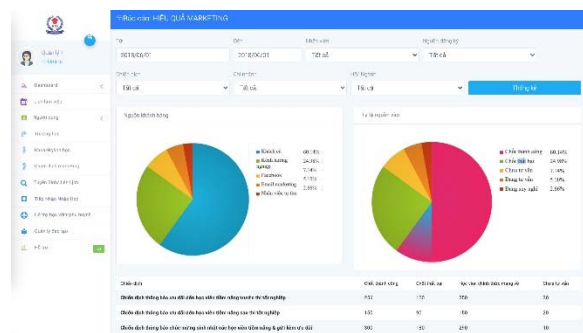


Figure 8: Report on Marketing Effectiveness Analysis

7.2. Sales management - admision consultant

Manage customer data: Including raw customers (target), potential customers (lead), organizational customers (businesses), and individual customers (Figure 9).

Daily Sales Activities: Employees plan their own work and keep track of their schedules in their accounts. Managers can quickly check each employee's schedule and work progress, and notify employees of new assignments (Figure 10, 11,12).

Mobile App for Sale: Integrated mobile app for easy work management.

Sales Kit Sales Support: Supports all employee lookup features such as: Research policies related to the study program, research program information and research customer problems or questions and how to handle them.

Report on consulting results: Report on consulting results and employee consulting status, as well as sales closing and consulting in branches. Báo cáo kết quả tư vấn:

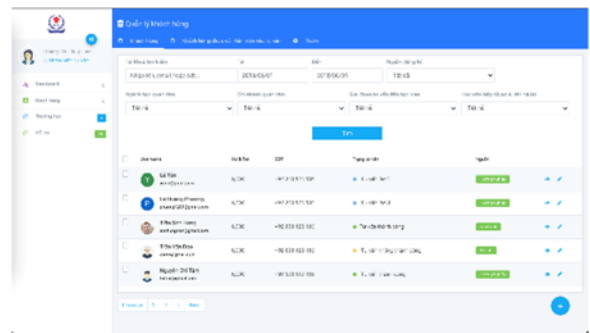


Figure 9: Customer data

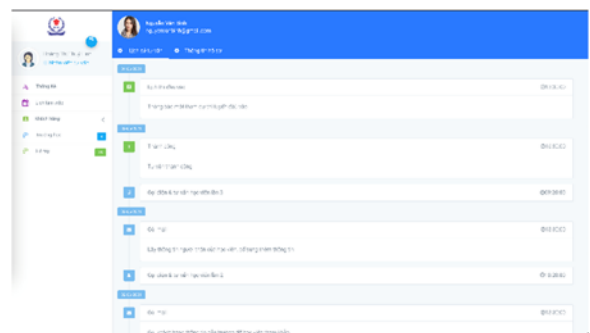


Figure 10: Consulting history

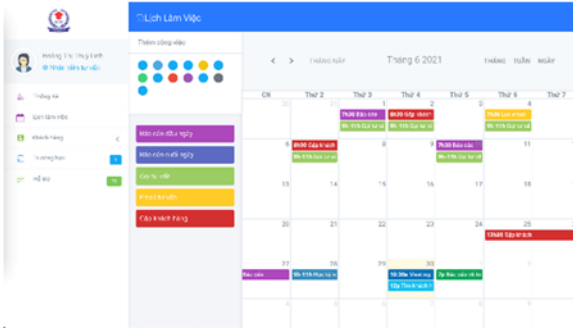


Figure 11: Employee's schedule



Figure 12: Efficient working report.

7.3. Customer care management

After receiving leads, staff will take care of potential customers as well as customers who are currently using the service; job functions include: Call center for customer service; SMS notification to remind customers; Zalo's customer reminder notification; Use a chatbot/messenger to nurture customers; Email/automation can be used to nurture customers; Manage customer request tickets through the portal; Administrate FAQ – knowledge repository; Customer service support report.

7.4. Management of training:

The customer service department will transfer the relevant sticker to the customer's request for training staff to handle. Furthermore, the system feature will allow for the scheduling of lectures, as well as the teaching schedules of teachers and lecturers, in order to avoid duplication. Among the job duties are: Management of Scores; Management of Attendance; Organize and arrange teachers of career

guidance in middle and high schools; Organize the scheduling of teachers to teach at the school.

7.5. Administration of the system:

A CRM user authorization system with a hierarchical structure, specifically as follows: User Administration; Management of Role Trees; Permission to share information; Section on Access Rights.

8. Conclusion

The CRM system is not new to the industry, and it has also been shown to be effective in customer relationship management in education via research and practical applications. The CRM system developed in this study focuses on admissions consulting and customer care support (find-lock-keep), evaluates the effectiveness of marketing strategies to adjust appropriate finance, and increases student and parent satisfaction with school services. Because of the benefits listed above, the CRM system will promote maximum efficiency when used in private schools. The authors' CRM system research was implemented at the College of Economics and yielded very positive results. Specifically, increasing the number of students enrolled in the 2018-2019 school year by 35% and lowering the dropout rate by 10% compared to the same period last year (Le, 2019). However, due to the impact of the Covid-19 epidemic, the effectiveness of the current CRM system evaluation has not been assessed for the school years (2019-2020) and (2020-2021). The author's CRM system was constructed. The next direction the author team will study important variables in the CRM system when building for universities. Built and designed to optionally add or remove modules in accordance with the elements of the schools, the next direction the author team will study important

variables in the CRM system when building for universities.

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NGHIÊN CỨU VÀ THIẾT KẾ HỆ THỐNG CRM TRONG TƯ VẤN TUYỂN SINH VÀ HỖ TRỢ SINH VIÊN - TRƯỜNG CAO ĐẲNG QUỐC TẾ TP HOCHIMINH

Nguyen Quynh Lam¹, Do Doan Trang², Vo Trong Cang³

Tang Minh Huong⁴, Nguyen Thi My Le⁵

¹Binh Duong University, Binh Duong, Viet Nam, nqlam@bdu.edu.vn

²Binh Duong University, Binh Duong, Viet Nam, doantrang.bolt@bdu.edu.vn

³Binh Duong University, Binh Duong, Viet Nam, vtcang@bdu.edu.vn

⁴Dai Viet My English Center, Dak Nong, Viet Nam, minhhuongtang@gmail.com

⁵International College Of Ho Chi Minh City, Ho Chi Minh, Viet Nam, lentm@ich.edu.vn

Tóm tắt: Ngày nay, việc tư vấn và hỗ trợ tuyển sinh cho sinh viên là những yếu tố quan trọng nhất tại trường đại học. Phụ huynh và học sinh được coi là những khách hàng đang trải nghiệm dịch vụ đào tạo tại trường đại học, vì vậy sự quan tâm và hỗ trợ đối với phụ huynh và học sinh là rất cần thiết. Việc nghiên cứu và thiết kế hệ thống CRM đã đưa ra các phương pháp hiệu quả hơn trong trường hợp giao tiếp với khách hàng và hỗ trợ bộ phận tư vấn tuyển sinh nâng cao năng suất. Mặt khác, hệ thống CRM giúp tương tác giữa bộ phận tư vấn tuyển sinh với các bộ phận khác nhằm giảm tình trạng học sinh bỏ học giữa chừng. Ngoài ra hệ thống CRM còn giúp sinh viên vừa trải nghiệm khóa học miễn phí vừa có thông tin trước khi bước vào khóa học tại trường đại học. Kết luận về việc áp dụng hệ thống CRM trong công tác tư vấn và hỗ trợ tuyển sinh cho sinh viên đã làm tăng 35% số lượng sinh viên nhập học (2018 - 2019) và giảm 10% tỷ lệ học sinh bỏ học cùng kỳ năm ngoái.

Từ khóa: CRM; Quản trị quan hệ khách hàng; tư vấn tuyển sinh; hỗ trợ cho sinh viên