

# **Building Social CRM Framework on Enterprise Architecture Framework Using Value Chain Process Approach**

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## **Abstract**

Customer Relationship Management in this social media era (which is known as Social CRM or CRM 2.0) requires a quite different treatment compared to the previous one (or often referred to as Traditional CRM or CRM 1.0). The use of social media in the Social CRM has changed the role of the company and the customer, which was originally a corporate centric to currently a customer centric. Universities and colleges are a different service company compared to other kind of service companies in general term. Social CRM Framework is needed in this higher education sector because their customers (students) are very expertise in the use of technology. It makes this generation very familiar in utilizing social media. This Social CRM Framework is built on the Enterprise Architecture (EA) framework, results an information system outcome since Enterprise Architecture

can bridge the speed gap between business changes with the information technology change. The EA used is the Zachman Framework and Architecture of Integrated Information System (ARIS) Framework. The mapping results between Social CRM Frameworks and EA has produces 6 cells, namely the data, time, network, people, function and motivation. This paper discuss how to fill in the function cell and people cell using the Value Chain Process (is called the Higher Education Value Chain) and the APQC Process Classification Framework<sup>SM</sup> approach which is made into business process outcome, then this business process will be described to be business process model and workflow model (organization unit and work product).

**Keywords:** Social CRM Framework, Enterprise Architecture (EA), Value Chain Process, Higher Education Value Chain, APQC Process Classification Framework<sup>SM</sup>, Business Process Model, Workflow Model

## **1 Introduction**

This paper is resuming the previous one about the comparison of all models of CRM 1.0 that is mapped into the Enterprise Architecture (EA) framework, they are: Zachman Framework (ZF) and the Architecture of Integrated Information System (ARIS) Framework) to produce a Social CRM (CRM 2.0) Framework. This mapping results produce six cells form; Data, Time, Network, People, Function, and Motivation in the row Scope (Contextual) [1,7]. This paper discusses in detail the Function cell and the People Cell, as well as its derivatives on the Business Model's row (Contextual) where the result is a Business Process Model (from cell function) and Workflow Model (from people cell). Workflow model consists of organization unit and work product. The making of Social CRM framework over the EA framework needs to be done by paying attention to several reasons such as: (1) Customer Relationship Management (CRM) which is a part of an Enterprise System, besides the Enterprise Resource Planning (ERP) and Supply Chain Management (SCM)[4], (2) the CRM roadmap development that is growing vary vast and is followed by the explosion of social media using (Social CRM or CRM 2.0)[6], (3) Enterprise Architecture is needed to bridge the development of business very quickly with its Information Technology development. This research is carried out specifically at the higher education field this sector has its unique characteristics that are different from service companies in general which is specified to be (1) the attachment with a long time period between the customer and the company, and (2) the customers are always within the same age range for all the time (which is currently recognized as the Gen Y, a generation that has an extraordinary intelligence in technology). Expertise in the use of this technology had created a generation that is very familiar in the use of social media. Therefore, the research object in this paper is the private universities

across Indonesia. The mapping above can be seen in details in the following figure.

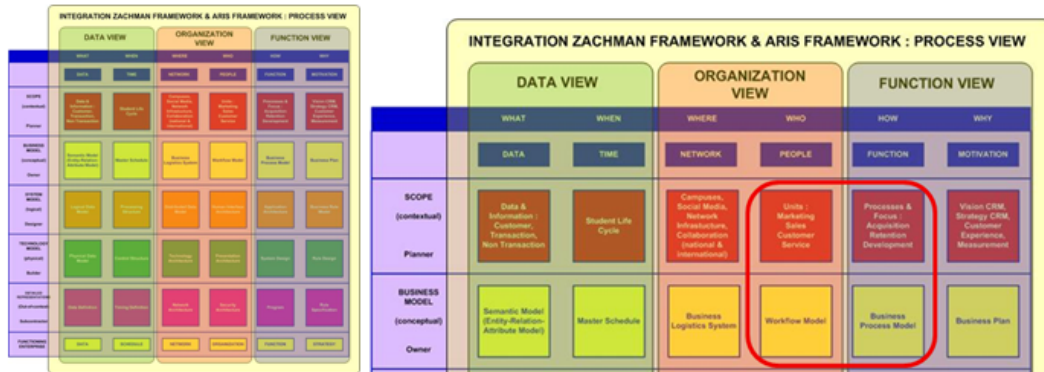


Figure 1. The result of Social CRM framework mapping into the Enterprise Architecture [7] and focus this paper on red rectangle

## 2Value Chain Process

The approach taken to fill the Function cell and People cell is utilizing the concept of value chain that was developed by Porter [5]. From this value chain, we can learn the major processes undertaken by any company to obtain competitive advantage that will enable it to acquire business excellence as well as organizational units that will be involved in the main processes. The key processes is executed by end to end. Therefore, the analysing process is using the value chain that is often called the Value Chain Process [5]. The application of the value chain on the higher education filed is named the Higher Education Value Chain. The proposed Higher Education Value Chain can be seen in figure 2 (a). The relationship between Social CRM with value chain process occurs because Social CRM has three main activities, they are: acquiring new customers, retaining existing customers and developing customer value [2]. When Social CRM is talking about retaining existing customers then it will be associated with perceived overall process by customers from end to end, this is where we can see the value chain process in details. On the other hand, CRM is executed by 3 (three) units within the company, they are the Marketing unit, the Sales unite and the Customer Service unit. Each unit has a responsibility towards the main activity, for example the Marketing unit is reposnsible in acquiring new customers, the Sales unit is responsible in developing the customer value through cross-selling and up-selling, while the Customer Service unit is responsible for retaining the existing customers. The value chain process will be resulting outcome of a more detailed sub-processes, and then to be mapped into organizational units that will have their own parts. These results have been mapped using the APQC Process

Classification Framework<sup>SM</sup> [8] (the mapping result can be seen in Table 1). This process is referred to as Business Process Model and Workflow Model [3]. In the figure 2 (b) is an example of detailed pictures of business process models and workflow models (organization unit and work product).

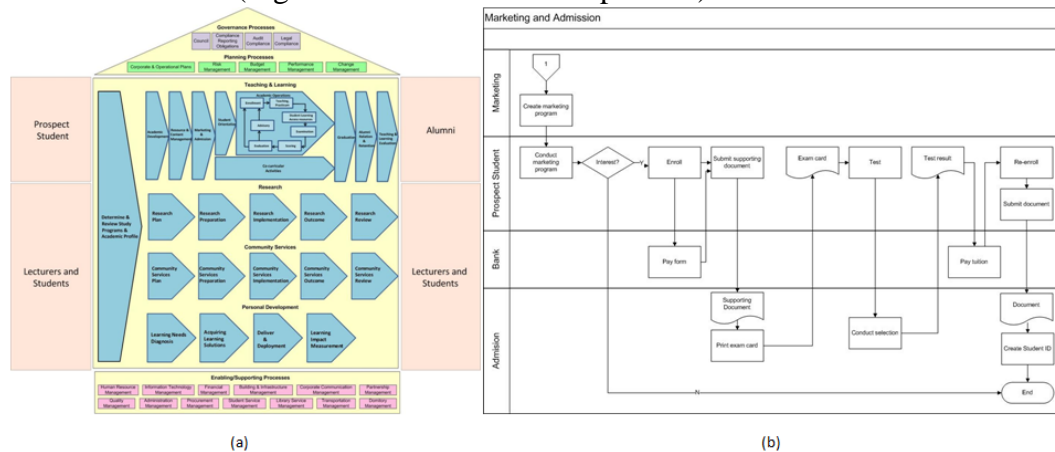


Figure 2. (a) Higher Education Value Chain; (b) Business Process Model and Workflow Model for Marketing and Admission

Table 1. The mapping result between higher education value chain and APQC Process Classification Framework<sup>SM</sup>

	Porter's Value Chain	APQC Process Classification Framework	Higher Education Value Chain
Primary	Inbound Logistics	2.0 Develop and Manager Products & Services	Academic Development
			Resource and Content Management
	Operations	4.0 Deliver Products & Services	Research Plan
			Research Preparation
			Community Services Plan
Outbound Logistics	4.0 Deliver Products & Services	Community Services Preparation	
		Learning Needs Diagnosis	
Marketing and Sales	3.0 Market and Sell Products & Services	Acquiring Learning Solutions	
Services	5.0 Manage Customer Service	Student Orientation	
Support	Firm Infrastructure	1.0 Develop Vision & Strategy	Academic Operation
		8.0 Manage Financial Resources	Cocurricular Activities
		9.0 Acquire, Construct, and Manage Assets	Research Implementation
		10.0 Manage Enterprise Risk, Compliance, Remediation, and Resiliency	Community Services Implementation
			Deliver and Deployment
			Library Service Management
			Domitory Management
			Transportation Management
	Graduation		
	Alumni Relation and Retention		
	Research Outcome		
	Community Services Outcome		
	Deliver and Deployment		
	Marketing and Admission		
	Student Service Management		
	Administration Management		
	Corporate and Operational Plan		
	Council		
	Financial Management		
	Budget Management		
	Building & Infrastructure Management		
	Compliance Report Obligations		
	Audit Compliance		
	Legal Compliance		
	Risk Management		

Table 1 (continued). The mapping result between higher education value chain and APQC Process Classification Framework<sup>SM</sup>

Porter's Value Chain	APQC Process Classification Framework	Higher Education Value Chain
Support	11.0 Manage External Relationship	Partnership Management
		Corporate Communication Management
	12.0 Develop and Manage Business Capabilities	Performance Management
		Change Management
		Teaching Learning Evaluation
		Research Review
		Community Services Review
		Learning Impact Measurement
		Quality Management
	Human Resource Management	6.0 Develop and Manager Human Capital
Technology Development	7.0 Manage Information Technology	Information Technology Management
Procurement	4.0 Deliver Products & Services	Procurement Management

### 3 Findings

From the description above, we can see that the value chain process can be used to derive sub-processes in the Function cell and organization units on the People cell within the Social CRM framework that is built on top of the Enterprise Architecture framework. The process of scientific validation has been done by mapping these processes to the APQC Process Classification Framework<sup>SM</sup>. This derivation process results the Business Process Model of Function cell and Workflow Model from People cell.

### 4 Limitation and Future Research

The derivation results from value chain process to be business process models and workflow models is a suggestion or proposal from researchers who have been doing and observing processes in higher education sector for more than seven years. Currently, the results of a detailed business process models and workflow models are being provided to the domain experts, they are the rectors of 58 private universities across the DKI Jakarta province whose institutions belong to the Webometrics ranking and or 4ICU ranking to get feedbacks and approvals. The feedback results and approvals will be published on the next paper.

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