

# SAP ERP Analysis as the Key of the Company's Procurement Process in the Use of Social Media

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**Abstract**— Information technology plays a role in developing a modern business strategy in a fishing company in Maluku (Indonesia). Understanding the product life cycle must be improved even though they understand the supply chain strategy, with the fact that in the past few years the amount and value of production are not always stable. The results of this approach provide almost 90% of the information data needed by utilizing Social media as a key alternative in the procurement of raw materials that support SAP ERP Enterprise Core as a key system in developing the company's business. ERP implementation and solution package integrated with SAP Business Suite includes SAP CRM (Customer Relationship Management), SAP SCM (Supply Chain Management), SAP SRM (Supplier Relationship Management) and SAP PLM (Product Life Cycle Management). SCM, PLM in their supply chain strategy and CRM, SRM as an integrated information system network technique through the rapid development of social media. The impact is not only for the company, but it also has a big influence on the welfare of the local communities (fishermen) in producing qualified raw materials.

**Keywords:** *Decision Making Analysis, SAP ERP, Social media, Procurement Process.*

## 1. Introduction.

At least 26 fish companies are registered to operate in the water areas of AMBON (capital city of Maluku Province) east of Indonesia, with marine and fishery resources with marine and fishery

Resources that are very diverse and may never be finished. Technology information in the world has become one of the important roles in human life, with various developments and innovations in the company that most can full fill every desire, which is expected, but on the other hand, the impact off loss can also occur. References [1] the digital world is analyzed through numbers that indicate Social media tools play a Very important role for a company and their

customers. Economic strength is reflected in the amount of researches that are published in marketing journals [2]. Assessing how traditional media communications affect satisfaction in a business relationship [3], [4] Explains how Key Performance Indicators are used to monitor and manage social digital technology applications, how companies effectively utilize social media as a marketing channel [5]. References [6] the key to a successful Communication strategy is to match target customers and reach engagement with them. system implementation, transition to CRM usage for SCRM [7], Application of SCRM system using social media platform that control public opinion will measure the efficiency of activities and help companies to identify, which social media solutions benefit from supporting their business [8]. Companies need a multidisciplinary, coordinated, and knowledgeable expertise category to apply Enterprise Planning (S-ERP) systems [9]. Enterprise resource planning systems (ERP) are increasingly regarded as a technical platform for many business process changes and future improvement projects [10]. References [11] Post-implementation changes tend to degrade the quality of ERP systems and data that they use, and have a negative impact on company performance. Utilizing the capabilities of a hybrid ERP system, it combines the functionality of a traditional (formal) ERP installation with Enterprise Social Software (ESS) capabilities [12]. ERP becomes one of the most important enterprise applications and enables standard business processes with integrated databases and change management considered one of the most important factors for successful ERP implementation [13]. The fact that most of today's ERP systems include CRM modules and applications [14]. ERP the supply chain has become a fundamental strategy for companies that aim to protect their competitive advantage. References Defining how to integrate corporate strategy throughout the supply chain, coordinating material, information and financial flows to full fill end-customer demand [15], [16]. Require companies

to focus on improving efficiency in their way of matching supply and demand [17]. The challenge for companies is to identify and exploit opportunities through factors in it, including familiarity, behavioral care, information sharing and trust, all affecting the company's cognitive outlook regarding SCRM technology implementation [18]. Corporate strategy must respond promptly to every business opportunity, Decision-making to determine the quality of raw materials and reliable workforce requires a systematic performance appraisal [19]. In this case, efficient and effective decision-making is to select suppliers [20]. Experienced companies believe that choosing suppliers is counted as the most important activity of an organization. ERP for the process of supplier company segmentation. References so that the process of supplier selection by the company can be done effectively and efficiently resulting in an objective decision [21].

## 2. Methodology.

Companies should be aware of the needs of business processes with partners, Creating business competition had shifted from a traditional enterprise basis to a modern basis [22]. Supply chain strategy was one part of the overall business strategy that was designed based on hierarchical structure calculations with well-defined companies (innovation, low cost, service, quality) [23]. ERP had the ability to facilitate the achievement of corporate goals. It would focus on revenue growth, reducing operating costs, working capital and capital efficiency while maximizing corporate value in understanding indicator factors through social media. This research consisted of the following steps. First, the theoretical basis of applying the system was reviewed of the form a research framework. Second, this study proposed a conceptual model. Third, the research data set was built by collecting manuscripts and searching journals with electronic databases.

### 2.1. SAP ERP System.

Theoretical research of this study was the first step that was focused on the process of selection of ERP solutions, which were really in need of the company. The reason was because the researchers believed that to obtain maximum results was the right strategy composition of the target in determining the integrated strategy for them. The complete solution in the SAP ERP strategy was SCM in this case the management of current resource between the origin and destination. References [15, 16, 17] Developing companies must have the ability to build supply, distribution and

alliance networks to create supply chains. Because supply chain management was defined as managing process and control. Common thread between actions were taken to achieve the goals, it created in streamlining the integration of suppliers, manufacturers, storage. Product Life Cycle Management (PLM) could support the whole process of raw material product development. References [33, 34] Developing a corporate conceptual model was to mitigate and route PLM systems in every process of strategy with the process of management, coordination, or to gain complete business risk control. They involved full transparency and thoroughness in the quality management process and impeccable product monitoring [24].

### 2.2. Social Media (S-CRM) and knowledge management

CRM was the design of an organizational structure for two-sided relations with the customer. An important aspect of the company's operations was to acquire and maintain supplier in a more modern way [25]. References [26] over the past 20 years, CRM had continued to grow until now as Social SCRM. The emergence of social media now forced companies to rethink their business strategy [27]. This would make cooperation with customers in a comprehensive increasingly manner, References [28], [29], [30] SRM was a partial intervention variable between supplier and firm performance. References [31] Product life cycle management suggested an overall approach to the integration of business knowledge and techniques throughout the entire product life cycle. The proposed life cycle approach analyzed the multi-criteria decisions that were developed to characterize and identify environmental profiles and supplier points for five different raw material products [32].

## 3. Research Model.

Companies generally have the same goal that is the profit in business, to get maximum results. This company must be supported with qualified raw materials and a reliable workforce. The researcher analyses the most prominent constraints of corporate strategy to overcome the limitations of their supply of raw materials with suppliers or communities (fishermen). Based on researchers' analysis, 30% of the 90% of businesses that occur between the companies with suppliers or the communities (fishermen) have a very significant effect for them, then the researchers think that this can be minimized

by the implementation of SAP ERP enterprise core model, because this strategy can be divided into two parts: SCM and PLM, which are aimed to supply chain process and SCM and SRM are modeled for strategy of applying relation between them. By the growing alternative social media development in the modern business market, these results can be used to enhance the value of the company, in their gradual decision-making.

### 3.1. Research Data Models

The ERP system handles the corporate functions of their basic business, such as financial, human resources, material management, sales and distribution. The most popular application support in nowadays business market is SAP. With ERP as the solution package supporting supply chain in SCM strategy with PLM, they have criteria as in the following table.

### 3.2. ERP system and SCM performance

When organizations are facing increasing global competition, organizations have no choice apart to become more effective. Enterprise Resource Planning (ERP) system provides a single solution to provide a better understanding of the management and transparency of their business operations become a mainstay of virtually every organization. Therefore, it is important for IS programs to consider ERP in their offering. Many companies have integration issues and require absolute software solutions that can integrate various functional areas, and at the same time on functional areas to share a single and central database without any data. Analyze the multi-criteria decision was developed to characterize and identify environmental profile and suppliers' point to five different products Raw materials.

Davenport and Brooks (2004) recorded an impact ERP systems to SCM help the companies to share information with other partners. After receiving orders from their customers, their suppliers will soon replenish raw materials based on the information they receive. To monitor and gather information in the supply chain, ERP system is required with addition external functions and SCM tools and manufacturing execution systems. The main philosophy of SCM is to have the right product in the right place, at the right price, at the right time and in the right conditions. Therefore, companies not only need to circulate information within the company but also they need to share the right information with the right supply chain partners at the right time. To achieve this goal, organizations need information systems, such as ERP

systems, to facilitate synchronization of the entire supply chain and to give information to all supply chain partners to aid their decision-making and ultimately achieve customer satisfaction. ERP systems are generally understood as an important precursor to the performance of SCM and a very useful tool to improve.

**Table 1:** Criteria Company

No	3 Corporate identification structures		
	Continue	Quality.	Cost.
1.	Financial status	Pattern recognition raw materials	Prices of products or raw materials
2.	Reports	Reliability	Fee (money Pocket) The cost of shipping and distribution
3.	Experiences	Timely delivery of	Fees Qualities
4.	Relationship or proximity	Capacity supply	Rates and customs
5.	Complaints Supplier	Personality Innovative	Late fee
6.	Structure Geographic	Qualities spot Transportation	
7.		Ease of communication	
8.		Climatic conditions	

Source: data Pt. Perikanan Nusantara Ambon. 2017.

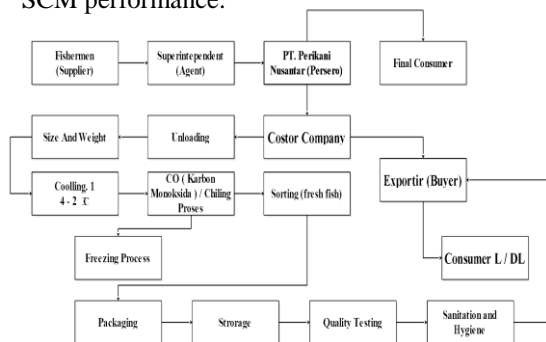
### 3.3. Social media

Customer Relationship Management (CRM) is an important concept in modern marketing, it has a very large number of suppliers, but it is so hard to keep it for long period. The researchers first analyze their strategy and then expand to a higher level with the benefits of social media, first presenting sectors that are related to standard CRM. Meanwhile, in the second point the researchers observe SCRM potential services that can be used to improve each sector of CRM before. For example, the sales sector within a company can be upgraded by the recommendation products for its customers, which can increase purchases and revenues. In addition, buying predictions can help companies to avoid products lost by communities in certain seasons. The deployment of the company's deal can help the sale, which can easily happen to send the right information through mutual identification. Similarly, other SCRM services can help CRM in different ways.

Employee involvement, lack of management chairman support, cultural incompatibility issues, and ineffective use of ERP systems will lead to failure of the ERP system, then cause the entire company to go bankrupt. This result will prevent the company's manufacturing to implement the ERP system. The ERP system has become a prerequisite in the business market and the backbone for e-business.

### Research questions.

1. Relationship between integration and performance of SCM.
2. The relationship between logistics management and SCM performance.
3. Relationship between production planning and SCM performance.
4. Relationship between controlling and SCM performance.
5. Relationship between workflow management and SCM performance.



**Figure. 1.** Concepts of Company SCM Structure

### 3.4. ERP Logistics

Each supplier has an obligation to ensure the quality of raw materials for the company, sometimes due to lack of supply chain management, basically the quality will disrupt any business profits. So the researchers analyse and compare their performance with the assessment criteria in the following table.

References [33] Developed the conceptual model that develops the company's ability to mitigate and routing the PLM system in every process of the strategy (called "the system's ability PLM") with process management, coordination, and the ability of absorption. To get the business risk control and a perfect performance they involve full transparency and rigor in the process of quality management and monitoring products impeccably [34]. Impact of supplier-customer relationship to innovation companies include transaction cost economics, resource dependency theory, and the theory of incomplete contracts SCRM a client placement strategies as the main process in each company actuaries [35]. Social customer as soon as possible to learn about the company. However, social media ahead of activities that produce competitive advantage for these companies if implemented socially [36].

Therefore, software vendors built ERP systems in the mid-1990s to solve integrated problems, created effective business solutions, and provided the company with all IT requirements under one software system [37].

### *The relationship between structural, cognitive, and relational dimensions in social capital.*

1. A higher level of structural capital of an organization is associated with higher levels of organizational cognitive capital.
2. A higher level of structural capital of an organization is associated with higher levels of relational capital of the organization.
3. The higher level of cognitive capital of an organization is associated with higher levels of relational capital of the organization.

### *Social capital and knowledge management.*

Establish a communication channel in promoting the exchange, creation, and combination of knowledge among individuals, business groups, and business partners.

1. The higher level of structural capital of an organization is associated with a higher level of organizational emphasis on knowledge management.
2. The higher level of cognitive capital of an organization is associated with higher levels of organizational emphasis on knowledge management.
3. The higher level of relational capital of an organization is associated with higher levels of organizational emphasis on knowledge management.

**Table 2:** Comparison of Company supplier performance assessment Criteria.

no	Location supplier	Performance management supplier	Frequency evaluation
1	TLH	Excellent 70%	from March to July 2017
2	HTM	Enough 60%	February 2017
3	LTH	Excellent 80%	May - August 2017
4	HT	Fair 50%	May 2017
5	P.JAYA	Very satisfied 90%	from January to August 2017
6	THR	Very satisfied 80%	from March to August 2017

Source: data Pt. Perikanan Nusantara Ambon, 2017

**Table 3:** Supply Chain Challenge

Challenges and Weaknesses	Description of supply chain challenges and weaknesses
External	Increased fuel costs, Addressing oil price volatility, Supplying chain risk, Operating structure as a result of global recession.
Competition	Balancing in serving customers who deal with suppliers, Effecting globalization on supply chains, Increasing volume of globalization and market convergence, Individualization, Acceleration of modification and diversification of product quality, Pressuring innovation enhances intense competition between producers who generate more mergers or acquisitions.
Customer	Cost reduction and service improvement, Economic weakness rate, Creating lean supply chain, efficient planning, competitive production cost and pressuring on OEM to reduce cost
Industry	Inadequate infrastructure, operating with low levels of collaboration and not responding to market changes

Source: data Pt. Perikanan Nusantara Ambon. 2017

#### 4. Results and Analysis.

Supply Chain Management is one of the company's greatest assets. However, it can also be the biggest burden for companies. The researchers analyse and apply ERP with SAP application with an integrated solution package for supply chain strategy from supplier to company with the concept of approach that gives good relation with communities (fishermen) concept, which will be applied in the following figure.

**Table 5.** Comparison of Supplier Company

Continue	Tlh	Ht m	Lt h	Ht	Jp	Thr	C
Financial	yes	yes	yes	yes	yes	yes	6
Reputation			yes		yes	yes	3
experience	yes		yes	yes	yes	yes	5
Relationsp			yes		yes	yes	3
Complaints					yes	yes	2
Geographic	yes	yes	yes	yes	yes	yes	6
Quality	TLH	HTM	LTH	HITU	J.P	THR	C
Raw	yes	yes	yes	yes	yes	yes	5
Reliability			yes		yes	yes	3
Time	yes	yes	yes	yes	yes	yes	6
Capacity	yes	yes	yes		yes	yes	5
Innovation	yes	yes	yes		yes	yes	5
Transportation	yes	yes	yes	yes	yes	yes	6
Communications			yes		yes	yes	3
Climate Condition							0

Cost	TLH	HTM	LTH	HT	JP	THR	C
Price BB	yes	yes	yes	yes	yes	yes	6
Cost (pocket)					yes	yes	2
Distribution costs					yes	yes	2
Cost quality	yes	yes	yes	yes	yes	yes	6
Customs					yes	yes	2
Cost of delay							0

Source: data Pt. Perikanan Nusantara Ambon. 2017

**Table 4:** Result of analysis for ERP

Item Statistics			
	Mean	Std. Deviation	N
THL	1.5000	.51299	20
HTL	1.5500	.51042	20
LTH	1.3500	.48936	20
HITU	1.4000	.50262	20
P.JAYA	1.1000	.30779	20
THR	1.1000	.30779	20
Financial	3.8000	2.04167	20
Reputation	3.8000	2.04167	20
experience	4.0000	2.05196	20
Relationship	4.0000	2.05196	20
Complaints	3.8000	2.04167	20
Str. Geographic	3.9000	2.04939	20

Source: data. Perikanan Nusantara Ambon. 2017

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
HTL	29.8000	9.537	.100	-1.907 <sup>a</sup>
HTM	29.7500	9.461	.126	-1.931 <sup>a</sup>
LTH	29.9500	10.366	-.155	-1.669 <sup>a</sup>
HITU	29.9000	8.832	.345	-2.148 <sup>a</sup>
J PELITA	30.2000	9.642	.198	-1.893 <sup>a</sup>
THR	30.2000	9.642	.198	-1.893 <sup>a</sup>
Financial	27.5000	18.474	-.714	-.220 <sup>a</sup>
Reputation	27.5000	6.789	-.079	-2.491 <sup>a</sup>
experience	27.3000	10.221	-.329	-1.281 <sup>a</sup>
Relationship	27.3000	16.432	-.633	-.381 <sup>a</sup>
Complaints	27.5000	7.947	-.174	-1.968 <sup>a</sup>
Geographic	27.4000	10.147	-.324	-1.299 <sup>a</sup>

Source: data Pt. Perikanan Nusantara Ambon. 2017

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
31.3000	10.116	3.18053	12

**Table 6.** Result of analysis for ERP

Item Statistics			
	Mean	Std. Deviation	N
THL	1.5000	.51299	20
HTL	1.5500	.51042	20
LTH	1.3500	.48936	20
HITU	1.4000	.50262	20
P.JAYA	1.1000	.30779	20
THR	1.1000	.30779	20
Financial	3.8000	2.04167	20
Reputation	3.8000	2.04167	20
experience	4.0000	2.05196	20
Relationship	4.0000	2.05196	20
Complaints	3.8000	2.04167	20
Str. Geographic	3.9000	2.04939	20

Source: data. Perikanan Nusantara Ambon. 2017

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Source: data Pt. Perikanan Nusantara Ambon. 2017

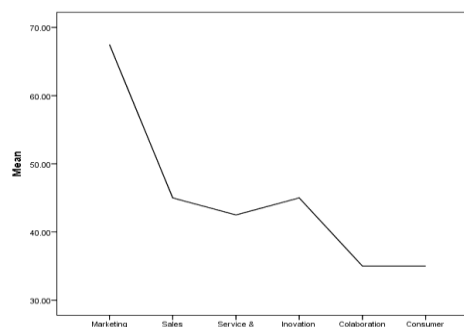
Scale Statistics

Mean	Variance	Std. Deviation	N of Items
31.3000	10.116	3.18053	12

**Perspective of Media Social**

These findings prove that the customer basis is concentrated by reflecting strong supplier-customer relations and high switching costs, motivating suppliers to invest more in R & D and becoming more innovative [35]. However, the evidence also shows that a strong customer bargaining power creates problems and forces suppliers to invest less in innovation.

The results are above average for social media implementation techniques, media as a source of sophisticated indicators that control the situation and affect the business partnership on corporate innovation.



**Figure. 2.** CRM to S-CRM Company reports

Marketing					
		Freq.	%	Valid %	Cum %
Valid	30.00	1	25.0	25.0	25.0
	70.00	1	25.0	25.0	50.0
	80.00	1	25.0	25.0	75.0
	90.00	1	25.0	25.0	100.0
	Total	4	100.0	100.0	
Sales					
		Frequency	Percent	Valid %	Cum %
Valid	.00	1	25.0	25.0	25.0
	50.00	1	25.0	25.0	50.0
	60.00	1	25.0	25.0	75.0
	70.00	1	25.0	25.0	100.0
	Total	4	100.0	100.0	
Innovation					
		Frequency	Percent	Valid %	Cum %
Valid	.00	1	25.0	25.0	25.0
	50.00	2	50.0	50.0	75.0
	80.00	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

Service & Support					
		Frequency	Percent	Valid %	Cum%
Valid	10.00	2	50.0	50.0	50.0
	70.00	1	25.0	25.0	75.0
	80.00	1	25.0	25.0	100.0
	Total	4	100.0	100.0	
Collaboration					
		Frequency	Percent	Valid %	Cum %
Valid	.00	2	50.0	50.0	50.0
	70.00	2	50.0	50.0	100.0
	Total	4	100.0	100.0	
Consumer					
		Frequency	Percent	Valid %	Cum%
Valid	.00	2	50.0	50.0	50.0
	50.00	1	25.0	25.0	75.0
	90.00	1	25.0	25.0	100.0
	Total	4	100.0	100.0	

The CRM system plays an important role in supporting this view by integrating data between the sales and marketing teams and providing appropriate reporting capabilities. CRM systems are typically regarded as Enterprise Systems (ES) types, with many CRM solutions that build themselves in the marketplace, such as Sales-force, Sugar CRM, Hub-spot and other providers [14]. The CRM market reaches 26.2 Billion USD by 2015, and Sales-force is the current market leader and holds a 19.7% market share.

## 5. Conclusion

In this study, we developed a theoretical framework to investigate the effects of risk management on the performance of the company's supply chain that has developed into e-Supply Chain with a corporate information system strategy that had considerations in the company's decision making in order to compete in the business market, We took this step because we saw that HR was unable to be aligned with natural resources so that many of these companies did not find opportunities to compete with others. The tangible results were that the three combinations of Risk Management strategy, e-SCM and company information flow were able to minimize the company's business failures and show that this strategy of almost 80% had a positive impact, because the results in 2017 found a significant increase in their companies, ranging from the information system by HRD to the implementation of the supply chain strategy for each of their suppliers.

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