

# The Role of Supply Chain Process in the Goal Attainment among United Nations Missions in Conflict Situations

## A Case Study of United Nations Mission in South Sudan (UNMISS)

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**Abstract-** *The need for organizations to have successful supply chain management so that, the goals of these organizations are attained is uncontested. However, the UN peacekeeping missions have had challenges ensuring the effectiveness of the supply chain. Therefore, this study sought to establish the effect of supply chain processes on the attainment of goals in the UN peacekeeping missions. Supply chain processes involved value creation, integration of key business processes and collaboration of the team members and other partners. The theoretical underpinning of the study was based on the Systems theory of Bertalanffy (1950) to view UNMISS as a system with supply chain management. The study adopted a descriptive case study research design. Descriptively, the study employed questionnaire and document reviews in the data collection process while analysis and presentation of findings involved the use of tables, graphs and charts. The study established that the supply chain processes are very important in the attainment of UN peacekeeping mission goals in South Sudan. These processes in terms of value creation, integration of key business processes and collaboration amongst stakeholders ensure that there is value for money through full utilization of resources, obedience of decisions made by the UN secretariat, employment of competent staff training and continued flow of their activities. The model results showed that value creation has a positive significant effect on the attainment of goals in the UN peacekeeping mission in South Sudan. The researchers recommended that the need to embrace technology is paramount when it comes to supply chain management and attainment of goals by the UN peacekeeping missions.*

*Key words:* supply chain Management, Value creation, conflict, goal attainment, UNMISS

### 1. Introduction

The role of supply chain process, as well as the management of these processes in the attainment of goals of an organization is uncontested. Supply chain has been defined differently by different scholars. Kenneth et al., [1] define a supply chain as a set of three or more entities for organizations and/or individuals directly involved in the upstream and downstream flows of products, services, finances, and/or information from

source to customer. Stank et al., [2] define Supply chain management (hereafter referred to as SCM) as a “strategic level concept”. Ho et al., [3] conceptualized Supply Chain Management as having three core elements: value creation, integration of key business processes and collaboration. It is important to note that successful supply chain management requires cross functional integration within the firm and across firms that comprise the supply chain [4]

The theoretical underpinning of the study was based on the Systems theory of Bertalanffy, (1950) to view United Nations Mission in South Sudan (hereafter referred to as UNMISS) as a system with supply chain management. Systems theory provides an analytical framework for viewing an organization in general. Underpinned by that, this study based on Ho et al., [3] to conceptualize supply chain processes as value creation, integration of key business processes as well as collaboration amongst stakeholders including staff, suppliers and clients. United Nations (hereafter referred to as UN) currently implements numerous activities including Peacekeeping to maintain international peace and security throughout the world [5] Today, UN is operating fourteen field-based Special Political Missions in various countries [5] UN’s Peacekeeping missions directly involves supply chain management that have been questioned for cases of procurement malpractices and therefore, measures are now being sought to ensure that procurement is transparent and accountable though fast enough to allow timely provision of rescue service operations [5]. A case in point is an audit of the U.N. mission in Sudan that revealed tens of millions of dollars lost to mismanagement and waste and substantial indications of fraud and corruption [6]

United Nations Mission in South Sudan (UNMISS) was established from UN Mission in Sudan (UNMIS) formed on 9 January, 2005 to monitor the Comprehensive Peace Agreement (CPA) that ended over 20 years of civil war

between South Sudanese rebels (SPLA/M) and the Khartoum government [7]. The idea was that this mission has involved a lot of procurement of goods and services and therefore, adequate data would be got from the UN staff at the mission [7]

Economic growth is now largely derived from business activity, with private financial flows moving around the world now far exceeding official aid or grants [8] Business has long set the pace in supercharging the productivity of human endeavor, ending conflicts and defeating disease, communicating and computing among others; This can be achieved with the correct flow of supply chain processes [9]. Supply Chain Management (SCM) considers integration of both information and material flows seamlessly across the supply chain as an effective competitive weapon [10].

Many organizations have begun to recognize that SCM is the key to building sustainable competitive edge for their products and/or services in an increasingly crowded marketplace [8] The concept of SCM has been considered from different points of view in different bodies of literature such as purchasing and supply management, logistics and transportation, operations management, marketing, organizational theory, and management information systems. Various theories have offered insights on specific aspects or perspectives of SCM, such as industrial organization and associated transaction cost analysis, resource-based and resource dependency theory, competitive strategy and social political perspective [11]

### 1.1 Theoretical analysis

The theoretical basis for this study is derived from the systems theory of organizations [12]. A system in this frame of reference can contain regularly interacting or interrelating groups of activities. This theory emerged as part of the intellectual agitation following World War II (It is crucial to note at this point that peacekeeping activities and UN are also traced at this period). Systems theory is the interdisciplinary study of systems in general, with the goal of explaining principles that can be applied to all types of systems at all nesting levels in all fields of research. It was developed by Ludwig von Bertalanffy who was concerned of the growing compartmentalisation of knowledge and argued that certain general ideas could have relevance across a broad spectrum of disciplines [12]

Bertalanffy believed a general theory of systems should be an important regulative device in science, to guard against superficial analogies that are useless in science and harmful in their practical consequences. He argued that despite obvious differences among the many kinds of organizations or departments, they still share very general

characteristics and it is important to discover what they are [13]

The systems theory cuts across the four paradigms of management thought. Every organization that produces output is a system of some sort. This is because; organizations have a complex social system such that, separating the parts from the whole reduces the overall effectiveness of organization [10]. An organization including the United Nations Mission, regardless of size and purpose and the management perspective is basically concerned with relationships, structures and interdependence as opposed to constant attributes. This theory recognizes the interdependence between groups of individuals, structures and processes that enable an organization to function [12].

This study was underpinned by the postulates of the systems theory because UN peacekeeping missions like other organization are always in constant exchange with the other stakeholders including government and society. The postulates of this theory are; all phenomena can be viewed as a web of relationships among elements, or a system, all systems have common patterns, behaviors, and properties that the observer can analyze and use to develop greater insight into the behavior of complex phenomena and to move closer toward a unity of the sciences. It is crucial to note that organizations have relationship with the environments that can be seen as the source of complexity and interdependence. In most cases, the whole organization has properties that cannot be known from analysis of the constituent elements in isolation.

The promises of the theory are that; designed to deal with complexity, Attempts to do so with precision, takes a holistic view, it is a theory of emergent's actions and outcomes at the collective level emerge from the actions and interactions of the individuals that make up the collective organization [12,14].

In view of the above, the supply chain management needs to consider all the processes as a system well knowing that failure of one of the activities affects all the other process as informed by the systems theory [15]. It is that basis that the researchers considered value creation, integration of business processes and Collaboration among staff and members as well stakeholders. The view was that a combination of these, affects the attainment of goals in UN peacekeeping missions.

This study was therefore guided by the specific objectives of; (i) To find out the effect of value creation on the attainment of goals in the UN peacekeeping missions, (ii) To ascertain the effect of integration of key business processes on the attainment of goals in the UN

peacekeeping missions and (iii) To establish the effect of collaboration of team members and partners on the attainment of goals in the UN peacekeeping missions

## 2. Literature review

### 2.1 Understanding Value creation in attainment of goals in the UN peacekeeping missions

The business dictionary defines Value creation as the performance of actions which increase the worth of goods, services or even a business. Many business operators now focus on value creation both in the context of creating better value for customers purchasing its products and services, as well as for shareholders in the business who want to see their stake appreciate in value [14].

Goal attainment is a methodology that shows promise for application to intervention effectiveness research and program evaluation in occupational therapy [16].

Austin et al [17] investigated the collaborative value creation (CVC) considering nonprofits and businesses. They presented the partnering processes that unpack the value creation dynamics and the collaboration outcomes that examine the benefits and costs on multiple levels [17]. They suggested that greater value is created at all levels of analysis, micro, meso, and macro, as collaboration moves from sole creation to co-creation of value [17]. The CVC framework assigns equal importance to all forms of value (economic, social, and environmental), types of actors (individuals, organizations, and societies), and time scales (short/long term), providing the analytical paths for assessing value creation holistically [16, 17]. Their argument was that examining systematically the processes and the outcomes of value co-creation allows for greater specificity, dimensionality, and inclusivity.

Robert [18] set out to apprehend claims about person-product relationships circulating in the world of business. He takes up approaches that presuppose the embeddedness of economic action in shifting networks or assemblages of people and things and that call attention to the agency distributed within such networks [18]. He posed two sets of related questions. Whether we can translate marketing claims that relationships between consumers and corporate brands define a locus of value creation into the terms of Marx's theory of value? And how might this translation revise not only the marketing claim, but also Marx's understanding of surplus value creation? Second, whether we can translate the claim that value creation hinges on a dynamic relationship between corporations and consumers into terms of a theory of participatory democracy? [19] He addressed these questions of commodity networks and consumer agency with a set of visual props drawn from research into the socio technical

lives of an iconic type of global commodity: Coca-Cola brand soft drinks

### 2.2 Understanding Key business processes and the attainment of goals in the UN peacekeeping missions

Ghattas et al [20] established a Learning Business Process Model (LPM) as part of a process lifecycle management approach. They defined business process learning as the mechanism which provides the ability to perform a specific process better with time, based upon the experience acquired while executing the process, which is reflected through the accomplishment of better soft-goals. The LPM relates the process outcomes, the process context and the process soft-goal measurement in order to establish proposals for paths that would improve the soft-goal outcomes.

According to Murray [21] purchasing effectiveness requires that the price utilized by the purchasing department for an item is not necessarily a good measurement for purchasing performance. The price of an item may fluctuate due to market conditions, its availability, and other demand pressures; therefore the purchasing department may not be able to control the price. A popular method of assessing purchasing effectiveness is to review the inventory turnover ratios [22]. The ratio measures the number of times, on average; the inventory is used, or turned, during the period. The ratio used to measure the liquidity of the inventory. However, this is not always a great measure of purchasing effectiveness as seasonal requirements for having items in stock can make this measurement inaccurate.

Murray [21] also argues that in order to ensure effective purchasing there is need to monitor and observe efficiency in the entire purchasing process. Administrative costs are the basis for measuring purchasing efficiency. This performance measurement does not relate to the amount of purchased items that the department has procured. The measurement relates to how well the purchasing department is performing in the activities they are expected to perform against the budget that is in place for the department. If the purchasing costs are within the budget then the efficiency of the purchasing department will exceed expectations. If the department is using funds over and above the budget then the purchasing function is not efficient.

According to the Chartered Institute Purchasing and Supply (CIPS)[23] effective purchasing is relevant for the smooth operations of an organization and the expenditure of resources outside the organization, and the dependence on an external supply chain, exposes the organization to a wide variety of risks. A significant function for the

purchasing structure of an organization is to identify, if possible minimize, and otherwise manage the likely impact of such risks to the organization itself and to other stakeholders [9, 23]. For any significant expenditure, long-term commitment, or identifiable formal risk assessments will be made, as appropriate, addressing: supply risk, demand risks, process risks, control risks, Environmental risks and social risks [23].

Integration of SCM processes ensures that strategic supplier partnership, information sharing and, to an extent, customer relationship are possible. Integration of the SCM entails all the agents in the supply chain joining efforts to pursue common goal for example customer satisfaction [24]. It also enhances coordination amongst partners by creating a compact chain leading to chain efficiency. This is because it leaves no space between the manufacturer and the distributor and it encourages the facilitation of information flow along the entire chain. [24]

Successful SCM should not only focus on the integration of external partners, but also internal integration. Kim [25] argues that, comprehensive efforts for improvement in all supply chain functions within a firm should be made by, shifting the focus of their supply chain practices from functional and independent to general and integrative. Internal integration can be accomplished by the automation and standardization of each internal logistics function, the introduction of new technology and continuous performance control under formalized and centralized organizational structure [22, 25]. External integration can be achieved through sharing information and the strategic linkage with suppliers and customers, as well as the standardization of logistics processes between firms [25].

### **2.3 Understanding Collaboration of the team and the attainment of goals in the UN peacekeeping missions**

Parkinson [26] considered Collaboration as a mutually relationship that is beneficial and defined, entered into by two or more individuals or organizations to achieve common goals. The relationship includes a commitment to mutual relationships and goals, a jointly developed structure and shared responsibility; mutual authority and accountability for success and sharing of resources and rewards. In fact, it is imperative to keep in mind that collaboration is a means to an end, not an end in and of itself. Therefore, mutual efforts are useful in terms of enhancing organizations` focus, centralizing processes, getting better communication within and between organizations so as to achieve the desired goal [26].

Batt [27] built on the extent literature of buyer-seller relationships to develop a model that describes the

relationship building process. He started from the suppliers who offer quality, and demonstrated how relational satisfaction leads to trust and the customers desire to maintain the relationship. The variables were examined in relation to the dependence and the exchange partners willingness to make idiosyncratic investments.

According to Durch [28] the United Nations has no single, co-located team dedicated to managing information, tracking multiple crisis and conflict trends, recommending preventive action based on those trends, or anticipating international UN requirements for either peacekeeping or peace building. Repeated efforts to create such a capacity have been resisted by UN member states. The Panel recommended establishing an ECPS-based information and strategic analysis staff (EISAS) to tackle such tasks. Member states again opposed the measure, allowing only a small ECPS support secretariat.

DPKO's Best Practices Unit and Situation Center, however, are evolving rapidly as part of a peace operations knowledge network, and DPA's Policy Planning Unit is developing support networks outside the UN system. Combined with the growing number of UN headquarters personnel with field experience, such offices may permit some of the Report's objectives to be met by widely dispersed people using a few common data libraries and joint reporting and analysis criteria. As recommended, an UN-wide Extranet is being developed to connect headquarters and UN missions worldwide with broadband communications. UN policies and procedures posted to the extranet will promote delegation of authority to missions and thus greater speed and efficiency in hiring, management, and procurement, plus rapid sharing of best practices [5].

Responding to ethnic massacres in north eastern Congo, UN Secretary General urged the Security Council to authorize first an emergency multinational coalition force and then an expanded and more robust mandate for MONUC, the UN peacekeeping mission in the country [28]. The larger UN force began to deploy in August 2003, replacing French-led Operation Artemis at the end of that month. In early October 2003, the UN assumed command of peacekeeping in Liberia. A shaky ceasefire and peace accord reached in Accra, Ghana, by Liberia's several political/military factions the previous June soon broke down, necessitating the rapid deployment of West African peacekeepers with UN blessing [28]. This force was given logistical support by the well-established UN operation in neighboring Sierra Leone and temporary air support by an American amphibious ready group offshore. West African troops were mostly re-hatted as blue helmets when the UN Mission in Liberia (UNMIL) got underway [29]

### 3. Methodology

#### 3.1 Design

This study adopted a descriptive case study research design. This design was selected to enable the in-depth description of the effect of supply chain process on the goal attainment of UN mission in a conflict situation. Descriptively, the study employed questionnaire and document reviews in the data collection process

#### 3.2 Study Population and sample size

The population of the study was all the employees at the UN Peacekeeping Mission in South Sudan. The study however targeted employees at different management levels at the UN Peacekeeping Mission in South Sudan. The study employed a sample size of 40 respondents. This sample size is considered large enough for the researcher to study the supply chain processes and procurement of UN in a conflict situation.

#### 3.3 Sampling Techniques and data collection

Simple random sampling method was used to select respondents in this study. This sampling technique did not tolerate any level of bias in choosing the sample hence doing away with the sampling errors. [30]

The researchers designed a structured questionnaire with mostly close ended questions. This was self-administered by the researchers. Document review was done as a source for secondary data. UN peacekeeping mission documents such as UN reports on supply chain activities and their effect on goal attainment among UN missions in conflict situations were reviewed. Permission was sought from the head of the mission before the process of data collection

#### 3.4 Data processing and analysis

The data collected was edited by the researchers to ensure completeness and accuracy and was entered using Epi-data computer program since this programme did not give room for data entry errors. After entry, data was exported to Statistical Package for Social Scientists (SPSS version 20) for analysis. Univariate level of analysis was performed. This analysis involves measures of central tendency such as one variable averages. Findings were presented in frequency distribution tables; Spearman correlation was performed to test the relationship between goal attainment and the supply chain variables. A simple

linear regression model was run to ascertain the empirical effect of the independent variables on the dependent variables. All tests were measured at 0.05 level of significance.

### 4. Results

#### 4.1 Background characteristics of study participants

The background characteristics of the participants included the age, gender, marital status, household size and education level. The total number of participants in this study was 40 sampled from different management levels of UN staff in UNMISS. Of the 40 participants, more than half (60%) were male while less than half (40%) were female (table 1). Half of the participants (50%) fell in the age bracket of 31-40 years. More than a quarter (30%) was in the age bracket of 41-50 years. 20% of the participants were between 20-30 years. Most participants 80% attained university degrees while 20% attained other qualifications from other tertiary institutions. The results further reveal that half of the participants (50%) were at lower management level while more than a quarter were at middle level management. Only 20% were at top level management positions. Details are described in table 1 below

**Table 1: Background characteristics of study participants**

Characteristic (n=40)	Frequency	Percentage	Mean ( $\pm$ SD)
<b>Gender of participant</b>			1.36 $\pm$ 0.48
Male	24	60	
Female	16	40	
<b>Age of participant</b>			43.3 $\pm$ 13.57
20-30	8	20	
31-40	20	50	
41-50	12	30	
<b>Education level</b>			2.17 $\pm$ 0.66
Other qualification	8	20	
University degrees	32	80	
<b>Management level</b>			1.27 $\pm$ 0.99
Top level	8	20	
Lower level	20	50	
Middle level	12	30	

#### 4.2 Effect of Value creation on the attainment of goals in the UN peacekeeping missions

Under this, the interest was in discovering the effect of value creation on the attainment of goals in the UN

**Table 2: value creation**

Statement	SD	D	NS	A	SA	Mean
Operating decisions are made by UN Secretariat	00	00	15	20	65	3.8
UN logistics team competent	00	00	10	30	60	3.9
UN peace keeping team has continuers flow of activities	00	5	5	20	60	3.8
UN undertakes training on standard operating procedures	00	00	00	30	70	3.8

*SD=strongly disagree, D=Disagree, NS=Not sure,*

*A=Agree, SA=strongly agree*

The results in table 2 above reveal the decisions made by UN secretariat to promote full utilization of resources registered a mean value of 3.8 indicating that the decisions favor full resource utilization. The UN procurement procedures and many other governing policies are essential in abolishing resource wastage and thereby promoting full resource utilization. On whether the logistics team is competent, the response registered a mean value of 3.9 indicating that members of the logistics team are skilled, knowledgeable and experienced in the UN logistics activities. This is supported by the fact that most of them had high education attainment with majority having studied up to university. This means that the logistics team is competent. The members of the logistics team are skilled, knowledgeable and experienced in the UN logistics activities. This results from the fact the team members had served UN peacekeeping mission for a reasonable number of years. This makes them able to handle and implement the activities of the mission within the stipulated time aimed at attaining the goals of the UN peacekeeping mission in South Sudan. Concerning the

peacekeeping mission in South Sudan. Value creation was studied in terms of accountability and ensuring efficiency, transparency and value for money in peacekeeping procurement. The findings are presented in table 2 below;

aspect of training, the response registered a mean value of 3.8 implying that UN staffs undergo competent training about standard operation procedures. The training is done before assignment of duties to the employees in the mission. Training is performed about general or standard operation policies and procedure aimed at attainment of goals of the UN peace keeping mission. Similarly the UN peacekeeping team has a continuous flow of its activities based on 3.8 mean value registered in this response. The procurement activities of the UN peacekeeping mission in South Sudan follow a systematic process. Measuring the relationship between goal attainment and supply chain processes

#### 4.3 Integration of key business processes and the attainment of goals in the UN peace keeping missions

This explored the effect of integration of key business processes on the attainment of goals in the UN peacekeeping missions as highlighted in the second objective for this study. The results are presented in table 3 below;

**Table 3: Effect of integration of key business processes on the attainment of goals in the UN peacekeeping missions**

Statement	SD	D	NS	A	SA	Mean
Procurement follows the standard UN procurement procedures.	00	00	10	60	30	4.2
UN peacekeeping mission operates hand in hand with other organizations or bodies to ensure smooth flow of its activities.	00	00	00	60	40	4.4
There is a good supplier partnership in organization	00	00	20	50	30	4.1
The organization outsources critical services.	00	10	30	50	10	3.6
The aspect of cycle time compression is never left out.	00	10	00	80	10	3.9

*SD=strongly disagree, D=Disagree, NS=Not sure, A=Agree, SA=strongly agree*

Source: Primary Data (2015)

Table 3 presents the percentages and means of responses on effect of integration of key business processes on the attainment of goals in the UN peacekeeping missions. The results reveal the following; on whether procurement follows the standard UN procurement procedures, the response registered a mean value of 4.2 indicating that

procurement in the UN peacekeeping mission in South Sudan follows the standard UN procurement procedures. The procurement procedures followed in the purchasing and selling of UN properties are well documented as way to avoid mismanagement of the properties. The mean value of 4.4 was registered on whether UN peacekeeping mission operates hand in hand with other organizations or

bodies to ensure smooth flow of its activities. This implies that on average, respondents agreed that the UN peacekeeping mission operates hand in hand with other organizations or bodies to ensure smooth flow of its activities. On whether there is a good supplier partnership in the organization, the response registered a mean value of 4.1 implying that on average, respondents agreed that UN peacekeeping mission works cordially and harmoniously with the suppliers. This shows that the peacekeeping mission works cordially and harmoniously with its suppliers of food stuffs, clothes and other basics to the victims of conflict. Concerning outsourcing, the study found out a mean value of 3.6 indicating that UN peacekeeping mission in South Sudan often outsource its services. UN usually hires and recruits its own staffs that do the UN activities in the peacekeeping missions on its behalf. The mean of 3.9 was registered on the aspect that

cycle time compression is never left out. This shows that the aspect of cycle time compression is never left out. The activities of the UN peacekeeping mission usually follow systematic process from the beginning to the end of the mission. This makes its work continuous in order to enable it attain its goals in the long run.

#### 4.4 Collaboration of stakeholders and the attainment of goals in the UN peacekeeping missions

The attainment of goals in UN peacekeeping missions requires that stakeholders collaborate. Therefore, the researchers were interested in establishing first of all whether the stakeholders engaged in managing the supply chain in UNMISS collaborate and then establish the effect of this collaboration on the attainment of goals in UN peacekeeping mission in South Sudan. The results are presented in table 4 below;

**Table 4: Effect of collaboration of team members and partners on the attainment of goals in the UN peacekeeping Missions**

Statement	SD	D	NS	A	SA	Mean
Team work exists in the UN peace keeping mission	00	00	00	90	10	4.1
Teams are well managed	00	00	10	40	50	4.4
Team members are result oriented	00	00	00	60	40	4.4
The aspect of Information Technology sharing is up-to date.	10	00	20	50	20	3.7
Procurement team works hand in hand with the management of the UN peace keeping mission	00	10	30	50	10	3.6

*SD=strongly disagree, D=Disagree, NS=Not sure, A=Agree, SA=strongly agree*

*Source: Primary Data (2015)*

Table 4 presents the results on effect of collaboration of team members and partners on the attainment of goals in the UN peacekeeping missions. It reveals the following findings; on whether team work exists in the UN peacekeeping mission of South Sudan, the study registered a mean value of 4.1 for the response. This finding implies that employees in the UN peacekeeping mission work together as a team in order to attain the organization goals. This indicates that there is collaboration in the peace keeping mission. This finding is in agreement with [28] who revealed that the United Nations has no single, co-located team dedicated to managing information, tracking multiple crisis and conflict trends, recommending preventive action based on those trends, or anticipating international UN requirements for either peacekeeping or peace building. Concerning team management, the response registered a mean value of 4.4 indicating that teams in the UN peacekeeping mission in South Sudan are well managed. On whether team members are result oriented, the response registered a mean value of 4.4 implying that members in specific teams operating under the UN peacekeeping mission in South Sudan work hard to yield positive results each single day. The belief is that, the better the results, the higher the chances of renewing their

contracts. This makes the employees to work hard and achieve the goals of UN peacekeeping mission. Similarly employees share information technology as observed by the mean of 3.7 on this response. This finding indicates that technology helps members of the UN peacekeeping mission to improve on their productivity and efficiency. In a similar way, procurement team works hand in hand with the management of the UN peacekeeping mission according the response's mean value of 3.6 which implies that the working relationship between management and other employees in the mission is good. The working relationship between management and other employees in the mission is good.

#### 4.5 The relationship between goal attainment and supply chain processes

Results in table 5 indicated that legal value creation, key business processes and collaborations were positively and significantly correlated with goal attainment ( $r=.579$ ,  $p \leq 0.01$  for value creation,  $r=.565$ ,  $p < 0.01$  for key business processes, and  $r=.601$ ,  $p < 0.01$  for collaborations). The correlation results reveal that there exists a positive, moderate and significant relationship between supply chain processes Parameters and goal attainment. These finding implies that the supply chain

processes contributed moderately to attainment of goals in the UN. This is further explained by establishing the coefficient of determinism for each supply chain process parameter which shows that only 33.5%, 31.9%, and 36.1% of variations in goal attainment can be explained

by value creation, key business processes and collaborations respectively

**Table 5: Summary of correlation between Goal attainment and value creation, key business processes and collaboration**

	1	2	3	4
<b>Goal attainment (1)</b>	1			
<b>Value creation (2)</b>	.579**	1		
<b>Key business Processes (3)</b>	.565**	.649***	1	
<b>Collaboration (4)</b>	.601**	.543**	.698***	1

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Source: Primary data

#### 4.6 Supply chain processes on the attainment of goals in the UN peacekeeping mission of South Sudan.

The purpose of the study was to measure the effect of Supply chain processes on the attainment of goals in the

UN peacekeeping missions. These processes were studied in terms of value creation, integration of key business processes and collaboration of stakeholders involved in the supply chain management. To establish this, a simple linear regression was run and the results are presented in table 6 below;

**Table 6: Regression analysis for the effect of supply chain processes (value creation, key business processes, and collaboration) on goal attainment**

	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		
	B	Std. Error	Beta	T	Sig.
(Constant)	0.818	0.113		7.253	0.000
Value creation	.590	0.189	.833	3.115	0.004
Key business processes	.291	0.164	.301	1.771	0.085
Collaboration	-1.261	0.335	-1.092	-3.759	0.001
R Square	.407		F Statistic	18.332	
Adjusted R <sup>2</sup>	.385		Sig (F Statistic)	.000	

*Dependent Variable: Goal attainment Predictors: (Constant), value creation, key business processes, collaboration)*

Source: Primary data

The results in table 6 present the following

Model showing that;

Goal attainment = 0.818 + 0.590 value creation + 0.291 key business processes - 1.261 Collaboration.

These modeled results show that value creation has a positive effect on the attainment of goals in the UN peacekeeping mission in South Sudan. This implies that increasing values enhances chances of attaining goals in the UNMISS by 0.590. (B=0.590, P<0.01). Integration of key business process had a positive but non-significant effect on the attainment of goals in the United Nations

peacekeeping mission in South Sudan (B=0.291, P>0.05). This means that integration of key business process increases the probability of attaining goals by 0.291. Key business processes integration implies that SCM is not a specialized supporting function but, a basic strategic business process [31]. The implication is that Integration replaces inventory with information to provide visibility, such that raw materials and finished goods can be replenished quickly and arrive at the points of use in smaller lot sizes, especially in a just-in-time system. Key business process integration represents the most advanced state in the evolutionary development of purchasing, procurement and other supply chain activities [32]. The results further reveal that Stakeholder collaboration has a



negative but significant effect on attainment of goals in UN peacekeeping mission in southern Sudan ( $B=-1.261$ ,  $P<0.001$ ). This shows that increasing collaboration reduces the probability of attaining goals by 1.261. A single organization can hardly meet customer demand on its own and therefore the support of other organizations in the supply chain is also needed [33] Therefore, it is vital that strategic alliances that are long term are made for the effectiveness of supply chain management. These can take forms of; cross organizational logistics management, joint planning, supplier-buyer partnerships, control of inventory and information sharing [34].

## 5. Conclusion and Recommendations

Supply chain processes involved value creation. The study established that the supply chain processes are very important in the attainment of UN peacekeeping mission goals in South Sudan. These processes in terms of value creation, integration of key business processes and collaboration amongst stakeholders ensure that there is value for money through full utilization of resources, obedience of decisions made by the UN secretariat, employment of competent staff training and continued flow of their activities. The model results showed that value creation has a positive significant effect on the attainment of goals in the UN peacekeeping mission in South Sudan. Therefore UN needs to be the source of procurement best practices so that member states can always draw lessons from the United Nations. Effective peacekeeping procurement in UN is a good step towards realization of the robust vision of the U.N. as a key vehicle for maintaining international peace and security quickly ran afoul of the interests of member states.

The study recommended that since United Nations is a family with a number of organizations, like World Health Organization, Food and Agricultural Organization, United Nations Children's Education Fund among others; UNMISS needs to collaborate with all these such that peace building and keeping is holistic in the country. Such collaboration comes with numerous benefits to the stakeholders.

In addition, it is crucial that the supply chain system of UN conforms to the public procurement of the host country. This respects the independency of the state and minimizes conflict amongst these independent organs for mutual existence. It also allows for litigation of those who abuse the supply chain procedures.

It is further vital that technology is embraced in promoting supply chain management and attainment of goals by the UN peacekeeping missions. Management information systems are paramount when it comes to management of

the supply chain for effective pre-bidding, actual bidding and post bidding for effectiveness.

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### Key note

*The findings, interpretations, and conclusions expressed are entirely those of the authors and should not be attributed in any manner to The United Nations (UN), to its affiliated organizations, or to members of its Board of Executive Directors.*

### References

- [1] Kenneth W., Green J., Whitten D. & Inman R. A., (2008): The impact of logistics performance on organizational performance in a supply chain context.
- [2] Stank, T.P., Keller, S.B. and Closs, D.J.(2002), Performance benefits of supply chainlogistical integration, *Transportation Journal*, Vol. 41 No. 2/3
- [3] Ho, D.C.K., Au, K.F. and Newton, E. (2002), Empirical research on supply chain management: a critical review and recommendations", *International Journal of Production Research*, Vol. 40 No. 17, pp. 4415-30.
- [4] Lambert D., M. (2008) *Supply Chain Management: Processes, Partnerships, Performance Supply Chain Management institute*, 3<sup>rd</sup> edition.
- [5] Gowan R. and Gleason M., (2012) *UN Peacekeeping: The Next Five Years. A Report by the New York University Center on International Cooperation Commissioned by the Permanent Mission of Denmark to the United Nations.*
- [6] Kanjanakantorn, p., (2008), *United Nations Mission in Sudan (UNMIS) UN business seminar in cairo, Egypt 2 – 3 June, 2008*
- [7] Fréchette, L., (2012) *UN Peacekeeping: 20 Years of Reform: CIGI Papers no. 2*
- [8] Tan, K. C., Lyman, S. B. & Wisner, J. D. (2002). *Supply Chain Management: A Strategic Perspective. International Journal of Operations & Production Management. Volume 22. Number 6. Pp 614-631. Emerald Group Publishing Limited.*
- [9] Tracey, M., Lim, J. & Vonderembse, M. (2005). The impact of supply chain management capabilities on business performance. *Supply Chain Management: An International Journal. Volume 10. Number 3. Pp 179-191. Emerald Group Publishing Limited*

- [10] United Nations (2013) United Nations Secretary Generals' report.
- [11] Salazar M. R., (2012) The Effect of Supply Chain Management Processes on Competitive Advantage and Organizational Performance
- [12] Von Bertalanffy, L (1968). General Systems Theory: Foundations, Development, Applications. New York: George Braziller
- [13] Hong L. and Scott E. (2004) Groups of diverse problem solvers can outperform groups of high-ability problem solvers. Michigan Business School and Complex Systems
- [14] (<http://www.businessdictionary.com>)
- [15] Ngugi K. J. and Mugo W. H., (2012) Internal Factors Affecting Procurement Process of Supplies in the Public Sector; a Survey of Kenya Government Ministries. Nairobi, Kenya.
- [16] Mailloux, Z., May-Benson, T. A., Summers, C. A., Miller, L. J., Brett-Green, B., Burke, J. P. (2007). The Issue Is-Goal attainment scaling as a measure of meaningful outcomes for children with sensory integration disorders. *American Journal of Occupational Therapy*, 61, 254–259.
- [17] Austin, J., E. & Seitanidi, M., M., (2012), "Collaborative Value Creation" A Review of Partnering Between Nonprofits and Businesses. Part 2: Partnership Processes and Outcomes
- [18] Robert J. Foster, (2007); The Work of the New Economy: Consumers, Brands, and Value Creation *Cultural Anthropology* Vol. 22, No. 4
- [19] Bruno Latour (2005b): Resembling the Social; An Introduction to Actor-Network-Theory; Oxford University Press Inc., New York
- [20] Ghattas, J. Soffer, P., Peleg, M., (2009) A Goal-based approach for business process learning Department of Management information systems.
- [21] Murray M., (2014) Negotiation in the Purchasing Process.
- [22] Bent R., A. (2014) The significance of supply chain management with regard to the attainment of value and strategic objectives for municipalities within South Africa: A case study; A Thesis presented in the Faculty of Management Science at Stellenbosch University in partial fulfilment of the requirements for the degree Masters in Public Administration.
- [23] Chartered Institute of Purchasing and Supply (CIPS) (2013). Purchasing policy and procedures-knowledge how to. Pretoria, South Africa.
- [24] Cambra-Fierro, J. & Ruiz-Benitez, E. (2011). Notions for the successful management of the supply chain: learning with Carrefour in Spain and Carrefour in China. *Supply Chain Management: An International Journal*. Volume 16. Number 2. Pp 148-154. Emerald Publishing Group Limited.
- [25] Kim, S. W. (2006). Effects of supply chain management practices, integration and competition capability on performance. *Supply Chain Management: An International Journal*. Volume 11. No 3. Emerald Group Publishing Limited.
- [26] Parkinson C., (2006) Building Successful Collaborations: A guide to collaboration among non-profit agencies and between non-profit agencies and businesses. Cambridge & North Dumfries Community Foundation.
- [27] Batt P., J. (2003) Building Long-Term Buyer-Seller Relationships in Food Chains. International farm management congress, Curtin University of Technology
- [28] Durch William J, Holt Victoria K., Earle Caroline R & Shanahan Moira K. (2003). The Brahimi Report and the Future of UN Peace Operations.
- [29] Office of the Internal Oversight Services (2010) Supply chain management in the United Nations Mission in Liberia. Internal Audit Division, United Nations.
- [30] Amin, M. E. (2003), Overview of the Methodology of Research. A paper presented at a Seminar on overview of Education Research Methodology for teachers of the School of Education, Makerere University.
- [31] Chong, A. Y. L., Chan, F. T. S., Ooi, K. B. & Sim, J. J. (2011). Can Malaysian firms improve organizational/innovation performance via SCM? *Industrial Management & Data Systems*. Volume 111. Number 3. Pp 410-431. Emerald Publishing Group Limited
- [32] Gunasekaran, A., Patel, C. & McGaughey, R. E. (2004). A framework for supply chain management performance. *International Journal of Production Economics*. Number 87. Pp 333 – 347. Elsevier.
- [33] Hugo, W. M. J, Badenhorst-Weiss, J. & Van Biljon, E. H. B. (2004). Supply Chain Management. *Logistics in Perspective*. Van Schaik Publishers – Pretoria
- [34] Banomyong, R. & Supatn, N. (2011). Developing a supply chain performance tool for SMEs in Thailand. *Supply Chain Management: An International Journal*. Volume 16. Number 1. Pp 20-31. Emerald Group Publishing Ltd.