# "An Administrative Approach from Santa Claus and Stork"

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#### Resume

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## Abstract

As a public domain, the Santa Claus is able to deliver in a single night million of products in different places in the entire world. On the other hand, the Stork also deliver a million of products a day but the delivery time can achieve nine months. In this work, it is discussed several considerations concerning these two characters of the word folklore, Santa Claus and Stork, trough the theoretical concepts of the administration, human resources, production and logistic. This work intends to facilitate the memorization and comprehension of simple tasks for the beginning Administration and Engineering students and must be read as an exercise between the real and the imaginary presented in our lives.

Key-words: Santa Claus; Stork; logistic; distribution; Administration; folklore.

#### 1. Introduction

An approach from the administration system of two characters of the world folklore, Santa Claus and Stork, besides the enjoy aspect, is also an abstract exercise which can lead the graduated students from Administration and Engineering, knowing different aspects of the classical administration theory in a real environment. The classical administration theory is present in several aspects in our lives as employees or managers in the organizations. This work intends to compare the theoretical concepts from the administration science with the administration elements from management that appears in these histories. Logistics calculus with gravity centers basement were done in order to determine the better distributions places .These calculation take in account the population demand as well as the distance from these centers.

#### 2. Review

## 2.1. Classical Administration Theory

## 2.1.1. Taylor, Fayol and Military Hierarchy

In general aspects there are four principles that guide the Scientific Management proposed by Taylor (1995): planning, training, pricing, and division work.

The first principle suggest that the high direction and not the employ must determine individually the working science for the specifically job using time studies, with rigid patterns for each working movement.

The second principle suggests the scientifically selection of workers in accordance with the necessary competencies for the job, and after, training, teaching and polishing the worker. More than that, this principle suggests the elimination of the employees that refuse to adopt the new methods or are incapable following them.

The third principle suggests the cooperation with the employees, which implies on the bonus police for the good job executed according with the instructions and washed for the high direction.

The fourth principle suggests the equal division of work and responsibilities between workers and direction. The direction must delegate a group of workers to plan earlier the job.

According to Fayol (1975) it must not lead the workers thinking that the hierarchy violation will not be punished. This idea reinforces the military hierarchy in which the high administration plans and orders and the workers execute.

### 2.1.2. Maslow e Herzberg Theory

Herzberg related the productivity and motivation factors to the working environment. When this environment factor falls to a acceptable level the result is the un satisfaction with the work which diminishes the productivity.

According to Maslow (1975), more than the relation between productivity and motivation, this latter is connected with the hierarchy necessity, e.g., there is a increasing order of organism domination: physiologic, safety, care and self attending. More than that, for Maslow one satisfied necessity is not motivation anymore. He emphasizes that if the necessity was satisfied it seems like inexistent.

#### 2.1.3. X e Y Theories

McGregor, using the motivation theory of Maslow, noted that the traditional management approach (X Theory) established assumptions with worker satisfied necessities, physiologic and safety. Thus, proposed the Y theory directed to non satisfied levels, care and self attending, therefore still behavior conditioning.

Wren (1979) commenting the McGregor theory says that regarding the Y theory is the proposal of every manager to release the employees to achieve their own objectives in the direction of the organization objectives. This is the objective management in the traditional administration but the motivation came from the compromise of workers with the organization objectives.

## 2.1.4. Systemic and Strategic Approach

These approach besides the independence of the organization areas shows that they match and are dependent one from each other. The strategic approach helps to understand this interdependence and trough this comprehension it is possible to choose the better methods to manage. According to this approach there is not a single form or style of management, which means that the managers should find different ways to working with different situations, different cultures needs different approaches. Thus, strategic approach cannot be attributed to a single person or a group of people; it should be attributed to the all organization.

# 2.2. Santa Claus and Stork Folklore Review

### The Santa Claus Character

The Santa Claus character has your origin in the San Nicola history, an specially care saint by the orthodox christens and particularly by the Russians. San Nicola as younger traveled a lot knowing the Palestine and Egypt. Whereas he travels people remember him due the care and the gifts to the necessity children. The history says that the first gift from Santa Claus was gold coin for three poor girls. Because you generosity was interesting people San Nicola start helps people clandestinely, putting gifts in the houses chamines. This fact starts the client to let shoes in the fireplace waiting for gifts. After returning to Patara, in Licia province, San Nicola was declared Bishop of Mira City.

During the time the Saint was became famous of miracle and the medieval artists reported that constantly. At this time the devotion for him grow up for all Russia and Greece, became the patron of charity associations, children, sailor, single girls, trader, pawnbroker.

The protestant reform has the cult to San Nicola disappeared from Europe, with exception of Holland where persist as Sinterklaas, an adaptation of San Nicola's name. Holland colonizers took the tradition to New Amsterdam, nowadays New York, to the North American colonies. Sinterklaas was adopted by the American people who start to call him as Santa Claus.

Belk (1987) e Curtis (1997) suggested in their works several different versions and visions of modern Santa Claus, but for who believes, Santa Claus just lives at North Pole and every Natal night delivery a million of gifts to people of all the world.

## The Santa Claus Home [Correios, (2006)]

Traveling from Helsinque to north pole, after pass for Oulu and Rovaniemi, the route though the arctic polar circle. This invisible circle mark the entrance for the region where during the summer the sun never falls, even at mid night. And during the winter never wake up, even at mid day. At this place, Joulupukki in Finland, Santa Claus keeps your post office, where the letters from a million of children came from.

Following to northeast in the same route and going deeper to the selvage area, the residences became rare. In this remote and freezing place the residents create reindeers. After about 170km, the route pass though a city called Savukoski. Savukoski is near from Korvatunturi mountain, where Santa Claus keeps your primitive home. Inside the mountain the gnomes make the toys and other gifts for children in all the world.

## The Stork

The stork is worldly knowing as an official baby delivery. Traditionally its figure is remembered as a write bird caring out a baby in a white cloth using its month. There is no reliable dada about the headquarter placement but some administrative assumptions can be done.

### 3. Discussion

### 3.1. Productive Management [Maximiliano, 2004]

### Santa Claus

The tradition tell us that the gnomes are the employees from Santa Claus. In the Santa Claus post office the workers pass all the day making notes from the desires of children. Santa Claus works the majority of his time at the Polar cycle office. In his factory, a thousand of gnomes work uninterrupted to deliver at December 24 all the gifts.

Santa Claus has a centralized management, typical from a management of a familiar company. Remembering Taylor, the hierarchy follows the military arrangement, structured in a military authority. According Taylor the mechanical constructions companies are building in this military principle. The orders came from the General, Coronel, Major, Captains, Tenants and Sub Officials. At the same way, the industrial companies are organized by the Directors, Mangers, Bosses, Chiefs and finally workers. Fayol preconized that is dangerous to believe that a violation in the command unity will not be punished. For him, the older kind of organization in which the principle of command unity is kept must be sustained.

However, the gnomes are conducted by Santa Claus as if they are from family. This implies in a high personal satisfaction and consequently high productivity. Watching clearly with basis in the Maslow theory, the traditional management approaches of non satisfied physiologic and safety necessities does not agree with the gnomes. However using the Y theory of Herzberg-McGregor directed by the non satisfied levels of care and love due to the fact of the gnomes being orphans are behavior conditioning of high productivity. In this case, Santa Claus uses the objective management in the traditional way but the motivation came from the compromise of people with the organization objectives.

## Stork

A plausible modern explanation is that the stork has a in vitro fertilization lab to produce the solicited babies. In this lab are build all the babies from human race

according to systemic management in some aspects and strategic according others. The stork only contract specialists for the Jobs in each area. This helps the productive arrangement because only the best ones are contracted. The employees are hide as autonomic workers for a specific job, which diminishes the social payments. The stork has no register employees, is a modern virtual company. In the case of no more babies orders simply close the doors, which not happen a thousand of years. The workers are paid for the executed job, which keeps the motivation for the conclusion in a high level, because if the product does not be delivered there is no payment for the task.

There are three interdependent elements in the organization system adopted by the stork: sources (resources that company extract from the environment, information, capital, workers and equipments); process (competencies of the workers to transform the resources in products) and outsourcers (products or services). All of them surrounded by the changes in the environment which results in structure and performance growing. Some of the relevant aspects that influence the perform of a organization system are:

- 1. Clerical actuation in the political and legal areas, influencing the personal and state decisions;
- 2. Economic situation of the financial system of the country.
- 3. Development and technology available;
- 4. Educational and cultural level of the society.
- 5. Concurrence from other companies, as the case of aliening abductions registered sporadically.

As mentioned before the areas in the organization are independents but they are correlated. The strategic approach helps to understand this correlation and though this comprehension it is possible to decide how to invest in the junction of these parts. Regarding this strategic theory there is not a single form of administration. The managers must find different forms to solve different problems, depending the culture, religion and situation of country, and adapting the company to the market. The strategic approach, still called situational approach, cannot be attributed to a single person or a specific group of people, but to all organization.

In this scenario the pioneer of stork as the first female to be inserted in the working market has delivered the first baby to Eva in the paradise. This tendency of women incorporation in the market persists until our times.

## 3.2. Quality Control and System

Both Santa Claus and Stork have the quality and control system certified by the Creator Entity. Concerning the quality control the Stork works with 100% of inspection of products regarding functionality and per samples of a lot regarding the orders. The Santa Claus works only with samples of a lot, whereas the products are inspected during the production. The levels of rejections and reworking are monitored and established targets to be achieved.

The Stork evolution related with the inspection process during the production must be noted. Years ago, after planning and beginning of production, there was no inspection during the process, and the baby was delivered after 42 weeks. However, due to demand of the market, inspections during process have being conducted. Adopting this method it is possible to better understand the process as well as to verify the sex of the future baby, presence of any disease.

The quality system implemented were ISO 9001 for Santa Claus's organization and ISO 13485 for Stork's organization, The monitoring of clients satisfaction, planning of production and managing were also adopted.

## 3.3. Target Clients

## Santa Claus

The Santa Claus delivers in a single night a hundred of million gifts, using clones and freezing the time [Silverberg (1997)]. There are in the world about 2 million children, people in the range of 0 to 17 years old. But excluding the Jewish, Buddhist, Hindu, Muslin, and another hundred of non Christians group of children the universe of kids can be reduced to15% of the total amount, about 378 million children ( US Population Reference Bureau). For mathematicians calculus it will be considered 400 million. The last census appointed that the average of children per home is 3,5 which implies on 91,8 million of homes (100 million approximately). Supposing that every kid receives 2,5 gifts it is necessary to delivery 1 billion of presents. Thus the demand of products must be considered as 1 billion products.

## Stork

The Stork delivers Just one product at each time. Considering that we have 136 million of babies arriving at world each year (OMS -2004) the stork delivers one baby at each 3 minutes. Adding the 3 million that will not survive to the first days and the 4 million of died babies the demand of babies can be considered as 150 million per year.

## 3.4. Product Planning [Slack, (2002)]

# Santa Claus

As mentioned before Santa Claus has a production factory which produces about a million gifts to be delivered at Christmas Day. The gifts are produced using the competencies of the gnomes and the average demand is pre defined using statistics technique and six sigma concepts.

The initial demand for the next Christmas is carried out at January, after vacation of Santa Claus in a paradisiacal Brazilian beach. The calculus is conducted using the demand for gifts of the last 5 years and using the prevision of growing population estimated by OMS. Corrections on calculus are done monthly until December; when all the orders are analyzed dally to avoid mistakes in the deliverers. Market analysts work together with the gnomes during all year intending to indentify the gifts that will be solicited, analyzing tendencies, fashioning, regionalism. The children are

segmented according the needs, acquisitive power, region, in order to attend the orders and optimize the production.

All the production is conducted in order to attend the demand and there is no possibility of later deliver. Thus, they work with raising stock, sigmoid curve of production intending to compose quickly the stock. This implies on a highly cost of acquisition of supplies and components and there is no possibility of reducing or economy.

#### Stork

The stork works to attending orders and not to cover a demand. This implies on stopping production if the orders stopped. So the system management adopted from Stork mach quite well with the market. In this model the production is conducted by specialized contracted workers which permits to Stork dismiss or contract according the orders.

The planning of production is carried out according with the client's needs. In this moment the Stork collects the initial data of the project as skin color, compatibility degree with mother and father, eyes color, size, weight, hair. The fidelity of the initial data will impact in quality of the final product.

After collecting the initial data the planning of product is conducted. In this case the validation step is not done which implies on quality of product, but this will be further analyzed in this work.

#### 3.5. Human Resources [Bohlander, (2003)]

## Santa Claus

The correct choose of workers that produce to Santa Claus is fundamental as every fabric activity. The personal profile must be analyzed matching with the needs of work. In this case, because of the production of gifts by demand, there is the necessity of employees aligned with the Santa Claus strategy to deliver all the gifts without late. Thus after establishing the targets they must be achieved. Another relevant aspect is the versatility to produce the gifts, the workers must have flexibility to change quickly the activity.

In order to facilitate the delivery task during the Christmas night the Santa Claus uses clones. This clones must be selected attending some basic needs as availability to travels and timing versatility. As everybody knows the products are delivered at alternative times. The non commercial times facilitate the delivery of products and help the logistic. Because of the practice of market this kind of distribution became normal and thus it will hardly change. The employee selected by Santa Claus must understand the necessity to agree with this basic principles.

In the same working gnome career there are some divisions that alter the complexity grade of the tasks but there is no manager position to achieve. So the gnomes must be conscious that in this career they will not get the Santa Claus post.

The growing in the Santa Claus career is possible in the complexity of tasks in the distribution centers and as well as in the managing of this distribution centers. Therefore the Santa Claus' organization CEO vacancy is only filled in such few opportunities. These employees must understand that they will be promoted in the second range of managers. This is the same case of familiar companies.

### Stork

The stork should also choose correctly his employee. The Stork organization works with distribution and delivery of babies which implies on necessity of long travels, with long term distance from base and timing versatility.

The growing career in Stork organization must be quite well worked in order to avoid a high turnover. The storks has the possibility to grown in the complexity of the tasks in the distribution center as simple workers or managers. Therefore the CEO position is also difficult to achieve.

### 3.6. Logistic

### Santa Claus

The Santa Claus hide a group of consultants that have made MBA from São Paulo University in order to calculate the best points of distribution in all world. They use the weight/demand and the distance from the generator poles criteria's to carried out the measurements. This methodology is called gravity center. Because of the location of the Santa Claus's headquarter and considering the convention adopted by the rotation axis it was calculated the best places in African, Asiatic, south American, central American, European and Oceania continents.

Regarding the data from WHO - World Organization Health - 2001 census available the population from each country was adopted as the demand of gifts criteria to be delivered at the Christmas night.

As criteria of distance the higher north latitude and eat longer longitude of each continent evaluated to conducted the calculus. The values of latitude and longitude refers from the capital of each country.

The demand values were multiplied by the distance between the reference point to generator pole. The adding of the distance of longitude multiplied by the demand and divided by the adding of demand gives the correct longitude location for the distribution center. Similar calculus were done to correct latitude location.

Correct Longitude =  $\sum$ (demand x distance latitude)/ $\sum$ (demand) Correct Latitude =  $\sum$ (demand x distance latitude) /  $\sum$ (demand)

demand = population of country distance = distance from reference point to the capital of country Figure 1 shows the gravity center calculated to African Continent. It was observed that the gravity center calculated is located at Sudan. But due to availability and resources the gravity center was dislocated to the capital of Central African Republic.

Table 1 and 2 shows the calculated values for gravity center for African continent. Figures 2 to 6 show the gravity center for Asiatic, south American, central American, European and Oceania continents.

Country	Latitude	Correction	Poforonoo	Deputation	Don*Deference
Losotho	20.199		Reference		
Mozambiquo	29.103	-29,18	1	2057	2057
	25.565	-25,58	4,6	18644	85/62
South Amea	20.440	-25,44	4,74	43791	207569
	22.355	-22,35	7,83	1/8/	13992
Tonga	21.105	-21,1	9,08	99	899
Madagascar	18.555	-18,55	11,63	16436	191151
Zimbabwe	17.435	-17,43	12,75	12851	163850
Zambia	15.28S	-15,28	14,9	10648	158655
Solomon Islands	09.27S	-9,27	20,91	462	9660
Angola	08.50S	-8,5	21,68	13527	293265
Dem.Rep. Congo	04.20S	-4,2	25,98	52521	1364496
Congo	04.09S	-4,09	26,09	3109	81114
Kenya	01.17S	-1,17	29,01	31392	910682
Uganda	00.20N	0,2	30,38	24022	729788
Gabon	00.25N	0,25	30,43	1261	38372
Somalia	02.02N	2,02	32,2	9156	294823
Togo	06.09N	6,09	36,27	4656	168873
Cote d'Ivoire	06.49N	6,49	36,67	16348	599481
Sierra Leone	08.30N	8,3	38,48	4587	176508
Ethiopia	09.02N	9,02	39,2	64458	2526754
Nigeria	09.05N	9,05	39,23	116928	4587085
Guinea	09.29N	9,29	39,47	8272	326496
Djibouti	11.08N	11,08	41,26	643	26530
Guinea-Bissau	11.45N	11,45	41,63	1226	51038
Chad	12.10N	12,1	42,28	8134	343906
Niger	13.27N	13.27	43.45	11226	487770
Gambia	13.28N	13.28	43.46	1337	58106
Senegal	14.34N	14.34	44.52	2746	122252
Eritrea	15.19N	15,19	45.37	3815	173087
Sudan	15.31N	15.31	45 49	31809	1446991
Mvanmar	16.45N	16.45	46.63	84	3917
Qatar	25.15N	25.15	55 33	30430	1683692
Bhutan	27.31N	23,13	57.40	21/1	123086
Egypt	30.01N	27,51	57,49	60070	125000
	36.42N	30,01	00,19	209/19	4157605
Tunicia	36 50N	30,42	00,0	30641	2004011
Turiisia Dom Booplo's	20.00N	30,5	00,08	9201	03/52/
Republic	29.09IN	39 09	69 27	3781	261910
Belarus	53,52N	53 52	83.7	1552	120096
Adding	00.0211	00,02	03,1	665449	123300
Adding				000418	07
Adding/Volume					37

**Table1-** calculated values for Latitude gravity center for African continent.

Country	Longitude	Correction	Reference	Population	Pop*Reference
Namibia	17.04E	-159,57	1	1787	1787
Cote d'Ivoire	05.17W	-125,3	35,27	16348	576593,96
Bhutan	89.45E	-89,45	71,12	2141	152267,92
Myanmar	96.20E	-51,35	109,22	84	9174,48
Guinea	13.49W	-47,31	113,26	8272	936886,72
Niger	02.06E	-45,25	115,32	11226	1294582,32
Dem.Rep. Congo	15.15E	-42,2	118,37	52521	6216910,77
Egypt	31.14E	-38,55	122,02	69079	8429019,58
Eritrea	38.55E	-38,42	122,15	3815	466002,25
Gabon	09.26E	-36,48	124,09	1261	156477,49
Qatar	51.35E	-32,35	128,22	30430	3901734,6
Kenya	36.48E	-32,32	128,25	31392	4026024
Somalia	45.25E	-32,3	128,27	9156	1174440,12
Djibouti	42.20E	-31,14	129,43	643	83223,49
Sudan	32.35E	-31,02	129,55	31809	4120855,95
South Africa	28.12E	-28,16	132,41	43791	5798366,31
Nigeria	07.32E	-28,12	132,45	116928	15487113,6
Belarus	27.30E	-27,3	133,27	1553	206968,31
Gambia	16.40W	-24,08	136,49	1337	182487,13
Lesotho	27.30E	-17,04	143,53	2057	295241,21
Congo	15.12E	-15,12	145,45	3109	452204,05
Chad	14.59E	-14,59	145,98	8134	1187401,32
Angola	13.15E	-13,15	147,42	13527	1994150,34
Solomon Islands	159.57E	-10,11	150,46	462	69512,52
Ethiopia	38.42E	-9,26	151,31	64458	9753139,98
Mozambique	32.32E	-7,32	153,25	18644	2857193
Algeria	03.08E	-3,08	157,49	30841	4857149,09
Madagascar	47.31E	-2,06	158,51	16436	2605270,36
Sierra Leone	13.17W	-1,2	159,37	4587	731030,19
Tunisia	10.11E	0,06	160,63	9561	1535783,43
Тодо	01.20E	5,17	165,74	4656	771685,44
Zambia	28.16E	13,17	173,74	10648	1849983,52
Uganda	32.30E	13,49	174,06	24022	4181269,32
Tonga	174.00W	16,4	176,97	99	17520,03
Zimbabwe	31.02E	174	334,57	12851	4299559,07
Adding					
Adding/Volume	138				

Table 2- calculated values for longitude gravity center for African continent.











**Figure 3-** Gravity center calculated and the distribution center chosen for the Central American continent



Figure 4- Gravity center calculated and the distribution center chosen for the European continent



Figure 5- Gravity center calculated and the distribution center chosen for the Asiatic continent



Figure 1- Gravity center calculated and the distribution center chosen for the Oceania continent

At north American continent was adopted the capital of Canada to receive the distribution center because of the proximity with the bigger centers and due to fact of being the capital of this country. The criterion in Oceania was the same. In this both cases there were no senses to choose another point of distribution in the logistic point of view.

Figures 7 and 8 show the worldly distribution centers as well as which should be the distribution of gifts in the Christmas night.



**Figure 7-** Distribution centers calculated with the gravity centers criteria and with proximity to bigger center of demand.



Figure 8- Distribution center and probable routes to Santa Claus at Christmas night.

Table 2 shows the capitals chosen as distribution centers.

Continent	Country	Capital	
European	Poland	Varsovia	
African	Rep. Centro Africana	Bangui	
Central American	Nicaragua	Managua	
South American	Brazil	Brasília	
Asiatic	Nepal	Kathmandu	
North American	Canada	Otawa	
Oceania	Australia	Camberra	

Table 2- Capitals chosen as distribution centers.

#### Stork

Intending the reducing costs the stork has a deal with Santa Claus and are using the same distribution centers. Therefore because there is no centralizing production of babies, the factories are spread around the world, there is no necessity of the primary distribution as Santa Claus' company from the North Pole. Thus, decentralizing the production eventual falls in the supplies of babies can be regulated with the closest center. This behavior will obviously results in some problems, but this will be discussed further in this work.

#### **3.7. Products production troubles**

#### Santa Claus

In spite of Santa Claus has a logistic and production relatively well organized in theory some problems were detected though the client channel. Among these problems were detected the following non conformities:

- 1. the gift does not match with the asking of client;
- 2. the electronic gift does not have batteries;
- 3. the client received clothes instead of toys;
- 4. the gift became broken to the client;
- 5. the client received less gifts as solicited.

#### Stork

In the Stork process was also identified some non conformities:

- 1. lower level of phenotype adherence between parents and sun;
- 2. color of eyes does not match with required in the initial data of project;
- 3. genetic defects do not previously detected.

The first two non conformities are related with the fall in the production of local centers and supplying by the closest center with availability of products. Therefore the phenotypes probably do not match quite well.

### 4. Conclusion

The approaching of these two characters of the word folklore, Santa Claus and Stork, trough the theoretical concepts of the administration, human resources, production and logistic, intends to facilitate the memorization and comprehension of simple tasks for the beginning Administration an Engineering students. However this work must be read as an exercise between real and imaginary presented in our lives.

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