

## The Life Cycle of a Maritime Ship between “Product” and “Service”

Florin SORESCU<sup>1</sup>, Carmen Elena COCA<sup>2</sup>, Romeo BOSNEAGU<sup>3</sup>

**Abstract:** The life cycle of a ship represents an issue which the ship owner must take into consideration because he must know a series of aspects connected to the exploitation period until the moment of the current and capital repairs, the degree of use of the ship and separately for each installation, the moment of its taking out from service and especially how it can be extended its duration of exploitation. These aspects are not easy to be calculated because there appear a series of aspects connected to the shipping zone, the type of the transported goods, the way of exploitation and maintenance performed by the crews, the number of the exploitation days and many more others. The life cycle of the service performed by the ship, in fact the type of the transported goods is very important taking into account the changes on the maritime market, the competition between shipping companies, the development of the international economy and the requests of the customers of the shipping companies. In this paper, there are analysed the two aspects which a ship represents, as “a product” and as a performed “service” and it is presented a type of analyse for a maritime ship.

**Keywords:** marketing; product; service, life cycle, ship.

**JEL Classification:** M31

### 1. The Life Cycle of an Ordinary Product

Any product, during its presence on the market, evolves in a specific manner, this being known under the name of “life cycle”. The life cycle of the product can be defined as “a process which is developed in time, starting with the launching and reaching the coming out of the product from the market”, Niculescu (2000) et al.

---

<sup>1</sup> Senior Lecturer, PhD, Tomis University of Constanta, 100 Petru Vulcan Street, Constanța, România. Tel: +40.241.558.700; +40.732.600.169. Corresponding author: [florescu@yahoo.com](mailto:florescu@yahoo.com).

<sup>2</sup> Assis. Professor, PhD in progress, Tomis University of Constanta, 100 Petru Vulcan Street, Constanța, România. Tel: +40.241.558.700; +40.732.600.169. E-mail: [zelesneacarmen@yahoo.com](mailto:zelesneacarmen@yahoo.com).

<sup>3</sup> Associate Professor, PhD, Tomis University of Constanta, 100 Petru Vulcan Street, Constanța, România. Tel: +40.241.558.700; +40.732.600.169. E-mail: [romeo\\_bosneagu@yahoo.com](mailto:romeo_bosneagu@yahoo.com).

The life cycle of the product is similar to the biological life cycle of the human being, including stages or phases as: the birth, the growing up, the maturity and the decline. Specifically to the marketing approach it is the fact that at each stage of the life cycle of the product, the company can use different kinds of strategies, being in concordance with the objectives which the company establishes, with the available resources, and according to other factors, Prutianu (2002) et al. The life cycle of an ordinary product is influenced by the general strategy of the productive company in a certain moment or in certain specific or circumstantial periods, Catoiu (2002) et al. The study of the life cycle of the products has a great importance due to the following aspects: the possibility of explanation of the behaviour of the product market, the identification of the actions performed by the competition, the influence of the commercial strategy of the company, etc., Kotler (1996) et al.

The main aspects which characterized the life cycle of the product are given by the evolution of the sales, of the profits and the evolution of the orders and requests. The evolution of the product on the market can be described by a life cycle which the main stages are the launching, the growing up, the maturity and the decline. The launching or introduction stage of the product on the market or the birth stage of this supposes the expressing of the request for the product, its carriers being in this case the consumers of the "innovative" or "curious" type willing to try the product. The characteristics of this stage are the following: the low profits due mainly to the high costs of production and commercialisation, the high prices, the selective distribution, the intense advertising pointed towards the innovators, etc. The growing up stage of the product supposes an evolution in a favourable way of the sales, the preponderantly used strategy being that of penetrating the market, respectively of convincing a larger and larger number of consumers to buy the product. This stage can be described by the following elements: the increase of the profits, the consequence of the high prices and the request found in increasing, the applied distribution is preponderantly intense, the advertising aims at the advantages of the brand, the product starts to differentiate itself etc. The maturity stage appears in the conditions of saturation of the market and of the stabilization of the sales, during this registering the maximum of sales, Sasu (1998).

The defining elements of this stage are: the establishing of a relatively fixed structure of the company offer, which includes a reduced number of brands with a very-well defined position, the profits are reduced, the prices are maintained at a high level, the communication is that of a persuasive type and tries to differentiate and to maintain the brand image, the advertising is moderate, taking into account

that the product is already known, it is applied the promotion of the sales towards the consumers and distributors, the channels of distribution are stable and the advantages offered to the distributors are high, with the purpose of maintenance the product on the market, they are considered offers much more complex which include the product, at which it is added a certain number of services, etc.

The decline stage appears in the conditions in which the product is morally worn out, it can't respond anymore to the requests of the consumers. It is required, in this context, the redefinition of the product in the purpose of maintaining the request at an acceptable level. This stage can be characterized through: the decrease of the prices and of the profits (which are transformed in losses), the selective style distribution, the advertising in a minimum intensity, pointed towards the low price, etc. It is permanently shown a close connection between the life cycle of the product and the typology of the strategies used by the company.

There can be considered from this perspective two levels of analyse, thus: on the one hand it is concretized the strategies which the company can adopt in theoretical stages of the life cycle of the product, and on the other hand the strategies which are adapted to the specific life cycle of each product. From the strategies perspectives which are adapted to the specific life cycle of each product, there are usually differentiated the following situations: The companies whose products cover a long maturity stage or which sales increase in a continued manner, act, with priority, in the following directions, Kotler (1999) et al: the use of some distributions channels as short as possible; the innovation of the products; the comparative advertising; the extensive distribution; the maintenance of some competitive prices. The companies whose products succeeded in penetrating fast on the market act for: maintaining a productive capacity which allows the survival on the market found in increase; keeping a good position on the market using the quality and the brand image. The companies whose products are in the stage of the decline and which could be abandoned have to: think and position again the product; appeal to the classical variables of marketing in order to increase the sales. The life cycle of the product is a concept which tries to describe the sales and the profits of the product, the consumers, the competition and the specific marketing actions performed from its appearance and until its removing from the market or more precisely, the period of time between the moment of the launching of a product on a given market and the period of its complete withdrawal from that market.

The analyse of the life cycle of the product should have into consideration the following definitive elements, Boronad (2001) et al, too: The life cycle of the product is not identical with the period in which the product is in the use of the consumer: in certain situations, the withdrawal of the product from the market is not synonymous with its withdrawal from use/consume. The life cycle of the product is not identified with the life cycle of the group of the products from which this belongs to, respectively of the market of the product.

## **2. The Life Cycle of an Ordinary Service**

The marketing of the services was considered as a distinct domain as a result of a long relative process characterized by a series of delimitations which happened on different plans which defined the concrete content of the marketing (Kotler et al, 1996). Although it was first applied in the material goods domain, the conception of the marketing happened gradually in other domains of the social life. The assertion period of the marketing in services coincided with the period in which in the international economy the services knew a strong development. Once with the development of the society it imposed the necessity of using the methods, the techniques and the instruments specific to the marketing in order to anticipate the market reactions, the knowledge of the changes inside the market and not the last thing to counteract the competition. No matter the way in which there are presented the features and the specific of this domain, it is sure that the marketing of the services is made up as a specialized domain, autonomous, clearly differentiated, found in consolidation and permanent development. The economic and social dynamism from the material production domain, the transformations made in the last years from the people mobility point of view reflected in the transport activities. The transport activities are based at the same time on equipment, infrastructure and human resources. As the other types of services, one of the main objectives in this domain is the synchronization of the offer with the request of transport services. In order to transform the offer of the services from potential into effective, it is implied the state, on the one hand, through macro-economic decisions appropriate especially in the legislative and infrastructure domain, and, on the other hand, the economical agents who perform these services. The different kinds of transport, of people or of goods, which also can be: terrestrial transports, maritime or in the air, imposed the delimitation, the specification and the application of the methods and the techniques of marketing differentiated for each

of these types. From here, it appears the necessity of determination of the elements specific to the shipping domain and to its characteristics.

### **3. The Life Cycle of a Maritime Ship**

The life cycle of a ship can be dealt with from two points of view, thus: the ship as a product and the service performed by the ship, Iordanoaia (2005). The builder shipyard is interested in the ship as a product, according to its type, because these can be asked for by ship owners according to the evolution of the market. The ship owner is interested in the life cycle of the service performed with the help of the ship, according to the type of the navigation and to the employment contract. Between the two situations there is a close connection because the existence of the transport service, the request of the market for ships of a certain type makes that a shipyard adapts, responds to the request of the ship owner. Sometimes the shipyard builds a ship of a certain type then it never has orders for this type and it reorientates its capacities of production towards other types of ships, so that it can say that it made a unique product.

#### *A) Phases of the Life Cycle of a Ship as Product*

The life cycle of a ship is very important for the builder shipyard because the research of such a cycle supposes: the establishment of the general and the specific factors which act upon the life duration of a ship, the determination of the stage in which there is in a certain moment each of the main components of the category from which it takes part, the estimation of its future evolution on the maritime market. The research of the life cycle of the ships can lead to the obtaining of some ideas and solutions which concern the policy from the shipping building domain and from the maritime transports for the type of the ship submitted to the analyse, starting from its modernization in the opportune moment, the change of the initial destination (as it is in the case of the multi-functional ships) or if it is the case even its taking out from the operational state, its selling at "second hand" or at old iron, once with the launching in the sea of a new ship, Bauchet (1992). The life cycle of a ship is influenced from the moment of its launching in the sea and its entrance in the service due to the action of some factors: heterogeneous, general, specific, with a direct action, with an indirect action, controllable and uncontrollable. According to the way in which it is conjugated the action of such factors it will result a large variety of the trajectories of the life cycle of the ship. Starting from the general

criterion accepted and mainly easier to be determined, the life cycle of a ship crosses more stages thus: the launching on the maritime market, the growing up or the development, the maturity, then the saturation of the market and the decline of the type of the ship.

Most of the cases the concept of "life cycle of the type of the ship" is presented under the form of a graphical profile. The volume of the sales of the ships of the same type will pass through more phases due to the appearance of other types of ships which will replace them on the market. In figure 1 it is presented the life cycle of an ordinary product, this graphic corresponds more to the situation of the small ships, those of the passengers type, sports boats and tourists' ones because they are produced by the series shipyards, even on the basis of a potential request, then they are taken out for sale on the market and after a certain period of time, according to the graphic, these "products" are replaced or withdrawn from the market. For the maritime ships of huge tonnage, built in series, the graphic has a special form, which differs from a ship type to another. Even in the situation of the building of some ships from the same series, these are not totally identical, due to the technical progress, to the appearance of some new machines and installations which are assembled on the same "ship body". Analysing the factors which determine the duration and the structure of the life cycle of the type of the ship it is observed that these can be general and specific:

1) From the category of the general factors there can take part: the technical-scientific progress of the equipment of shipping, communications, deck installations, and naval engines; the increase of the income of the ship owners and their exigency; the income increase of the "non-sailors" (amateurs) who wish to buy yachts and sport boats. These factors emphasize the moral use of the types of the maritime, river and tourists' (of pleasure) ships or existed in a certain moment on the maritime market, Branch (1998).

2) From the category of the specific factors there can take part: the type of the maritime ship (its destination); the size of the order, it means a single ship or more ships; the capacity of the ships to be able to be used for the transport of other types of goods; the size of the order: unique, of small or big series; the regulations of the economical legislation, etc. Besides these factors, there must be added the ones directly connected to the builder shipyard, aspect which has a decisive influence upon the life duration of the ships. Corresponding to each stage from the life cycle of the "products", stages in which the sales reach different levels, there are

necessary policies as different as the marketing, viewing the technical-functional characteristics of the ships, a certain price and distribution strategy, a different promotion policy. The duration of the life cycles of the products differ from a product to another, all being dominated by the correlation between the volume of the sales and the profit. In the conditions of the establishment of a connection between the life cycle and the curve "of adopting the product by the consumers", the passing from a phase to another of the life cycle will take place in accordance with the number of the ship owners or the amateurs who buy this type of ships.

The entrance of the type of the ship in the decline phase supposes its abandonment gradually and in this way the restriction of the number of the customers. The shortness of the life cycle of the type of the product is a process which characterizes the majority of the modern industry branches. For each shipyard it shows a great importance both the total length of the life cycle of the ships, no matter their type, and the duration of each phase partly, the obtained benefit being found in a direct connection to the number of the ships made on the market. Even though there is a tendency of the request of the ship owners for building some unique ships, still the most advantageous for the shipyard is to build more ships of the same type or following the same project, McConville (1999).

The ship owners, as a majority, are people who worked on the ship board, have sea experience and know the maritime market, but their training does not allow them the integral knowledge of the process of a ship building. Thus, these launch an order for the building of a ship, but the managers of the shipyard can make offers of building the same type of ship to other ship owners, too. If the project of building belongs to the shipyard, then this can sell it to other shipyards or ship owners. Another aspect of great importance is connected to the fact that an initial project can get to be changed in a proportion of 10-30%, due to the technical problems connected to the way of building the ship. This aspect is relevant because it helps us to understand why the ships from the same series do not look the same one with another.

*B) "The Life Hope" of the Ship*

In theory and practice of the modern Marketing it is considered that when it is made the final decision of launching on the market of "a new product" it is taken into consideration a certain "life hope" of this, Niculescu (2000) et al. According to the prognosticated volume of the sales and of the benefits, the life hope of the product offers an economic justification for its propelling on the market. In real the

conditions of the market, the companies can't control, only in exceptional cases, the trajectory of the life cycle of the product, these are limited only to the surveillance of the evolution of the product on the market so that it can influence favourably its trajectory.

Thus, through the permanent report of the pattern of the life cycle of the product to its real evolution on the market, the mix of the product will be adapted to the requests specific to the phases which the product practically passes through. In the shipping transport domain "the life hope" of the ship is very important for the ship owners, because this has double meaning: technical and economical, Iordanoaia (2004). From the technical point of view, it is stated that a ship, after a few years of exploitation, gets to a certain technical use being necessary a series of partial or capital repairs. These must be planned and executed rigorously because they have direct influences upon the time in which the ship is not found in exploitation. From economical point of view it is stated a certain "moral" use, it means new ships appear, with new installations and modern apparatus, with superior speed, with reduced consume of fuel and even with a reduced number of crew members. This type of use reduces the hope of life of the ship, that's why it is important for the ship owner to be informed with the new evolutions and tendencies in the shipping transport, to anticipate and then to plan the modernization of the ships in order to prolong their life, both from the technical point of view and from the economical point of view.

The withdrawal of the ship from the exploitation, selling it at "the second hand" or at old iron must be anticipate in good time, and the choice of this moment must be chosen carefully, the establishments of the ways of avoiding the forced elimination of the ship from the market can lead even to the obtaining of some certain advantages. The problem of evaluation of the "life hope" of the ship supposes a fair, realistic evaluation, but such a measure supposes the estimation of the probable life duration of the ship, still before its launching in the sea, and on the other hand after it was launched, the diagnosis of the phase from the life cycle which the ship reached, of its chances of "survival". In the case of the economic theories there is used a series of methods to find the respond for the two problems. The first is represented by the possibility of evaluation of the life duration of the ship, right before the launching of the building order. This is a problem of anticipation, being able to use the method of the phenomenological extrapolation, Stopford (1997). Thus the ship can belong to a certain class, category or group, whose evolution determined by the life cycle and by the shape of its curve is



known from the previous experiences. The second is the comparison method which starts from the premise that the ship evolution on the market can be the same with that which had the same type of ship on another market or even on the same market, in this case being about the transport routes, CIM (2007). There can be also used a series of intuitive methods of anticipation or simulations techniques, but the most used is the method of analyse the statistical data which regards the evolution of the sales and of the ships building from that type. In the table no.1 there are presented the main types of the maritime ships, with the anticipated duration of exploitation, the medium duration, the number of years until the first capital repair, the maximum number of years estimated in the active service (of exploitation) and the way of use after its taking out from the service, before its ship breaking.

**Table 1. The life hope of the main types of ships**

type of ship	the medium anticipated duration (years)	the medium duration in service (years)	the number of years until the first capital repair	the maximum years number in service	the possibilities of use after the taking out from service, before the shipbreaking
OIL TANKER	15	12-14	5	17-19	CISTERN AT BERTH
CHEMICAL TANKER	10	10-12	4-5	15-16	CISTERN AT BERTH
LPG	15	15	5	15	-
PORT CONTAINER	17	19	7	23	-
BULK CARRIER	25	30	7-10	35	-
CARGO	20	25	10	30	FLOATING DEPOSIT
RO-RO	15	15-17	7	20	-
FERRY-BOAT	15	15-16	10	25	-
LINE PASSENGER	20	20	7-10	25	FLOATING HOTEL
CRUISE PASSENGER	25	25	7	35	FLOATING CASINO
TECHNICAL SHIPS (SPECIAL)	25	25	10	35	-
AUXILIARY SHIPS	25	25	10	35	-

*Source: The author's study*

The study of the author has at its basis: The situation of the ships built in the shipyards from: Constantza, Mangalia, Tulcea, Braila, Orsova and Galati from Romania, Varna from Bulgaria and others. The situation of the ships entered the capital repairs from The Maritime Fleet Exploitation Company "Navrom" between the years 1970-1989, from the maritime shipping companies with state capital: "Navrom" between the years 1990-1998, "Petromin" between the years 1990-1999, "Romline" between the years 1990-1997, National Company "CFR-Goods", ferry-boat agency Constantza between the years 1996-2008. The situation of the ships of the Romanian maritime shipping companies with private capital: "Mihei Shipping" between the years 1995-2008, "Histria Ship management" between the years 1994-2008, "Idu Shipping" between the years 1995-2004, "North Star Shipping" between the years 1994-2007, "Cosena" between the years 1995-2006, "Coremar" between the years 1995-2007. The situation of some foreign maritime shipping companies: "Zodiac" and "Tanker Pacific" between the years 1998-2008, "Dubai Shipping" between the years 1995-2007, "Santos" Bolivia between the years 1995-2005, "Neptun Orient Line" Barcelona between the years 2002-2007, "Maersk" between the years 1995-2007, "Thome Ship Management" between the years 2000-2008, but from other companies, too.

The information was obtained through direct contacts with the general managers of the companies, with ship captains and the personnel hired at these companies headquarters or at their agencies from abroad. I took a number of 155 of maritime ships with tonnages between 5,000-165,000 tdw thus: 23 oil tankers, 14 chemical tankers, 10 LPG, 26 port-containers, 11 bulk carriers, 18 cargoes, 13 Ro-Ro-s, 7 ferry-boats, 8 line passengers, 4 cruise passengers for tourists, 9 special ships and 12 auxiliary ships. I consider that the study is estimated because margin of error is of 2,5-3 %, what at the total number of 155 of ships is quite much, also it is possible that from certain reasons the people who I asked the information wouldn't give me all the necessary information. Thus in the margin of error enters certain wrong information and numbers, certain situations of the ships which were not taken into consideration by the ship owners, etc. But the results of the calculations can help us to understand the time period of exploitation of some types of ships.

#### **4. The Life Cycle of the Service Performed by the Ship**

The life cycle of a service depends on its character, on the characteristics of the services which impose certain economical determinations. Starting from the

characteristics of the services there can be made analyses and interpretations of their life cycle. The main characteristics and features of the services are the following:

A) The intangible nature of the result of the activity, meaning that the services can't be appreciated qualitatively before of being bought or performed. Due to the fact that in the case of the shipping transports many contracts are obtained due to the previous relationships between the ship owners and charterers in the case of line shipping, it is possible that the charterers could anticipate the way of performing the service, meaning he could have trust in the ship owner, that the goods will reach well the destination.

B) The concomitant, the in-separation of the consume and the production, meaning the fact that the performance of the service takes place in the same time with the commercialization and the consume. In the case of the shipping transports the service means in fact loading, arranging the goods, making different activities for protecting the goods during the transport, unloading and the transfer of the commercial documents which accompany the goods.

C) The services can't be measured in measurement units or counted, as in the case of the products. The use of some technical-economic indicators in order to measure the results of service performance refers in fact to the use of some objects (in our case ships) for their accomplishment, and the relationship with the customers (the charterers) is indispensable. Nowadays, there can be still measured the number of incidents at goods, the losses during the loading, during the transport or the unloading, which can thus be used by the charterers in order to measure and appreciate the performed service.

D) The proximity of the services, which supposes a certain participation of the customer at the service performance, what in the case of the shipping transports it is obvious through the fact that a charterer can send its representatives on the ship board in order to follow the way of loading, transport and unloading of the goods.

E) The social characteristic of the services which is given by the relationships between its participant groups or its beneficiary.

F) The perishability of the services is given by the fact that after their accomplishment they "disappear", they don't remain as such. Once with the unloading of the goods in the port, the contract and the service are finished, not being able to exist, for example, a post-sales "service".

G) The heterogeneity of the services which means that these have a very different characteristic from a case to another, being great differences between two categories of services. This is found especially at the cargoes which transport general goods and which, in a very short time, after unloading some goods, can load totally different goods, which impose other technical solutions for the safe transport.

H) The variability of the services is determined by their complexity and by the basis factors which can't repeat identically, from a situation to another.

I) The lower productivity comparing to the production of goods. This is one of the first problems of the ship owners, nowadays being searched solutions for the increase of this productivity through a series of methods and managerial techniques.

J) The diversity of the services imposes specific conditions of market for making the prices, different from those of the products. If in the line shipping the price is easy to be established, in that of "tramp" the situation is different and implies bigger problems for the ship owner.

K) The big ratio of the personnel participant to the service performance, which influences the productivity and its quality. Besides the hired personnel at the company headquarters, which is in charge with the search for contracts of freight, with ship supplying, with the safety, with the accountancy, with the human resources, the ship crew, as an unit, has a special role in the service performance.

## **5. The Type of Analyse of the Life Cycle**

Further on, it will be presented the "life cycle" analyse of the performed service by the ship of the oil tanker type "Gulf Glory". This analyse has on its basis the real situation of this maritime ship, for a period between the year of its launching and a year predicted for the ship withdrawal from the market, having certain correlations with the indicators which refer to the prognosticated volume of the goods and of the benefit which the ship owner wishes to obtain. The shipping company can control the trajectory of the life cycle of the service of the ship, without limiting only to the surveillance of its evolution on the market, as in the cases of the production companies from the inland, so that it could influence its trajectory favourably.

Through the permanent report at the "life cycle of the ship" type at its real evolution on the market, the operation and the functioning will be adapted to the requests specific to the phases which are crossed. This supposes a rigorous, detailed, in time training, thus the activities' programming, the current and capital repairs and the modernization of the equipment, of the installations and of the board systems which can contribute to the prolongation of the life cycle of the ship service. Following the activity of the ship in the period 1995-2007, with the help of the data from the table no.2 there can be made the graphics which represent the variation of the number of voyages of the ship, the variation of the number of the days of current and capital repairs. The waiting represents: waiting of setting free the berth for loading; unfavourable weather for the operation; dead times between the arrivals of the ships for unloading. In 1997 (Mangalia), 2000 (Piraeus), 2003 and 2006 (Dubai) there were made the capital repairs in the shipyards, with the climbing of the ship on a dry dock, Dubai Shipping (2006).

**Table 2. The ship voyages, the operation, the repairs and the waiting**

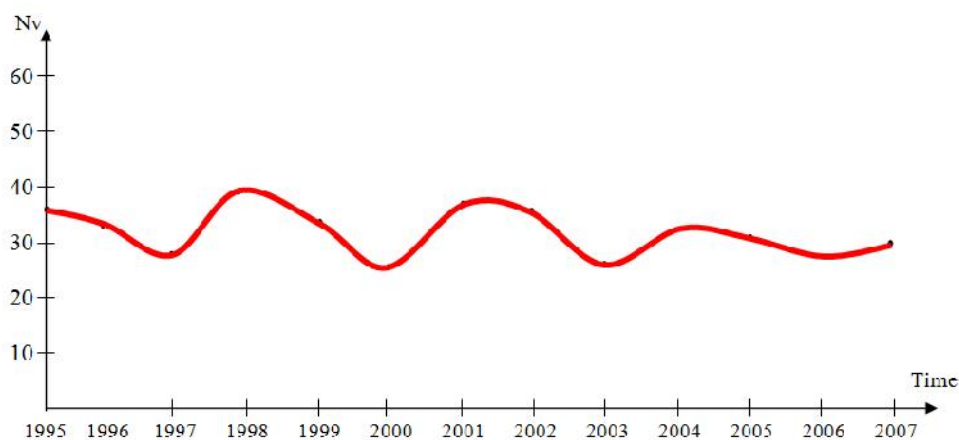
YEAR	NUMBER OF VOYAGES	NUMBER OF DAYS OF OPERATION	NUMBER OF DAYS OF REPAIRS	NUMBER OF DAYS OF WAITING
1995	36	298	48	19
1996	34	297	61	8
1997	28	224	116	25
1998	39	342	18	5
1999	35	314	36	14
2000	26	235	120	11
2001	37	341	20	4
2002	36	321	35	9
2003	28	226	110	29
2004	34	306	37	23
2005	33	305	42	18
2006	29	219	123	23
2007	33	318	31	16

*Source: "Dubai Shipping" Company*

In figure no.1 it is presented the variation of the number of the voyages of the ship according to: the number of the voyages (Nv) made yearly and the period of 10 years taken into consideration. It is observed the direct correlation between the

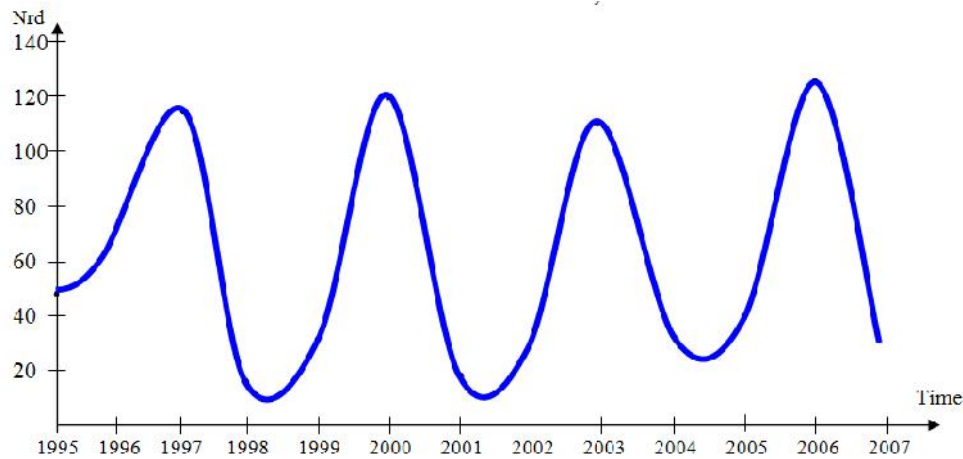
years in which the repairs were made and the following years, when the number of voyages increases every time comparing to the previous year. In figure no.2 it is presented the variation of the number of the repairs days of the ship according to the number of the repairs days (Nrd) made yearly and the period of 10 years taken into consideration. It is observed the fact that in the years following the years when the capital repairs were made, the number of the repairs days is very small comparing to the previous year.

Comparing the two graphics it is observed each trend of being into a direct correlation. It means that the number of voyages is directly connected to the repairs days, so the increases and the decreases are observed on each graphic in those years. Such graphics are important for the company because the evolution on the maritime market implies risks, and the surveillance of the trajectory of the life cycle of the performed service must be permanent and cover the most critical periods.



**Figure 1. The variation of the number of the voyages**

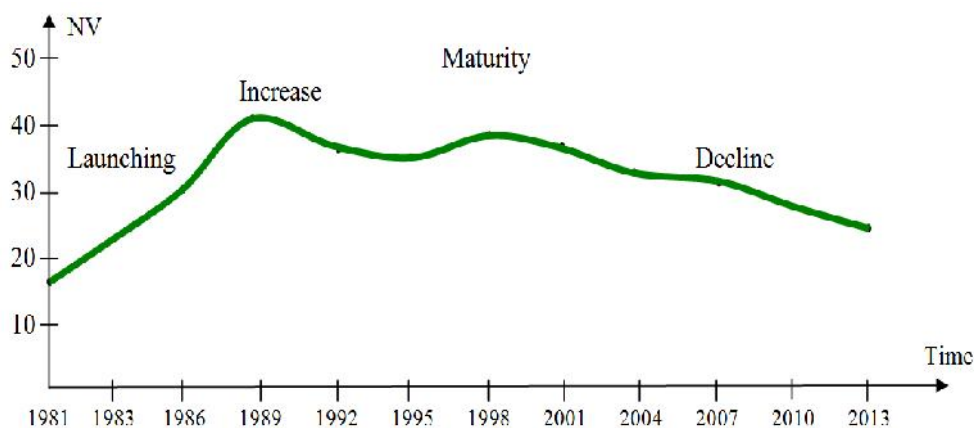
*Source: The author's study*



**Figure 2. The variation of the number of the repairs days.**

*Source: The author's study*

In figure no. 3 there are presented the phases of the cycle of the service performed by the ship, for a period between 1981, the year of its launching in the sea and the year 2004, with a prediction of time for a period of activity between 25-30 years. The life cycle of the service can be also influenced by the international legislation, but following its shipping routes and knowing the fact that some states have a certain policy regarding the respect of the international regulations, it is considered that this ship will reach the "venerable" age of 30 years old through the yearly current and capital repairs at every 3-4 years what it will prolong the service of the oil transport and of its derived products. But, if the company's management has an offer of transforming this ship into a basis ship or into a deposit of the cistern type, with repairs at the body, structure and installations, without those at the main engine, it can prolong its life cycle as "a product", performing through this a service connected to the transport of the oil products, that of a floating deposit.



**Figure 3. The phases of the life cycle of the service of the "Gulf Glory" ship**

*Source: The author's study*

A series of authors use for the determination of the life cycle of the ship physical indicators, as the number of voyages, the number of days of operation and of stopping, Branch (1998), and the others use valuable indicators: the value of the freight, the selling price of the ship (nominal or on the market), the exploitation costs, etc., Stopford (1997). All these methods are significant for the company's management, but they must be made by the specialists in economical-financial analyse, by the specialized personnel in financial operations or by the experts-appraisers, otherwise they remain simple information and numbers, without relevance for managers, Iordanoaia (2004).

## 6. Conclusions

The analysis of the marketing at a maritime shipping company must become an important component of its management due to the implications and the situations which can be solved. This analyse must be made at least once a year, but it can be made every semester, as well, due to the fluctuations which appear on the maritime market, both regarding the goods and the ships, the transport routes and the legislative limitations. The analysis of the marketing at a shipping company can point out a series of aspects which prove that inside it the management is a modern one, efficient and pointed towards the customers. Strictly from the marketing point of view, there are more aspects to be solved at the maritime shipping companies,



there must be taken a series of measures for: the change of the organizational structure for the development of the marketing component, the selection and the employment of some specialists in marketing, perfecting the hired personnel with some marketing attributions.

The companies which act in the maritime transport domain don't approach the marketing in the same way in which the products' companies do, and in the conditions of a high competition such as that from the complex market of the services of maritime transport, the things get complicated more. Due to the fast changes from the maritime market and with a future that can be uncertain many times, the maritime transport companies were put in the situation to adjust, to change the traditional strategies. The changes from the transport technology domain, the information and the connected branches, and the continual liberalization of the society, the shortness of the life cycle of the maritime ships and the change of the traditional relationships between the producers and the detail ones replaced the tendency of continual expansion, and the registered profits by the companies are bigger than the previous years.

During the years, some shipping companies adopted different strategies of differentiation, through the promotion of their brand associated with a high quality of the offered services, with the latest technology, equipment with a high rate of renewal, as for example the equipment which pass beyond a certain age and/or don't belong to the qualitative standards anymore, are withdrawn from circulation and sold, professionalism and experience. The successful companies tend to differentiate themselves especially through the elements which present an importance for their customers. Although apparently as in the case of the products, the price makes the difference, in the maritime transport the freight does it, the reality proves that there are taken into account much more aspects among which these which have a relevance in this paper: the oldness of the ships with which it is operated; the degree of technologizing the operations; the condition of the equipment on the board; the capacity of loading, speed, medium consume per nautical mile; the training of the captain, of the crew members and of the personnel inside the company which contribute to the maintenance and to the prolongation of the operational condition of the ship.

These will mean for the shipping companies great investments of money and time for the acquisition of the latest technological equipments, capable to tolerate a bigger traffic of information, stocking some basis of data and confidential

information, with limited rights for each user partly, organization of some training and perfecting courses for the company employees, these representing a "key" resource in the prolongation of the life duration of the ship as "a product". Making the repairs in time and making the investments for the maintenance in functioning of the quality standards will help at the prolongation of the life cycle of the ship as "a product" But the prolongation of the life cycle of the service performed by the ship takes part from a context connected to the transported goods, the shipping routes, the hardness of the legislation in this domain or other factors which contribute to the increase or decrease of the quantity, meaning the game of the request and offer from the maritime market. The Marketing specialists must use these studies for the market evaluation of the ships and especially for making the decisions of selling the ships at "the second hand" then when the situation from the market asks for.

## 7. References

- Bauchet, P. (1992). *Le Transport Maritime/The maritime transport*. Paris: Economica.
- Boronad, V., Didierlaurent, F., Lavorata, L., Massabie-Francois, M. & Poulain, E. (2001). *Commerce International. Marketing et Negociation/International Commerce. Marketing and Negotiation*. Paris: Breal, Rosny Cedex Publisher.
- Branch, A.E. (1998). *Maritime Economics, Management and Marketing*. London: Stanley Thornes Publishers Ltd.
- Catoiu, I., Balan, C., Popescu, I.C., Orzan, G., Veghes, C., Danetiu, T. & Vranceanu, D. (2002). *The Marketing Researches*. Bucharest: Uranus Publishing.
- Constantza Naval Shipyard (1970-2008). Operative Documents, Constantza, (CNS).
- Daewoo Mangalia Heavy Industries (1995-2008). Operative Documents, (DMHI).
- Iordanoaia, F. (2004). The Marketing Manager in Maritime Transport Companies. *Annals of Maritime University*, Vol. no. VI: Constantza, pp 33-37.
- Iordanoaia, F (2005). *Maritime and Port Marketing*. Constantza: Nautica Edition.
- Iordanoaia, F. (2005). *The Maritime and Port Marketing*. Constanta: Nautica.
- Kotler, P, Armstrong, G. (1996). *The Marketing Principles*. N.J., USA: Prentice-Hall Inc.
- Kotler, P., Saunders, J., Armstrong, G., Wong, V. (1999). *The Marketing Principles*. Bucharest: Teora.
- McConville, J. (1999). *Economics of Maritime Transport*. London: Witherby & Co.
- Niculescu, E., Hlaciuc, E., Buda, S. & Stoica, C. (2000). *Modern Marketing*. Iasi: Polirom.
- Prutianu, S., Anastasiei, B. & Jijie, T. (2002). *Marketing Research*. Iasi: Polirom.

Sasu, C. (1998). *International Marketing*. Iasi: Polirom.

Stopford M. (1997). *Maritime Economics*. 2nd Edition. London: Routledge Press.

\*\*\* The Shipping Company "Santos" (2006). Bolivia, Operative Documents, M/V "Santos C".

\*\*\* Aker Naval Sypiards (2000-2007). Braila, Galati, Orsova, Tulcea, Operative Documents.

\*\*\* The Chartered Institute of Marketing Reports (2003, 2004, 2006, 2007) London, (CIM).

\*\*\* The Shipping Company "Dubai Shipping" (2006). *The United Arab Emirates. Operative Documents*. M/T "Gulf Glory".

\*\*\* The Shipping Company "Mihei Shipping and Trade" (2007). *Constanta, Operative Documents*.

\*\*\* The Shipping Company "Santos", (2006), Bolivia, Operative Documents, M/V "Santos C".

\*\*\* The Shipping Company "Dubai Shipping" (1995-2008). *Operative Documents*, Dubai, M/t "Gulf Glory".

\*\*\* The Shipping Company "Mihei Shipping and Trade" (1991-2008). Operative Documents, Constantza.

\*\*\* The Shipping Company "Zodiac" Maritime Agencies Ltd (2003-2007). London.

\*\*\* Operative Documents of the ships: M/v "Santa Monica", M/v "Kota Sejarah", M/v "Santa Barbara".