



## **Shipping Challenge**

**By**

**Yoram Chisik**

### **Overview:**

It is close to midnight and the silence on the deck is only broken by the sound of the high waves crashing on the ship as it battles its way through the stormy waters of the North Sea but alas the lights of Rotterdam are just barely visible on the horizon and in a couple of hours Captain Windemeer will be able to relax after navigating his ship through stormy seas, political turbulence and economic uncertainty not to mention the odd pirate or two. Now is the time to rest and plan the next voyage.

Shipping Challenge is a real time single/multi player simulation/strategy game using real world live data in which the player in the dual role of an owner and captain has to navigate the ship and maximize the profit generated by the trip while contending with the demands of the weather, economic markets and political instability.

### **Key Features**

The Player assumes the dual role of owner and captain and therefore the responsibilities for purchasing and maintaining the ship, deciding on what cargo to carry, finding the most lucrative markets in which to trade those cargoes, plotting the route to get to those markets and of course navigating the ship itself.

The player will have to contend with the effects of the forces of nature in the form of the weather, seasonal fluctuations in ocean currents, earthquakes and icebergs, financial and geopolitical events in the form of fluctuations in the commodity markets and war zones and the ravages of time on the ship and its cargo. In a multiplayer game the players also have to contend with the supply and demand implications of the decisions made by the other players

The player may choose to play in the current economic conditions, re-enact a specific period in history such as the Great Crash of 1929, World War II, The 1973 oil embargo and the Gulf War or a purely fictional scenario. The player is supplied with real world data on commodity prices, weather conditions, the political climate and news events relevant to the time period in which they are playing. If the player chose to play in the current economic scene real time updates of weather and commodity pricing data may be downloaded via the internet. In multiplayer mode the actions of other players will be reflected in the game play, e.g. player A offering piloting services, or a glut of oil in a particular market because a lot of players decided to export oil to that market.

## Expanded Features

### Player Role

The player assumes the role of a ship owner with the responsibility of captaining his own ship. The player is responsible for all matters related to the ship, its cargo, and the profitability of the venture.

The ultimate goal of the game is to gain a high level of experience and to accumulate the biggest amount of capital. The player begins the game with a basic level of skill and with a limited amount of start-up capital as the game unfolds the player gains experience and can accumulate capital. Players are assigned rank designations as they gain more experience and accumulate more capital starting with the rank of a *deck hand* a player can progress to the ultimate level of *Admiral of the high seas*. Designations are an instant and most coveted means of prestige among players as participants in a multiplayer game can instantly gauge the experience level of a player by looking at the player designation which is always displayed in conjunction with the name of the player without having to refer to the specific details contained in the player's profile (captain card). The controls on the display would also change their appearance as a player gains a higher rank thus the regular compass will be replaced with a golden compass and the steel drawer representing the records vault would be replaced with an oak drawer more befitting the ready room of a higher ranking captain. Additional control items such as a golden watch and a pair of binoculars can be gained through advancement in experience and rank and will be added to the control panel to serve as a permanent reminder of the player's achievements and the benefits and status of a higher rank.

In a multiplayer game an alert message will be sent to all players announcing the award or new rank received by the player. Throughout the game taunting or suggestive messages such as a golden watch would look good here, or player B already got himself a pair of binoculars would be occasionally displayed to encourage players to seek out advancement and gain new awards and ranks.

Designations, levels of experience and accumulated capital are saved from game to game and thus the player can leverage them throughout different phases of the same game or in different games.

Capital is expressed in the simple monetary term of dollars, the more dollars a player has the better his financial standing.

Experience is a more complex measure and is divided into several measurements of experience.

Experience is gained in various ways:

- Years at sea, the most basic form of experience used as a non specific measure of experience for general assessment.
- Experience with specific types of ships based on type of ship e.g. general cargo, tanker, etc. and the gross tonnage of the ship. To gain experience on bigger ships the player must accumulate the appropriate number of years at sea and gain competence with specific types of vessels.
- Experience in sailing specific routes, experience gained while sailing through a specific geographic region. Certain routes and passages such as the Panama Canal, Prince William Sound, etc. require a specific level of experience to navigate through and if the player has not achieved that level than a pilot will have to be hired to navigate that portion. Once the player has achieved the required level he or she may pilot their own vessel and offer their piloting services to other vessels for a fee, if they are in the area.

- Experience in sailing into specific ports, all ports require specific levels of experience to moor a ship, if a player has not achieved that level he or she will have to hire a pilot to navigate that portion. Once the player has achieved the required level he or she may pilot their own vessel and offer their piloting services to other vessels for a fee, if they are in the area.
- Accident history, if the player has been involved in any accident such as a ship sinking, oil spill, collision or any other mishap the type and severity of the incident is recorded in the captain's card.

The combination of the experience level and capital resources of the player will impact the type of ships the player may own, the credit rating, insurance rates and whether the player may sail through specific waterways.

A complete record of the experience and sea history of the player including detailed information on specific experience levels, pilot privileges, rank designation, commendations and events such as loss of ship or rescuing people lost at sea will be recorded in the captain's card which serves as a player profile. The player can view the card at any time and see their achievements and progression in the game. In a multiplayer game the players can look at the captain card of any one of the other players to see their specific qualifications and gauge their level of experience and expertise.

The captain card is an important element of the game recording the rank, history and achievements of the player. When additions are made to the card such as when a player achieves a new rank or piloting privileges in a new port the game will pause to add the new commendation and mark the achievement. In a multiplayer game an alert will be sent to all players informing them of the new rank or qualifications gained by the player.

## **The Ship**

Depending on the level of experience, capital resources and credit rating gained, a player may choose the ship that will best fit their needs. The selection of ships will include:

- General cargo ships
- Container ships
- Various types of ore carriers
- Oil and gas tankers
- Refrigeration ships
- Car carriers
- Roll On Roll Off (RO RO) ships
- Passenger and car ferries

The price of a ship will be determined by its type, size and condition with bigger, newer and better maintained ships costing more to buy and operate.

In the historical scenarios such as The Great Crash of 1929 and World War II the selection of ships is limited to the type of ships available at the time.

A player may own more than one ship and may sell any ship at various ports of call.

The type, age and condition of the ship will impact the operation and insurance costs of the ship as well as the cargo the ship may carry.

Ships constantly age a fact which must be taken into consideration by the player with regards to cost estimation, maintenance and hazards, a ship that has not been properly maintained will sink.

If a ship is lost at sea the player will not be killed but his financial status and designation may be effected by the cause of the loss. If the ship was lost due to negligence by the player such as lack of maintenance or a gross navigation error such as piloting the ship into a coral reef the insurance may not reimburse the player for the ship and the player will have to start with what ever capital resources they were able to save with possible negative repercussions on the player designation depending on the type of event. If the loss of the ship was due to events that could not be avoided such as a tsunami wave or war activity the player will be reimbursed by the insurance and may use the capital received as compensation to buy a new ship, acquire cargo and continue in the game.

All events involving loss or severe damage to a ship are logged in the captain card and will impact insurance rates and rank designation eligibility in addition to the capital implications.

### **The Cargo**

Players can choose the type of cargo they want to carry from general container cargo, through bulk commodities such as grain, potash, oil to cars, oranges and the like. The type and size of the ship owned by the player and the amount of capital reserves available to the player will limit their choice of a cargo as they will only be able to buy commodities their ship is capable of carrying and they can financially afford.

Cargo is also subject to an aging factor and the value of the cargo will diminish the longer the duration of the trip with some cargos more perishable than others for example oranges.

### **Mode of playing**

The game can be played in three modes:

- Single player no internet connection. In this mode the player plays alone and the environment is controlled by the Artificial Intelligence engine. The data although based on real world data is not current live data but historical data stored in the game media.
- Single player with downloaded data. In this mode the player plays alone as in the previous mode but the weather, earthquake, pricing and other real world data are periodically updated via the internet to reflect current weather and market conditions.
- Multiplayer mode. In this mode multiple independent players can if they choose to interact with other players. Each game is played individually on an independent console or PC but will display the position and relevant data on other ships using a peer to peer data exchange system. Players will be able to make deals with one another such offer their services, sell their cargo or their vessel e.g. a player with pilot experience in certain ports may offer them to other players. The game artificial intelligence engine would balance the offerings and transactions, when there are enough offers from other players it will only display these offers when there are not enough players or not enough offers it would fill in the gaps with data from its repository.

Players in a multiplayer game may choose any of the available scenarios and may opt to download live data via the internet, but all players must be playing the same scenario to assure a consistent game environment is maintained among all participant players.

In a multiplayer mode the player may log out of the game in periods when they are not actively playing or may opt to set the game to snooze mode in which the player will receive notification of events such as a ship being put up for sale or someone requiring a pilot via a messaging service such as e-mail, internet messaging or SMS and will be able to decide whether to respond to the event or not. Players in a multiplayer game may also leave a game entirely to join another multiplayer game or play the game in single player mode.

## **Scenarios**

The game can be played in a number of scenarios:

- Current world political economic and weather conditions as reflected in the data downloaded via the internet
- Fictional simulation in which fictitious geopolitical, economic and weather events are mixed in with real world data to create an environment based on the current world, i.e. all the countries and level of technology are the same but events such as international conflicts, economic conditions and weather are generated by the system and do not reflect the current state of world affairs.
- Historical scenarios which accurately reflect the geopolitical, economic and weather patterns of specific periods in the 20<sup>th</sup> century such as The Great Crash of 1929, World War II, The 1973 oil embargo and the Gulf War. World maps, news, economic and weather conditions as well as the selection of ships will reflect the conditions and available technology of the time.

Live data downloads are only relevant to the current world scenario as the historical data required for all other scenarios is contained in the media.

In a multiplayer game all players must play the same scenario to assure consistency among players.

If a player decides to end one scenario and start another the accumulated experience, ships and capital resources may be transferred from one level to another but will be translated into the values appropriate to the period. For example the value of capital will be translated to the appropriate value for the historical period concerned. The same applies to the size of ships, if the player owns a supertanker and decided to change the scenario to World War II the size of the ship would be changed to reflect the size of oil tankers during World War II.

## **Available Data**

In order to enable the player to make the appropriate decisions various data sets are available to the player such as:

- Navigation charts, for plotting the course of the ship
- Information on ports such as size of ships the port can accommodate, available berths so the player can reserve a spot for when they plan on arriving or know how many days they will have to wait outside the port for a docking place
- Weather data
- Earthquake data and warnings
- Current interest rates
- Current commodity prices for the commodity they can buy and ship
- Current shipping rates for various types of cargo so they can compute the profit for the voyage

The player can also view information on:

- the current state of the ship, age, corrosion level, condition of the engine
- Their capital reserves

- Their captains card detailing the level of experience achieved and any mishap records
- A global view of ports and shipping lanes
- A radar view of the immediate area, near by vessels etc.

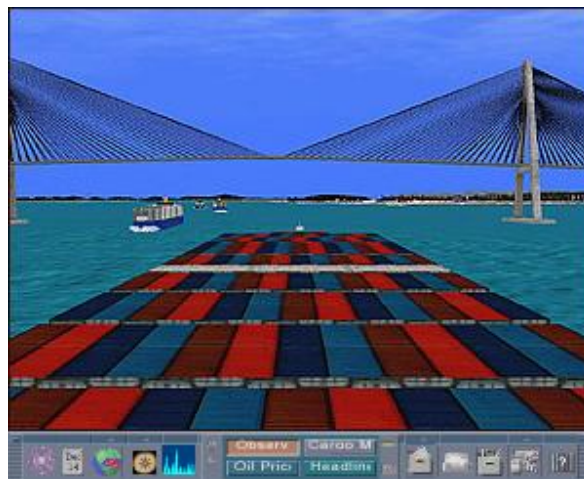
The source of the data will depend on the mode of playing and the scenario played:

- in a single player non connected mode the data will come solely from the game media
- in a single player with a live internet connection playing the current world scenario the data in the game media may be augmented with live data reports
- In multiplayer mode the data will come from two primary sources: the game media and information from the game consoles of other players. If playing the current world scenario the data may be augmented with live data reports delivered via the internet.

The AI engine will balance the data from all sources to create a seamless view to the player.

### **Graphics and Display**

The default display of the game is a 3D rendition of the view out of the bridge window which will display the sea, passing ships and the view of the harbour when arriving at a port. The motion and angle of view will change in response to the navigational commands issued by the player.



The bridge window is equipped with a holographic display so alerts such as turning the ships wheel to change direction, the radar screen to alert of another vessel getting to close, important news items such as a drop in the price of oil, the promotion of another player to a higher rank and other important news alerts and emergency displays will be superimposed on the window to draw the immediate attention of the player.

Petroleum (\$/bbl)		Price Change
▼ Nymex Crude	26.67	-0.19
▼ IPE Crude	25.45	unch
▼ Dated Brent \$	25.19	-0.12
▼ WTI Cushing \$	26.47	-0.39
▼ Nymex Heating Oil	67.25	-0.04
▼ Nymex Gasoline	78.50	-0.87

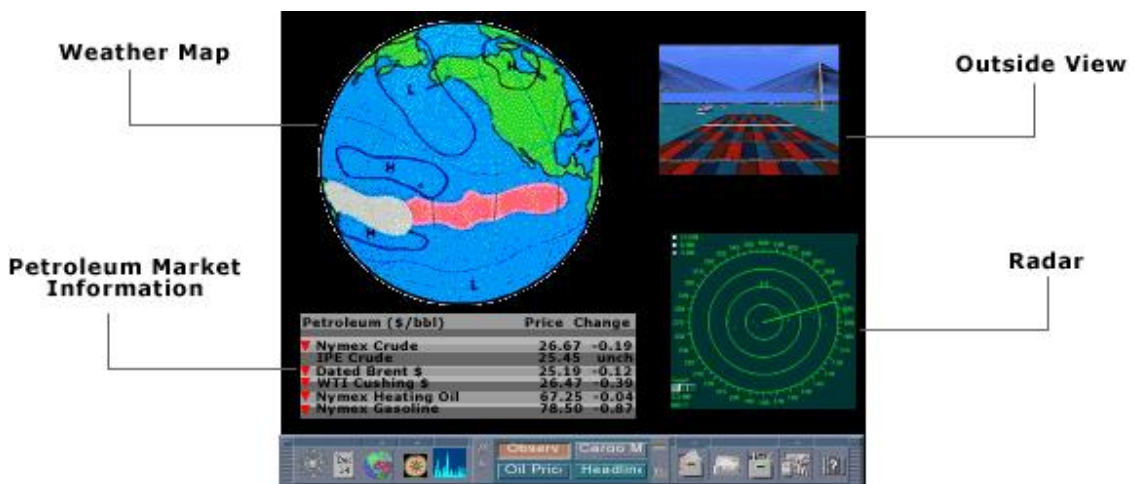
The control panel at the bottom of the display allows the player to change the display to view any of the instruments and data resources available such as the radar, weather maps, etc. The control panel is dynamic therefore the compass panel is not a simple compass icon but will display the proper compass heading. The control panel is fully customizable by the player, buttons and panels can be added and rearranged to suite each player's favourite mode of playing. Control panels also reflect the rank of the user with higher ranks gaining fancier instruments such as a golden compass.



In addition to the default view a variety of views tailored to a specific function will be available to the player at different stages of the game. At the beginning of the game the player will be presented with several displays in which the choice of scenario, ship, cargo, home port, and route specification will be made. These views will utilize two dimensional graphics, maps and textual information. The control panel will reflect the stage of the game the player is currently in, so during the ship selection phase the control panel will display buttons relevant to the task such as view ship layout, specification, etc. as well as buttons for going to the main selection screen of choose a ship, cargo, etc.



Throughout the game the player is free to use the default views or customize the display to their own game playing preferences the player may decide to utilize the holographic display to project control panels such as the radar screen into the main display area or split the screen to show several panels at once.



The flexibility afforded by the display and the control panel will permit novices to start playing immediately using the default screen arrangement while allowing more advanced players to customize the display and controls to their own liking without the intricacies of a complex menu system.

### Player Action

Using all of the available resources described above the player as the captain of the ship has to choose the type of ship, the type of cargo, port of call, specific route to be taken and then navigate the ship contending with all events along the way such as currents, weather, engine trouble, pirates and other issues all of which are dependent on the route chosen, the condition of the ship, and live events such as the weather and market forces thus no captain and no game would be exactly alike each will have its own unique set of characteristics and events assuring an action packed and demanding voyage.

Specific interfaces such as a map viewer to examine world maps, navigation charts and weather reports as well as cost estimation calculators are available to the player to view pertinent data, and evaluate different scenarios before making a decision.

## **Gameplay Walkthrough**

1. After the opening introduction which varies between the states of the game:
  - First time the game is played
  - New game started by an existing player
  - An existing player returning to a saved game

The player is presented with his current holdings and state of affairs:

- For a first time player that's the basic level of experience and start-up capital
- For a new game started by an existing player that's the current level of experience and capital resources
- For an existing player returning to an existing game that's the entire synopsis of where the game was left the last time the player played the game.

In an existing game the player would just carry on playing the game from where he left off after being informed of the history of the game and recent developments.

A new player and an existing player starting a new game will make their ship, cargo and destination choices and would then proceed to plot their route and plan their strategy.

2. Once the decisions have been made the game begins with the ship moving along its prescribe route and the player having to respond to events such as weather conditions, sea currents, pirate attacks, distress calls from other ships, stowaways, mechanical breakdowns, earthquakes, regional wars, ice bergs, collision hazards and the like.

If the player fails to properly react to an event he will either loose the ship or will suffer delays, further events such as breakdowns, legal or military action against the ship, etc. all of which have financial ramifications which may force him to declare bankruptcy and in essence loose the game or suffer a set back in experience and or capital resources which will hinder his progress in the game.

If the player reacts properly to the unfolding events in the game and manages to successfully complete a voyage he or she will gain the experience and capital gains entailed in that voyage. Experience and capital gained in one voyage will count towards future voyages and for the achievement of rank designations.

## **Worldwide Market Potential**

The concepts of shipping, world economic markets, weather and strategic thinking are well known throughout the world endowing the game with a universal appeal and global market potential since the elements of the game do not have any culturally dependent material and will be readily understood by players in all the nations of the world.

Since the concepts of the game will be globally understood the only element of the game that requires changing will be the language of the game and with that in mind we have divided the global market into language segments instead of cultural, national or regional segments.

The division of the game market into language segment does not mean the game will be devoid of regional or national elements. Using the user preference settings a player will be able to inject regional and national qualities into the game by naming the ship using a regional name, choosing a local home port and flying the national flag on the mast. The game will also support both metric and imperial units of measurements thus allowing the use of kilometres and miles as well as Fahrenheit and Centigrade depending on the regional preferences of the player.

The large selection of ports, types of ships and types of cargo means that while maintaining its global appeal the game can cater to the regional whims and interests of individual players thus a Japanese player who wishes to export cars on a car carrier from Yokohama or a Finnish player who wants to ship timber out of Helsinki or even a Costa Rican with an urge to ship bananas out of Puerto Limón would have no difficulty in doing so.

Six languages were chosen for the initial release:

- English
- Japanese
- German
- French
- Spanish
- Portuguese

The order of language release was determined by the size of the population speaking the language and the economic well being of that population group with the assumption that in more affluent countries the market for multimedia games would be greater than in the less affluent countries.

### **English**

English represents the largest and most affluent potential user base. The English language market is divided into a primary and secondary market. The primary market comprised of the United States, United Kingdom, Canada, Australia and New Zealand is made up of 400 million people residing in countries with a high per capita income level and high levels of internet connectivity.

The secondary market comprised of India, South Africa, Philippines and the Caribbean has a population base of over a billion people but while English is widely used large portions of the population are poor and internet connectivity varies from high quality to non existent.

A single version of English would work well across all these markets if the game avoids local slang expressions and provides in the documentation local contact information and for Canada warranty and contact information in French as well as English.

### **Japanese**

The Japanese language group is primarily made up of the people of Japan which with a population of 127 million people, a high per capita level of income and high levels of internet connectivity is the second largest market after the English speaking group of countries.

### **German**

The German language group is made up of the population of Germany, Austria, Liechtenstein, portions of Switzerland and Luxembourg totalling 96 million people with a high level of income and high levels of internet connectivity.

### **French**

The French language group is divided into a primary and secondary market. The primary market comprised of the population of France and portions of the population of Canada and Switzerland totalling 75 million people with a high level of income and high levels of internet connectivity. The secondary market comprising of various African nations has a population of over 100 million the majority of which would be of low affluence with low levels of internet connectivity.

### **Spanish**

The Spanish language group is made up of the 40 million residents of Spain plus 200 million residents of Latin American countries. This market place requires further examination as portions enjoy a higher level of income and internet connectivity while others have very low income and varied or non existent levels of internet connectivity.

### **Portuguese**

The last language group is made of the residents of Portugal and Brazil totalling 185 million people with a varied range of incomes and internet connectivity

## Other Languages

The above languages may also cater to the needs of additional markets not mentioned above; residents of other countries in which the predominant language is not supported by Shipping Challenge may buy a version of the game in one of the supported languages. Thus the English version can be viewed as having an international appeal while other languages may have a broad regional appeal for example German in Scandinavia. The design of the game allows the support of additional languages if market demand warrants the development of additional language versions.

## Competitive Market analysis

Shipping Challenge is a unique game both in term of its environment and its level of functionality in the current market there are no games that can be regarded in direct competition with Shipping Challenge.

In trying to asses the competitive environment for shipping challenge we looked at the current offerings for two perspectives. The first point of view was aimed at games using ships or a naval theme as the main focus of the game experience of which the majority were battle simulation games such as *Pirates* by electronic arts and older primarily PC games such as *Age of Sail II* simulating Naval warfare primarily during WWII. Since the primary focus of these games is naval warfare a different genre from the commercial simulation/strategy genre of shipping challenge they should not be viewed as a competitive challenge since they cater to a different segment of the gaming audience.

The second point of view looked at games with a commercial simulation/strategy focus a few games namely *Merchant Prince II*, *Airline Tycoon* share some of the game play aspects of *Shipping Challenge*.

*Merchant Prince II* by Talon Software is a commerce strategy game set in the renaissance period in which the player assumes the guise of a Venetian merchant and has to successfully complete a trade voyage while contending with the elements, pirates and corrupt officials. Although similar in some of its premises and roles to shipping challenge, *Merchant Prince* offers a linear story set in the renaissance offering the player little scope for evolution and none of real world data and progression choices offered by *Shipping Challenge*. *Merchant Prince* originally released in 1993 enjoyed a considerable following in its day and is still marketed for the PC platform so *Shipping Challenge* could capitalize on that fan base by offering them a completely new and enhanced experience of shipping and commercial transactions in the 21<sup>st</sup> century.

*Airline Tycoon* by Monte Cristo Games is an airline management game in which the player has to manage an airline and deal with all aspects of the business from grumpy passengers through equipment failures to setting up the flight path and buying planes. In principal *Airline Tycoon* is closer in its premise to *Shipping Challenge* than any other game out there as the player has to contend with a variety of market forces however *Airline Tycoon* lacks the real world excitement and feel of *Shipping Challenge* as its lacks the online data feeds of shipping challenge and all of its graphics are done in the form of cartoons giving it more of an amusing narrative game feel than a true strategy/simulation game.

Advantages	Disadvantages
<i>Shipping Challenge</i> is unique in terms of its environment and functionality	Reviewers may be tempted to draw incorrect parallels due to the lack of a direct competition to compare against
<i>Shipping Challenge</i> with its dynamic	We need to make sure <i>Shipping</i>

<p>environment, multiple scenarios and real world data provides a very lively game play environment in which no two games can be alike a totally different experience from existing commercial strategy games such as <i>Merchant Prince II</i> which has a very linear story line and is permanently set in the Renaissance.</p>	<p><i>Challenge</i> is not regarded as an upgrade to <i>Merchant Prince II</i> but is viewed as a completely new gaming experience</p>
<p>While <i>Airline Tycoon</i> is set in the Airline industry <i>Shipping Challenge</i> is set in the shipping industry and offers a far greater array of scenarios and choices, in addition <i>Airline Tycoon</i> is designed as a humoristic game with a cartoon like interface while <i>Shipping Challenge</i> adopts a more realistic interface.</p>	<p>Need to emphasize the unique qualities of <i>Shipping Challenge</i> as a simulation/Strategy game so it will not be confused with the cartoonish nature of <i>Airline Tycoon</i></p>

## Platforms

Platform requirements will vary based on the mode of playing preferred by the user.

- Single player stand alone mode in which the game relies entirely on the resources included in the media will work on any game console (equipped with a memory card or other means of permanently storing small amounts of information) or PC as it only needs to store state information on game progress, capital and experience levels.
- Single Player with downloadable data would require a hard drive to store the downloaded data and an internet connection via a modem or broadband connector
- Multiplayer mode would require an internet connection and additional storage to store multiplayer information. If Player chose the multiplayer with downloadable data option a hard drive would be needed to store the downloaded data

At the moment the only two platforms with an integrated hard drive and built in internet connectivity are PCs and the XBOX, Sony plans to offer external hard drive and modem modules for PlayStation 2, Sega also has plans to offer a modem module and a 64MB memory expansion module.

Game development will be carried out in C++ using DirectX graphics libraries as C++ and DirectX are the most widely supported gaming development platforms.

The first Platform to be released would be the XBOX, followed by PC version. Since the XBOX operating system is derived from windows 2000 the same code base should work on both the XBOX and PCs with Microsoft 98 and up, however since graphics support on PCs is dependent on a variety of different graphic cards and drivers the PC platform would require a higher level of testing and debugging than the fully debugged XBOX and therefore the planned launch is for XBOX first and PC later on when the longer testing cycle has been completed.

Support for the PlayStation 2 and the Nintendo GameCube will follow pending evaluation of the hardware requirement support offered by Sony and Nintendo and market analysis for offering a limited single player no download version tailored to the limited hardware resources of these platforms.

## Controls

The controls for Shipping Challenge are designed to enable the player to gain maximum flexibility with the least amount of buttons.

## PC

On the PC platform the main control device will be the mouse and control elements on the screen which will be highlighted when the mouse is moved over them and can be clicked to perform a function or to reveal a set of navigation menus. In addition the arrow keys can be used for movement and the user may map any of the keys on the keyboard to a specific menu option or function. To aid novice players certain function keys will be pre-programmed with default values but it is assumed novice players will rely primarily on the mouse and standard interface while more advanced players may opt to map specific keyboard keys.

## XBOX

On the XBOX there are several control layouts depending on the status of the game, i.e. whether the player is navigating the ship or making strategic decisions such as plotting a course, selecting a cargo, or buying a ship. The player may remap the controls to suite individual preferences.

The preliminary design contains three layouts designed for the XBOX game controller:

- The control panel interface from which the player will choose the various options e.g. type of ship, type of cargo, mode of play, etc.
- Map interface in which map data such as navigation charts, port locations, weather maps, etc. are presented
- Ship navigation interface through which the player navigates and controls the ship

All of the interfaces contain 4 programmable quick key buttons which the player can set for a particular menu or view option of their choice and thereby minimizing navigation. The Quick keys will come pre-programmed with default values set to toggle the radar, alerts display box, overview map and news ticker displays. This will allow novice players to get used to the game environment quickly while affording advanced players with all the flexibility they need.

### Control Panel Layout



## Map Interface Layout



## Ship Navigation Layout



## Prototype Requirements

An early prototype of Shipping Challenge will be developed with the following goals in mind:

- The prototype will serve as a proof of concept showing the viability and technological feasibility of the game on the target platforms.
- It will serve to demonstrate the game is a fun and enticing activity capable of captivating players and sustaining their interest in the game
- It will act as a test bed for the game controls and for player reactions.

The aim of these goals is to assure the basic assumptions of the game and the design implementation of the game are in line with the expectations and habits of the target audience for the game.

In order to achieve these goals the prototype needs to contain the following elements:

- Main control panel
- View of captain card showing the players level of expertise, etc.
- Ship and Capital resources view
- Ship Selection View
- Cargo selection view
- Views displaying critical data such as maps, economic and news data
- Bridge view
- Radar view
- The complete data set required for one of the scenarios
- Data for at least five ports of call
- Data for several types of ships and several types of cargo
- Artificial Intelligence and Graphics engines required to support the full play of one of the scenarios.

### **Risk & Assumptions**

Most of the scenarios will utilize historical data contained in the game media, a large proportion of the data required to support the live data update feature for those playing the current events scenario is available free of charge. Need to further analyze the potential cost ramifications of the updates either in terms of the cost of continued data updates or the load on the server, if costs may become prohibitively expensive the feature may be turned into a subscription service for those players wishing to use it.

Multiplayer game sessions will be carried out in a peer to peer fashion thus the players will be utilizing their own memory and network resources. The central server will only be used for initial exploration of registered players as well as community building and marketing activities.

### **Summary**

To sum up the proposal, we believe Shipping Challenge is an exhilarating, thought provoking and stimulating game sure to captivate and enthrall a global following of gamers with a taste for simulation, strategy and asset building games.

Our approach to game development is based on two elements; a deep understanding of our target audience coupled with a deep understanding of the game environment. We believe that a rich and engaging gaming experience would lead to a success in the market place and have strived to develop one of the most compelling and enticing gaming environments through the combination of:

- Dynamic and enticing game environment rich in 3D views
- An amazing array of real world data and instrumentation ranging from weather maps and commodities data to radar and GPS displays on a holographic deck.
- Numerous captivating scenarios ranging from the historical to the purely fictional.
- A wide array of ships, cargos, home ports and destinations allowing players to define their goals and chart their own destiny.

By combining these gaming elements with our language based approach to market segmentation we strive to develop Shipping Challenge into a challenging, enthralling and exciting game with a broad global appeal.

As you can see we have already conducted extensive research and laid the ground work for the implementation of our gaming vision. We hope that you share our excitement and would join us in turning Shipping Challenge into gaming reality.