# Questionnaires Analysis

# Questionnaire

**Beacon- Marine Loading and Path Detection System**

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| **NEW USER (who doesn’t use any software)** | |
| Question 1 | 1. What is your Job Profile or designation in the enterprise?   route planner  load planner  Higher Management  Any other, Specify\_\_\_\_\_\_\_\_\_\_\_\_ |
| Justification | This is primary question to identify the staff and worker related to enterprise and the can be related o the response in the other questions. |
| Response |  |
| Analysis | Route planning and loading is done by very professional staffs of the company, The planning process also have intervention from the higher authority and other crew members. So planning was a mismatched process in the new system. |
| Question 2 | 1. Do you have used any tool for route map/load planning?   Yes  No  Any other, Specify\_\_\_\_\_\_\_\_\_\_\_\_ |
| Justification | This question is asked to new user to check the knowledge about the software. In small companies it is seen that people don’t know there can be software like this to help them. |
| Response |  |
| Analysis | About 50% of the new users does not heard of the software or having knowledge of them .About 37 % know that they can have software like this but they don’t the benefits |
| Question 3 | 1. Do you feel like having need of any software that can reduce complexity in the planning process?   Yes  No  Any other, Specify\_\_\_\_\_\_\_\_\_ |
| Justification | The question sees the user expectation, or need in the market. Since planning is very complex, it is expected to see the user response on the new software that makes problem solve in seconds. |
| Response |  |
| Analysis | More than 75 % user expects the new system that can help them in reducing complexity. With increase use of computer everyone expects a smart system to solve the problem in organized and smart way. |
| Question 4 | 1. How much time does it take to plan a route map?   In Seconds  In minutes  In hours  Can’t Say |
| Justification | To get a average amount of time taken by an algorithm. This question gives a data of the speed of the existing system and the average of time taken by the problem in the existing system. |
| Response |  |
| Question 5 | 1. Do you believe software can result into cost benefit and time benefit for the organization?   Yes  No  Any other, Specify\_\_\_\_\_\_\_\_\_\_\_\_ |
| Justification | It is asked to verify the rationale of the system in terms of cost benefits and time benefits. A successful cost cutting and time cutting is the prime target of the application and this concept is validated by the user’s perspective |
| Response |  |
| Analysis | About 80 % users believe in that it is must for the company to reduce time and cost in calculation and travelling .Also they believe that more container can be loaded in the ships with automated software. |
| Question 6 | 1. What are the numbers of consignment you send per day on average?   Less than 50  less than 100  More than 100  Less than 1000 |
| Justification | Questions ask the amount of consignment moved by the company on daily basis. It will be used for further to design the application and its speed in order to solve the average amount of time |
| Response |  |
| Analysis | An Average of 100 consignments is moved by 55 % of the company. Rest company have their consignment between 100 to 1000 on average. It will be very hard to calculate the travel plan and load plan for more than 1000 times by one software. Company needs multiple copies of the software installed on several machines. |
|  | 1. Have you ever faced a highly complex and unsolvable route map/ container loading scenario?   Pretty Much  Sometime  Never  Other Please specify \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Justification | The question is asked to find out the average of the complexity and unsolvable problem arises before the manual system. Most of the places where these system are not applied, how problematic they find this scenario. |
| Response |  |
| Analysis | More than 50% user are affected by the complex nature of the problem, they have no way to load other than random or by experience. This is the common process for most of the staff to just load by the experience. |
| Question 9 | 1. Do you solely responsible for the decision in the planning process?   Yes  No, we work in team  Yes but require approval from higher management  Any other, Specify\_\_\_\_\_\_\_\_\_\_\_\_ |
| Justification | This is asked to determine the work flow of the organization. If there is single administrator a standalone desktop application would be sufficient. A group planning can never be done without the online or network shared application. |
| Response |  |
| Analysis | Only 35 % organization allow planning under one head , but most of the time there only approval by the other manager, So the response results in a portable result in image or document file can highly serve the purpose . |
| **EXISTING USER**( who have used some software of this kind) | |
| Question 10 | 1. Which of the following tool you use for route planning?   Google Map  Custom made tool  TSP solver  Any other, Specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Justification | Asked to take account the popularity and usability of the different route planning application available in the market. Google map is pretty good but can’t solve the analytical way. |
| Response |  |
| Analysis | Most of the companies have no choice of using Google Map to find the path and solve the shortest path. However they don’t use path analytically based on the traffic, whether, loading and other plans. |
| Question 11 | 1. Which tool you use for load planning?   2D/3D Load Packer  Container Load Simulator  packVol  Any other, Specify\_\_\_\_\_\_\_\_\_\_\_\_ |
| Justification | This question is asked to see the popularity of a application , so that the features and methods can be researched and applied in the current project . |
| Response |  |
| Analysis | About 50% companies follow packVol , its has great design ,database connectivity and very good algorithmic approach to solve. The design principle and human computer interaction also very good .Other 30 % user either use 2D/3D software or any custom made software in general. |
| Question 12 | 1. How did you find using software/tools for route map and loading for novice users?   Easy  Average  Hard  Any other, Specify\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Justification | To find the usability and the training on the software , Its varies from novice to expert , but for a general it is taken into account , how hard is to use this kind software by professionals |
| Response |  |
| Analysis | Most of the user find it average to use , most of the terms are technical and requires knowledge of subject matter , only 25% users think that it is hard for novice users that can be solved by better design and user manual. |
| Question 13 | 1. How much time does the software takes to create a final plan ( from entry to final result ) ?   In seconds  In Minutes  In Hours  one day |
| Justification | It accounts the average time to solve the problem or loading, this includes basically the time of entry and time taken by algorithm to reach the optimize solution. Time complexity of the algorithm is always prime issue .Developer use theta (notation to find the final time of the algorithm. |
| Response |  |
| Analysis | Around 60 % users believes that the total task is of around 30 minutes to 2-3 hours by using this software. On the other hand the software is not very fast that can solve in minute and also very slow that takes a huge time in the process. |
| Question 14 | 1. Do you need software with excel data entry and language support feature?   Yes  No  Any other, Specify\_\_\_\_\_\_\_\_\_\_\_\_ |
| Justification | The additional feature in the application gives it a success star. Excel sheet and language support are one of the very important feature available in any software today |
| Response |  |
| Analysis | Around 80 % users find it the mandatory and useful feature that increase the work flow and decreases the complexity. Language support is also very important in the international environment of working. |
| Question 15 | 1. Is there any feature that use backtracking and editing on the previous planned data?   Yes  No  Any other, Specify\_\_\_\_\_\_\_\_\_\_\_\_ |
| Justification | This is regarding the manual customization after the plan is generated. Most of the application does not allow for customization on the application generated plan. This question gives the account of need of this feature. |
| Response |  |
| Analysis | About 50% users find this solution to be useful. IT is good to edit the final plan according to the user as small changes can always be reflected on the final sheet regardless of what is best optimized. |
| Question 16 | 1. What is the format of Final Plan result file?   Image  pdf  doc  Any other, Specify\_\_\_\_\_\_\_\_\_ |
| Justification | Portability of the final plan is done through this. Automatic document generation feature , how much it will be useful . This also represents the use of a single software that can work within the work break structure of the organization. |
| Response |  |
| Analysis | Most of the user appreciate the document generation feature and particularly in editable format as .doc file. Other notes, records and task can be entered in the bottom of the report for evaluation and other user. |
| Question 17 | 1. Are you satisfied with the quality of software you are using?   Very dissatisfied  Satisfied  Quite satisfied  Needs Improvement |
| Justification | This question is asked as the feedback of the application they are using, the features are more than enough and same as this project. Satisfactory level give arise to demand and usefulness of the project. |
| Response |  |
| Analysis | Around 75 % users rate these application on the satisfactory level , Most of the feature are enough to solve the problem and does not demand and extra updating on the feature or logics. |