Evolution of Integrated Systems

Panteleimon Pantelis COO
Let's look at the productivity onboard

- Most of your users are onboard.
- The average cost per man/hour on the ship is a multiple of that in the office.
- Most of the data you manage in the office originates from data entry on the ships. If you want to be productive, we start from the ship!
  - Whether this is automatically picked up from systems like AIS
  - Or manually entered like reporting an incident which affects a number of modules
    - A Defect from PMS,
    - Risk Assessment from Document management,
    - Non-compliance note from Document management,
    - A PO from Purchasing for the service repair or spares, and
    - A link to Crewing to record who did the work and ensure now days that this matches with what was reported
  - In the STCW module.
Lets look at the productivity ashore

- Firstly tools like lotus 123 came and was overtaken by excel. Then proper accounting software was introduced to reduce headcount and errors.

- Then people thought if we record in accounts expenses related to spares why not build a purchasing system to link straight to accounts and then that is the conflicts between technology and Users start.

- Then we made a maintenance system and linked it in the same database by the same manufacturer and called it integrated solution but based on the principles of architecture and design of the accounting system.

- For the IT guy it is integrated but is it for the Superintendent, that has to approve a purchase based on what his maintenance schedule requires?

- So we have two types of integration one for the IT management which is managing the software and one for the Users which is to manage their jobs, tasks etc.

- The companies then decide where is the priority when putting systems onboard as there are a number types of integrated systems spanning the gap between user centric and technology centric solutions. We have the options to buy from one player or best of breed and integrate them.
What do we mean by integrated software

• Same Navigation through the software

• Same look and feel through all the applications, do they look like they were created by the same company?

• Training in use of the one module should be enough to get users to use the new ones.

• Do customizations look like they are part of the product or would they need new training to use them? Does the software allow you to make good customizations

• Is the back office database using one database and can you create your own reports through a data dictionary. **Is it the correct database technology for a shipping company.**

• Does all the software work on the same infrastructure without needing complex architecture and maintenance on the ships?

• Do you have one automated replication method between ship and office and then integration with other 3rd party tools.

• For the future are further integration ease with systems like ShipServ or ECDIS or AIS?
The companies then decide what is their priority when putting systems onboard and ashore as there are a number of types of integrated systems, as described before, spanning the gap between user centric and technology centric solutions. We have the options to buy from one player or best of breed and integrate them?

These basic options are:
1. Do you want a specialized software vendor that integrates with other top vendors for the rest of your needs?

   • This solution will provide the best of breed, one software on the ship and best software options in the office.
   
   • One concern is that some software was not designed to be integrated which is outdated and doomed to become extinct
   
   • People are afraid that such a solution can be expensive

2. Do you want a single vendor that can offer integrated solution?

   • The problem with this is that you often have below standard modules in their attempt to satisfy all needs
   
   • Likely to be technology centric and not user centric.
3. What happens when you want to get the best of both? You take a vendor with as many applications as possible and then customize for your own needs.

- The problem with this is that the software ends up being custom and the cost of upgrades is very expensive and you end up stuck with a stagnant system.
- Your solution is as good as your requirements

4. Software from a big organization that maybe has not developed a lot of products but has the financial backing to do it quickly?

- Solutions are based on platform not designed for shipping
- Class Societies making software but you are both a policeman and a judge.
- Using land based system like SAP or Navision have good accounting systems for the office but everything else has to be build on top of that including communications with the ship.
- You are never sure what will Microsoft or SAP do to support you when they change their systems.
So we have to manage a trade off

• In the office we can afford to have many software on a users desktop more than we can on the ship.

• The problem you have is how good is the one vendor solution compared with a best of breed integration that provides a common interface for the most used modules?

• Remember on ships you also have solutions like ECDIS, Kongsberg, Loadicators software whose nature means you are already providing best of breed solutions.
Thank you