

MAKING MARINE SOFTWARE EASY TO USE – DONT GO SUPERFICIAL

Presented by:

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**Managing Director
Ulysses Systems, APAC**

PRESENTATION SUMMARY

- ❑ **THE NEED FOR INFORMATION MANAGEMENT**
- ❑ **SOFTWARE'S ROLE TOWARDS ADDRESSING MARITIME INFORMATION MANAGEMENT NEEDS**
- ❑ **"REAL" BENEFITS OF MARINE SOFTWARE SOLUTIONS**
- ❑ **UNIQUE CHALLENGES FOR MARINE SOLUTIONS**
- ❑ **IMPORTANT FACTORS INFLUENCING "EASE OF USE"**
- ❑ **RELATIONSHIP BETWEEN CONVENIENCE AND EASE OF USE FROM A SOFTWARE USER PERSPECTIVE**
- ❑ **KPIs and CONVENIENCE**
- ❑ **PRACTICAL ILLUSTRATIONS**
- ❑ **ULYSSES UPDATE**
- ❑ **CONCLUSIONS**

Many seafarers are familiar with the following scenario...

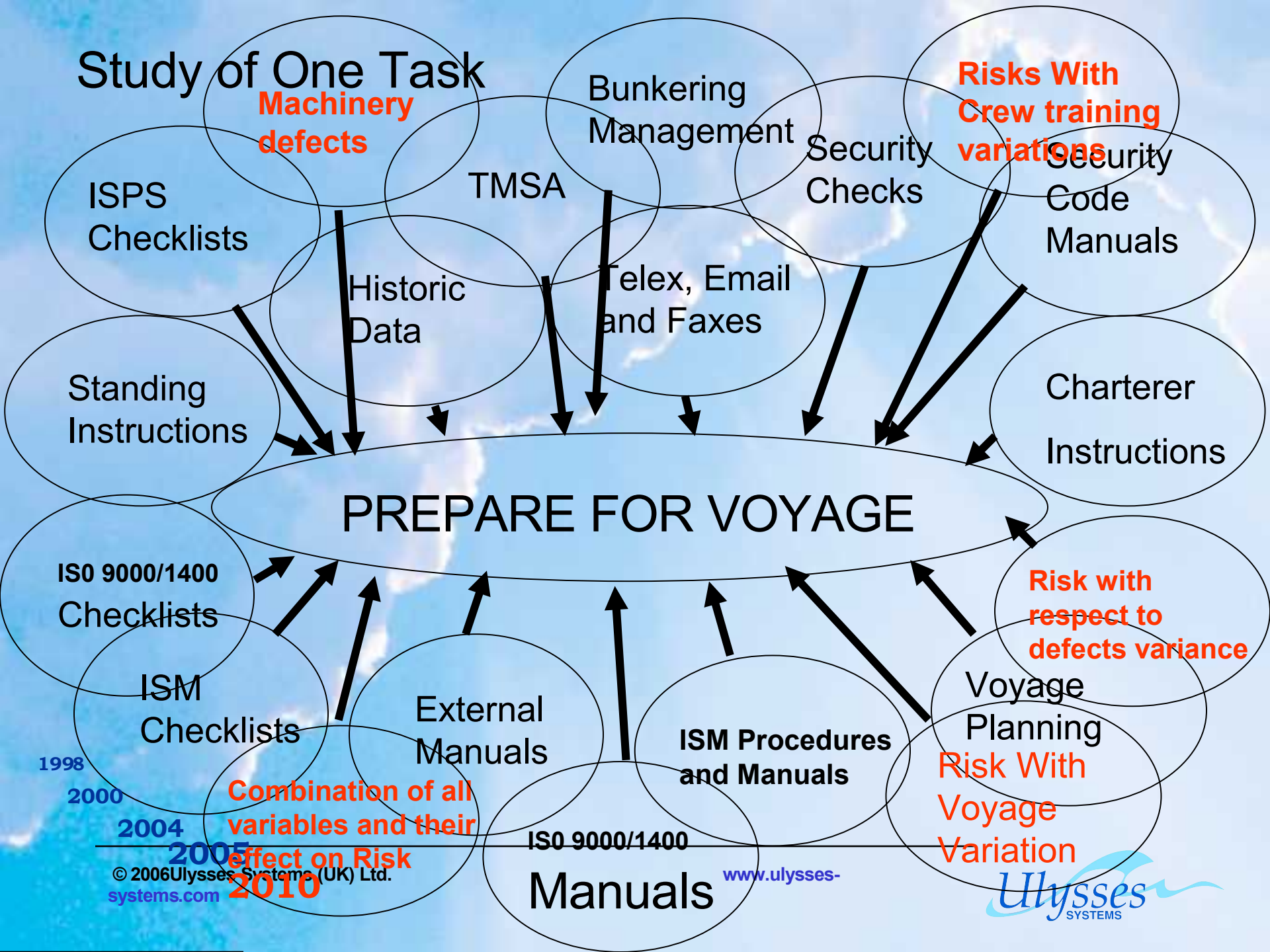


A vessel is approaching the Mississippi River and must prepare for arrival at a port in the New Orleans area. The Ch. Mate, in anticipation of arrival, will spend significant time on standby in the forecastle and on the bridge. Upon anchorage in a waiting area, the Ch. Mate must attend to clearance and inspection procedures before relocating the vessel to another anchorage, where he must oversee bunkering operations, stores deliveries and prepare for crew transfers. This must all be completed before berthing when he will prepare the vessel for loading or discharging operations (loading plan, cargo formalities, etc.). In light of all these responsibilities, in order to comply with current statutory requirements, the Ch. Mate is expected to simultaneously complete numerous checklists, forms, reports, and messages, all while attending to his other duties.

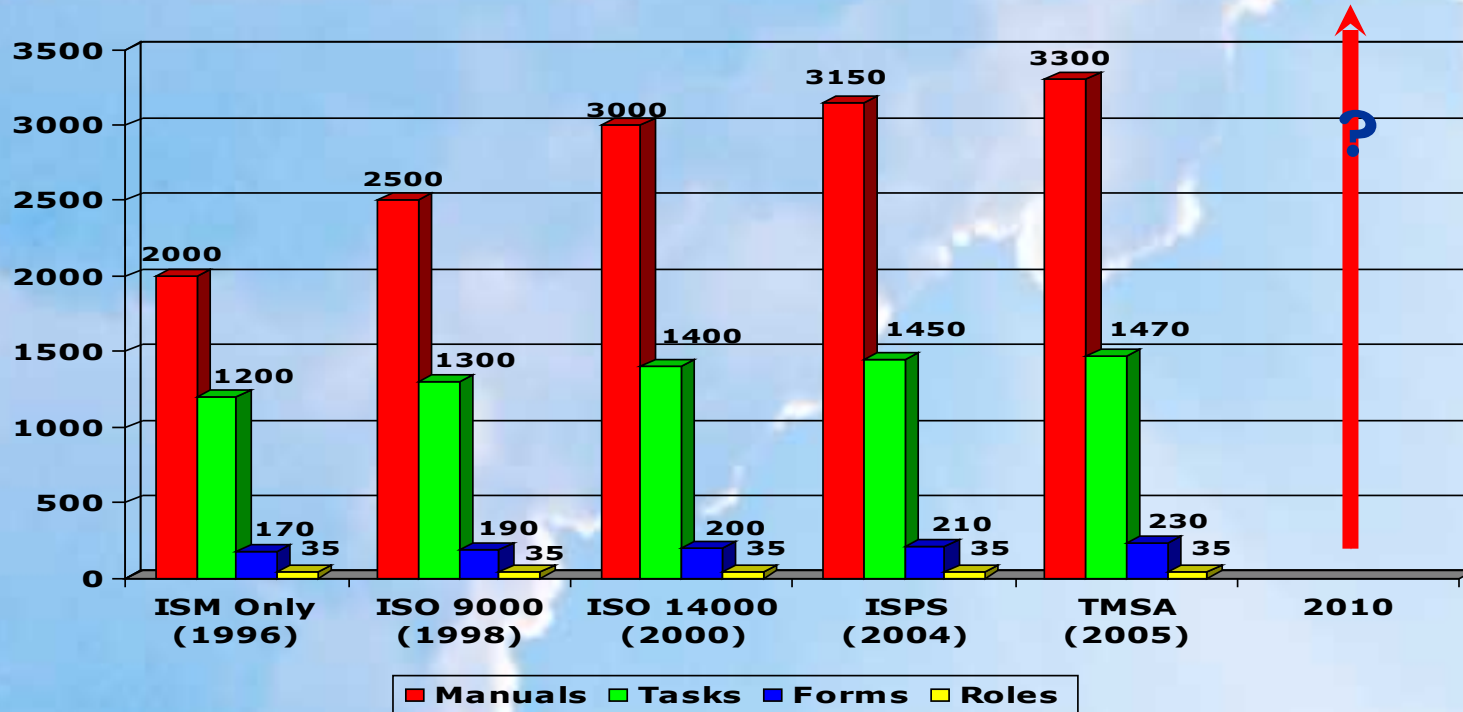
What about the Master?

Not limited to.....

- ✓ attending to immigration, customs and port authorities,
- ✓ sending off the arrival message to all parties concerned,
- ✓ ensuring all new crewmembers undergo adequate familiarization training,
- ✓ troubleshooting cargo operation abnormalities while properly recording evidence of due diligence
- ✓ preparing the ship for the new voyage and sending off estimated time of departure (ETD) notes to all interested parties,
- ✓ supervising security measures,
- ✓ presenting crew records and relevant managerial records to inspectors,
- ✓ signing off bunkering checklists and bunker delivery receipts,
- ✓ addressing crew cash advances and medical requirements
- ✓ demonstrating risk management due diligence in the case of a recent occurrence which could affect seaworthiness.
- ✓ ensuring that work rest periods are adhered to



EVOLUTION OF THE INFORMATION REVOLUTION



Tasks + 23%

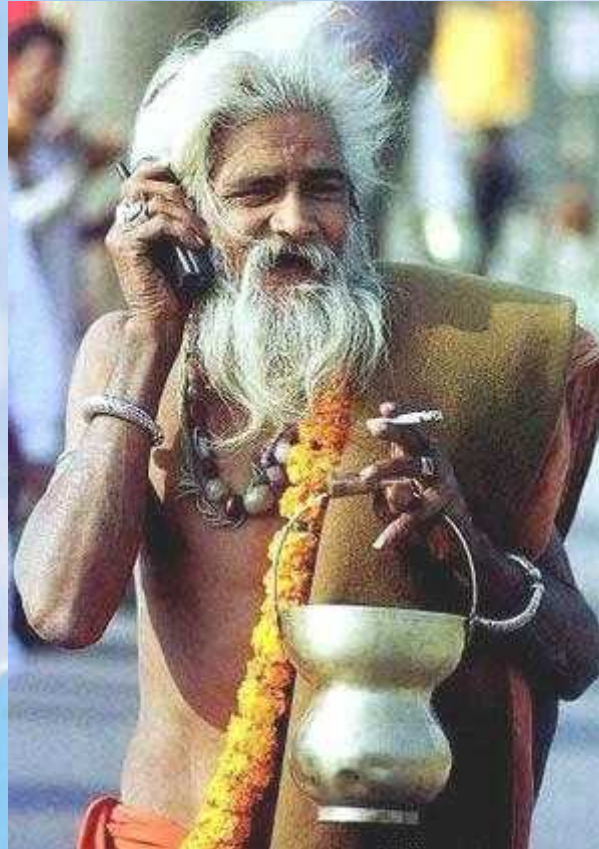
Form Types + 35%

Manuals + 65%

In the first 7 Years - What will happen in the next 10??

One thing is Sure Roles 0% (probably minus!!)

HOLY SMOKE!



**WE WILL NEED MORE THAN JUST DIVINE INTERVENTION FOR
SALVATION FROM INFORMATION OVERLOAD**

So How Can Marine Software Solutions Help?

- ✓ Provide **accurate, relevant information** in manageable volumes
- ✓ Reduce user **engagement time** for non-critical activities
- ✓ **Reduce duplication** of effort
- ✓ Make obscure, fragmented **information easy to find** without unproductive preoccupation
- ✓ Ensure **speedy, accurate information transactions** even in stressful or distracting situations
- ✓ Encourage convenient and accurate **data input**
- ✓ **Facilitate active knowledge management** as a byproduct of normal usage

Unique Challenges for Marine Solutions

- ⇒ Main users = Multi-tasking Risk Managers
- ⇒ Average users have low or no formal exposure to IT
- ⇒ Compensate for lack of clerical/secretarial assistance
- ⇒ Distributed offshore business units
- ⇒ Data transfer over satellite - EXPENSIVE
- ⇒ Contractual, migratory human resources (mainly seafarers)
- ⇒ High demand for minimal user training and familiarization
- ⇒ High demand for client-manageable content flexibility
- ⇒ Regulatory compliance
- ⇒ Rapid scalability
- ⇒ Automated audit trail

Relationship between Ease of Use and Convenience

FROM A HUMAN PERSPECTIVE, EASE OF USE IS BASED MAINLY ON INDIVIDUAL PERCEPTIONS

THE SINGLE MOST IMPORTANT FACTOR THAT INFLUENCES USER PERCEPTION OF EASE OF USE IS.....

CONVENIENCE

"Most software solutions meet basic functional demands, albeit in varying degrees. However it is the core DESIGN convenience invested right from product inception, that will determine the extent of ease of use."

..Relationship between Ease of Use and Convenience

DEFINITION:

Ease of Use is a human perception derivative whereas Convenience is the result of deliberate cognitive design

FORMULA:

CONVENIENCE FACTOR (CF) = PERCEIVED EFFORT – ACTUAL EFFORT

HIGHER CONVENIENCE FACTOR = GREATER EASE OF USE i.e. CF>0

HIGHER CONVENIENCE ALSO LEADS TO :

- **Lower Investment of User Time & Effort**
- **Lower Software Life Cycle Cost**
- **Better Acceptance**
- **Encouraged Usage**
- **Lower Familiarization Effort**
- **More Accurate Data Input**
- **Representative Results that Deliver Accurate KPIs**

...and now let's consider the Buzzword Fan's flavour of the year... KPIs

A practical definition.....

KPI = KEEPING PRIORITIES INTACT

Prioritizing the right indicators that most influence your
business success... example...

- **EXTENSIVE** MEASUREMENT AND REPORTING OF KPIs IS RAPIDLY BECOMING AN INDUSTRY NORM. E.g. THE TMSA INITIATIVE SPECIFIES SUCH KPIs FOR THE OIL TANKER TRADE
- CONVENIENCE-ENCOURAGED **REPRESENTATIVE AND TIMELY DATA INPUT** IS ESSENTIAL FOR ACCURATE KPIs
- THE ADVERSE EFFECT OF POOR DATA INPUT INCREMENTALLY GROWS AS THE DATA IS PROCESSED AND USED WITHIN THE SYSTEM

GARBAGE IN = MORE GARBAGE OUT

PRACTICAL ILLUSTRATION OF CONVENIENCE THROUGH SOFTWARE

These examples illustrates how suitable marine solutions not only affords ease of use but also provides REAL business benefits towards 2 very important and common marine priorities

EXAMPLE 1:

REPORTS AND REPORTING

EXAMPLE 2:

RISK MANAGEMENT

ATTENTION IS DRAWN TO THE EASE OF MULTIPLE REPORTS DERIVED FROM INFORMATION ENTERED ONLY ONCE BY THE PRIMARY USER

EXAMPLE 1: TMSA REPORTING AND KPI MONITORING

ILLUSTRATION 1: TMSA 4c Requirement

The Company needs to maintain the amount of outstanding PM tasks across the fleet expressed as a % of the total monthly planned maintenance tasks, recorded monthly with a YTD figure also indicated. Rankings between 1-4 (4 having the lowest % value and thereby being most desirable) are awarded.

.....ILLUSTRATION 1: TA & TMSA ELEMENT 4c

Task Assistant - v2.4.38.1 (R4A2)

Review Historic Key Performance Indicators
TMSA Element 4C KPI for 2004

WorkPlace

Vessel

Vessel /	Year	Month	Total Jobs	Expired Jobs	KPI
[All Selected Vessels]		Full Year (Average)	1177	86	10
- M.T.					
M.T.	2004	September	7	4	57.1
M.T.	2004	October	38	12	31.6
M.T.	2004	November	52	4	7.7
M.T.	2004	December	40	0	0
- M.T.					
M.T.	2004	January	28	2	7.1
M.T.	2004	February	78	16	20.5
M.T.	2004	March	31	1	3.2
M.T.	2004	April	23	0	0
M.T.	2004	May	150	1	0.7
M.T.	2004	June	44	0	0
M.T.	2004	July	68	4	5.9
M.T.	2004	August	79	9	11.4
M.T.	2004	September	50	0	0
M.T.	2004	October	40	3	7.5
M.T.	2004	November	374	30	8
M.T.	2004	December	75	0	0

Task Navigator

admin User: Superintendent
Athens Office

Search: Review Historic Key Performance Indicators

- View Long Term Schedule
- Lay-up Management
 - Define Lay-up Periods
 - Manage Lay-up Job Lists
- Maintenance System Setup
 - Define Offices and Vessels
 - Manage Master and Ship Setups
 - Manage Update of Offices and Ships
- Performance Statistics
 - Monitor Key Performance Indicators
 - Review Historic Key Performance Indicators
- Purchasing
 - Manage Expenses and Costs

Context Navigator

Context Template: Reporting Period, Vessel

Search:

- Report Period
 - 2003
 - 2004
 - 2005
- Vessel
 - M.T.
 - M.T.A
 - M.T.
 - M.T.
 - M.T.
 - M.T.

17 TMSA Element 4C KPI loaded.

2:52 PM

EXAMPLE 1: TMSA REPORTING AND KPI MONITORING

ILLUSTRATION 2: TMSA 3b Requirement: _

- ***For Stage 3 Score: The Company needs to demonstrate evidence to prove an 80% retention rate for senior shipboard officers over a 2 year period.***
- ***For Stage 3 Score: The Company needs to demonstrate evidence to prove at least 80% retention rate for ALL shipboard officers over a 2 year period.***

....ILLUSTRATION 2: TA & TMSA ELEMENT 3b

Task Assistant - v2.4.38.1 (R4A2)

Review Historic Key Performance Indicators
TMSA Element 3B KPI for: M.T. C

WorkPlace

Vessel ▲

Vessel ▲	Year	Month	Total Sig...	New Crew	KPI
[All Selected Vessels]					
[All Selected Vessels]		Running Year To Dat...	4	3	41.7
M.T.					
M.T.	2006	January	1	1	100
M.T.	2006	February	3	2	66.7
M.T.	2006	March	0	0	0
M.T.	2006	April	0	0	0

Task Navigator

admin User: Superintendent
Athens Office

Search: Review Historic Key Performance Indicators

- Purchasing Administration
 - Edit Stores Categories
 - Purchasing Defaults
 - Maintain Expense Types
 - Standard Conditions
 - View/Edit status name
- Budgeting
 - Manage Current Budgets
 - Review Budget History
- Performance Statistics
 - Monitor Key Performance Indicators
 - Review Historic Key Performance Indicators

Context Navigator

Context Template: Reporting Period, Vessel

Search:

Only search below highlighted item

- Vessel
 - M.T.
 - M.T. A
 - M.T.
 - M.T.
 - M.T.
 - M.T. Athenian Freedom
- Report Period
 - 2004
 - 2005
 - 2006

5 TMSA Element 3B KPI loaded.

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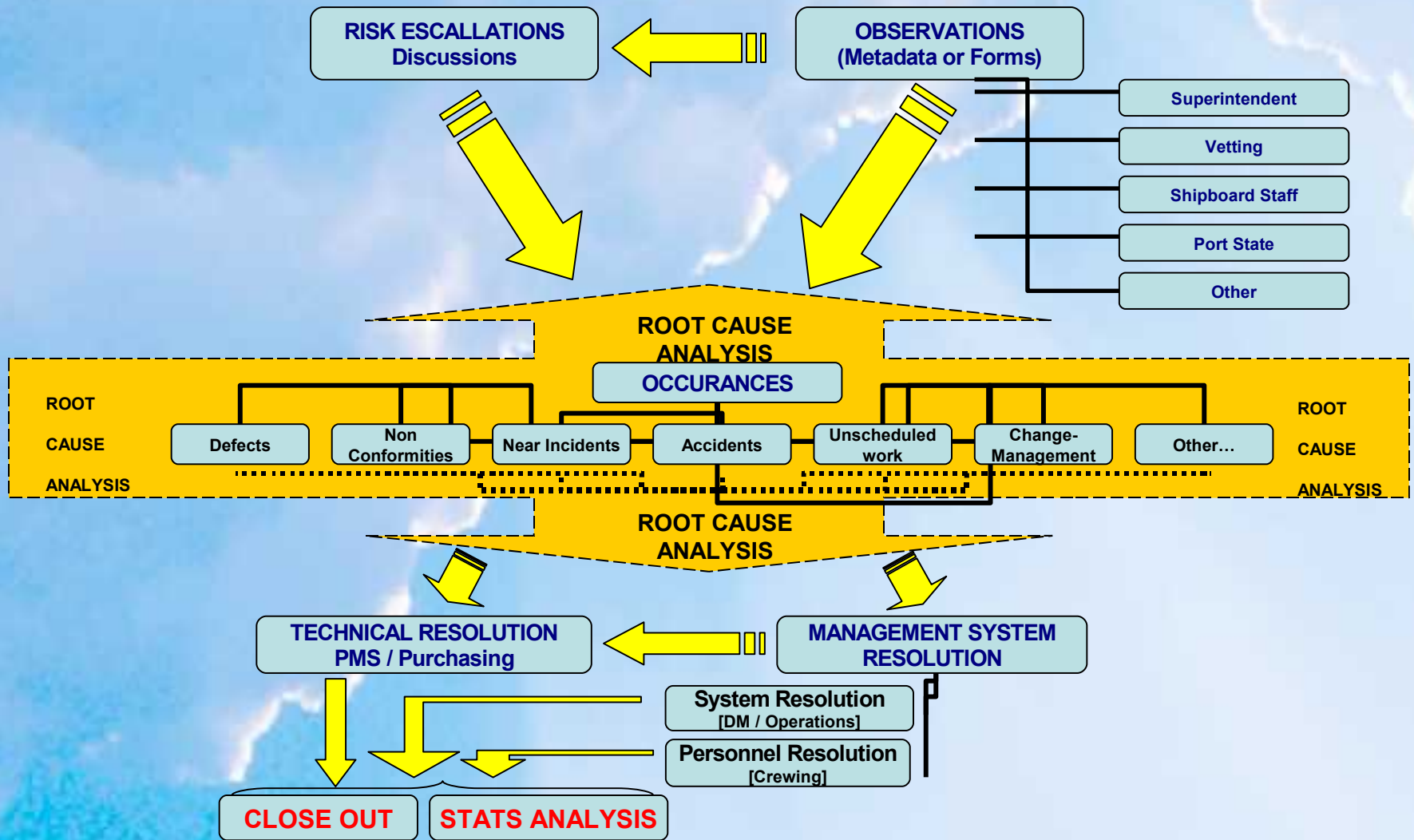
Start | Logo... | Inbo... | MSN ... | Skyp... | TA Task... | EN | 18:34

EXAMPLE 2: Risk Management

Some facts...

- ❑ **Risk Management (RM) = Knowledge Management (KM)**
- ❑ **Practical RM comprises of the following components:**
 - **Process-based**
 - **Experience-based**
- ❑ **Process-based components can be effectively facilitated by suitably convenient KM solutions through...**
 - **Accurate distribution of relevant information amongst disbursed teams involved in the decision making process**
 - **Automated archiving and retrieval of information**
- ❑ **Essential relevance is added to the decision making process by combining team Experience with the results of Process-based RM**
- ❑ **Suitable solutions facilitate the convenient combination of Experience and Process based RM**

Risk management flowchart



TARCC : The new improvements of TA that serves Risk Control

Task Assistant - 1.85.5 Plus - (Service Pack S42C42)

Roles Mail Boxes Hide Tasks Expand All Collapse All Task Info Help Close

TMSA_RISK CONTROL: Assess Risks, Escalate Reports and Monitor Corrective Actions. (Deck)

Site: All Ships Voyage: All Voyages Unread only

Manual References Forms and Messages Support Tools

Folders and mailboxes for this task:

- Standing Instructions
- Unofficial Reminders
- General Communications
- Ship NCN's Observations (Incident ...)
- IANMR
- Defect
- Office NCN's
- Risk Assessment
- Inbox
- Pending
- Outbox

Select a document and click an option:

Form code (Name)	Subject	Notes	Regarding	Last m
OBS(Observations)	PC BACK UP DRIVE DAMAG...	OPEN	Brownship	Master
OBS(Observations)	MAINTENANCE FORMS MIS...	NCR RAISE	Brownship	Techr
OBS(Observations)	RADAR'S MALFUNCTION	DEFECT-RAISE	Brownship	Quality
OBS(Observations)	FORECASTLE WAS FLOODED	NCR RAISE	Redship	Quality
OBS(Observations)	LOSS OF ANCHOR	DEFECT/NCR/INCIDENT...	Brownship	Techr
OBS(Observations)	MOORING WINCH/ REPLAC...	DEFECT-RAISE	Redship	Superi
OBS(Observations)	PROVISION CRANE TROLLE...	DEFECT-RAISE	Brownship	Techr
OBS(Observations)	SKANTI VHF 3000 CAN NOT ...	DEFECT-RAISE	Redship	Superi
OBS(Observations)	COW LINE ON DECK	DEFECT-RAISE	Redship	Superi

Options: View Delete Information Create From... Send Mail Follow Up...

Quality Safety Manager

Comply with International Workhours and Rest Period Requirements
Monitor Quality and Safety Records
Control Documents and Data
Conduct Internal Quality Audits Onboard and Ashore
Manage External Quality Audits Onboard and Ashore
Follow-up on Master's Review Reports
Continuously Review Contingency Plans and Take Immediate Action
Prepare for and Conduct Management Review Meetings (at least annually)

context

- Engine Room
- Deck
 - Hatches
 - Deck and Spaces
 - Forecastle deck
 - Main deck
 - Poop deck
 - Tween deck
 - Accommodation decks
 - Mast houses
 - Forecastle stores
 - Poop stores
 - Deck bosun stores
 - Bowthruster space
- Void spaces
- Mooring
- Hull
- Cargo Equipment
- Navigation Equipment
- Hotel System

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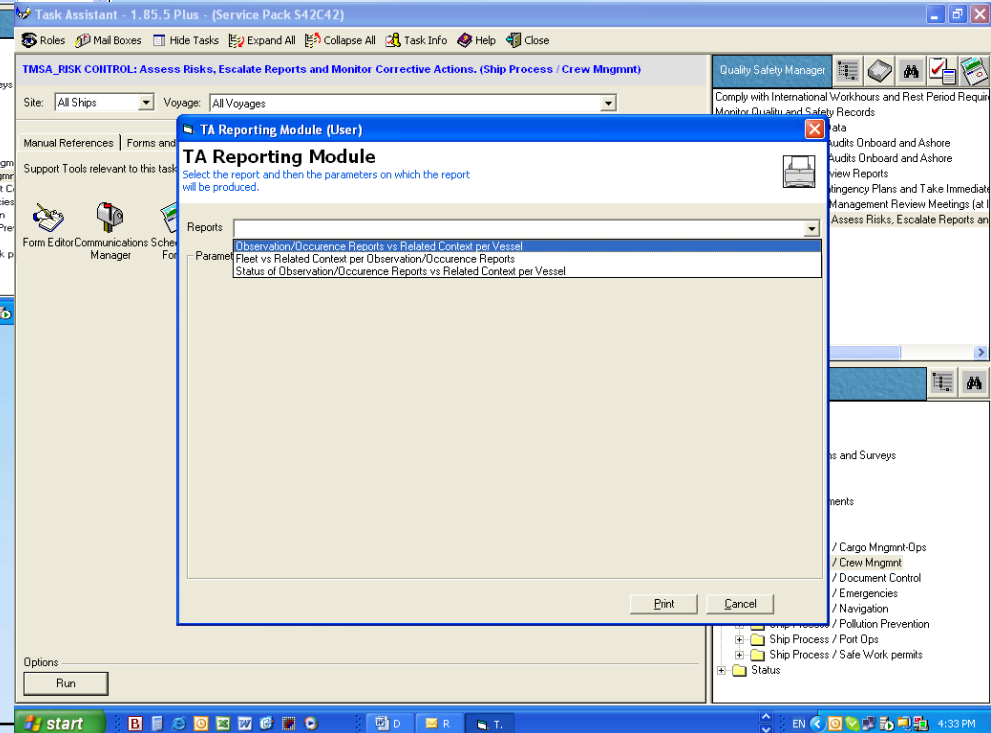
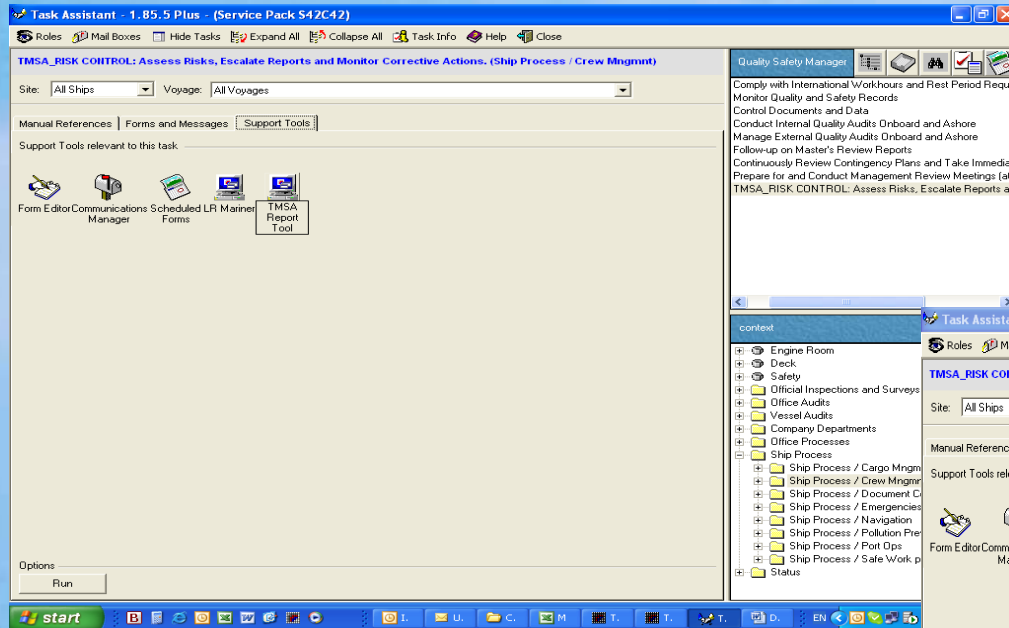
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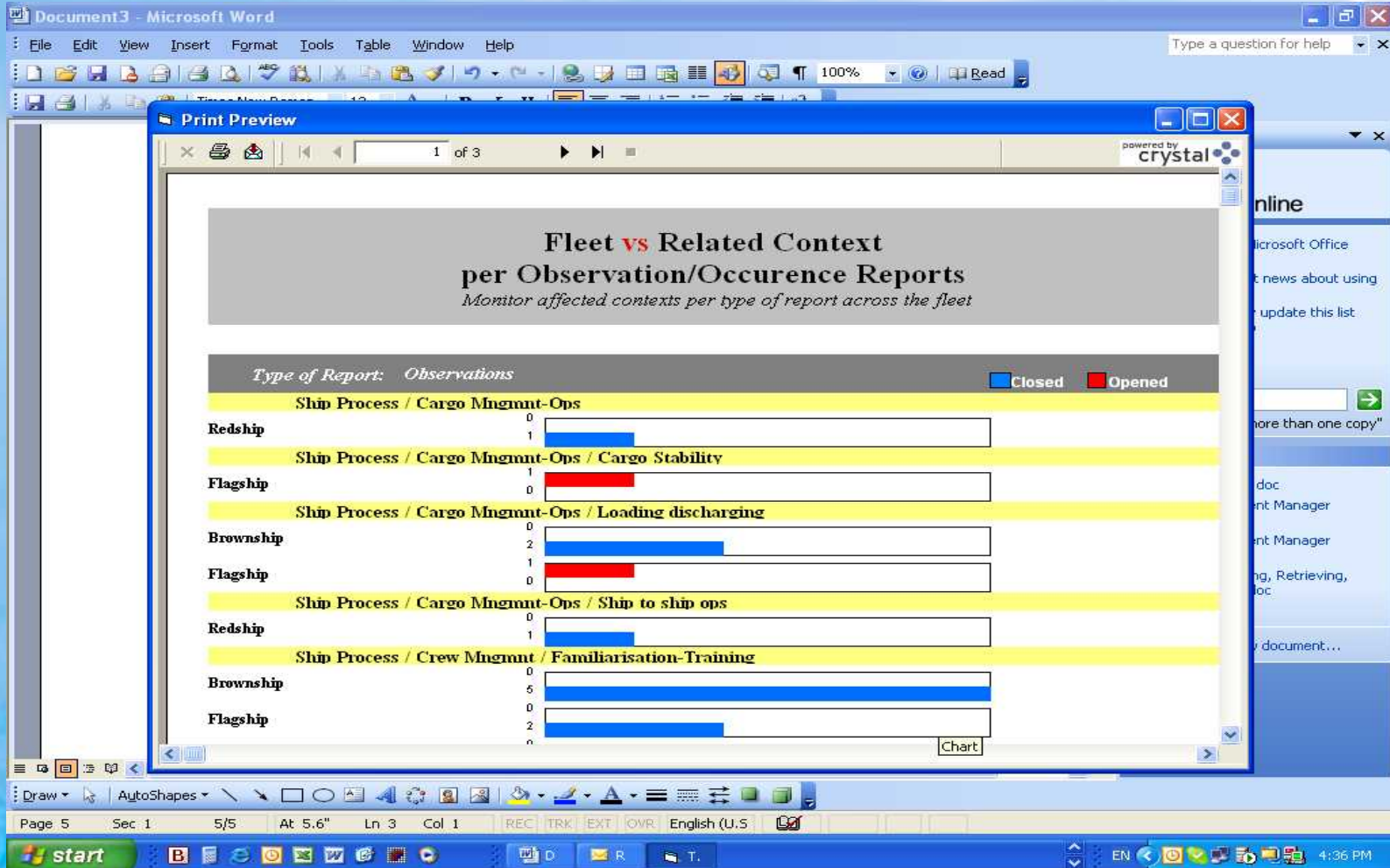
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- Hotel System

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CONCLUDING REMARKS

To summarize : -

- **CONVENIENCE ENCOURAGES EASE OF USE**
- **CONVENIENCE IS A DERIVATIVE OF DELIBERATE CORE DESIGN INVESTMENT**
- **MAXIMIZE USER CONVENIENCE TO ENCOURAGE USAGE AND ENTRY OF ACCURATE INFORMATION.**
- **ENSURE THAT YOUR SOLUTION ENABLES ACTIVE KNOWLEDGE MANAGEMENT AUTOMATICALLY AS A NATURAL BY-PRODUCT OF NORMAL SYSTEM USAGE.**
- **ADDRESS THE "WHAT'S IN IT FOR ME" FACTOR FOR ALL MAJOR STAKEHOLDERS AS EARLY AS POSSIBLE AND CONTINUOUSLY THROUGHOUT THE SOFTWARE LIFE-CYCLE.**
- **MEASURE AND BENCHMARK THE USAGE AND EFFICIENCY OF YOUR SOFTWARE PERIODICALLY AND USE RESULTS TOWARDS CONTINUOUS IMPROVEMENT.**

Ulysses Systems - RECENT FACTFILE

Total sales for 2005: up by 107 % over 2004

2006 sales up to June 2006 are already 143 per cent more than total 2005 sales, and total 2006 sales are forecast to be 300 per cent growth greater than 2005.

In terms of employees, the company has doubled in size over the past 12 months and now employs around 120 people.

The company recently opened a new office in Tokyo, Japan in addition to existing centres in London, Athens, Singapore, Mumbai and Toronto

The software is being used by over 1,000 vessels

Website: www.ulysses-systems.com

Questions?

THANK YOU