



WEBINAR 2020

**NEW – SHIP BUILDING
PROJECT MANAGEMENT**

**SMART COMPREHENSIVE METHODE – SUITABLE
PROJECT MANAGEMENT METHODE FOR
INDONESIA SHIP BUILDING CONSTRUCTION**

Suitable Project Management Method For Indonesia Shipbuilding Industry

MAY 2020

HVB – HENNY VAN BREMAR



BIODATA

Dipl.-Ing. Henny Poerwanti, IR

Dir. & CEO : since 2011 & sekarang

- Bremar Schifftechnik (Singapore & Indonesia)
- PT. XXX (Indonesia)

Background : Naval Architect & Mechanical Engineer

Specialist : Marine, Oil & Gas

Project Experiences: Commercial Ship, Navy, FPSO, Offshore Drilling Rig (Jack Up & Semi), Onshore Drilling Rig, Floating Facility

Clients : Petronas, Indonesia Company, M3nergy, Malaysia, Proceanic, USA, Deep Blue, Singapore, etc



CAREER

1992-1999

INDONESIA

Kodja, PT. PAL

(Design Engineer)

2000 – 2005

GERMANY

Luerssen Werft,
LR Hamburg

(Engineer)

2006 – Now

SINGAPORE

Sembawang Shp,
Keppelfels, EMS,
Rubicon, Proceanic,
Deepblue, Compass
Energy, Brema
Schif)

(Senior Engineer &
CEO)

□ PROJECT MANAGEMENT IN GENERAL

- Adalah kegiatan/ aktivitas yang terjadi pada proyek dengan tujuan untuk mengatur, mengarahkan dan mengurus proyek hingga proyek selesai dan tercapai tujuannya.
- Aktivitas penting utamanya: Merencanakan, Menyusun Strategy, Mengendalikan dengan jalan mengontrol dan memonitor, mengevaluasi.
- **Yang perlu diperhatikan: BIAYA, WAKTU & KUALITAS**

□ SHIP BUILDING PROJECT MANAGEMENT

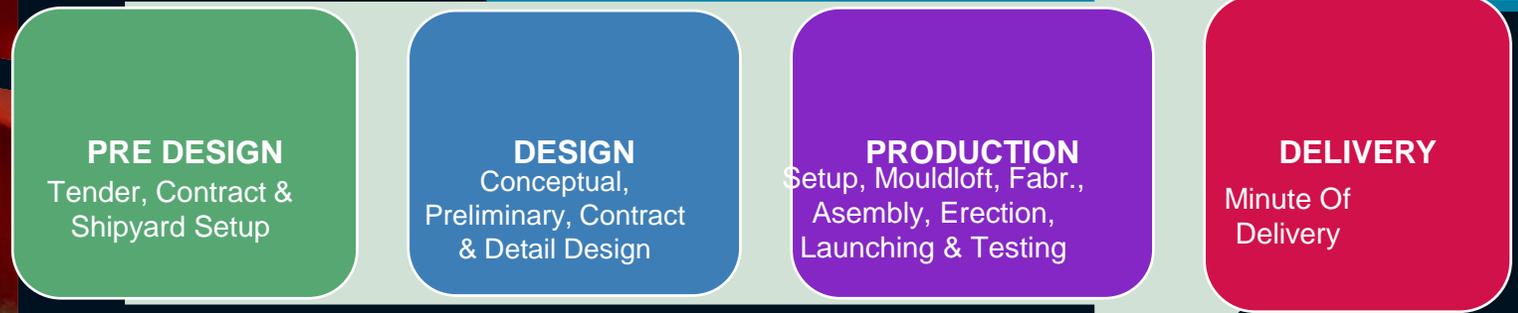
- Adalah manajemen proyek yang dikonsepsi khusus untuk pembangunan kapal baru atau konversi dengan menggunakan project management sesuai dengan standard International.
- Pembangunan Kapal melibatkan 4 elemen (EPCI) → Menggunakan EPCI Concept
- Disesuaikan dengan kultur dan kondisi kerja dimana kapal itu dibangun





SHIP BUILDING PROCESS

GENERAL METHOD Sumber: IPERIND



SMART COMPREHENSIF PM Sumber: Private Property (Bremar Schifftechnik)





THE MOST PROBLEM FOR NEW BUILDING & CONVERSION

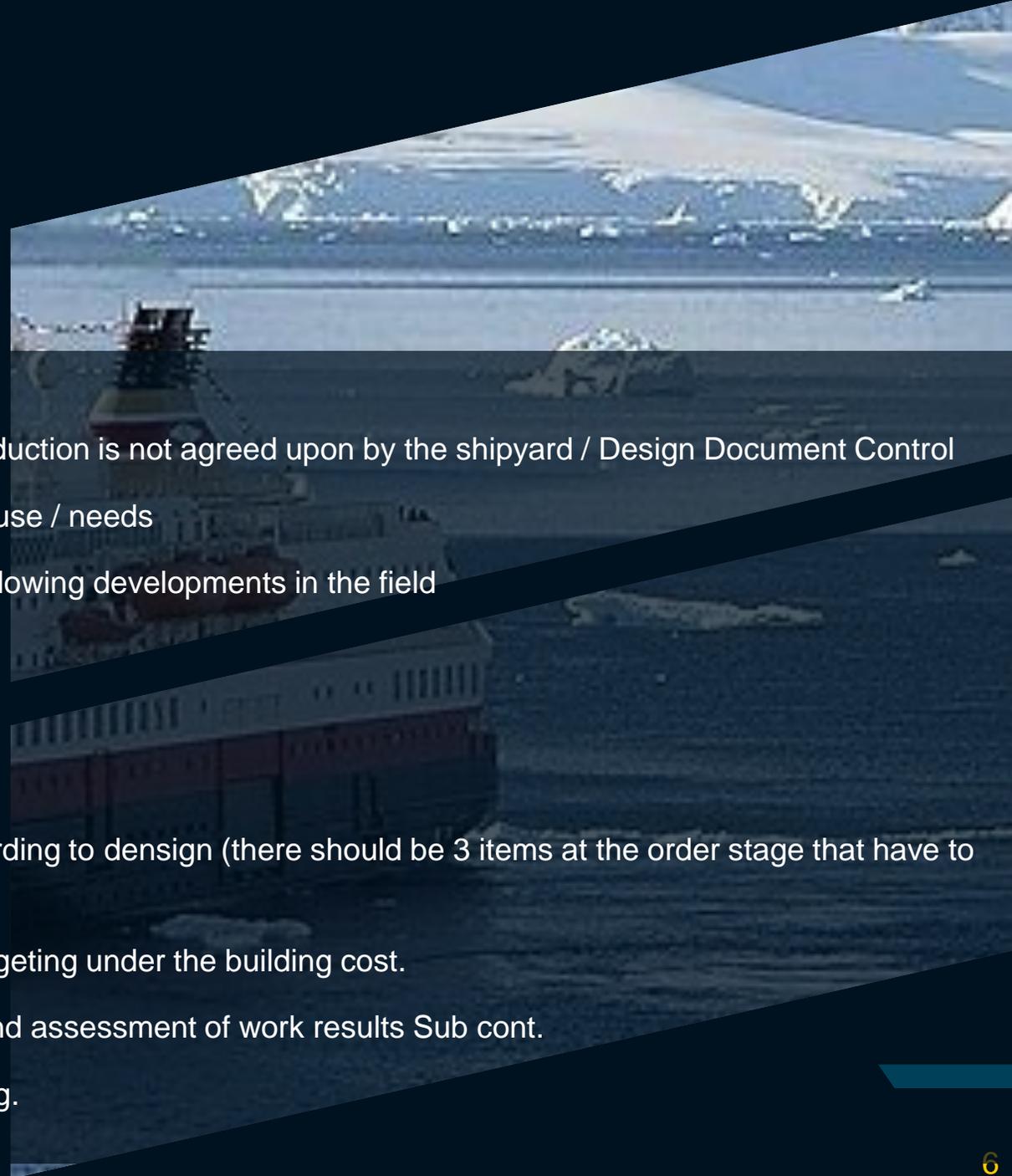
• What's the Problem?

1. KESALAHAN MEMILIH GALANGAN KAPAL
2. DESIGN
3. PROCUREMENT
4. DELAY
5. BAD QUALITY
6. OPERATION FAIL (NOT EFFICIENT)
7. CLASS PROCEDURE ISSUE
8. NOR AS PER SPECIFICATION OR OVER SPECIFICATION
9. OVER BUDGET
10. UNDERSTANDING OF CLASS PROCEDURE APPROVAL
11. SHIPYARD ACCIDENT



WHY?

1. Lack of preparation & chasing targets to pass the tender
2. Design consultant appointed is not capable / the process of design reduction is not agreed upon by the shipyard / Design Document Control
3. Order Material & Equipment does not pay attention to the schedule of use / needs
4. Project Schedule is not detailed & project strategy is never updated following developments in the field
5. QC standards & procedures are not familiarized (Yard Standard)
6. When the feed process does not involve a department operation
7. Ignoring procedures and chasing targets with the aim of stealing start
8. The ship was built not according to spec. especially at speed not according to design (there should be 3 items at the order stage that have to sit together)
9. Mistakes in the fabrication process and can also be due to project budgeting under the building cost.
10. At the beginning of the contract do not include payment procedures and assessment of work results Sub cont.
11. The HSE procedure should be established and tried from the beginning.
12. etc.





HARUS ADA SOLUSI yang TEPAT untuk pemula (non experience shipyard) dan galangan kapal yang berpengalaman untuk dapat memepmudah dan memperbaiki kinerjanya dalam membangun kapal sesuai dengan aturan class dan permintaan client.

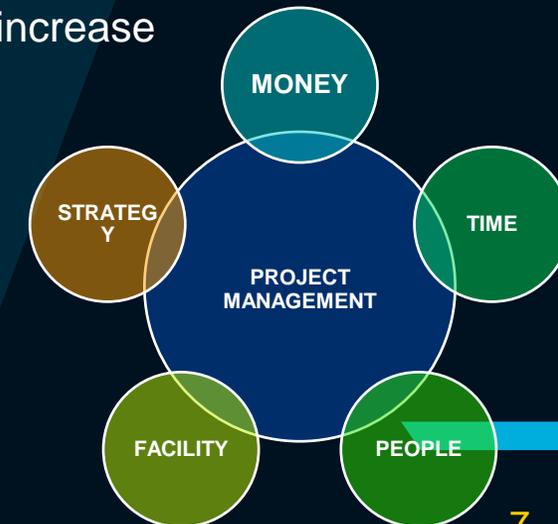
HOW?

THINK ABOUT THE SOLUTION

**RED CARPET FOR
PRODUCTION - METHOD**

“SMART COMPREHENSIF PROJECT MANAGEMENT”

1. Increase productivity of all EPC divisions (Engineering, Procurement, Construction)
2. The EPC team is more focused and works on schedule & on because the work is more organized
3. Minimize errors in construction work & increase acceptance rates
4. Project completed within budget
5. Building quality is appropriate and expected
6. The ship building process is completed faster
7. Full control & monitoring
8. Calculation of more actual progress
9. Maximum quality controlled & monitored
10. Maximum benefit for shipyards



STAGE OF PROJECT MANAGEMENT



- Stage 1: Understanding the project environment
- Stage 2: Objectives, Scope & Strategy
- Stage 3: Identify the activity, Estimate Times & Resources
- Stage 4: How to execute the project and apart of the
- **Stage 5: Project Control**



16 ACTIVITY OF SHIPBUILDING PROCESS

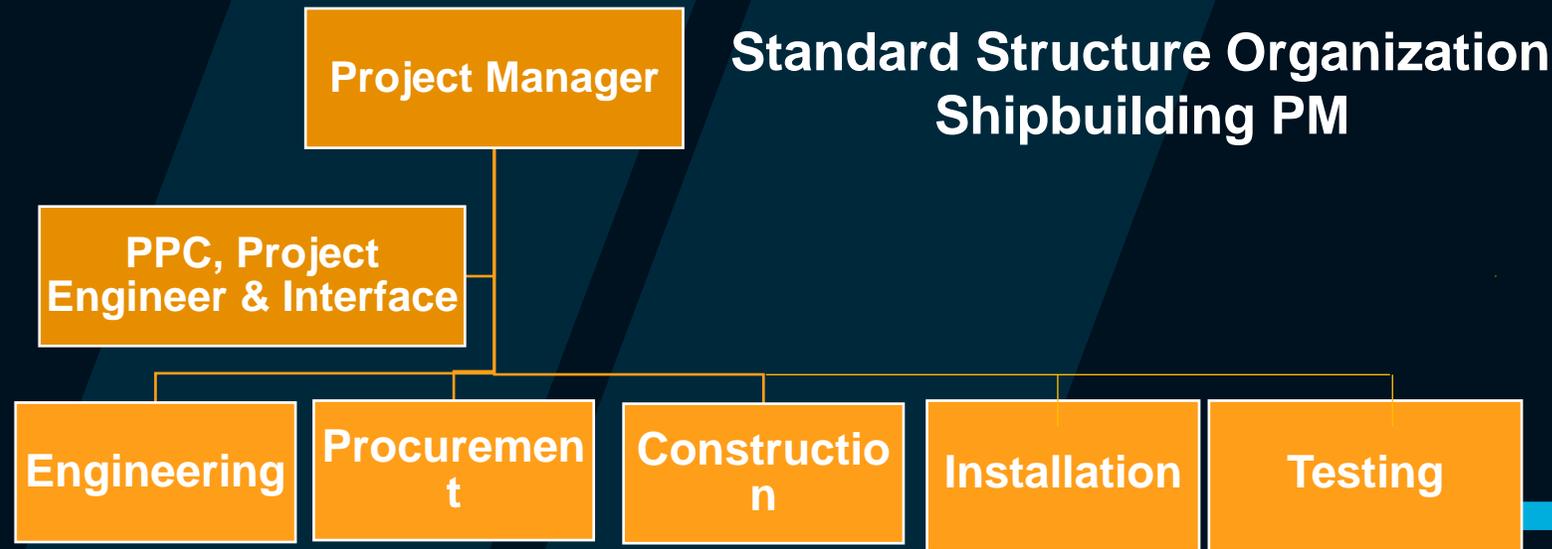
Associated with :
Project Budgeting
Project Strategy
All element



1. Feasibility study
2. Budgeting
3. Design Process
4. Schedule & planning
5. PMT (Project Management Team) & all aspects / equipment needed (administration & completeness)
6. PPC (Production planning control) for EPCT (Engineering, Procurement, Construction, and Testing)
7. First Cutting
8. Production process
9. Keel Laying
10. Fabrication of each block
11. Field Supervision & Inspection
12. Erection block
13. Inclining Test
14. Interfacing with all parties & Launching ceremony
15. Sea Trial
16. Delivery Time

PROJECT MANAGEMENT INSTRUMENT & PRODUCT

1. Contract with Project Owner
2. Specification & General Arrangement
3. Structure Organization
4. Master Schedule & Breakdown Schedule (until level supervision)
5. PPC (Work, Procurement, Drawing)
6. Block & Installation (Erection) Diagram
7. Project Reporting (weekly & monthly)



PROJECT CONTROL & MONITORING

Very important for the continuity of the project in order to achieve the target **ON TIME, ON BUDGET & QUALITY.**

Therefore what needs to be monitored are:

1. Design (Basic & Fabrication)
2. Cost (all department)
3. Time (schedule & planning)
4. Quality
5. Safety





PROJECT STRATEGY

Cara bagaimana dapat menyelesaikan proyek dan menyelesaikan permasalahan yang ada di proyek dengan jalan:

1. Meminimalkan resiko
2. Meminimalkan biaya
3. Mempersingkat waktu

Untuk Pencapaian Target dilaksanakan berdasarkan:

1. Milestone
2. Project Phase

Pencapaian berhubungan dengan pembayaran, hal ini tergantung bagaimana isi perjanjian dengan project owner.

Kapan percepatan dilakukan?

- Melihat berapa % keterlambatannya?
- Dan pada prosentase itu berefek kepada berapa hari?

VERY IMPORTANT TO NOTE

Success of a project requires good cooperation and responsibility:

1. Team Work & Professional (MENTAL & CHARACTER)
2. Close Coordination & make sure (TRUST)
3. Commitment & Consistence (ATTITUDE)
4. Fast Action (TIME IS MONEY)
5. Reporting (HONEST)
6. Open & don't hide the problem (CARE)
7. Problem Solving (RESPONSIBILITY)
8. Safety (CARE & PROTECT EACH OTHER)



The 3C's to Success



VIDEO – SHIP BUILDING PROCESS



Launching Ship - The Whole Process of Building and Launching a Giant Ship | Technology Connections

<https://youtu.be/OWmJmoZz2w0>



**THANK
YOU!**

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