An Insight of Malaysia’s Offshore Fabricators Based on Survey: Technology & Challenges Moving Forward

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1.0 PROJECT SOFTWARE USAGE

- **Schedule Software**: Yes  No
- **Procurement Tracking Software**: Yes  No
- **Document Management System**: Yes  No
- **Pre-Commissioning / Commissioning**: Yes  No
- **Integration of software into one common program**: Yes  No
- **Experienced difficulty in software implementation**: No  Yes
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2.0 SOFTWARE OPERATOR

<table>
<thead>
<tr>
<th>In-house Software Operator Sufficiency</th>
<th>Difficulty in Getting Software Operator</th>
</tr>
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<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Insufficient for PDMS</td>
<td>Difficult to get Bocad operator</td>
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3.0 New technology to be introduced by Fabricators in the near future:

1. CNC for 5 axis cutting
2. Working with National Productivity Corp
3. SmartPlant Construction software
4. Expansion of auto-welding machine
5. Integration between office and yard
6. Work packaging system
7. RFID for material & manpower
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4.0 Methods of Sourcing New Technology

1. Participate in exhibition
2. Presentation by Technology Vendor
3. International yard visit especially in China
4. Staff attachment in different yard

5.0 Performs International Benchmarking (E.g. IPA, IHS, etc.)?

- [ ] Yes
- [ ] No

6.0 Time taken to complete WPR & MPR

**WPR**
- 3 Days
- 2 Days

**MPR**
- 3 Days
- 5 Days
- 6 Days
- 7 Days
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7.0 Agreeable to Standardised Progress Report Format / Template

8.0 Self Rating on Projects Performance

AVERAGE RATING: HSE 7.5; SCHEDULE 8.4; QUALITY 7.9
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9.0 Issues in Obtaining Skilled Workers

- Critical issue to obtain Welder & Fitter
- Minor issue to obtain Welder & Fitter
- Minor issue to obtain E&I worker
- No issue

10.0 Aspiration for things to simplify & standardise amongst all PAC

1. Bulk material (reduce inventory)
2. Utilization of off-the-shelf material
3. Welding Procedure Specification
4. HSE Standards
5. Progress Report

11.0 Causes of Schedule Delay

1. Engineering issue: Challenges in finalizing DDE & VDI
2. Procurement issue: Delay in arrival of procured material, non performance vendor & red tape in procurement process
3. Manpower issue: Absenteeism & welder availability in the market
4. COA process
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12.0 Ways of Addressing Interfacing Issue With Engineering Consultant

1. Co-locate Fabricator’s discipline engineer at Consultant’s office
2. Each Consultant’s discipline engineer needs to report to Fabricator’s discipline engineer
3. VDI is performed by Fabricator’s engineering team
4. Establishment of interface management procedure

13.0 Fabricators Wish List

1. Continuity of projects
2. Pool of trusted and reliable vendors registered under SWEC
3. Vendor is capable and not solely dependent on principal
4. Timely issuance of COA by CIDB
5. More empowerment of Fabricator by PAC e.g. HSE Mode 3 implementation