Benchmarking Newspaper Production Efficiency

Through Production Key Performance Indices (KPI)

NEW

Registrations end by 15 May 2019

Newly added KPIs for 2019:
Capacity utilization, OEE, Inventory Ratio, Renewable energy, Printed waste efficiency, Direct variable consumables, Print finish

www.wan-ifra.org/rmtc
Benchmarking Newspaper Production Efficiency

In 2016, WAN-IFRA did a benchmarking project on assessment of environmental KPI’s (e-KPI) for newspaper production, where a total of 14 KPI’s were benchmarked. The project covered KPIs from environmental and production metrics. Altogether a total of 31 printing plants from India had participated in the project. This project was done under strict non-disclosure agreement to ensure the security and privacy of data & reports of the participants.

In continuation of the previous benchmarking project, this financial year WAN-IFRA propose an extension project “Benchmarking Newspaper Production KPI” and will focus solely on newspaper production KPI’s. In the extension project of benchmarking we added updated KPI’s and international metrics for measurement and analysis of KPI’s.

This will be helpful for internal as well as external benchmark to compare the performances within print sites. This project will also help printing plants to assess the manufacturing efficiency, compare performance with other similar production sites, identify areas of improvement and act to improve.

Benchmarking gives the broader picture about the efficiency of your process and efficient usage of materials, spares and newsprint in comparison with the similar set up with in industry.

It directs the team to optimize the consumption & improve the performances of Energy, Water, raw materials, capacity utilization, OEE, yield, etc. It has economic benefit as well.

- Project benchmarking is based on consumption of resources and hence could give a clear picture of over utilisation and wastages.
- It measures limited number of KPI’s only- Easy to measure
- Only most important production KPI’s are measured to have a clear direction on product cost.
- Easy access to data. SAP system could provide data for most metrics
- Possibility for internal as well as external benchmark to compare the performances.

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Benefits of participation

- Know the efficiency of your operations in relation with other printing centers
- Find the right questions related to efficiency and consumption
- Prioritize actions related to raw material consumption and waste generation
- In long term, evaluate the efficiency of actions
- Benchmarking for consecutive years at discounted prices.

About WAN-IFRA

WAN-IFRA, based in Paris, France, and Frankfurt, Germany, with subsidiaries in Singapore, India & Mexico City, is the global organisation of the world’s newspapers and news publishers. It represents more than 18,000 publications, 15,000 online sites and over 3,000 companies in more than 120 countries. Its core mission is to defend and promote press freedom, quality journalism and editorial integrity and the development of prosperous businesses.
<table>
<thead>
<tr>
<th>S.no</th>
<th>Key Performance Indices</th>
<th>Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capacity utilization</td>
<td>Actual Output / Potential Output</td>
<td>Numbers / Numbers (%)</td>
</tr>
<tr>
<td>2</td>
<td>Overall Equipment Effectiveness (OEE)</td>
<td>Efficient use of machines</td>
<td>%</td>
</tr>
<tr>
<td>3</td>
<td>Inventory Ratio of machine</td>
<td>Inventory consumed in rupees / Inventory of spares stocked in rupees</td>
<td>Rupees / Rupees (%)</td>
</tr>
<tr>
<td>* Only on machine spare parts, not on daily consumables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Renewable energy utilization</td>
<td>Renewable energy / Non-renewable energy</td>
<td>KWH / KWH (%)</td>
</tr>
<tr>
<td>5</td>
<td>Energy efficiency</td>
<td>Energy / Paper delivered to customers</td>
<td>KWH / Tonnes</td>
</tr>
<tr>
<td>6</td>
<td>Newsprint waste</td>
<td>Waste Paper / Paper consumption</td>
<td>Tonnes / Tonnes (%)</td>
</tr>
<tr>
<td>7</td>
<td>Printed waste efficiency</td>
<td>Total printed waste / Total waste generated</td>
<td>Tonnes / Tonnes (%)</td>
</tr>
<tr>
<td>8</td>
<td>Ink Mileage</td>
<td>Ink consumed / paper delivered to customer</td>
<td>Grams / m²</td>
</tr>
<tr>
<td>9</td>
<td>Direct variable cost efficiency</td>
<td>Total cost of Plate, Blanket, ink, wash, fountain solution / Paper delivered to customers</td>
<td>Rupees / Tonnes</td>
</tr>
<tr>
<td>10</td>
<td>Newsprint Stock effectiveness:</td>
<td>Average paper stock / Paper delivered</td>
<td>Tonnes / Tonnes (%)</td>
</tr>
<tr>
<td>11</td>
<td>Downtime</td>
<td>Downtime / Run time</td>
<td>Mins / Mins (%)</td>
</tr>
<tr>
<td>12</td>
<td>Web break frequency</td>
<td>Web break / 100 reels</td>
<td>Rolls / Break</td>
</tr>
<tr>
<td>13</td>
<td>Print finish &amp; Delivery</td>
<td>Average Print finish time of main publication</td>
<td>Time</td>
</tr>
<tr>
<td>14</td>
<td>Manpower efficiency</td>
<td>Number of man hours worked / Paper delivered to customers</td>
<td>Hours / Ton</td>
</tr>
<tr>
<td>15</td>
<td>Water efficiency</td>
<td>Water consumed / paper delivered to customer</td>
<td>Litres / Tonnes</td>
</tr>
</tbody>
</table>

* Data Required period for benchmarking: 01 Apr 18 to 31 May 19 (FY 2018-19)
** Metrics & measuring units are only indicative, we analyse each KPI with different metrics and final the metrics of the each KPI will be based on best fit and co-relation fit of it.

### Time Table

<table>
<thead>
<tr>
<th>Activity</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project proposal</td>
<td>05-Apr-2019</td>
</tr>
<tr>
<td>Last date for signing-up</td>
<td>15-May-2019</td>
</tr>
<tr>
<td>Last date for data submission</td>
<td>31-May-2019</td>
</tr>
<tr>
<td>Data Validation</td>
<td>20-June-2019</td>
</tr>
<tr>
<td>Data analysis</td>
<td>01-July-2019</td>
</tr>
<tr>
<td>Report</td>
<td>14-Aug-2019</td>
</tr>
</tbody>
</table>

### Fee for WAN-IFRA Members

<table>
<thead>
<tr>
<th>No. of printing plants</th>
<th>Fee per printing plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Printing plant</td>
<td>INR 80,000 / EUR 1000</td>
</tr>
<tr>
<td>3 or more plants</td>
<td>INR 55,000 / EUR 700</td>
</tr>
<tr>
<td>5 or more plants</td>
<td>INR 40,000 / EUR 500</td>
</tr>
</tbody>
</table>

* Add 18% GST tax over the fee.
** Above discounted fee is for second time participant and members only. First time participant fee of 20% (if applicable) and non-member fee of 20% (if applicable) will be charged.
Registration Form

Please complete the form and send, e-mail or fax to:
WAN-IFRA South Asia Pvt. Ltd.
3rd Floor, SIET Administration Building,
54 K B Dasan Road, Chennai India, 600 018
Tel: +91.44.4211 0640, Mob: +91-8792178292
Fax: +91.44.2435 9744
Email: infoindia@wan-ifra.org (or) prabhu.n@wan-ifra.org

Payment details:
☐ By cheque, favouring WAN-IFRA South Asia Pvt. Ltd., payable at Chennai
☐ By Bank Transfer (Please await invoice)

Total amount payable in INR

Signature, Stamp

Company information
Company ________________________________
Address ________________________________
City ___________________ Postal Code _________________
Country ________________________________
Company E-mail __________________________
Phone __________________ Fax __________________

☐ WAN-IFRA Member ☐ Non-member

Please register the following printing centres:

1. ______________________________________
2. ______________________________________
3. ______________________________________
4. ______________________________________
5. ______________________________________
6. ______________________________________

Important Note:
Payment is required with registration and must be received prior to the event to confirm your registration. Confirmation will only be sent via e-mail upon receipt of payment. WAN-IFRA South Asia reserves the right to make any amendments that it deems to be in the interests of the event without any notice.

Cancellation & Replacement
Any cancellation or replacement must be sent in writing via e-mail or fax. A 50% refund will be given if cancellation is received 2 weeks before the event. Regrettably, no refund can be made for cancellation received less than 2 weeks before the event. A replacement is welcome if you are unable to attend. Written notice should be given to WAN IFRA South Asia not later than 2 weeks before the event.

Consultants

Prabhu Natrajan is B.E in Printing Technology and works as Research Engineer at WAN-IFRA. He is responsible for the technical research activities of WAN-IFRA.

He is a project manager for International Color Quality Club (ICQC) and oversees Research and Material Testing Centre (RMTC), which offers services of newsprint & news-ink testing, quality evaluation services, ISO 12647-3 audit and certification, ISO 9001, 14001 and 45001 certifications, Color management, Mechanical audit, Press simulator training & other training on technical topics.

Benchmarking Manufacturing Efficiency
Based on Environmental Key Performance Indices

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