Idhammar

Idhammar OEE – The Business Case

ABSTRACT

Analysing and recovering even a one second production loss can add up to significant **bottom line savings** in manufacturing, particularly in FMCG. This is why OEE software systems have evolved to deliver far more than a means to automate calculations and keep score.

Adopting **lean manufacturing** and striving for **operational excellence** will help companies achieve sustainable advantages with OEE providing the complete **data capture, analysis, reporting** and management toolkit required to support a culture of creative and proactive problem-solving.

This paper outlines the business case for implementing an OEE software system to **measure**, **analyse** and **improve operations**.

CONTENTS

Also available for download from www.idhammarsystems.com/resource:

Idhammar OEE
Vital production support toolkit for Manufacturing Managers

Idhammar REPORTS
Browser based, real-time reporting

Idhammar Cloud
Flexible delivery, system architecture & licensing options

Business Case

The outline business case

OEE Software Systems have evolved to deliver far more than a means to automate calculations and keep score. Today, the OEE Software System is a vital Manufacturing Management tool. Even businesses that have invested in ERP and MES solutions are able to build the case for deploying an integrated OEE application to *transform loss management strategies* and *justify improvements*.

Enabling *powerful drill-down* at group, site, line and asset level, OEE Software Solutions equip teams with the insights they need to achieve *greater control of production*.

On a day-to-day basis, real-time reporting against KPIs can alert manufacturing teams to issues and *accelerate response times to performance recovery*. Meanwhile, trend analysis over time enables *Continuous Improvement* teams to quantify losses and prioritise improvement opportunities.

Systems such as Idhammar OEE provide the complete data capture, analysis, reporting and management toolkit required to support a culture of creative and proactive problem-solving.

Typically, within six months an OEE Software System pays for itself but ROI can vary significantly depending on:

Mode of data capture	Initial OEE score
The Industry	Business; focus on the Improvement Agenda

If the business aspires to *World Class Manufacturing* with a *zero tolerance* to downtime and optimised profitability – the case for an OEE Software System that integrates with a CMMS and / or WCM system should also be considered.

KEY BENEFITS OF AN OEE SOFTWARE SYSTEM

1 Increased management capability with valuable performance reports to inform decision making and control risk

2 A boost to profitability as lost opportunity and waste are identified and reduced

3 Greater visibility of production losses and manufacturing operation

To find out more about Idhammar's OEE software and complementary products:

The value of recovering lost opportunity

> *With Idhammar's OEE software system, I am able to write reports which will prove vital for future strategy and production choices*
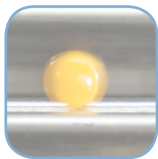>
> *2 Sisters Food Group*

> *Before using Idhammar's OEE software system, it was very difficult to monitor line activity, however we now have scientific evidence to show exactly how the line is performing, rather than anecdotal educated guesses*
>
> *2 Sisters Food Group*

The value of recovering lost opportunity with OEE Software Systems

Prior to deploying the OEE Software Solution, the manual process required to define the loss structure of a plant was a debilitating management overhead that steered valuable time and resources away from improvement activity. Yet without investing resources in this cumbersome OEE analysis, it was difficult to ensure that improvement efforts were spent on the most urgent or profitable activity.

Idhammar OEE, particularly when combined with automatic data capture systems, has transformed Manufacturing Management by automating the analysis of a plant's *Availability, Performance and Quality loss data*. Best of breed systems also provide essential *business intelligence* with *drill-down root cause* information at the touch of a button. Using the trend reporting function within Idhammar's OEE software system helps pinpoint non-production opportunities to *reduce overall manufacturing costs* – such as supplier evaluation and best price energy futures.

From elemental APQ calculations to strategic Business Intelligence:

Overall Equipment Effectiveness	Major Loss	Example	OEE Report	Business Intelligence
Availability	Unplanned Stops	Breakdown	Downtime as a Percentage of Operating Time	Cost of Downtime as Cash Value
	Planned Stops	Changeover (product/shift)	Overall Labour Effectiveness Score	Shift comparisons to identify best performing teams and their methods
Performance	Minor Stops	Process disturbances	Downtime by events (showing number of failures and/or minutes lost)	'What If' analysis to quantify the value of eliminating stops over a specified length of time
	Slow Cycles	Reduced line speed	Increased Units Report (the extra units which could be produced with each 1% improvement)	Quantify under-utilised capacity for production increase opportunities
Quality	Production Rejects	Rework	Real time unit count Cost of waste report	Monitor energy wasted during rework
	Start Up Rejects	Scrap	Quality score	Batch traceability for Quality Audits

To find out more about Idhammar's OEE software and complementary products:

Benefits of OEE

Improvement agenda

Management tools such as the Idhammar OEE Improvement Agenda enable Continuous Improvement teams to make individuals **accountable for recovering lost opportunity**. Each time a loss recovery action is identified, tasks are recorded as an Improvement Agenda item with flags to plan, measure and monitor progress. Figures for the costs and savings of resolving the loss can be included along with target completion and review dates, so that **progress is tracked and recorded accurately**.

The case for automated data capture

Automatic data capture starts to become critical as the OEE score increases. When considering the business case for automatic data capture, many Production Operations Managers also factor in the value of involving line Operators in the diagnosis of stoppage events.

Best-in-class OEE software systems allow for a range of data acquisition methods and have the capability to **combine real-time performance data feeds** (from PLCs and SCADA systems) with supplementary data entered via touch-screens. Whether the business requires a fully or partly automated solution the key is to ensure the data captured is meaningful, visible, and used to drive continuous improvement.

Operational benefits of making OEE visible

The speed with which the business can recover losses is greatly improved by deploying an OEE Reporting Software that tailors relevant information to users - from shop floor to boardroom. Detailed trend analysis is required by Continuous Improvement Managers in order to develop **loss management strategies**.

Operators, on the other hand need, an 'at-a-glance' view of shift progress. **Displaying real-time, job-specific KPIs via touch screen dashboards** engages shop-floor operators and encourages accountability whilst simultaneously improving teamwork.

Using **Andon Displays** to alert teams to problems on the line that may impact the shift's schedule is a proven way to motivate teams and to get back on track. The 'Andon' method of signalling, works most effectively when used in conjunction with Business Alerts.

This visibility of data allows **escalation of critical issues** and **accelerates engineering response times** to maintenance, manufacturing, and production issues. Sending calls / request for help directly to a CMMS also prevents critical issues being missed or misreported. The task then becomes part of the maintenance planning and operational improvement process.

The opportunity to integrate: overall production effectiveness

The compound measure of 'profitability' is now one of the most important KPIs for most manufacturers. Understanding the cost structure combined with the detail analysis of efficiency losses of a manufacturing process can help teams identify **innovative equipment, processes, and product strategy** that will improve Overall Production Effectiveness.

The evolution of asset, manufacturing, and energy management technology means that many businesses have all the data needed to identify opportunities to **improve production effectiveness** already at their fingertips – and world-class manufacturing software providers like Idhammar Systems deliver the integration required to transform this data into a highly-prized business asset.

OEE in the Cloud

Benefits of an OEE Software System in the Cloud

Today's OEE Software Systems can be deployed *on site* or as a *Cloud* solution that can be accessed via a browser over a secure internet connection. Choosing a Cloud solution means the business will benefit from *low upfront costs* and *easily manageable Operational Expenditure savings*, as well as a number of other time and money saving benefits:

|	
Software updates - implemented around the clock alarms	**Scalability - the solution grows with the business**
Freeing up IT from day-to-day CMMS support	**Easy integration - with hosted and site-based applications**
Data security - Role Based Access Control	**Data security - data back-up management**

With leading providers offering a flexible range of data capture, display, and deployment options to tailor their solutions to your specific manufacturing environment – the business case for implementing an OEE System has never been clearer.
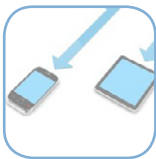
IT support and specialist knowledge

Idhammar's team comprises **CISM Qualified specialists** who are specifically trained in managing hosted environments, ensuring the best possible support for;

Software installations & configuration	**Day-to-day system support**
Updates & backups	**System deployment & implementation**

Outsourcing these tasks to Idhammar Systems has been proven to *reduce customers' overall IT spend*.

To find out more about Idhammar's OEE software and complementary products:

Why choose Idhammar OEE

Strategic Benefits:
- Strategic loss management
- Continuous Improvement
- Productivity improvement
- Lean manufacturing
- World Class Manufacturing
- Energy management
- Quality assurance

Cost Benefits:
- Increased asset uptime
- Fewer emergency breakdowns
- Improved response times
- Energy consumption Reductions
- Reduced management overheads

Management Benefits:
- Automated OEE analysis
- Improvement agenda
- Accurate data capture
- Flexible, automated reporting
- Real-time dashboards & business alerts

Cloud Benefits:
- Free up in-house IT
- Scaleable to business
- Security
- Software updates
- Easy integration

CONCLUSION

Idhammar's OEE System software is specifically designed to help you apply OEE reporting and management tools to your manufacturing processes. From **single to multiple production lines** or cells, and from standalone sites to multi-location enterprises, Idhammar's OEE Software Solution is a **vital management and decision support tool**. Providing information on **availability, performance and quality;** it is all you need to exploit the full power of OEE and achieve world-class lean manufacturing.

To achieve a successful implementation and to optimise the success of an OEE Software Solution, organisations must focus on ensuring a commitment to using it as a fundamental, organisation-wide tool to **drive continuous improvement** in an effective manner.

Dedicated implementation, training and support

With more than thirty years experience delivering high spec application software to manufacturers and facilities managers, Idhammar understands the needs of maintenance professionals - from shopfloor to boardroom. Our **experienced implementers** provide assistance and guidance in the configuration of Idhammar OEE to equip stakeholders with business insights into operational issues and trends in a timely and informative manner.

Integration with WCM, OEE and MMS Software

Idhammar OEE integrates with a range of operational improvement systems, enabling manufacturing teams to gain **greater control of downtime** and get production back on track as quickly as possible to **protect profit margins**. Combined with Idhammar MMS, the solution ensures the fastest response to downtime, whilst integrating with Idhammar OEE or other high spec OEE helps manufacturers achieve a **balanced schedule of preventative and corrective maintenance**. Idhammar's integrated WCM, OEE and CMMS solutions are proven to maximise equipment uptime, keep assets in peak operating condition, and improve productivity.

WHY CHOOSE IDHAMMAR FOR YOUR OEE SOFTWARE SYSTEM

1

Real-time production reporting
- make every second count

2

Time saving data capture
- save time and money

3

Operator engagement - gather information quickly to improve factory efficiency

To find out more about Idhammar's OEE Software and complementary products: