

Introduction

2023 has got off to a busy start for the MOMi team. In January we had a very long overdue team meeting at our head offices in Haarlem, NL. It was the first time all of us were in the same room ... ever! Technology is great but nothing is as good as being in the same room together, catching up, sharing ideas and learning from each other. It wasn't all work. We joined our colleagues from ATS Global for a new year celebration meal.



Despite today's economic reality, which is for many more challenging than in the previous year, education is certainly in focus for our customers in 2023. There is a significant demand for in-house classroom-based programs. Our instructors have been busy delivering MES MOM education programs in Denmark, USA and more are scheduled for the months to come. Next to this the online programs are provided regularly.

With respect to our business consultancy activities, exciting times continue with MOMi consultants successfully collaborating with customers in France, The Netherlands, Poland, Turkey and USA and are travelling to most of those locations. Covid is not a pandemic anymore and has become (a minor) part of our normal life now.

In this Newsletter, an article from *Mathijs* "Back to OEE" sharing some thoughts on what is behind that well-known KPI. *Sarah* created an overview of our best practice methodology for selecting a MOM solution.



As an Authorized Training Provider partner of MESA International, it is a great pleasure to announce the Refresher Program which will bridge the gap between the initial MESA MES/MOM Methodologies programs and the recently introduced renewed versions (more on page 3).

I hope you will enjoy reading this eleventh edition of the MOMi Newsletter. Please, let us know if you have any questions and/or suggestions either via our [website](http://www.mom-institute.org) or by e-mailing [Sarah Knight](mailto:sarah.knight@mom-institute.org).

Jan Snoeij, President

About MOMi

The Manufacturing Operations Management Institute (MOMi) is an *Expert Division* of ATS Global.

MOMi offers best-practice business consultancy services to support the full change cycle in a dynamic operations environment and provides strategic and tactical advice to manufacturers, delivering the 4th Industrial Revolution.

MOMi provides independent education programs to manufacturers, preparing their people to leverage new smart technologies through the power of knowledge.

Our team has extensive experience in supporting manufacturers around the globe and provides best-practice services to help them to continuously improving their performance (step-by-step).

MOMi's consultants and instructors work from a pragmatic basis to deliver effective, deployable strategies. MOMi's team consists out of independent, professional experts in the domain of Manufacturing Operations Management.

More: www.mom-institute.org

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In-House Programs In Demand

In the introduction of this newsletter, it is already mentioned that in-house programs are in demand. The Certificate of Competency (CoC) program of MESA's "MES/MOM Methodologies" is most popular with sessions in Denmark, USA, Ireland and The Netherlands.

The MESA CoC program "B2MML and Integration Fundamentals" is another one that will be provided as in-house training.

Another very popular subject for in-house programs is the ISA-95 standard. The content is often tuned to the specific situation of the participants' company.

Of course the 'open' programs - for which everyone can register – are scheduled regularly as shown on page 7 of this Newsletter and on our [website](#).



Participants of the Panasonic in-house MESA MES/MOM Methodologies CoC Program

What Our Customers Say

"Thank you very much for a great course and wonderful training session. It's certainly insightful, covering almost every aspect of manufacturing, very well-explained and valuable to every stakeholder of the manufacturing industry. I can confidently say that I learned many new things during the past 4 days."

Chandra Sekhar Panditi, Panasonic (MES MES/MOM Methodologies CoC Program, February 2023)

"Thank you again for the detailed and knowledgeable training workshops in Aalborg."

Abhijeet Jaisingpure, Consultant (MESA MES/MOM Methodologies CoC Program, January 2023)

Education in Focus: MES/MOM All you need to know!

Going back to basics and keeping it simple can be the start of great achievements. The manufacturing industry is changing. Big Data, the Internet of Things, Digital Transformation, Smart Factories, ... is all very exciting, but is it real?

One thing is for sure, manufacturing organizations will not become self-organizing without achieving operational excellence by utilizing Manufacturing Operations Management (MOM) / Manufacturing Execution Systems (MES) first.



MOMi have developed a 2-day classroom based or 3 session on-line program which provides an extensive overview of **MES/MOM** and how to leverage its full potential both in the short and long term. A successful change requires alignment of your ways of working in manufacturing operations, organization & governance, your people's skill set and the supporting IT. This course introduces the relevant industry standards for MES/MOM, like ISA-95, and many other aspects to create a well-designed roadmap to improve your manufacturing performance.

When you are preparing for new smart technologies, you need to know about the technologies and solutions available to you today and the best practices for successfully justifying, implementing, and sustaining them long term.

Next opportunity to join **MES/MOM All you need to know!** is March 14 – 16, online 09:00 – 13:00 CET. Register here [→ → → www.mom-institute.org](https://www.mom-institute.org)

Latest News: MESA Refresher Program Coming Soon

Last summer(2022), the MESA Global Education Program about MES/MOM Methodologies was completely renewed. After 11 years – during which continuously small changes and improvements were made – the following topics have been added or updated:

- A special introduction with actual trends and observations in manufacturing and MES/MOM and Smart Manufacturing, which serves as a basis for all other courses in the program.
- The course about standards now has more explicit focus on MES/MOM and all information is made up to date with the latest versions of them.
- A special course on Smart Manufacturing and Industry 4.0, including a wide range of advanced technologies and the explanation of how MES/MOM forms the foundation for leveraging these technologies successfully. The course about solution architecture now also comprises the related standards like Reference Architectural Model Industry 4.0 (RAMI4.0) and Industrial Internet Reference Architecture (IIRA).
- More attention is given to “Manufacturing Maturity” as a fact-based approach for creating roadmaps toward a future improved situation: assessment – analysis – plan to improvement.
- A specific course about Manufacturing Master Data Management, which is a prerequisite for an adequate response to the increasing dynamics of the demand and for Smart Manufacturing and Industry 4.0.
- Explicit examples of successful cases for the justification of the investment in MES/MOM and smart manufacturing initiatives (ROI) and best practices how to find the benefits.
- A new course for MOM Solution Deployment, replacing the old Project Management course.



In Q2 of this 2023, we will start scheduling so-called Refresher Programs for both the 2-days Certificate of Awareness (CoA) and the 4-days Certificate of Competency (CoC). This offers the certificate holders the opportunity to catch up with all the new topics in approximately half the time and cost of the programs.

We will send invitations to the participants of the sessions from 2011 – 2021. However, we may not have up-to-date contact details of all of them. If you are interested, just let us know via our [website](#) or by e-mailing [Sarah Knight](#). Then we can keep you informed.

Back to OEE

By Mathijs Philips

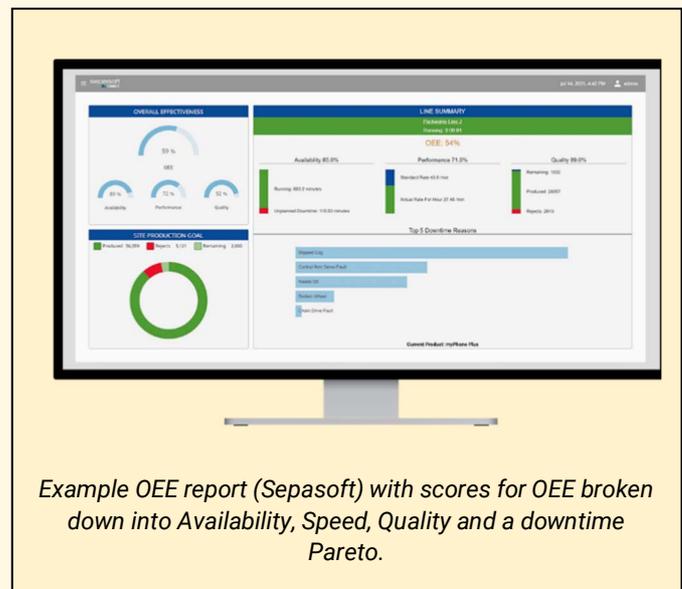
At the end of last year, one of our customers asked if we could help explain the concept of OEE (Overall Equipment Effectiveness) and support with requirements definition for an OEE system in production.

If you are not familiar with OEE: it is a way of monitoring a production process over time. Typically showing a score of 100% if the production process runs as, it should. And more importantly if the line is not running as it should. OEE shows where the line suffers from losses, like unexpected downtimes (the line should run but does not), speed losses (it is running but not up to nominal speed) or quality losses (the line runs but the quality of the product is not good).

This makes OEE a great KPI to monitor a production line (the bottleneck) and it gives valuable hints on where to look for improvements. The theory around OEE has been around for some time already and originates from the Japanese TPM school (Total Productive Maintenance).

So, it was interesting to start on this journey one more time. If you are looking for operational improvement of a production line, consider an OEE project.

- The subject of OEE may not be the most innovative or high-tech, but the value is there, nonetheless. It is not about fancy AI, or cloud, or analytics. But it focuses on the right questions.
 - How is the line running?
 - what do we consider “good performance”?
 - What do we want to measure to find losses?
 - Where are the opportunities for improvement?
- IT is an enabler in an OEE project: it should serve the objective of improving the line, by collecting and reporting information on performance and loss events. Too little or too much attention to IT is not good.



Example OEE report (Sepasoft) with scores for OEE broken down into Availability, Speed, Quality and a downtime Pareto.

- Improvement with an OEE project requires a balanced cooperation on three sides:
 - Operations on the shop floor, doing correct registration and watch the process and its performance.
 - IT to collect information and make it available for analysis.
 - Operational excellence, to work with the data and take action to remove root cause.

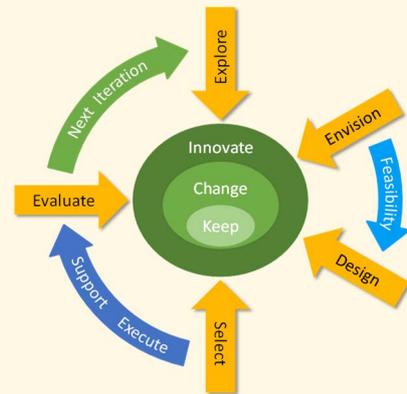
Business Consultancy in Focus - MES Selection Process Overview

By Sarah Knight

To stay in business competitively, every manufacturing company needs to improve continuously. However, this needs to be done while remaining extremely efficient, effective, and compliant with all applicable regulations. A huge challenge!

An appropriate strategy and a structured approach are required for successful control of the Business Change Cycle. It comprises all steps:

1. initial exploration of the improvement potential,
2. the sound benefits case supporting the investment decision,
3. the design of the blueprint for the future, including the processes, organization & governance, people skill sets and the enabling technologies,
4. up to the deployment and support of the solutions to deliver sustainable improvements.

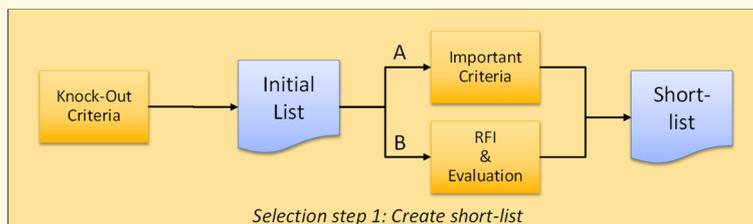


In the Selection, we distinguish two phases: “Create the short-list” and “Find the Champion”. As mentioned, the preparation steps determine the business drivers, expected benefits, scope, future improved ways-of-working and architecture.

From the results of the preparation steps, knock-out and other important criteria for the MOM solution can be obtained. Today, hundreds of MOM solutions are available on the market. The knock-out criteria are used to create an initial list, which may comprise 10 – 20 MOM solutions.

Dependent on the defined important criteria and the available information about the MOM solution in the initial list, there are two options:

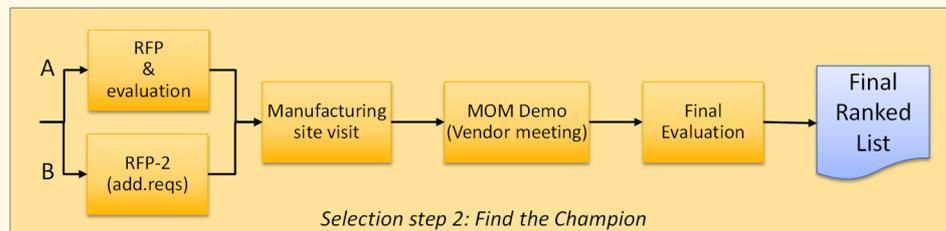
Option A: It is possible to reduce the number of potentially suited products to a short-list of approximately three (3) based on the already available information.



Option B We ask the vendors of the initial list for additional information. That can be done by creating a Request for Information (RFI) and then evaluating the response from the various vendors. Typical content of a Requirements Document is:

- Objectives of the MOM solution implementation,
- Description of your business processes and the focus (scope) chosen for the project(s),
- Required functionality (e.g. referring to ISA-95) and non-functional aspects,
- Interfacing with other systems,
- List with relevant questions.

After the acceptance of the shortlist by the decision makers, there are again the same two options. If the short-list is created without communication with the vendors (A), they need to be informed through the Requirements Document. Typically, two topics are added in comparison to the RFI above: explicit scenarios to be demonstrated at the meeting with vendors and a clear budget indication. The scenarios represent certain parts of the manufacturer's operations, which are decisive for the ultimate success. Otherwise (B), we need to share additional requirements and the two aforementioned topics with the short-listed vendors.



The vendors are invited to visit the manufacturing site, to get a better understanding of the objectives, the processes in scope, etc. During the vendor meetings, the scenarios are demonstrated and all questions from both the manufacturer and the vendors are answered to create mutual understanding.

The final evaluation, after the demonstrations, will result in a list in which the solutions are ranked on added value. In the end, the bottom line added value, where the total cost of ownership is included, decides which solution is the champion.

Note:

1. When sharing information with a vendor (RFI, RFP) a Non-Disclosure Agreement (NDA) may be needed.
2. The Requirements Document(s) need to comprise sufficient information, but not too much. Too little information may lead to selecting a solution that does not deliver the expected benefits. Over specifying may lead to more customization than is needed and possibly no offers.



Training Schedule



Program	Days	Start date	Location	Price (€)
MES/MOM: All You Need to Know!	3	2023-03-14	Online (09:00 – 13:00 CET / 16:00 – 20:00 SGT)	1.695
MESA MES/MOM Methodologies – Certificate of Competency (CoC) – FRENCH	4	2023-03-21	INSAVALOR Lyon (F) Classroom (8:30 – 17:00 CET)	3.950
MESA MES/MOM Methodologies – Certificate of Awareness (CoA)	3	2023-03-22	Online (14:00 – 19:00 CET / 09:00 – 14:00 EDT)	2.395
MESA B2MML & Integration Fundamentals Certificate of Competency	2	2023-03-28	Online (14:00 – 18:00 CET / 08:00 – 12:00 EDT)	1.995
Applying ISA-95 for Operations	2	2023-04-05	Online (14:00 – 18:00 CET / 08:00 – 12:00 EDT)	995
Serialization in Manufacturing	2	2023-04-12	Online (14:00 – 18:00 CET / 08:00 – 12:00 EDT)	995
IT/OT Convergence for a Connected Factory	2	2023-04-25	Online (14:00 – 18:00 CET / 08:00 – 12:00 EDT)	995
MESA MES/MOM Methodologies – Certificate of Competency (CoC)	5	2023-05-08	Online (14:00 – 19:00 CET / 08:00 – 13:00 EDT)	3.950
Smart Manufacturing and Industry 4.0 Strategies	3	2023-05-23	Online (09:00 – 13:00 CET / 15:00 – 19:00 SGT)	1.695
MESA MES/MOM Methodologies – Certificate of Awareness (CoA)	3	2023-06-06	Online (14:00 – 19:00 CET / 08:00 – 13:00 EST)	2.395
MESA B2MML & Integration Fundamentals Certificate of Competency	2	2023-06-13	Online (09:00 – 13:00 CET / 15:00 – 19:00 SGT)	1.995

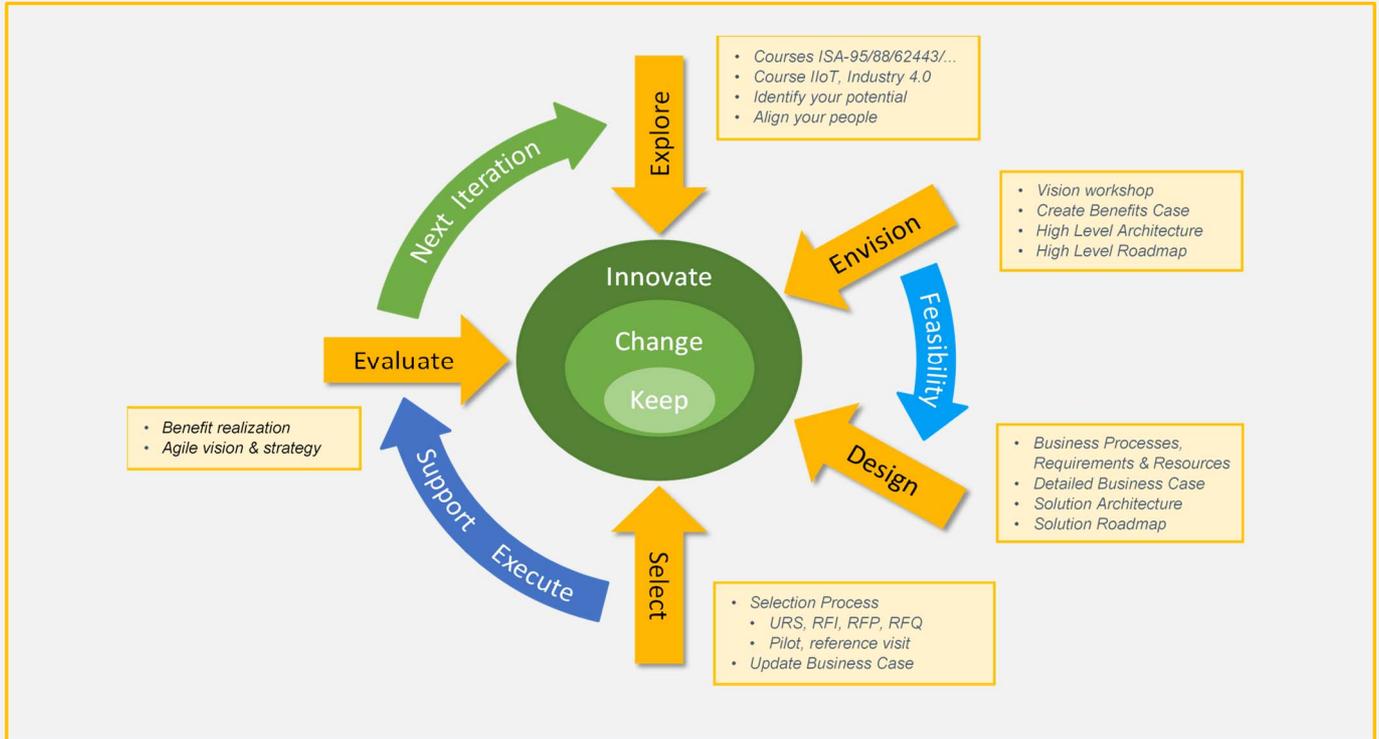
MOMi's education programs are delivered as public sessions as well as in-house. For **In House** programs, the content can be tailored for your team and your specific situation.

Please ask [Sarah Knight](#) for more details about In-house programs – typically for 8 participants or more – or if you want to participate with a smaller group. Attractive reduced fees may apply.

For more information and registration, see our [website](#)



MOMi Business Consultancy: Control the Business Change Cycle



MOMi Education: A Comprehensive Set of Programs

