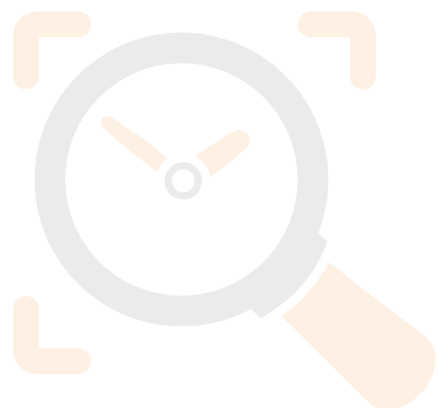


## MULTI MOMENT ANALYSIS (MMA)

Because every moment counts

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How to gain accurate, current data on Bottlenecks, Efficiency Gaps,  
Time-Killers and Time-wasting Routines in your Organization





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## FOREWORD

“The MMA is hands-down the most effective and efficient method to reliably quantify any business process”.

This is the one sentence explanation I still use today to describe the MMA to somebody new to the theme. This book will expand on that statement and give you the necessary insight and detail to substantiate this bold claim.

I have worked with the author of this book in a small, but very successful consulting company where we transformed the MMA from an obscure paper-based organizational study methodology from the 1960s into a renowned and modern tool for the 21st century. The switch from paper-based to digital not only increased the accuracy tremendously, but also enabled us to go after completely new questions and gain insights into process efficiency previously simply not possible.

The book will detail many of those new dimensions and how they can be applied for your business success.

After personally carrying out many MMA studies, several of them for fortune 500 companies, and seeing the results and the initiatives sparked and supported by its results first hand, I am convinced that this method will further grow in popularity and go from insider tip to mainstream in a short amount of time. This book is an important step into that direction and will give you a head start to leverage MMAs potential now.

*Andreas Schild,  
BSc Chemistry,  
MBA Innovation Management*





## INTRODUCTION: SOME QUESTIONS - JUST BETWEEN US

I start our introduction to MMA with some questions, and I want you to be honest and serious about these. As CEO, Entrepreneur or Business owner you are surely quite used to being in control of processes across your enterprise. Actually you should know how everybody performs in which place using which tools or resources just at this moment.

- › So what about your employees as the core of your business - which your staff surely is - and their role as a key part of business success? What are they doing at this moment?
- › What about work places and production lines? How are they used just now?
- › Did you ever pay serious attention to the time factor and the efficiency of work routines?



### Just between us:

- › Do you know what your employees do at this moment you are busy reading this e-book?
- › Do you know how time is spent in your organization just now?
- › Do you know if these activities are useful, effective and contribute to business success?
- › Do you know the bottlenecks and weaknesses in all your processes?
- › Do you know the chances necessary and the potential to optimize working processes for the future?
- › Where exactly are these chances and that potential?
- › Are the right employees performing the right tasks?
- › Do you know, not estimate, the value each of your projects is going to provide?
- › Do you know the most effective and efficient measures to improve your business processes?
- › Are all your current projects prioritized according to providing the most value, in the shortest amount of time?



A lot of managers confronted with these questions just raise an eyebrow and ask vice versa:

› Of course I don't know what everybody is doing just now. How could I? It is impossible to have such a close look at every moment in the working process. Nobody can do this even if he tries to stay in control all the time.

Well, I have to veto this statement at this point of our little interview. It is possible to have a close look at every moment in the working process and to gain deeper insights in the daily activities of your work-force.



In this e-book I will give you an overview of the applicable methodology and introduce MMA to you.

I will show you that MMA or Multi Moment Analysis is a great technique to make you collect all the above-men-

tioned information, and enable you to answer all questions above with a proper "yes".

I'm happy to point out the simplicity of MMA – so do not expect something complicated.

Also I promise to not bore you in the slightest:

**Just follow me into the world of MMA – because every moment counts.**

# THE CONCEPT OF MMA

## 1. Some Basics

A Multi Moment Analysis MMA or Sampling Work is a special statistical technique that enables you to gain data and information about your enterprise and work procedures. It is MMA's main objective to provide data and facts about the effort distribution in your enterprise. Consequently you will be able to distinguish value-adding tasks and activities from waste-of-time. MMA provides very reliable facts of the current situation. Efficiency killers and bloated administrative routines can be identified clearly and easily. Waste-of-time procedures and efficiency killers occur in very different forms and are often hidden.

Sometimes there is a vague subjective feeling among the staff that something is wrong or does not fit when it comes to daily work routines. Often your employees just feel, but do not know, the efficiency killers which may cause a latent feeling of working in vain, and make people dissatisfied. This means decreasing motivation at the same time. A dangerous development starts if these phenomena are not strongly opposed and changed within an appropriate period of time. Without reliable hard facts, it is impossible for

management to react and to improve the situation, respectively to make the right investment decisions with strong potential for the future. Efficiency killers prevent the potential of your enterprise to fully blossom.

The participation of your employees is very important for the success of an MMA. Your employees will be asked at random times what tasks they are performing at that very moment. This randomness guarantees the statistical accuracy and robustness of the MMA

results. Also, your employees will see the benefits of their participation in providing reliable, accurate data to address and discuss the issues that have been bothering them, but which they have not been able to quantify.

Finally, the effort to participate and the interruption of the workflow are minimal for an MMA and much lower compared to any comparable study (e.g. time study, standard data or pre-determined motion time system).





## 2. MMA answers a lot of questions for different types of enterprises

MMA offers answers where other techniques often leave just more questions. Have a look at typical questions that arise in the context of work routines in different working environments. Our first example covers an IT firm.



Imagine the following situation:

The exemplary firm wants to invest in a new business field without increasing the workforce or finding an outsourcing solution.

As employees already seem to be fully occupied with daily routine work, MMA will answer some important hypotheses about efficiency and work distribution specific to this firm:

- › How much time is wasted when electronically available data is transferred manually?
- › Is there time wasted and are there avoidable steps in routine administration processes?
- › Do errors and correction routines waste too much time?
- › Does data search and compilation take too much time?
- › Do supervisors spend too much time on checks?
- › Are the right people doing the right tasks?
- › Can further automation in the context of data analysis and reporting save time? How much?
- › Is there slack in up-dating routines, onboarding and offboarding processes, ticketing in the support routine?

In a productive and manufacturing environment MMA could answer the following exemplary questions instead:

- › Are supporting processes optimally aligned to production processes? Are production routines efficient?
- › Is quality management effectively organized?
- › Are administrative processes bloated?
- › Is the standard time of a manufacturing process appropriate?
- › Should an investment be made in staff, new machines or both?
- › Could simple activities be shifted to lower cost employees?

*Does your business need these answers?*

*Even now you might still not be convinced that your business depends on this data.*

*So far you got along fine without MMA – didn't you?*

*Let's take a second look at more of MMA's features.*

### 3. Some attractive characteristics of MMA

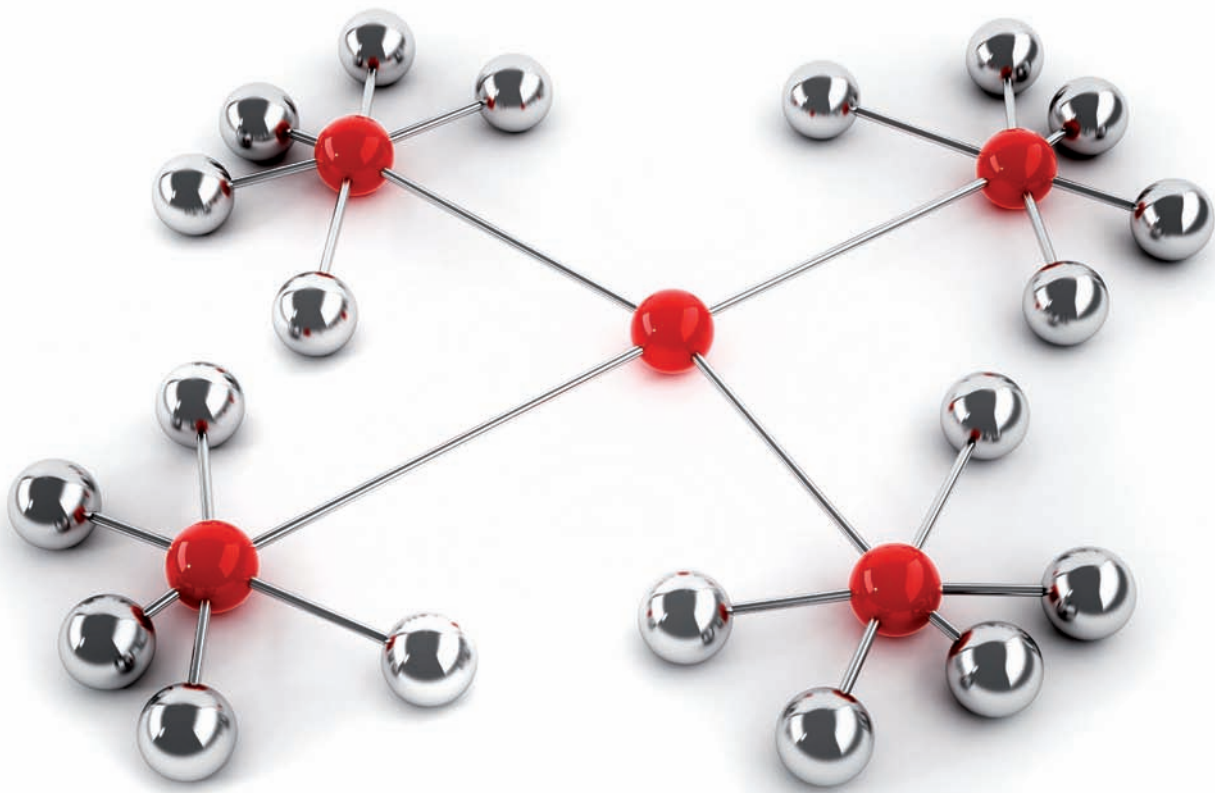
- › It provides you quickly with accurate data regarding the work distribution across all relevant processes.
- › It provides deep insights into job tasks and their respective efficiency.
- › It provides you with data to enhance performance across all domains and optimize your organizational layout.
- › With MMA data it is possible to explore different scenarios and accurately calculate outcomes for diverse improvement strategies.



### 4. Some details of the MMA methodology and new tools on the market - how a modern MMA works

- › Very simple data acquisition: Employees are asked at random time points to record their current activities. No need for recording durations, or start and end times of activities.
- › Digital support of the data collection through smartphones provides an unprecedented amount of data that allows derivation of the necessary information with great accuracy.
- › Real-time data collection and monitoring makes it possible to intervene and support during data collection
- › It also allows the interpretation of the collected data in every possible dimension.
- › This way organizations, roles, routines, processes and categories can be thoroughly scanned.
- › The MMA data reporting is completely anonymized. This alleviates any concerns of data protection representatives or work councils.
- › MMAs can be setup with general or customized additional dimensions that provide the necessary depth to answer complex questions. Typical examples are organization, role, categories, projects etc.
- › Sophisticated statistical methods are used to calculate work distribution and work allocation to any chosen dimension.
- › Additional reference bases can be defined and tracked during a MMA study to provide data for scenario simulation: E.g. for our IT firm the amount of support tickets could be tracked, which would allow to calculate and predict effects on efficiency, work force and infrastructure for increasing the amount of support tickets. MMAs build a reliable data source for inter-company or industry wide benchmarking

## 5. MMA-analyzed companies are far better off



- › They identify gaps and bottlenecks.
- › They have the necessary data for better planning.
- › They make better, informed decisions.
- › Their investment decisions are backed by measured data, not guesswork.

- › Their budget requests are substantiated with clear cost-benefit data
- › They optimize processes continuously – supported continuously by MMA.
- › They are able to optimize on key performance indicators: efficiency, cost reduction, productivity

- › They use the right people for the right tasks.

Are you curious to learn even more about MMA?



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## A LOOK AT THE HISTORY OF MMA

The roots of MMA seem to go back to 1927. The Englishman Leonard H. C. Tippett is said to have been the first one to apply a survey technique that had some key characteristics of a modern MMA. For the terminology it was the Dutch engineer Gerdien de Jong who coined the term "Multimoment" in 1957. Work Sampling is used as a term in Anglo-Saxon environments. French business knows Observations Instantanées. The methodology became more and more successful because it

allows a random sampling approach compared to costly full surveys.

### Modern technical equipment shapes a new MMA

MMA will gain even more momentum by the progressive development of computer-based data collection. MMA execution which is smartphone-, pc- and server-based can be regarded as a kind of new development of the MMA technique because its

possibilities are much more extensive than the classical MMA. Modern MMA allows a flexibility, velocity and most importantly data quantity that had been completely unknown to its forerunners. Different scenarios allow a comparison and evaluation of possible business strategies and their outcome. Reporting is fast and covers all potential questions. Modern smartphone technology perfects MMA for it makes it much easier to collect the data in a mobile, unobtrusive way.





## MMA HAS NEVER BEEN AS IMPORTANT AS TODAY: SUCCESSFUL BUSINESS STRATEGIES ARE BASED ON MEASURABLE GOALS

### 1. Modern business faces modern problems

A lot of industries face real pressure today. Business cycles have become extremely short due to global competition and increased demand on flexibility and agility. All businesses have to innovate faster and create more value in ever shrinking time cycles. On the other hand processes and routines become more and more complex. The amount of data to be processed is enormous. It challenges the organization's ability to analyze

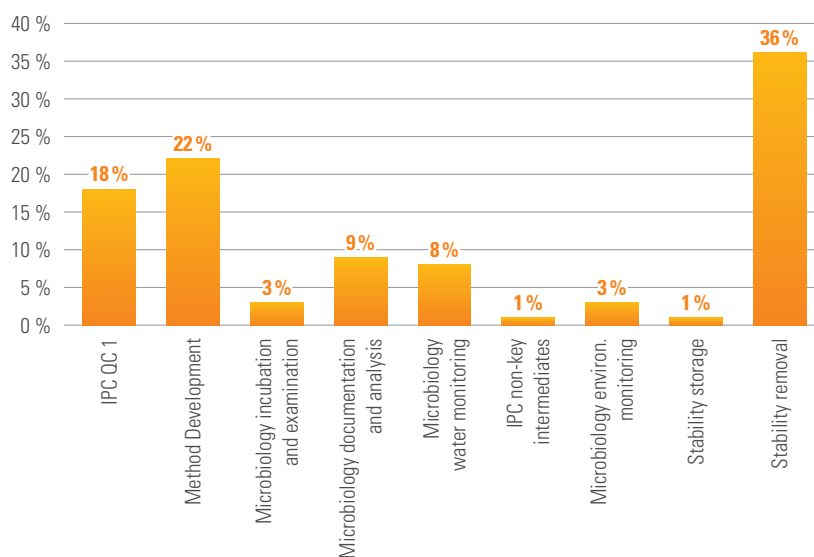
this data and turn it into valuable information. In this context it is difficult to divide important information from time-wasting data noise. To perform, enterprises are forced to optimize routines, administrative processes and organizations continuously and fast. Not to forget the cost pressure which limits resources especially when it comes to the human factor. "Less people to do more work" could be the current motto of many businesses. Limited re-

sources demand a sophisticated strategic approach to ensure efficiency. Efficient routines also increase employee motivation, which is an important key factor for success. "The right resources at the right place at the right time" could be a fitting description of the approach.

**MMA provides the necessary data to make the right decisions at the right time.**

### 2. Convincing Strategies require definite targets based on hard facts

Distribution across processes



Only measurable, accurate data guarantees successful business strategies. An accurate workload analysis provides the required data to plan human resources and to make routines much more efficient. In production cycles, gaps are detected and can be changed. Bloated administrative routines can be cut down to a reasonable size. The possibility to analyze data in multiple dimensions provides the necessary insight to go in depth and to reveal time-wasting routines step-by-step.

**MMA offers tools to allow in-depth analysis and to detect time-killers.**



### 3. Scenarios

Successful strategies not only require hard facts, but to be optimally tested before being executed. Scenarios

make it much easier to choose the right option when facing more than one possible alternative.

MMA uses scenarios to test possible strategies before they are installed.

MMA confers a major advantage over your competitors.





## WHERE DO YOU WANT YOUR BUSINESS TO GO?

As an entrepreneur and leader you need targets and processes ultimately to support your visions. Your vision represents the big picture, while processes and routines are the smaller cogs in the machine – nevertheless they are of crucial importance for your success. Visions require investment

decisions at the right time and in the right field. Of course you can just trust your gut instincts when deciding and combine it with more or less useful and mostly inaccurate estimates. This means business success becomes a kind of lottery – either you are the lucky one or not. With regard to the

above-mentioned high pressure and strong competition in many industries, we regard such an approach as quite reckless. Better solutions are at hand which help transfer your visions into reality.

**MMA can do better and MMA will do better.**

*MMA offers the quality data needed to make the right investment decision at the right time with the right people and in the right way.*

**In a productive and manufacturing environment MMA could answer the following exemplary questions instead:**

- › by gaining a great level of confidence calculating strategic improvements and potential efficiency based on MMA data.
- › by not depending on luck anymore. Luck might be useful – but reliable knowledge is hard to top.
- › by providing hard facts and reliable data to support meaningful discussions about possible benefits of major projects and processes. This

means that you do not only have subjective ideas about the value of certain measures – you know what they add to your business and whether they are useful or not.

- › by generating sound financing and planning data for projects enable you to convince financiers and shareholders much easier than before.
- › by securing reasonable workload for people and machines.

- › by keeping your staff motivated, informed and eager to succeed.
- › by minimizing non-productive work and maximizing value-added work.
- › by being able to rely on future benefits, not only hoping for them to materialize.
- › by basing your ROI on measured facts and not vague estimates



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## THE POTENTIAL OF MMA

The very potential of MMA centers on its flexibility and adaptability to various business fields. With modern IT as the backbone it is possible to personalize a MMA to your specific needs for data, information and scenario. MMA is an adaptable technique and always focuses on the specific case instead of im-

posing rigid tools other methods come up with. You decide what you want to know, which process you want to measure and what scenario is to be used. Compared to other study methods, especially paper based ones, the effort for data acquisition is negligible. MMA studies are proven to be less invasive

and much easier to carry out for the participants. The size of your business does not matter either, even if your organization has different sites these can be measured individually and then be compared.



So far you have learned something about MMA and its benefits.

Coming next we would like to give you an insight into the method and data collection process itself.

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## THE PROCESS OF MMA

### 1. Setting a goal

What do you want to know and where do you want to go? The answer to this question is of utmost importance, as it guides the set-up, the boundaries,

parameters and the necessary dimensions for your study, which ultimately shape the data and the outcome.



**What should be analyzed?**  
**Some examples are:**

- › The organization itself (performance, benchmarking)
- › Work distribution of processes and routines
- › Categories, reference bases, custom dimensions
- › FTE types or roles
- › Scenarios
- › Whatever you want to know...

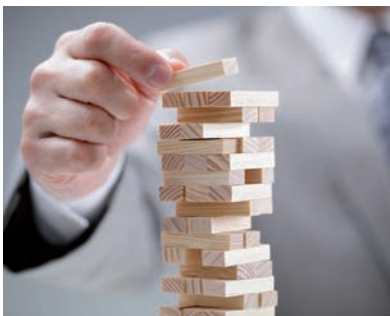
### 2. Preparation and prerequisites

The following list gives you an overview of the necessary prerequisites for a successful MMA study:

- › Detailed, up-to-date organizational charts down to employee level
- › Process charts, the level of detail depending on the previously set goals.
- › Activity lists, either derived from the process charts or otherwise available. A good starting point can be industry specific lists for typical work processes.
- › People are informed about MMA and their key role in collecting data.
- › An internal project team is designated, management support is secured and work councils are informed (if necessary)



### 3. Planning, organization and start of MMA



- › All Master data is defined, reviewed and agreed upon.
- › Infrastructure is defined and ready
- › Recording devices: Mobile devices (BYOD, rented), PC-based recording,
- › Network coverage
- › Training rooms for staff
- › It is advisable to plan for a test day before the actual data collection, to familiarize the participants and to make sure all master data is accurate and fits the reality of daily business.
- › Plan for a post-test day adaptation of master data, specifically the tasks

### 4. Measurement phase – normally 2-3 weeks



Real-Time data is collected and monitored throughout the organization by the participants. Data can be analyzed during collection on all dimensions such as roles, routines, organizations or activity categories. This can provide data for an early termination of the study if the predefined accuracy is reached.

### 5. Analysis and Reporting



The necessary amount of notifications depends on the goals defined at the start of the study. Main contributing factors are:

- › Number of dimensions
- › Number of processes/tasks
- › Number of participants
- › Desired accuracy (selected confidence level)

It is even possible to add additional categories or re-categorize measured tasks after the collection period to answer additional question brought up by the data.



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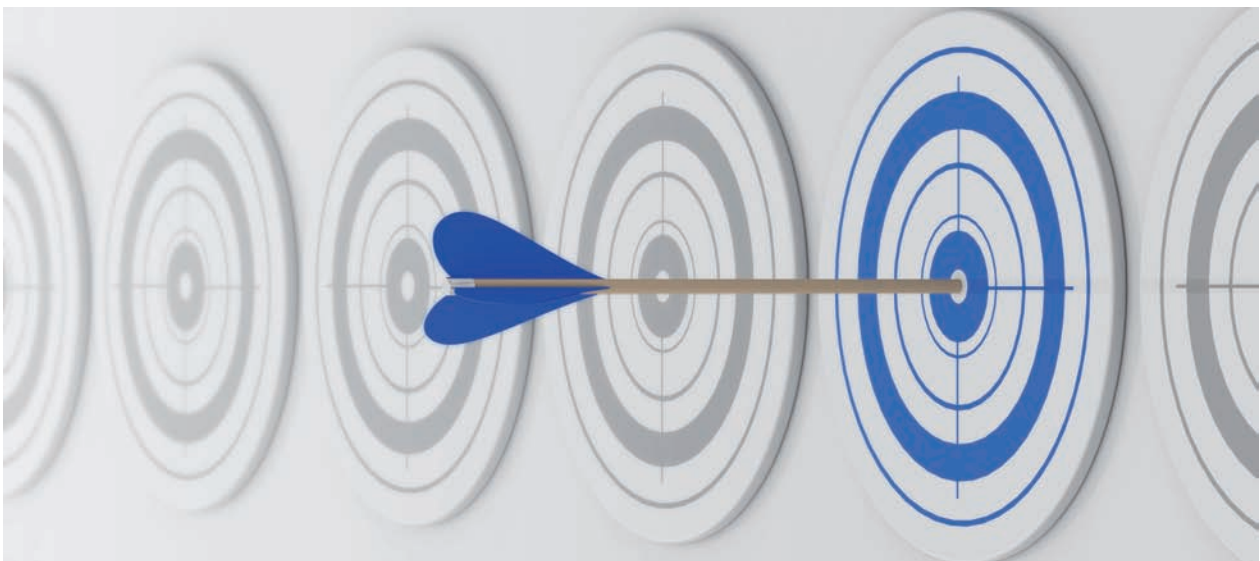
## PRACTICAL EXAMPLE: CONCLUSIONS OF MMA STUDY

At the very beginning we introduced an IT-firm to you which plans to expand into a new business field without wanting to invest much into new resources, especially as human resources were concerned. Also the new business demanded a higher accuracy and reliability than the normal work field, because it would be audited by an external quality management sys-

tem. Therefore, their MMA study targeted mainly all the bigger and smaller efficiency gaps they had not paid much attention to so far. As a result of the new business field, the rising workload could only be absorbed by working more efficiently than before. Meeting the higher quality goals was a challenge they had not too much time left to face. Also the time factor hinde-

red them to develop software of their own to improve routines, which meant improvements in work routines had to be realized by applying standard functionality from commercial off-the-shelf software.

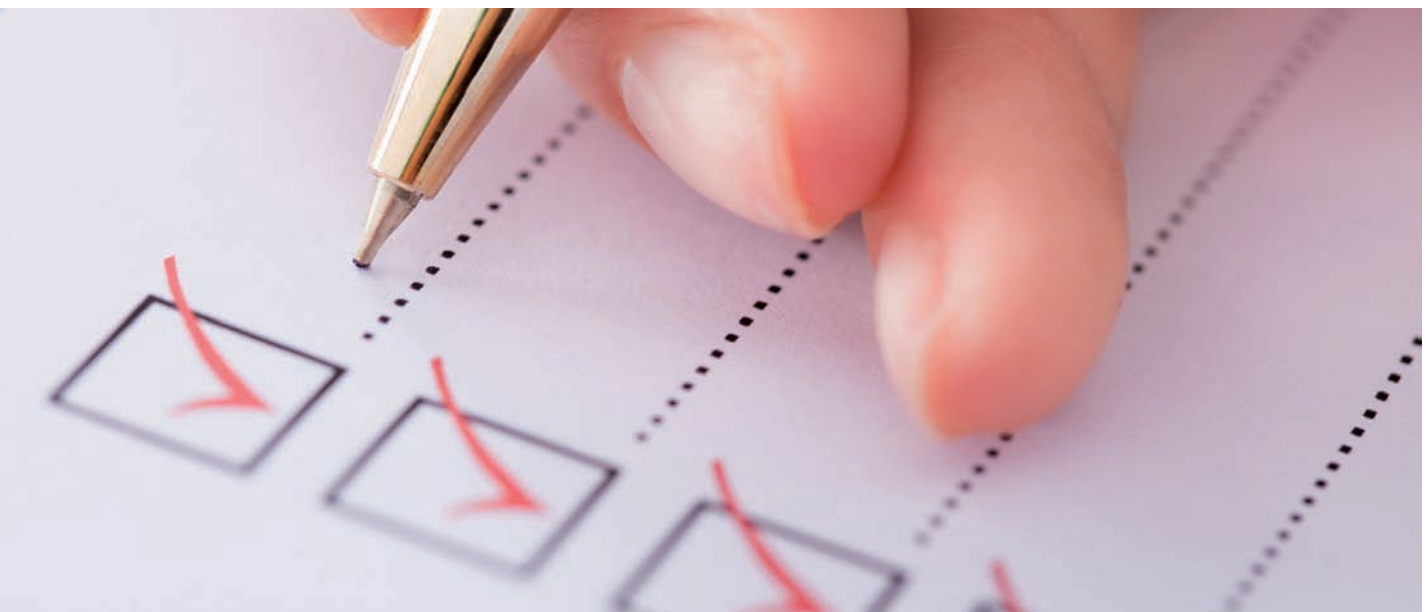
**Major task: Expand and improve quality without investing much cost and much time!**



## 1. What did the MMA study bring up?

In this case MMA could identify some routines that were especially time wasting and did not add any benefit. Especially certain tasks in the administrative process were classic time-killers.

- › Onboarding processes were handled manually and lacked a proper standard.
- › Offboarding processes were similar.
- › System problems led to a high amount of inquiries that put a high load on administrators.
- › There was no routine that set up a standard to cope with inquiries and error reports.
- › An information gap among work groups hindered efficient work because some tasks were totally neglected, while multiple team members performed other tasks.
- › Time was disproportionally spent on lower-margin projects
- › A proper report system had not been installed.



## 2. What MMA led to

Analyzing and discussing results led to the following improvements:

- › Work distribution was redefined and reprioritized on high-margin projects
- › Onboarding and Offboarding routines were standardized and became automatic routines performed by a software program.
- › An updating standard was installed.
- › An automatic report system for errors and failures was installed.
- › Inquiries and error reports of team members were treated by an automated ticket system.
- › Supervisor software could report on current system status at any given time.
- › An automated information system spread new data in a defined work group.
- › An automated report system supported communication.



To find ready-made software for the improvement processes, the results of MMA were used to build up different scenarios of changed processes. This enabled the firm to choose just the right product for their problems. This not only saved time but also costs because the different anticipated software programs could also be compared with financial aspects.

The quick outcome of the MMA study was able to meet the very tight time scale in that case. The staff who were

already working to capacity was not bothered much by the easily performed collection of data for the MMA study. The MMA study also allowed continuous monitoring of the crucial routines and their continuous improvement that resulted in a successful auditing process and quality management certificate later on.

Finally, after implementation and adoption into the daily routine, a short, focused MMA confirmed the projected efficiency improvements clearly

and validated the investment. This established the MMA as the go-to tool for any future project justifications.

**This exemplary case should have given you an impression of how useful and valuable MMA can be.**

**MMA leads to solutions and does not cause more problems.**

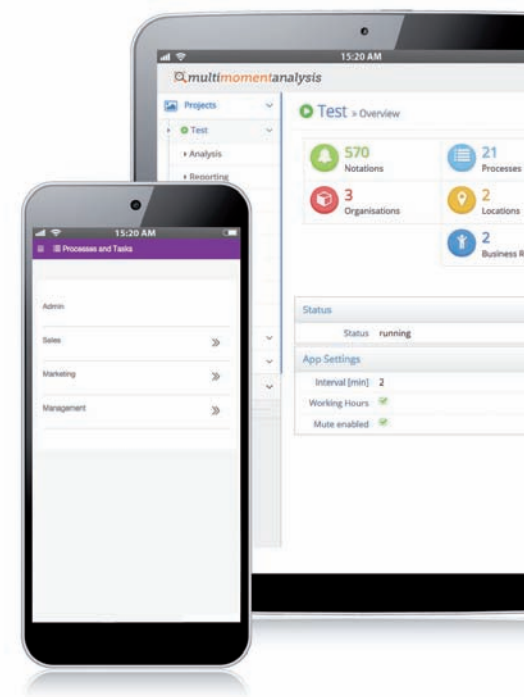
**MMA is an uncomplicated methodology.**

## ADVANTAGES OF MMA COMPARED TO OTHER STATISTICAL METHODS

I do not say that MMA is the only way to gain some statistical insights into your organization. But I'm sure it is a very powerful one and offers several advantages compared to other approaches.

- › MMA is focused and goal oriented.
- › MMA is easily performed – staff has just one question to answer: what are you doing right now?
- › MMA is flexible – it can be adapted to a large number of goals.
- › MMA saves resources – the mainly paperless collecting process reduces the effort and complexity of the study.
- › MMA is perfectly structured – results become much more reliable.
- › MMA is reliable – randomly collected data guarantees a proper insight of processes without bias.
- › MMA is quick – 2-3 weeks study duration with only minor effort on the participant side and only some days for preparation and analysis. MMA is anonymous – there is no personal blaming or personalized analysis
- › MMA keeps you in control – only knowing time-killers means being able to eliminate them.
- › MMA supports the best solution – by calculating scenarios you have the opportunity to choose the best way and go for most value.
- › MMA is sustainable – it allows continuous monitoring and improvement of routines.

**In my opinion, MMA is clearly the best way to measure effort and efficiency of processes in any field and optimally prepares you for success.**







---

## WHAT CAN I DO FOR YOU AND YOUR BUSINESS?



If I have successfully raised your interest in MMA we, and our partner network, can go into more detail with you in a personal interview. We are eager to define your individual major goals with you and set up a possible study scenario. Do not hesitate to contact us for a first non-committal interview.

Please go to <http://multimomentanalysis.com/index.php/contact-us>

### And the costs?

Of course costs play a role in every business endeavor. We are sure the costs to perform a MMA study are repaid quickly by being able to save on inefficiencies and more focused

investments. Prices differ according to the scope of the requested data so please obtain your personal offer directly from our MMA partners or us directly.

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## TYPICAL QUOTES AND EXPERIENCES

*„I am surprised how quickly and easily this MMA study was accomplished.“*

*„I would have never expected so many efficiency killers and time wasters among our processes. It was shocking and a wake-up call for improvement.“*

*„The MMA study was accepted by our people very well – often such studies cause some anger or impatience among the employees because it has to be fitted into an already heavy workload. No problem with MMA – it didn't bother people much. The fact that it works anonymously even calmed those easily agitated people who always suspect something of a personal blame or attack.“*



## MULTI MOMENT ANALYSIS (MMA)

A new of way of getting information about your organization



Author: Paul Planje

Layout: iomicron GmbH & Co. KG

Visit us:

**[www.multimomentanalysis.com](http://www.multimomentanalysis.com)**

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**me2any AG**

Wysshüslistrasse 14  
CH-6207 Nottwil

[info@me2any.com](mailto:info@me2any.com)  
[www.me2any.com](http://www.me2any.com)

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