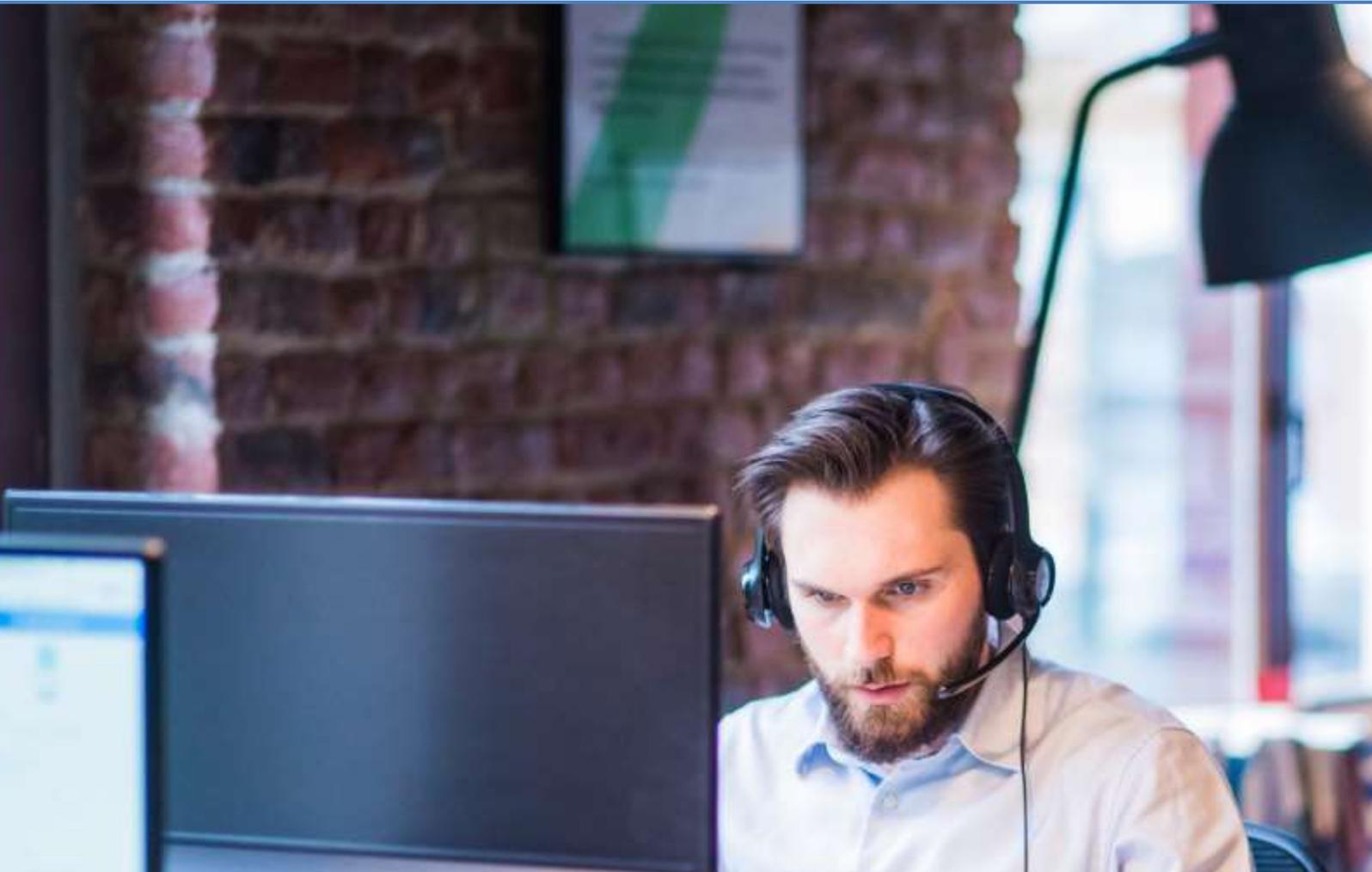


Professional FP&A systems



Covid-19, Gas Crisis, Supply Chain Issues -
7 Steps for hands-on Crisis Management
and Controlling

Content

Can you ever plan for something like Covid-19 or the gas crisis 2022?	3
7 steps to managing crises in planning	4
1) Risk management – are we prepared for the crisis? Simulate the immediate crisis effect on the company	4
2) Monitor and forecast short-term liquidity.....	5
3) Bridge cash gaps in case of liquidity bottlenecks	6
4) Optimization of personnel costs	8
5) Stabilize and/or improve sales through special offers or campaigns	10
6) Calculate and optimize the impact of changes in demand. Such as sales promotions, on production/capacity	13
7) Bringing together all relevant information – Integrated corporate planning	14
Conclusion & Outlook	15
smartPM.solutions in a Nutshell	16

Can you ever plan for something like Covid-19 or the gas crisis?

Probably not... the extent to which crises like Covid-19 and the Russia-Ukraine conflict is affecting everyday life is unpredictable. Borders shutting down, stock markets crashing, and the gas supply is no longer secure. The changes and adjustments that have to be made by companies for these exogenous shocks in terms of sales targets, dividend payments and share prices are challenging and potentially life-threatening.

But what can FP&A departments do to help as best as possible in these times?

Reflect on your role as a business partner, collect all relevant information on the feared or desired effects of market changes on the company, calculate various scenarios, analyze the results and, above all, make recommendations for optimal corporate management in these uncertain times:



Figure 1: How to deal with crises at our customer Hillebrand

This Whitepaper examines several aspects of **short-term and medium-term liquidity monitoring, as well as long-term optimization of the company's success, in particular through measures in planning organization and control**. It will be explained how using modern CPM & BI technology one can focus on highly relevant tasks to deal with exogenous shocks like COVID-19 and the gas crisis. As a result, a whole bundle of concrete measures and methods is proposed that enable the controller to use agile decision-making support. The article is enriched by numerous example analyzes and valuable tips from practice.

7 steps to managing crises in planning

1) Risk management system: are we prepared for the crisis? Simulate the immediate crisis effect on your company

Depending on the industry and the company structure (business areas, regions, etc.), it is probably necessary to obtain estimates of the effects of the pandemic or gas crisis on e.g. sales or other income statement items from all parts of the company.

Here is a practical example that shows all the effects of the crisis from the point of view of those responsible locally as part of a forecast adjustment with appropriate comments:

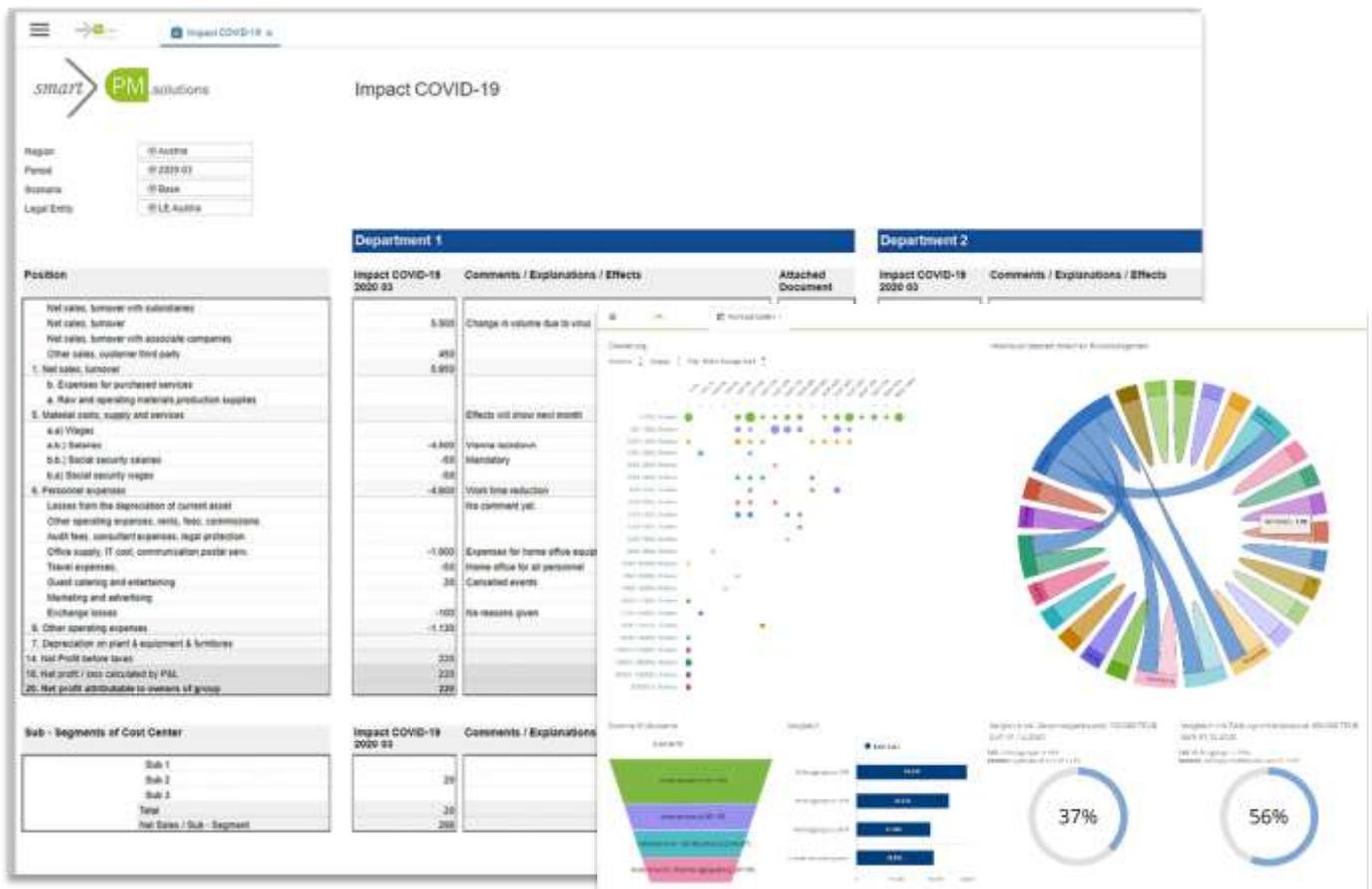


Figure 2: Commented expected "Covid-19" impacts per business line, risk management dashboard

All estimates from the different divisions can be analyzed in an aggregated manner (e.g. within a corporate group), all comments can be reported in a consolidated manner and joint measures can be taken.

2) Monitor and forecast short-term liquidity

Integrated Business Planning (IBP) systems connect to ERP or other source systems to analyze historical payment behavior per customer and predict future DSO (Days Sales Outstanding, payment periods). This information can be reconciled with the planned outgoing payments - such as salaries, taxes or for the purchase of materials or external services - on a weekly or daily basis:



Figure 3: DSO Dashboard for ad-hoc analysis and cash forecasts – daily/weekly/monthly level

Figure 3 shows the expected cash inflow per type of benefit. In addition, there is a detailed analysis of the due and overdue payments per customer. Past actual payment periods were supplemented with manual assessments of future payment practices.

3) Bridge cash gaps in case of liquidity bottlenecks

If you are already working with linked company data, you have access to all the information needed for monthly cash forecasts. Waterfall charts and delta markers visualize the cash-in/out development and highlight liquidity bottlenecks:

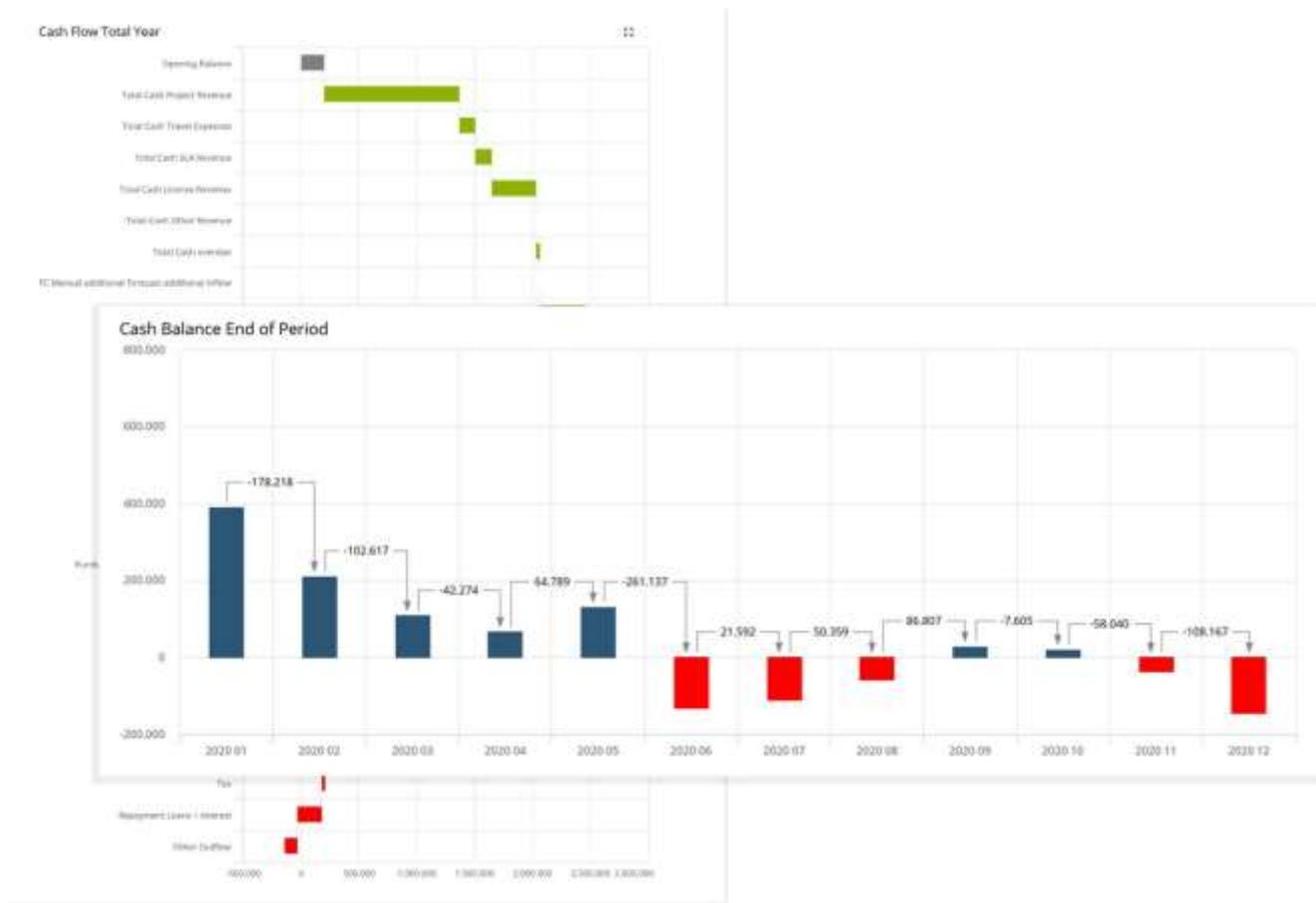


Figure 4: Detailed analysis of incoming and outgoing cash, also on a rolling basis

Cash forecasts should be revised on a regular basis, especially in challenging times. We recommend rolling forecasts, as they show the development of the available funds, e.g. in a weekly comparison, and serve as a basis for quick decisions.

In the event that the system highlights liquidity gaps or even longer-term financing requirements in certain weeks or months, it can react to this by extending credit lines or by taking out or planning new loans - semi-automatically if necessary.

Integrated business planning also means that all actions/initiatives/asures can be checked and tracked in terms of their impact on the finances or resources of the company - via online collaboration accessible to all within the framework of user rights, e.g. based on MS Teams:

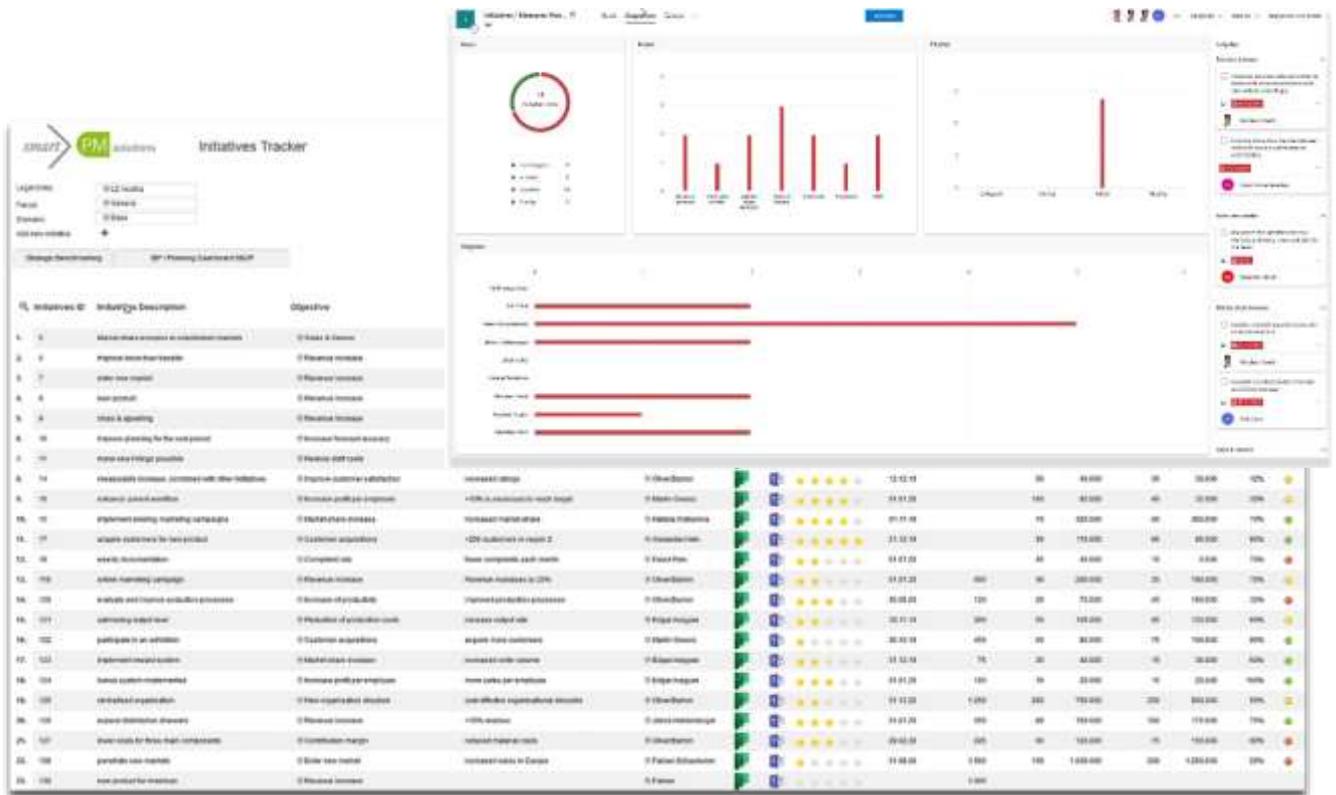


Figure 5: Initiative Tracker & Planner

By clicking on the corresponding team or planner symbols, online conversations can be started or suitable tasks can be assigned to the team members.

In order to ensure liquidity, loans and IC cash pooling can be defined/planned manually or even automatically taken into account in the system using the loan planning module as part of the integrated financial planning solution.

4) Optimization of personnel costs

Authorities in several countries are now offering pragmatic solutions to reduce the burden on personnel costs for companies in the event of underutilization without having to lay off employees on a large scale. This makes it possible to retain capable employees, whose knowledge the employer is likely to need again after the crisis. The smartPM.solutions module for personnel cost planning was developed to simulate personnel cost effects for this and similar approaches:

	Working hours per week	Salary (monthly)	Salary (yearly)	Reduction in working time [%]	Start	End	Duration in weeks	Covid-19 government aid package	Employer personnel costs
Impact		95.250,00	1.333.500,00					296.400,00	1.037.100,00
2010 - Adriana Ocampo Uria	40,00	2.500,00	35.000,00	20,0%	01.01.2020	29.02.2020	8	6.000,00	29.000,00
2011 - Albert Einstein	40,00	2.500,00	35.000,00	80,0%	01.04.2020	31.05.2020	9	9.000,00	26.000,00
2012 - Anna Behrensmeyer	40,00	2.500,00	35.000,00	10,0%	01.04.2020	30.06.2020	13	5.750,00	29.250,00
2013 - Blaise Pascal	40,00	2.500,00	35.000,00	50,0%	01.04.2020	30.06.2020	13	8.750,00	26.250,00
2014 - Caroline Herschel	40,00	2.500,00	35.000,00	50,0%	01.04.2020	30.06.2020	13	8.750,00	26.250,00
2015 - Cecilia Payne-Gaposchkin	40,00	2.500,00	35.000,00	50,0%	01.04.2020	31.05.2020	9	7.500,00	27.500,00
2016 - Chien-Shiung Wu	40,00	2.500,00	35.000,00	70,0%	01.05.2020	31.07.2020	13	10.250,00	24.750,00
2017 - Dorothy Hodgkin	40,00	2.500,00	35.000,00	80,0%	01.05.2020	31.07.2020	13	11.000,00	24.000,00
2018 - Edmond Halley	40,00	2.500,00	35.000,00	20,0%	01.05.2020	31.07.2020	13	6.500,00	28.500,00
2019 - Edwin Powell Hubble	40,00	2.500,00	35.000,00	50,0%	01.05.2020	31.07.2020	13	8.750,00	26.250,00
2020 - Elizabeth Blackburn	20,00	1.000,00	14.000,00	80,0%	01.04.2020	30.06.2020	13	4.400,00	9.600,00

Figure 6: Personnel planning form for detailed employee planning, taking into account reduced working time models

Forecast personnel expenses can be easily adjusted at employee level and reduced working hours can be planned for selected employees or even entire cost centers. The special added value results from the preliminary simulation of cost savings before corresponding decisions are made and applications are submitted to the authorities.

Employee	no action	Termination of Employment	Short time model	Regular Costs	Termination of Employment	Short time work
2010 - Adriana Ocampo Uria	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.251,0	2.810,4	664,4
2011 - Albert Einstein	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3.251,0	3.003,3	664,4
2012 - Anna Behrensmeyer	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3.251,0	3.003,3	664,4
2013 - Blaise Pascal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3.251,0	3.003,3	664,4
2014 - Caroline Herschel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.251,0	3.775,0	664,4
2015 - Cecilia Payne-Gaposchkin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.251,0	2.231,6	996,6
2016 - Chien-Shiung Wu	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.251,0	3.196,3	996,6
2017 - Dorothy Hodgkin	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3.251,0	3.389,2	1.328,8
2018 - Edmond Halley	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3.251,0	3.582,1	664,4
2019 - Edwin Powell Hubble	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3.901,2	6.845,2	765,6

Figure 7: Choice of employment option per employee

Figure 7 compares cost savings for the variants "no action", "termination" and "short time working hours". By maintaining the current vacation entitlements, the optimal procedure for reducing remaining vacation days before or during the reduced working hours can also be simulated.



Figure 8: Personnel cost forecast in scenario comparison, effects of short-time work

Employer grants can also be taken into account in the module. These can reduce the net loss of employees, since the short-time work allowance is calculated on the basic income without surcharges, depending on the legal regulation, which can have a negative effect on shift workers in particular. In order to cushion cases of hardship (e.g. for sole earners with children), flat-rate grants can be planned here, for example.

Based on what-if analyzes and the simulated influence on the income statement, balance sheet and cash flow (see Chapter 7), the right decisions are made on the basis of all current assessments, initiated initiatives and scenario simulations.

5) Stabilize and/or improve sales through special offers or campaigns

Special times call for special initiatives, and sales campaigns can significantly improve future sales. Special offers have a direct impact on sales and ideally also on the margin. The predefined promotions planner simulates the impact of special offers on sales, production and profit:

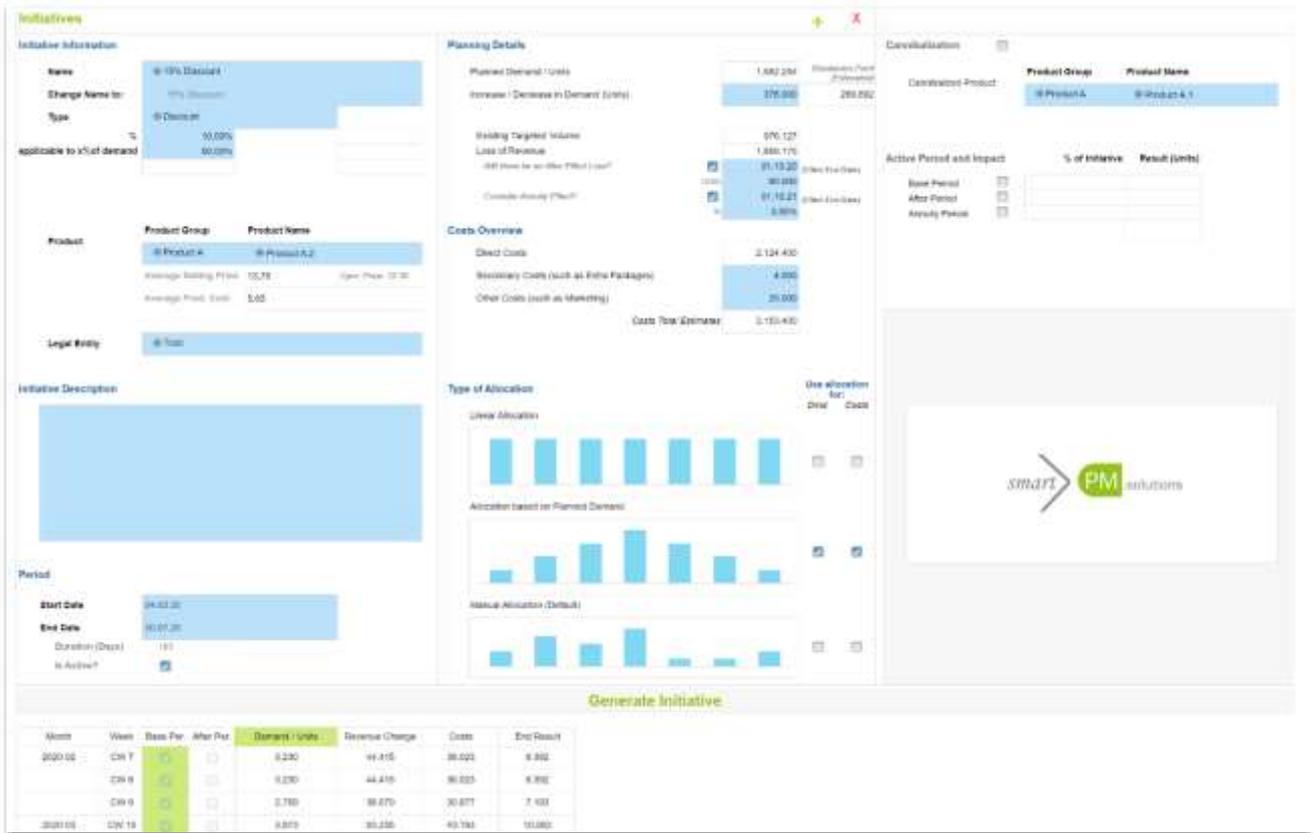


Figure 9: Define special promotions and simulate their effects in advance

Sales campaigns increase the demand in addition to the "base line", i.e. the total demand results from the existing/contractually fixed demand plus additional demand from sales promotions or otherwise stimulated demand.

We therefore think it makes sense to differentiate between different types of demand based on how likely they are to become revenue relevant.

A helpful approach for this is a comparison of the various types of demand with the capacity:

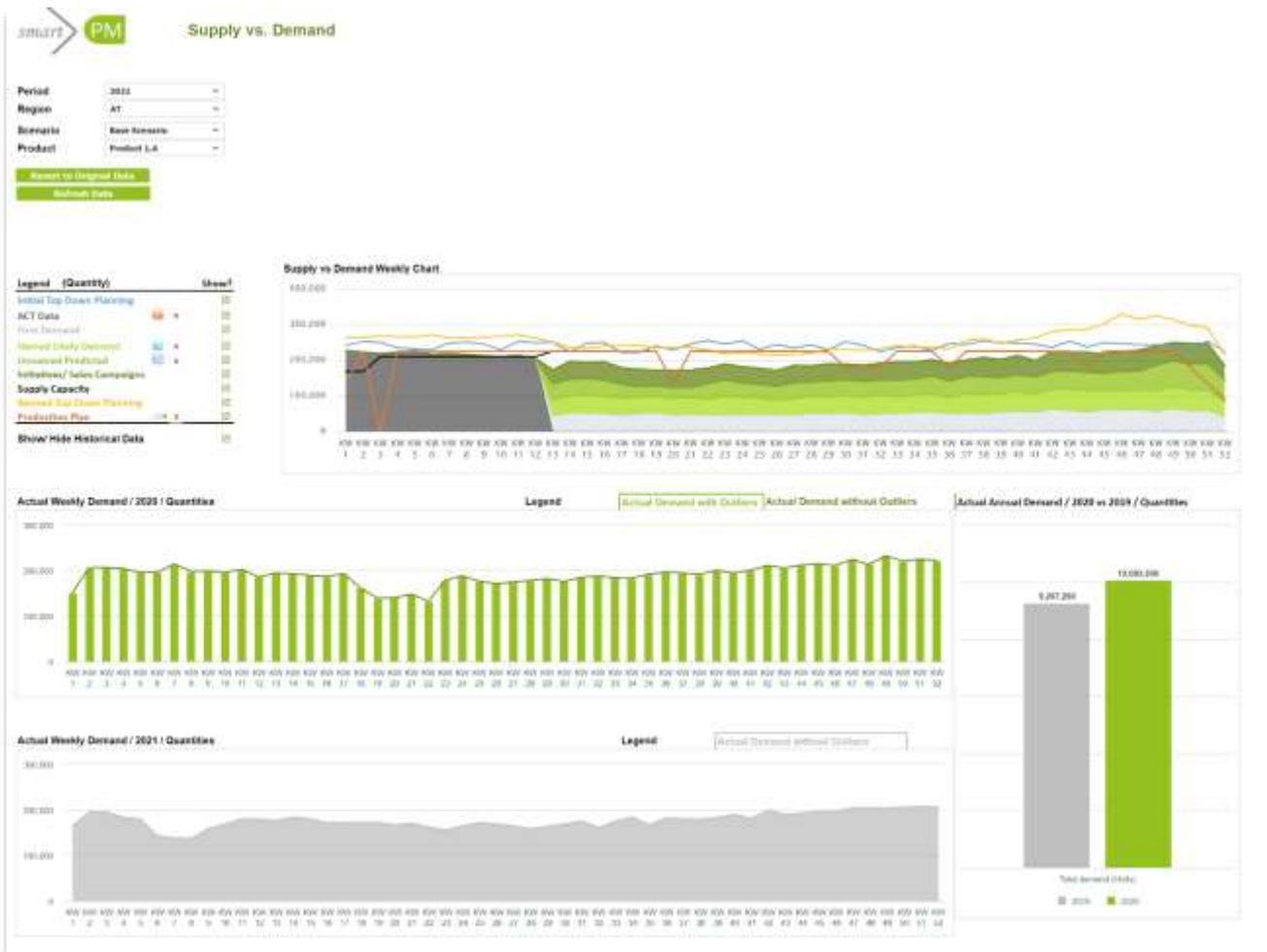


Figure 10: Demand types by probability, actual vs. forecast, supply vs. demand

Figure 10 shows past demand versus past production capacity, i.e. the ACTUAL, plus future demand differentiated according to the probability of occurrence. "Firm demand" or "baseline" has already been contractually agreed, "named likely" describes very specific, probable demand where the customer has already been determined. "Unnamed predicted" is predicted demand, of which the origin (client) has not yet been determined - and any gap between supply and demand that may still exist can be closed on the demand side, for example, through stimulating initiatives ("sales campaigns", special offers).

Forecast options include scenario comparisons (see Fig. 10 and 12) as well as range analyzes (confidence intervals) for forecasts:

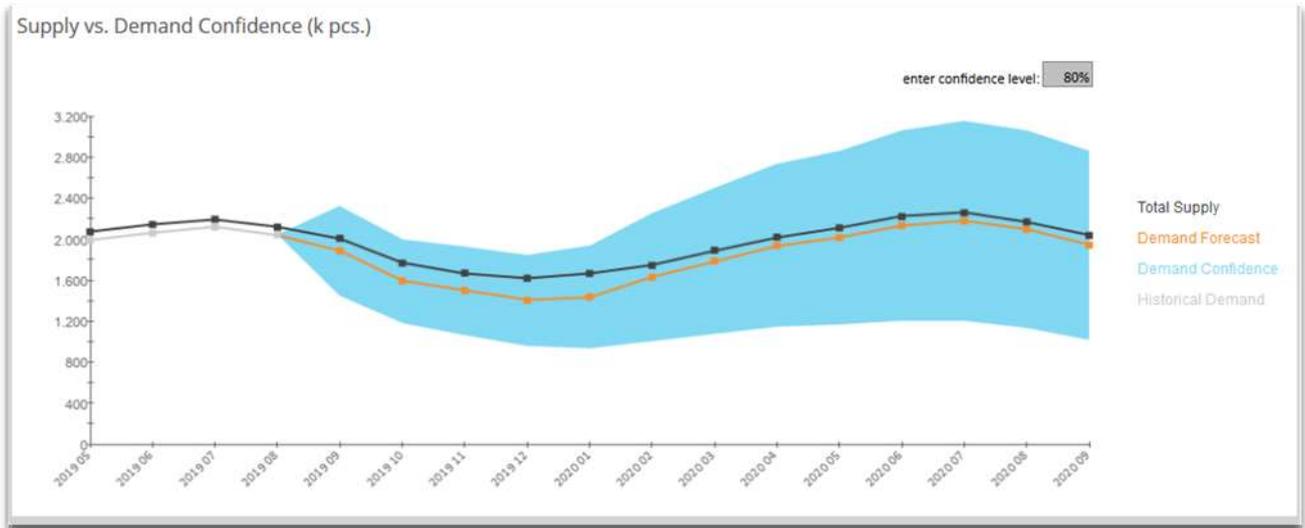


Figure 11: forecast demand in the confidence interval

The bandwidth simulation in Figure 11 shows that the demand in the underlying example will be between 1.2m and 2.8m pieces with an eighty percent probability.

Scenario comparisons help to simulate the impact of each possible action - and for each set of selected initiatives, the impact on P&L, balance sheet and cash flow can be simulated:

Period: 2020
 Scenario: Base
 Legal Entity: LE Germany
 Product: PRSE_GRM_RATESENIOR

Initiative	Start Date	End date	Impact (Q)	ROCE	Incl.?
15% Discount	04.02.2020	20.07.2020	321.062	11,31%	<input checked="" type="checkbox"/>
Buy 2 Get One Free	16.10.2020	31.12.2020	290.000	0,15%	<input checked="" type="checkbox"/>
Free Give Aways	13.02.2020	09.04.2020	95.200	0,04%	<input checked="" type="checkbox"/>
Facebook Marketing Campaign	07.08.2020	24.09.2020	283.707	39,38%	<input checked="" type="checkbox"/>

Period: 2020

Demand before and after Initiatives (Quantities)



Legend: Dmd. bef. init Dmd. aft. init

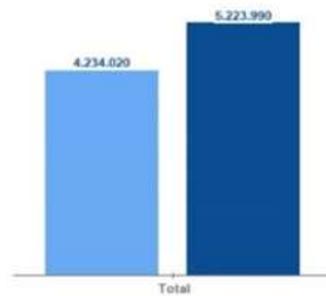


Figure 12: Impact analysis of individual measures in a scenario comparison

For example, it can be simulated how a certain discount campaign affects the product or company result of a certain scenario.

6) Calculate and optimize the impact of changes in demand on production/capacity

Keeping supply and demand in balance is essential in times of crisis for the economic survival of profit-oriented, manufacturing or service-oriented companies. In order to prepare in terms of production for ad-hoc changes in demand such as panic buying (e.g. in the consumer goods industry), a flexible S&OP optimization routine can automatically adjust production and, for example, bring forward the production of goods that are planned to be in greater demand in the following weeks or flexibly add production shifts:



Figure 13: Automated production plan optimization on a weekly basis

If it becomes necessary to reduce the availability of personnel and thus adjust production planning and personnel costs, the measures suggested in point 4 (optimization of personnel costs) can help.

Furthermore, the effects of production downtimes on the cost structure of production are simulated, specifically on fixed costs and variable cost blocks. Based on this information, discussions with suppliers can then be sought in order to improve the cost structure. The negative effects of the crisis (declining demand) are then compared with the countermeasures (e.g. short-time work) and material cost savings can be started and also included in the simulation.

7) Consolidation of all relevant information – Integrated corporate planning

Only fully integrated corporate planning offers a comprehensive picture of the influence of external shocks and internal reactions - and thus the switch from "reacting" to "shaping". Predict how the crisis will affect your company in the coming days, weeks, months and years, and let the integrated financial planning system calculate the impact on the income statement, balance sheet and cash flows of various business areas and the company as a whole:



Figure 14: Preliminary simulation of the impact on P&L and cash, reporting on exceptions

Figure 14 shows a P&L preview, highlighting the items that require special attention - as well as the preview of the impact on cash balances for the next few days and weeks.

Due to the great demand, we also offer you the possibility of an expert discussion. I look forward to an exchange. [Click here for my online calendar >>](#)



Conclusion and Outlook

We are aware that only around 25% of all companies use a professional corporate performance management tool that helps with the challenges of reporting, planning and forecasting. Everyone else is still wasting a lot of time and money sending MS Excel files around and manually quality checking them.

However, regardless of the technology deployed, we believe that at the end of any financial effort to deal with the current crisis, a comprehensive picture of the expected overall business situation must be considered. In practice, this works best with a combination of action planning, scenario comparisons, integrated financial planning and clear presentation in dashboards, as shown in the following figure:

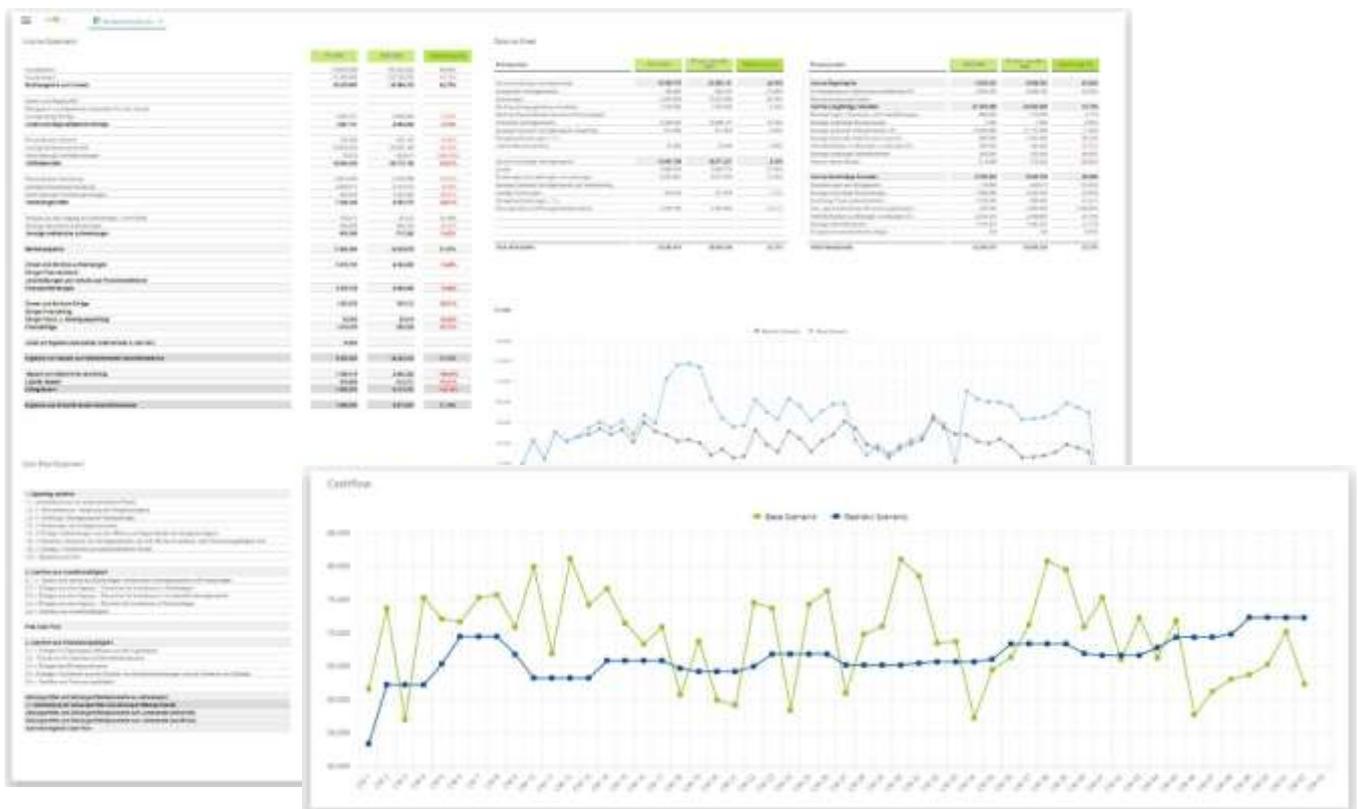
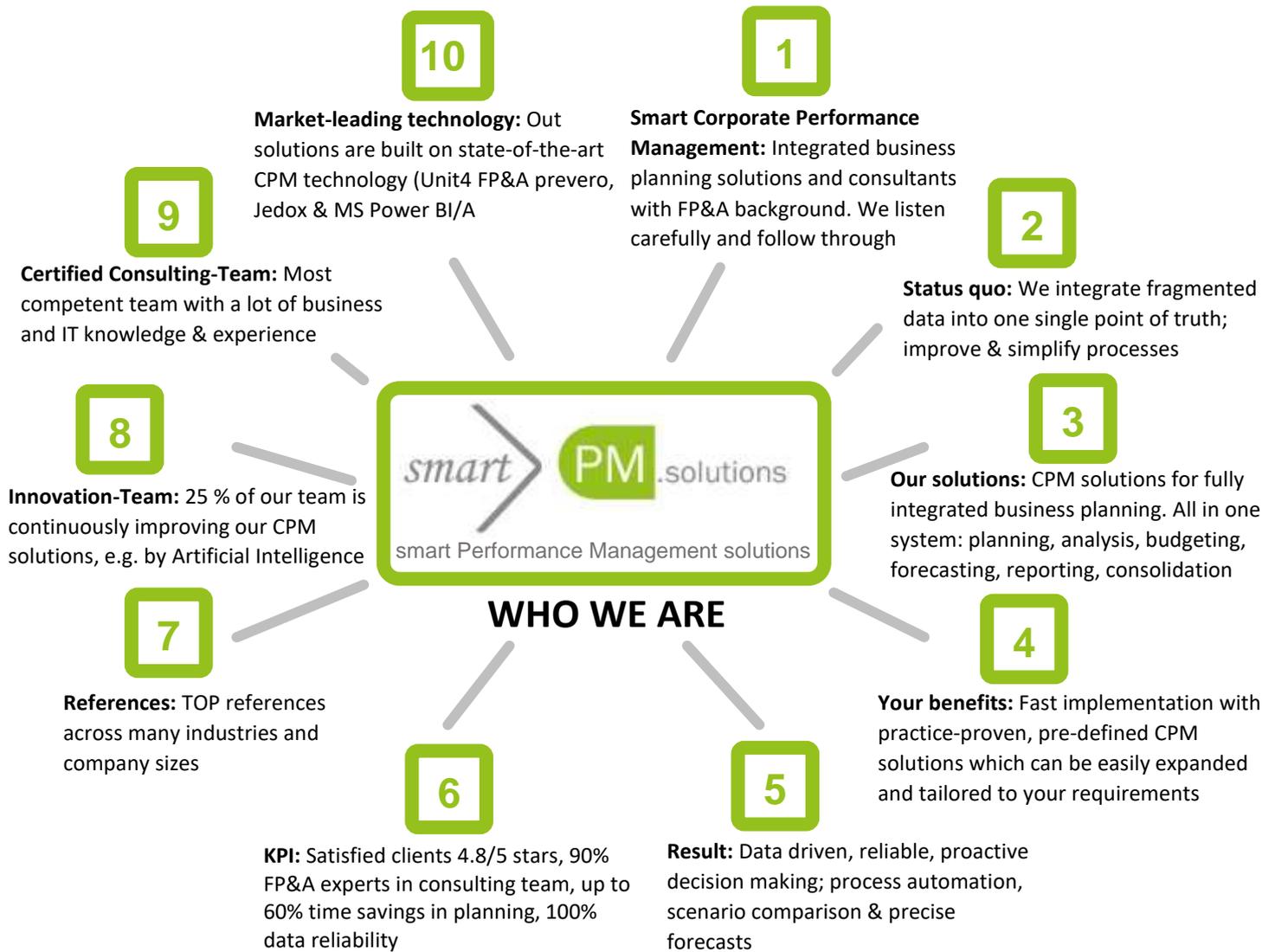


Figure 15: All relevant management information in a compact form: income statement, balance sheet, cash flow in a comparison of scenarios

For given reasons, we offer ad-hoc help for crisis controlling: Take the time and visit our [website](#), or register for an [online training course](#) that continues the topics of this technical article and shows the solutions live. If you are thinking of professionalizing your controlling with a CPM & BI tool: We recommend a preliminary project in which everyone involved can see the improvements with their own figures. The preliminary project doesn't cost much, but it helps massively in the decision as to whether a controlling solution should be purchased. [Just make an appointment for an expert talk on this topic](#)
>>> See you then!



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We look forward to an exchange of expertise with you!

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