

WHITEPAPER

MODERN CASH FORECASTING

CONTENTS

INTRODUCTION.....	2
REASONS FOR SUBOPTIMAL CASH FORECASTING.....	3
CHECK IF YOUR FORECASTING PROCESS IS UP-TO-DATE.....	4
FIVE STEPS TO CASH FORECASTING EXCELLENCE.....	5
WHY CHOOSE MODERN MIDDLEWARE FOR CASH FORECASTING?.....	9
BENEFITS OF MODERN CASH FORECASTING.....	10
IT'S ALL ABOUT THE CASH.....	11

It is now more important than ever for Treasurers and Cash Managers to have a clear view of their organizations' liquidity position and future cash flows. Treasury needs to ensure that sufficient funds are always available to meet ongoing operational and capital investment requirements. Now, economic, and political uncertainty continues to increase across global markets. As corporate Treasuries and Finance teams are looking for ways to successfully navigate this rapidly shifting environment, cash forecasting has become a key priority for financial professionals.

INTRODUCTION

Cash Forecasting in Focus

Cash forecasting is an essential part of successful business planning. Being aware of cash flows in and out of your organization gives you the needed insight and confidence to plan ahead and make the right decisions at the right time. Today, corporate Treasuries have to deal with financial risks that are intensified by global geopolitical and geo-economic tensions.

The turmoil around Brexit and the rise of protectionist trade policies, for example, continue to cause financial market instability. In the latest Global Risk Report¹ by the World Economic Forum, 90% of respondents expected the risk of economic confrontations and frictions between major powers to increase in 2019. The market volatility makes ensuring liquidity, now more than ever, a top concern. At the same time, global growth is showing signs of slowing down². Currently, interest rates remain favorable for borrowing, but the status quo can change rapidly. It would mean less leeway for corporate Treasurers when it comes to organizing affordable and flexible external financing. The record-level corporate debt burden that has built up since the last financial crisis³ just adds to the concerns.

Against this backdrop, it is no wonder that most Treasury professionals mention cash management and cash forecasting as the greatest focus for their organizations' Treasury operations over the next three years⁴. With all the looming uncertainties, Group Treasurers and Cash Managers feel the pressure to provide reliable visibility into cash to support the broader organization and business.

This whitepaper discusses how modern cash forecasting can help you achieve just that.



¹ The Global Risks Report 2019, 14th Edition. World Economic Forum
² IMF World Economic Outlook Update, January 2019
³ <http://www.oecd.org/corporate/risks-rising-in-corporate-debt-market.htm>
⁴ 2019 Risk Survey Report. The Evolving Treasury Ecosystem. Association for Financial Professionals.

REASONS FOR SUBOPTIMAL CASH FORECASTING

Efficient group-level cash flow and liquidity management have always played a key role in determining both the short-term and long-term success of a company. In the current volatile landscape, it has become even more crucial as discussed in the previous chapter.

However, surprisingly many corporate Treasurers are in the dark when it comes to their organizations' current liquidity position and especially their future cash requirements. It is not at all rare that Treasury and Finance professionals are making decisions and acting on forecasts that are simply poor and incomplete. For example, in a McKinsey survey⁵, half of the Treasurers surveyed admitted that their cash forecasting was less than 80 percent accurate.

► Poor Cash Visibility

If you don't know how much cash your organization has today, how can you predict how much you'll have tomorrow? The starting point for any effective cash forecasting activity should be a reliable overview of the group's current cash position. Many Treasuries are struggling to consolidate balance data and information on open items to achieve the needed real-time visibility over group-wide liquidity. This is the case especially in global companies with local operations, which translates into multiple subsidiaries and business units in various countries, numerous ERP and financial management systems, and dozens of banks and currencies.

► Relying on Spreadsheets

Traditional spreadsheets continue to be the most used tool for financial planning and cash forecasting even in large global organizations. They are also a frequent source of headaches for corporate Treasurers and Cash Managers. Both collecting data across business units and consolidating it into a group forecast with spreadsheets requires manual work. It makes the process tedious, time-consuming, and prone to input errors. It has been estimated that up to 94% of spreadsheets contain undetected errors⁶ for example in the cell formulas.

Even a small undetected error can turn into a big cost when you are dealing with aggregated corporate cash flows. Both collecting data across business units and consolidating it into a group forecast with spreadsheets requires manual work. It makes the process tedious, time-consuming, and prone to input errors. It has been estimated that up to 94% of spreadsheets contain undetected errors⁶ for example in the cell formulas.

► Lack of Subsidiary Involvement

Consolidating a group-level cash forecast requires a lot of involvement from subsidiaries and business units across the organization. A common stumbling block in the forecasting process is Group Treasury's inability to engage local subsidiaries to take ownership of their cash flow data. Without a clearly defined process and the support of a system solution and automation, the Group Treasury often ends up dealing with missed reporting deadlines, hunting down missing information, and troubleshooting for errors. If the quality of 'data in' is poor, you cannot really expect to get high-quality forecast 'data out'. On the other hand, the subsidiaries might feel that the effort invested in providing the cash flow information is not worth their time if the Group Treasury is unable to provide them in return with useful analysis and insights to support their business.

► Insufficient Reporting and Analytics Capabilities

Even Group Treasuries that have the company-wide cash flow data available might still fail to provide their organization with valuable forecast analysis and insight. A typical issue is that the tedious data collection and consolidation from multiple sources takes up most of the resources, leaving very little time for conducting a proper analysis. In addition, corporate Treasurers who are using an ERP or a Treasury Management system for forecasting often have only basic aggregated views at their disposal. They are missing out on the flexibility of building more detailed reports for the exact need of their business and creating impactful data visualizations. A lack of reporting capabilities also hinders the Group Treasury from ensuring and constantly improving the accuracy of forecasting, which in turn leads to sub-standard quality.

CHECK IF YOUR FORECASTING PROCESS IS UP-TO-DATE

Are you sure you don't have a blindfold on when it comes to forecasting your organization's cash? Take a look at your current forecasting process and ask yourself:

- Is data collection and consolidation effortless?
- Do you trust your data to be accurate and up-to-date?
- Can you focus on analyzing the data instead of collecting, cleaning, and double-checking it?
- Can you easily create reports showcasing the information your organization actually needs?
- Can you provide different stakeholders with visualized, easy-to-understand forecast reports?
- Do you have the means to monitor and manage the forecasting process in the subsidiaries?
- Are you able to constantly improve the accuracy and quality of your forecasts?

If you had to pause even for a little while on any of these questions, it might be a sign that it's time to focus on cash forecasting and make sure that you are on top of your group's liquidity and future cash. In the next chapter, we'll share how best practice cash forecasting processes are built.

⁵ www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-in-sights/five-steps-to-a-more-effective-global-treasury

⁶ *Errors in Operational Spreadsheets. Journal of Organizational and End User Computing, July-September 2009.*

FIVE STEPS TO CASH FORECASTING EXCELLENCE

Cash and liquidity management are more challenging than before. They also place greater demands on the forecasting process itself. It needs to be reliable, flexible, and quick to adapt to the changes in the operating environment. The best way to achieve a well-oiled cash forecasting process is with automation and a specialized cash forecasting software as illustrated below.

Recognize

Build a solid foundation with cash visibility

It's highly recommended that you start your journey toward cash forecasting excellence by painting a clear picture of where you are today. Before you can start reliably forecasting your future liquidity, you need to gain an accurate view of your group's cash balance and transactions. The current reality for many Treasuries operating in a scattered bank landscape and decentralized corporate structure consists of manual cash balance reports from subsidiaries and monthly or quarterly cash position reports. A forecasting project is a good time to centralize your view of your global cash positions. Instead of logging into electronic banking tools, start automated account statement subscriptions from your banks and just lean back and watch your global balance data pour in each night. You don't have to ask – and wait for – the subsidiaries to submit the data anymore.

The automated stream of balance statements enables efficient cash analysis and it also forms the foundation on which efficient cash forecasting is built.

Focus

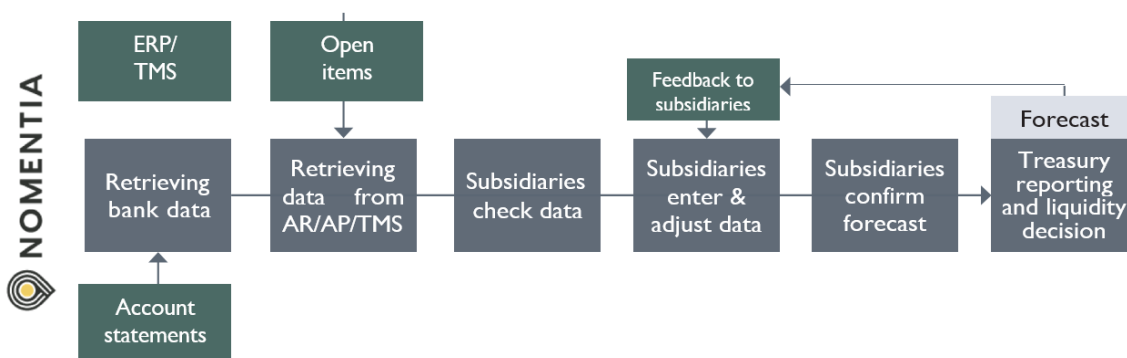
Keep it simple and focus on forecasting what actually matters for your business

A common mistake Treasurers make when it comes to designing a new or refreshed forecasting process is over-complicating. The first questions to ask should be what really matters for your liquidity planning and what is the goal for the forecasting process. Are you looking to reduce debt and interest rate costs?

Do you need short-term visibility to optimize liquidity and working capital, or are you more interested in identifying possible liquidity shortfalls and surplus in the long run? Determine your forecasting horizon and reporting categories based on the business objectives. Be sure to ask the local entities only for the data that you actually need. Be practical and create a cash flow hierarchy and forecasting structure that is as simple as possible.

It is also a good idea to explain to the local business units that you are not expecting 100% accuracy on the forecasts. Set achievable KPIs for cash inflows and outflows separately to communicate to the subsidiaries what is the level of accuracy that gives the Treasury enough information to manage the group's liquidity efficiently.

The Cash Forecasting Process



A standard cash forecasting process. Many parts can be automated, such as importing bank statements and open item information from various sources. The feedback to the reporting entities is essential for continuous improvement of the forecasting process.

Connect

Tap all the right sources for effortless and automated data collection

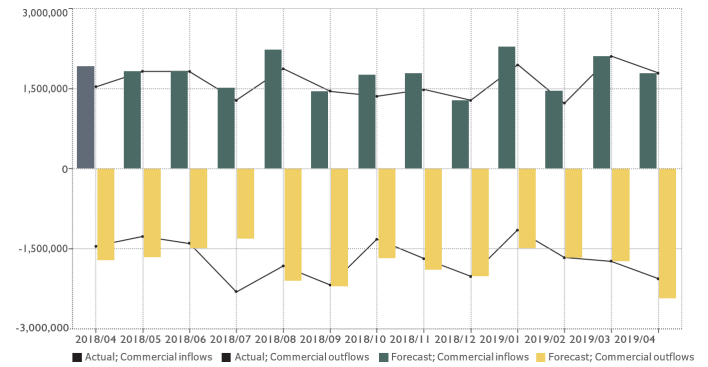
To shift focus and effort from data collection to data analysis, you need to collect all the cash flow data in your organization in a highly automated way. The first step is to automate the collection of the balance information from the bank account statements to gain an accurate understanding of the starting point of your forecast. Next, you'll need to collect the data in various source systems to create a comprehensive view on the future cash flows.

Typically, cash flow data resides in these systems:

- Accounts Receivable data from an AR ledger or ERP
- Accounts Payable data from an AP ledger or ERP
- Unapproved supplier invoices from an invoice workflow system
- Confirmed orders from a purchasing system
- Financial transactions from a Treasury Management System
- Payroll from an HR system.

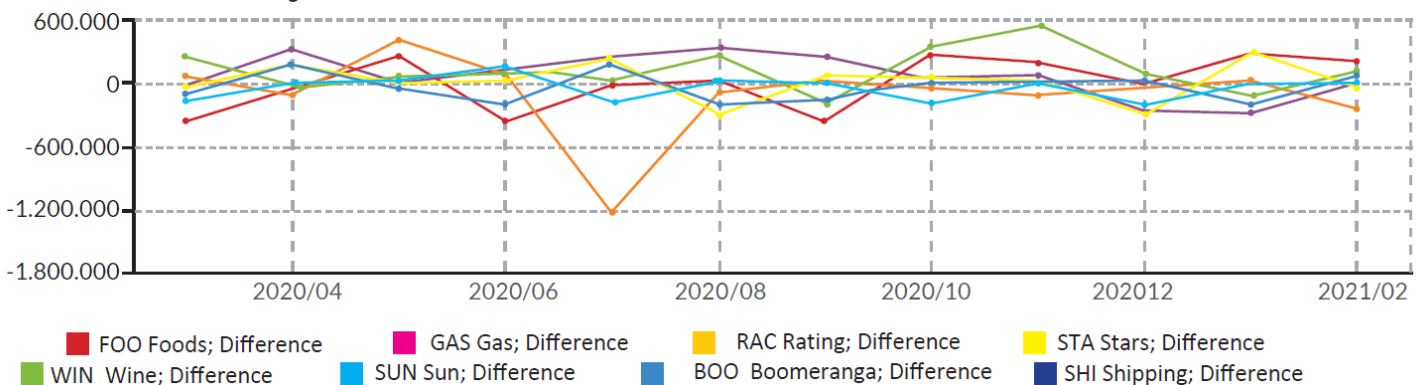
Consolidating all the relevant data from multiple systems and in multiple formats makes all the known cash flows in and out of the organization visible and enables you to stay on top of the situation. Most of the information should be available automatically with file integration, but it is a good practice to allow subsidiaries to add adjustments to the ledger data and input other ad-hoc cash flows for the forecasts manually if needed, to improve the accuracy.

Forecast vs Actuals Accuracy



By plotting the forecast data with the actual bank transaction data in the same graph, it is easy to spot deviations. It is an advantage to separate the inflows and the outflows instead of looking at the net cash flows.

Actual vs Forecast by Business Unit



For a quick overview of forecasting accuracy when looking at multiple companies at the same time, plot the difference in a graph. This difference is a simple subtraction looking at the difference between the net forecast and the net actuals.

Analyze

Create visualized and easy-to-access reports to provide impactful forecasts

A report does not add much value if no one uses it. One of the greatest benefits of a specialized cash forecasting software is that it provides multiple views to your consolidated cash data so that you can make the most out of it. Data visualization is a powerful way to highlight trends and pinpoint exceptions from your cash flows and, in addition, it makes it easy to share the discovered insights with a broader audience both internally and externally. A good reporting engine also allows you to drill down to the transaction level to find the root causes for the trends and exception and to take corrective actions. The Treasury might not be bothered with this level of detail but the local entities that are looking to improve the quality of their forecast will benefit from this possibility.

As data collection is automated and immediately centralized in one place, Group Treasury has more time to analyze the data for proactive and impactful cash management. These reports should be available in a modern cash forecasting tool as a standard set:

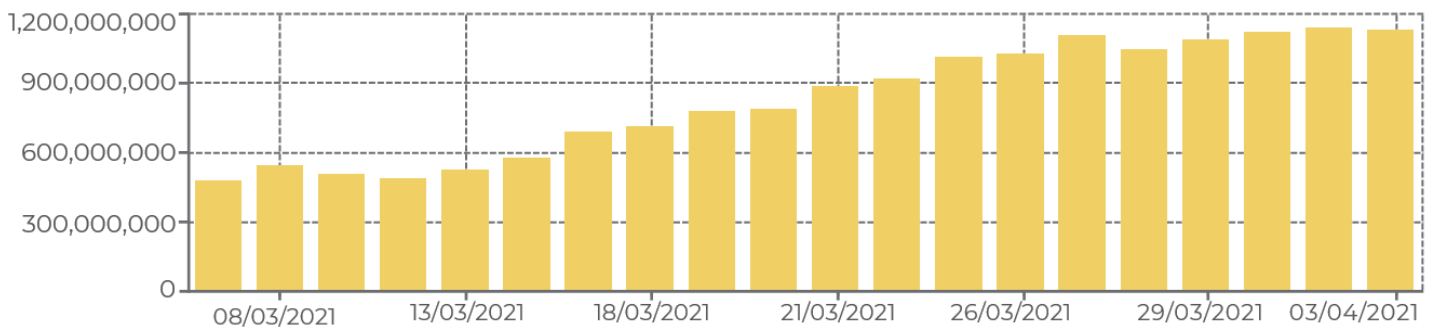
Cash Visibility Reports – Historical Cash (in days, weeks, months & years)

- Cash per bank account
- Cash per company and bank account
- Cash per currency
- Cash per bank
- Cash per cashpool (top accounts)
- Trapped cash and available cash
- Cash in cash pools and cash in stand-alone bank accounts
- Average cash balance per bank account
- Balance monitoring vs bank limit

Cash Forecasting Reports – Forecasted Closing Balances

- Per cash pool and bank
- Per currency (highlighting future needs of FX)
- Per company and bank account
- Per cash flows (AR, AP, salaries, etc.)
- Per group cash flows (financial, commercial, internal, external, etc.)
- Hedged currency-flows in % (comparing currency hedges with currency exposures)
- Scenario analysis reports

Total Cash in EUR



Cash visibility - All your historical cash positions in one graph. How is your total cash trending? The beauty of this graph is the data underneath. It can consist of a wide array of bank accounts in many different banks from different regions in the world. The data is updated automatically every morning, powered by incoming bank account statements or API-requests.

Engage and Reach for High Quality and Continuous Improvement

One of the keys to cash forecasting excellence is closely monitoring the accuracy of the forecasts. If you don't follow up on the deviation between your forecasts and your actuals, there's no point in making the forecasts in the first place. The Group Treasury should be able to provide the subsidiaries feedback on the quality of their forecast data. Setting well-advised KPIs for the accuracy of both cash inflows and outflows and creating easily accessible dashboards to follow up on the performance are proven ways to engage local business units in continuous improvement.

For Group Treasury, it is equally important to be able to take a closer look at the deviations in the forecast vs. actuals report and track down the causes for the inaccuracies. Top performing Treasuries also utilize advanced analysis to finetune the forecasting process further. For example, frozen forecasts (forecast vs. forecast) allow you to assess the accuracy of a rolling cash forecast at different points of the forecasting period. This helps you to determine the point in time when the forecast is reliable enough for you to actually start taking action based on it.

Forecast Deviation Reports

- Forecast vs. Actuals – per cash pool, per bank account or per company
- Forecast In vs. Actual In
- Forecast Out vs. Actual Out
- Difference in absolute numbers and %
- Forecast vs. Forecast (how a forecast is developing over time)

Forecast vs Actuals per Company and Month

	2021-02		2021-03		2021-04	
	Actual	Forecast	Actual	Forecast	Actual	Forecast
Consulting ■	-3,800.58	11,296.53	-296.60	5,647.49	9,316.12	-7,550.79
Opening ■	0.00	0.00	-3,800.58	11,296.53	-296.60	5,647.49
Cash flows simple ■	-3,800.58	11,296.53	3,503.98	-5,649.04	9,612.72	-13,198.28
Inflows ■	120,123.99	3,237,978.02	130,494.84	3,421,607.33	155,241.75	3,546,836.93
Outflows ■	-123,924.57	-3,226,681.49	-126,990.86	-3,427,256.37	-145,629.03	-3,560,035.21
Closing ■	-3,800.58	11,296.53	-296.60	5,647.49	9,316.12	-7,550.79
Stars ■	-378,361.32	523,096.38	-311,172.53	1,320,063.77	-131,085.67	1,940,322.10
Technology ■	-52,752.35	3,198,770.55	1,087,206.70	7,960,609.15	2,310,521.30	13,209,440.15

Another way of tracking deviations is by comparing forecast and actual data side by side on columns. In this example we show the different legal entities and the aggregated cash flows per month. Drilling down is possible to individual cash flows on row-level and to weeks and days on column level. Or the other way around. A flexible reporting tool lets the user decide the report structure.

WHY CHOOSE MODERN MIDDLEWARE FOR CASH FORECASTING?

A dedicated cash forecasting software, such as Nomentia Liquidity, offers plenty of benefits to corporate Treasuries.

- Specialized software is developed based on the needs of corporate Treasurers and Cash Managers and is dedicated to solving them. It supports the creation of best practice cash forecasting processes.
- Modern middleware can retrieve cash flow data automatically from various source systems and collect balance information from banks. It eliminates manual phases in data collection, which are error-prone and take time.
- A best-of-breed solution is system agnostic and can import structured files with data from any source systems, skipping the need for heavy system integrations.
- Dynamic drag-and-drop and drill-down functionalities allow you to create forecast reports based on your needs.
- Data visualization helps to turn the cash data into easy-to-consume graphs.
- A forecasting process that is facilitated through the use of software eliminates the key person risk associated with spreadsheets: the formulas are well-documented in the system.
- A dedicated software helps Group Treasury to manage the forecasting process and save time from administrative tasks with features such as automated reminders to subsidiaries to submit their data or alerts for missing imports.

BENEFITS OF MODERN CASH FORECASTING

Efficient and accurate cash forecasting is a key element in proactive liquidity management. With a more reliable view of your end-of-day, short-term, and long-term cash position, you can eliminate cash flow surprises, which could spell trouble for your business, and avoid making ill-informed liquidity decisions.

Save Money

The immediate benefit of improved cash forecasting will be visible on the bottom line. Accurate, reliable and automated forecasts provide the Treasury with actionable insight into the future cash flows both on a group-level and per business unit, cash pool or currency, for instance. Visibility enables better liquidity planning and you can, for example, avoid overborrowing and paying interest on financing you don't need. In addition to reducing debt facilities and other external funding arrangements, you can minimize the opportunity cost of having uninvested cash.

Time is money, too. As automation and system support reduce the amount of manual input needed, time is saved both at the Group Treasury and the local reporting entities. For the Group Treasury, getting an instant dashboard overview of current cash, short-term cash development, and the mid-term currency exposure can save hours, and in some cases even days. The local reporting entities can achieve similar time-savings with the automatically imported bank statements and cash flows from different banks and source systems.

Take Control

Cash forecasting enables the Treasury to better understand their organization's capabilities and seize relevant opportunities. A comprehensive view into the future cash inflows and outflows will give you time to react to possible liquidity issues on the horizon and steer your business clear of the risks. Cash forecasting gives you the chance to factor in different hypothetical scenarios – for instance, a 10% decrease in your supplier payments –

and see how they would affect your liquidity. Accurate forecasting is crucial also for efficiently hedging FX exposures.

Establishing a modern forecasting process that is supported by a specialized software gives the Group Treasury the control and ability to manage the process efficiently. Following up on the accuracy of the forecasts and sharing the information on personalized dashboards that are visible to the local reporting entities using the software sparks continuous improvement. You can see the reporting status at any given time and be sure that the data that is in the forecasts is up-to-date. Having a grip on the company-wide cash flows, Treasury can drive operational efficiency across business units and subsidiaries.

Become a Strategic Partner

In today's fast-paced business environment, Treasurers and Cash Managers are expected to deliver real-time information and faster strategic decision support to corporate management. A well-oiled and automated reporting process comes in handy when you are asked to quickly assess how a market event, for instance, affects your company's cash flows.

With reliable cash forecasts as the foundation, you can with confidence make bolder financial decisions to optimize liquidity. Modern forecasting also equips you with valuable business intelligence that helps to strengthen Treasury's role as a strategic business partner.

Gain Peace of Mind

Financial professionals are among those who suffer from work-related stress the most⁷. Increasing visibility to the future cash flows has the additional benefit of peace of mind both for the Treasurers and Cash Managers managing the group liquidity and also for the C-level corporate management they report to.

Accurate cash forecasting reduces cash flow surprises and helps you to be fully prepared to secure the group's liquidity in all circumstances. With solid, system-supported forecasting processes and automation, you can avoid making ill-informed decisions and acting on outdated, incomplete and inaccurate data – and thus, avoid losing sleep.

IT'S ALL ABOUT THE CASH

In a modern Treasury, cash forecasting should be simple, automated and accurate. In the end, it is all about better understanding the future of your group's most precious asset: the cash. Failing to predict the future cash position and liquidity requirements can put your entire business to jeopardy. On the other hand, excelling at forecasting will bring your organization a number of operational and strategic benefits.

Modern cash forecasting is a powerful tool for any corporate Treasurer or Cash Manager aiming to make the most out of the group's liquidity. After all, predictable cash is so much more enjoyable to manage.

⁷ <https://www.theglobaltreasurer.com/2018/08/20/financial-professionals-struggle-to-find-time-to-combat-stress/>

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Jouni has over 15 years experience in corporate cash management and has deep expertise in cash forecasting, payment factories and in-house banking, and process development. Previously, Jouni has worked in product management, consulting, and R&D.