The Future of Finance

Feodor's disciples

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The leading practices in finance are changing due to a fiercer competitive landscape in the pharmaceutical industry

Situation

The pharmaceutical industry is displaying a **strong competitive environment** with a heavy downwards pricing pressure. The finance function is forced to do more with less, and the difference in performance between the least- and most digitalized finance organizations is exponentially increasing.

Complication

Due to the **future increasing needs** in finance for quick adaptation, support decision agility, and global digital solutions, it is crucial for Lundbeck to **adapt** and **realize** the opportunities in those significant areas to become a **top financial performer**.
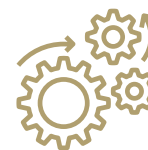
Question

Which **initiatives** and **implementations** would enable Lundbeck's finance organization to live up to future needs, become best-in-class, and thereby better **support Lundbeck globally**?

Answer

Simplification, automation, and standardization of financial processes will support the execution of Lundbeck's "Expand and Invest to Grow" and ensure the **future success** of Lundbeck. This will be done through several artificial intelligence tools such as RPA, Machine Learning, and Chatbots.

It will **allocate people** from the low value adding activity, Operational Finance, to the higher value adding activities, Business- and Specialized Finance.

This will help Lundbeck in **living up to future increasing needs** for financial operations, increase profitability, and become a top financial performer.
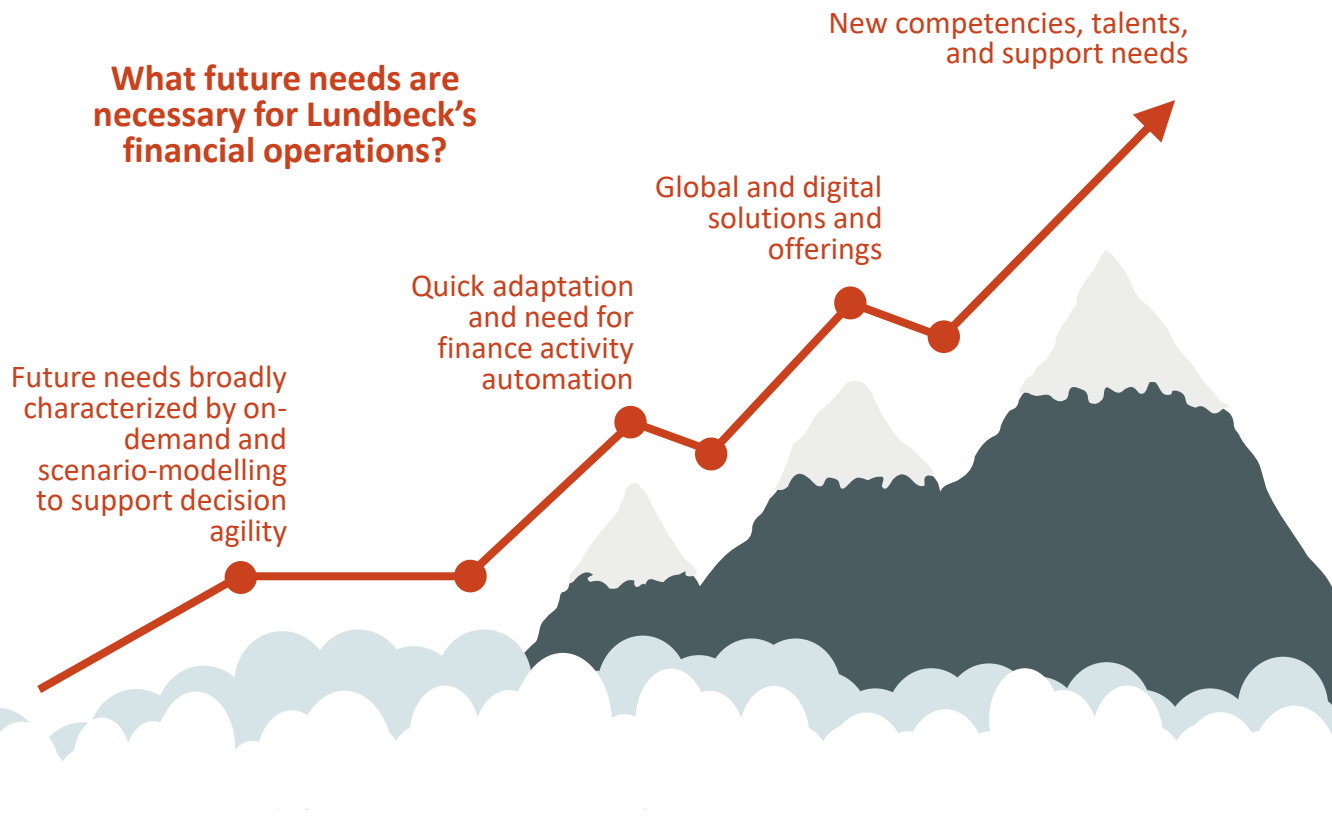
The future needs for financial operations emphazise new solutions and revolve around processes, people, and systems

> We need to optimize our processes, people, and systems – both locally and globally.

Bjørn R. Mogensen,
Senior Vice President
Group Finance

What future needs are necessary for Lundbeck's financial operations?

New competencies, talents, and support needs

Global and digital solutions and offerings

Quick adaptation and need for finance activity automation

Future needs broadly characterized by on-demand and scenario-modelling to support decision agility

Performance level

Best-in-class digital finance functions

Digital adoption rate

Least digital finance functions

1980   2000   2020   2040

Executive   **Insights**   Recommendation   Impact   Implementation
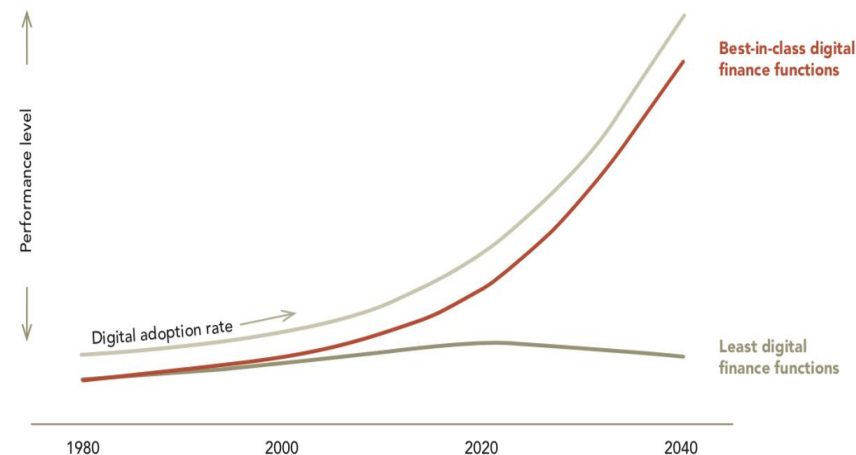
Automation of several financial tasks and sub-processes by utilizing technologies is crucial to continued increased profitability

A broad range of automatable tasks exist, but transactional tasks are most automatable

Automatability

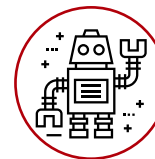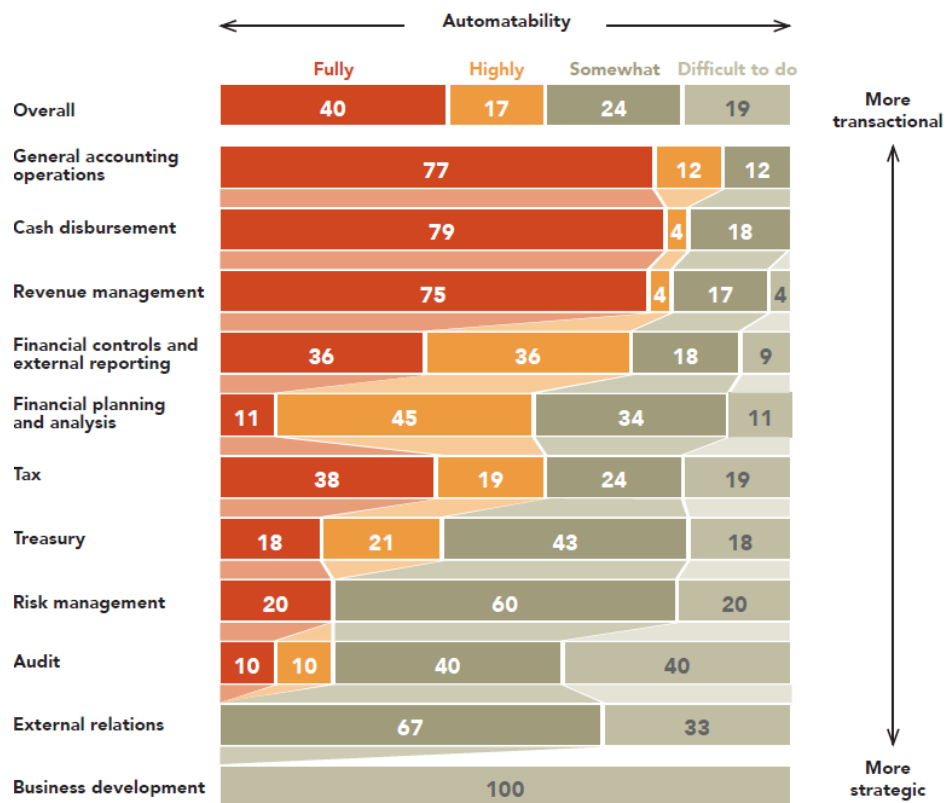| Task	Fully	Highly	Somewhat	Difficult to do
Overall	40	17	24	19
General accounting operations	77		12	12
Cash disbursement	79	4		18
Revenue management	75	4	17	4
Financial controls and external reporting	36	36	18	9
Financial planning and analysis	11	45	34	11
Tax	38	19	24	19
Treasury	18	21	43	18
Risk management	20		60	20
Audit	10	10	40	40
External relations		67		33
Business development			100	

More transactional → *More strategic*

¹Figures may not sum to 100, because of rounding.
Source: McKinsey&Company

Utilizing the newest technological developments enables companies to implement automated processes

Robotic Process Automation
The technology that allows a "robot" to emulate and integrate the actions of a human interacting within digital systems to execute a business process. This process can replace human actions in the simple part of financial organizations

Machine Learning
The part of AI that deals with the automation and streamlining of complex statistical modeling methods, analysis of big and complex data, and dissemination of results from these analyzes.
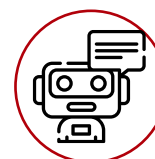
Chatbot
The chatbot uses information from Machine Learning to communicate with users. This is specifically helpful when trying to lower administrative costs at service centers etc.

These artificial intelligence tools are effective when trying to cost-cut and allocate employees from simpler to more complicated tasks, where the demand for specialized knowledge is larger
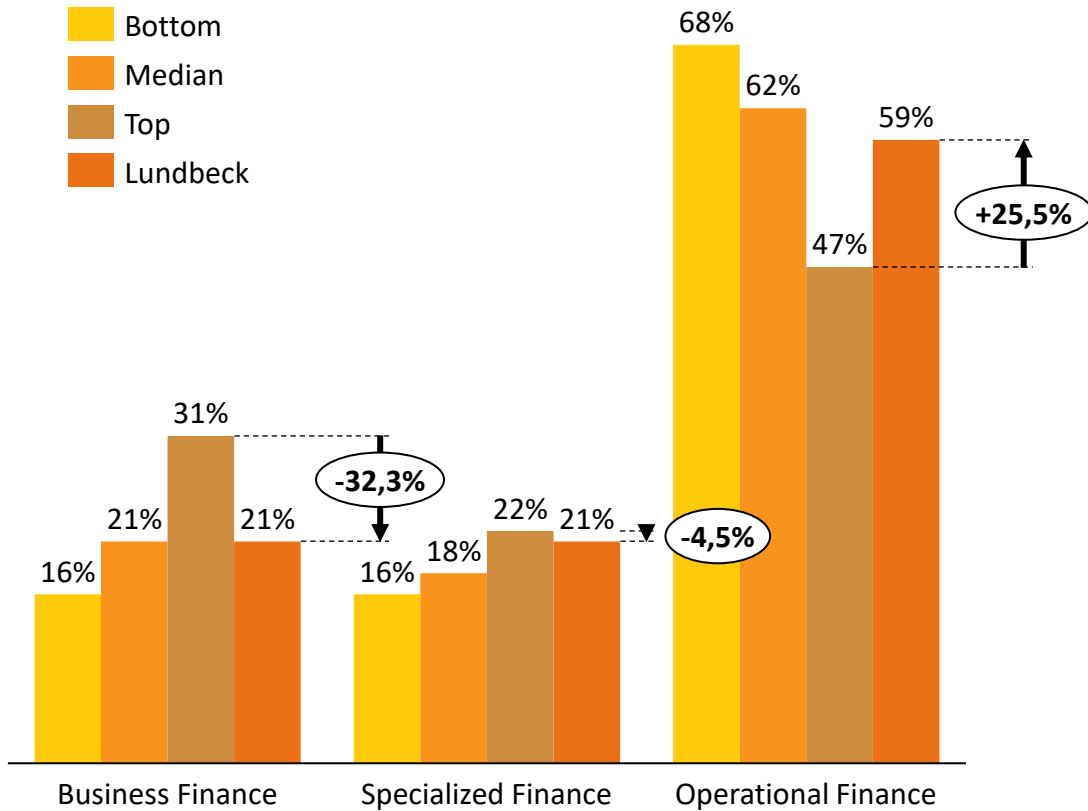
SOURCE: McKinsey
29-10-2020

Executive | **Insights** | Recommendation | Impact | Implementation

Utilizing new- and existing technoligies enables Lundbeck to allocate FTEs to more value-adding functional areas
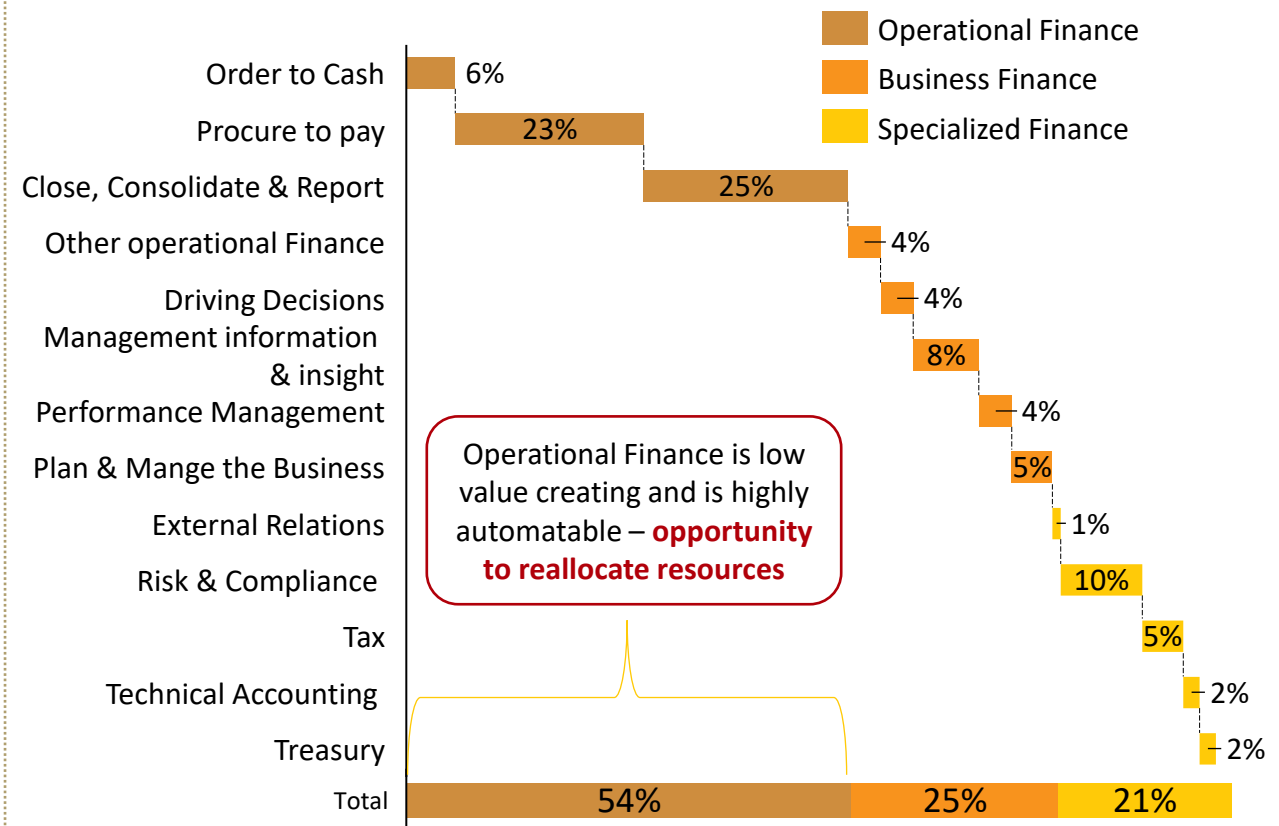
Lundbeck has a strong specialized finance department but lacks efficiency in operational- and business finance

FTE distribution in % across value drivers

- ■ Bottom (Yellow)
- ■ Median (Orange)
- ■ Top (Brown)
- ■ Lundbeck (Red-Orange)

Business Finance
- 16%
- 21%
- 31%
- 21%

-32,3%

Specialized Finance
- 16%
- 18%
- 22%
- 21%

-4,5%

Operational Finance
- 68%
- 62%
- 47%
- 59%

+25,5%

By implementing digital processes and systems, Lundbeck can reallocate resource to more value creating activities

FTE per sub-process for the total Lundbeck finance organization

- ■ Operational Finance
- ■ Business Finance
- ■ Specialized Finance

Sub-process	FTE %
Order to Cash	6%
Procure to pay	23%
Close, Consolidate & Report	25%
Other operational Finance	4%
Driving Decisions	4%
Management information & insight	8%
Performance Management	4%
Plan & Mange the Business	5%
External Relations	1%
Risk & Compliance	10%
Tax	5%
Technical Accounting	2%
Treasury	2%

Operational Finance is low value creating and is highly automatable – **opportunity to reallocate resources**

Total: 54% | 25% | 21%

SOURCE: Case material; McKinsey

Executive | **Insights** | Recommendation | Impact | Implementation

What, why, and how to enhance Lundbeck's financial organisation and facilitate the "Expand and Invest to Grow" strategy
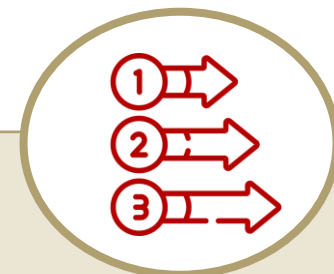
WHAT

Allocate people from the low value adding activity, Operational Finance, to the higher value adding activities, Business- and Specialized Finance.
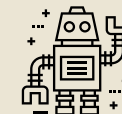
WHY

To live up to future increasing needs for financial operations, increase profitability, and become a top financial performer.

HOW

1) Standardization of processes
2) Smart processing
3) Automation

A zero-based operations model with digital processes and systems will result in simpler, faster and more efficient operations

Automation

- Roll out more comprehensive automation in the finance organisation with processes and systems focused on business- and specialised finance
- Utilize AI and RPA systems to enable real time data in the decision making process

Smart processing

- Introduce automated smart processing in the areas where it creates most value. That is in operational finance tasks, thus limiting time spent on low value adding tasks

Standardization of processes

- To implement digital and automated processes, the first step is to standardise global finance processes and automate the month-end process
- Establish transparency of processes through a co-developed shared data pool

The standardization of processes is used to incrementally move to full automatization by utilizing technologies and economies of scale

Utilizing the newest technological developments enables companies to implement automated processes
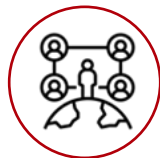
Standardize global finance processes
First, the company should run tests, designed to quantify the value attached to each task and process. Based on the test, the company should establish a global committee focused on streamlining processes and a shared transparent data base for the organization.
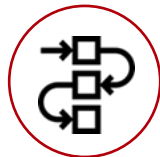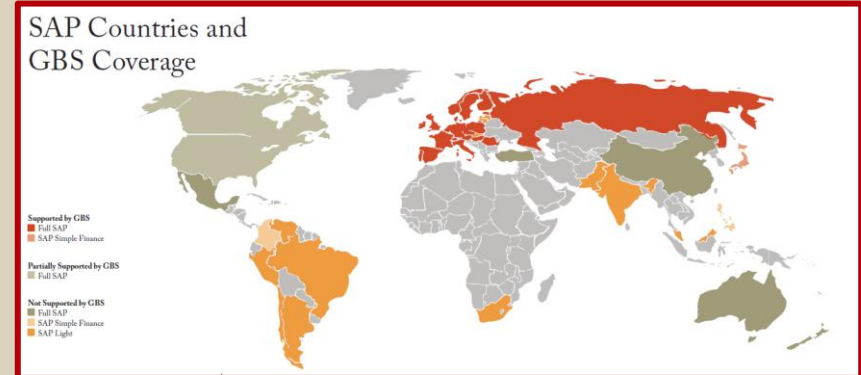
Automating month end process
It is necessary that the month end process is automatized in order to implement RPA and other new tech systems on existing processes. Through RPA companies can automate accounting, accounts payables and accounts receivable, thus, enabling automatization of the month end process.

Utilizing economies of scale at the GBS
Upon developing standardized processes, Lundbeck should utilize the GBS in Krakow as a centralized finance organization which handles the standardized Operational Finance tasks as well as ensures the continued standardization of transactional tasks.

SAP Countries and GBS Coverage

Supported by GBS
Full SAP
SAP Simple Finance

Partially Supported by GBS
Full SAP

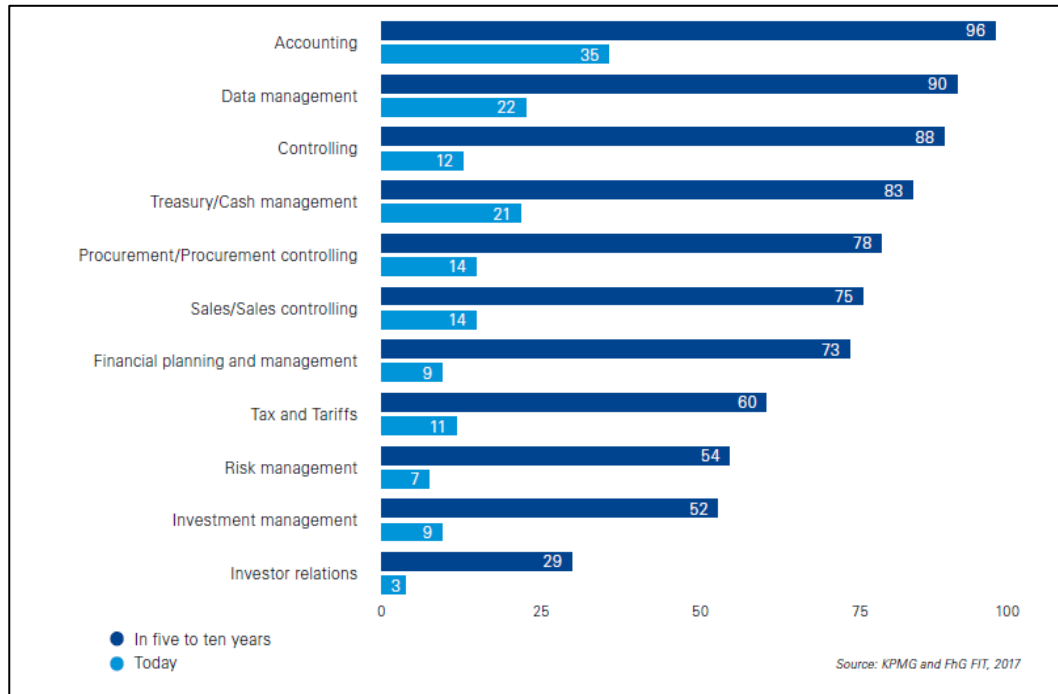Not Supported by GBS
Full SAP
SAP Simple Finance
SAP Light

Lundbeck is already trying to standardize and automate processes through the new SAP S/4 HANA. However more should be done to standardize and automate the processes in order to allocate the resources in the most efficient way. The SAP will be suplemented by artificial intelligence solutions.

SOURCE: McKinsey

Various artificial intelligence initiatives enables smart processes, decreases inefficiencies, and enhances automatization

Robotic process automation faces a huge potential in the future when financial tasks must be automated

Source: KPMG and FhG FIT, 2017

Bar chart values (In five to ten years / Today):
- Accounting: 96 / 35
- Data management: 90 / 22
- Controlling: 88 / 12
- Treasury/Cash management: 83 / 21
- Procurement/Procurement controlling: 78 / 14
- Sales/Sales controlling: 75 / 14
- Financial planning and management: 73 / 9
- Tax and Tariffs: 60 / 11
- Risk management: 54 / 7
- Investment management: 52 / 9
- Investor relations: 29 / 3

● In five to ten years
● Today

Lundbeck can automate many activities in Financial Operations as supplement to SAP by using RPA and thus cutting costs and allowing people to move to other activities

Machine Learning enables the change from looking backwards to forwards - to predictive and even prescriptive.

Past cash flow statements → Train model → Predicted cash inflows
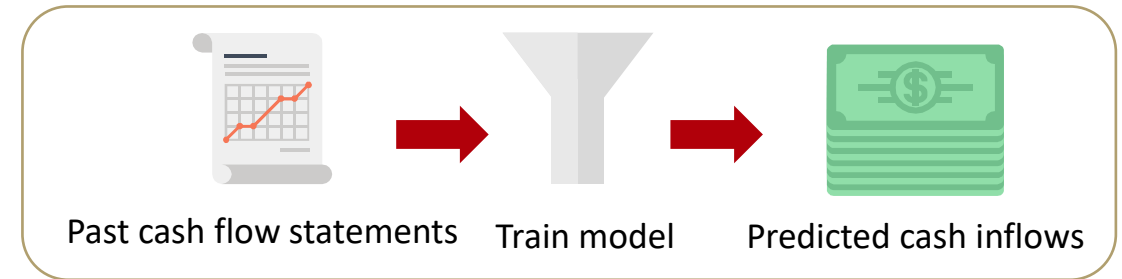
Machine Learning will help in building a database for the financial knowledge and data in the organization – obtained by people and RPA

Machine Learning will help developing learnings usable to build a chatbot. This bot will decrease inefficiency and ticket rout support better

Executive   Insights   **Recommendation**   Impact   Implementation

Bots bring the next generation of on-demand forecasting

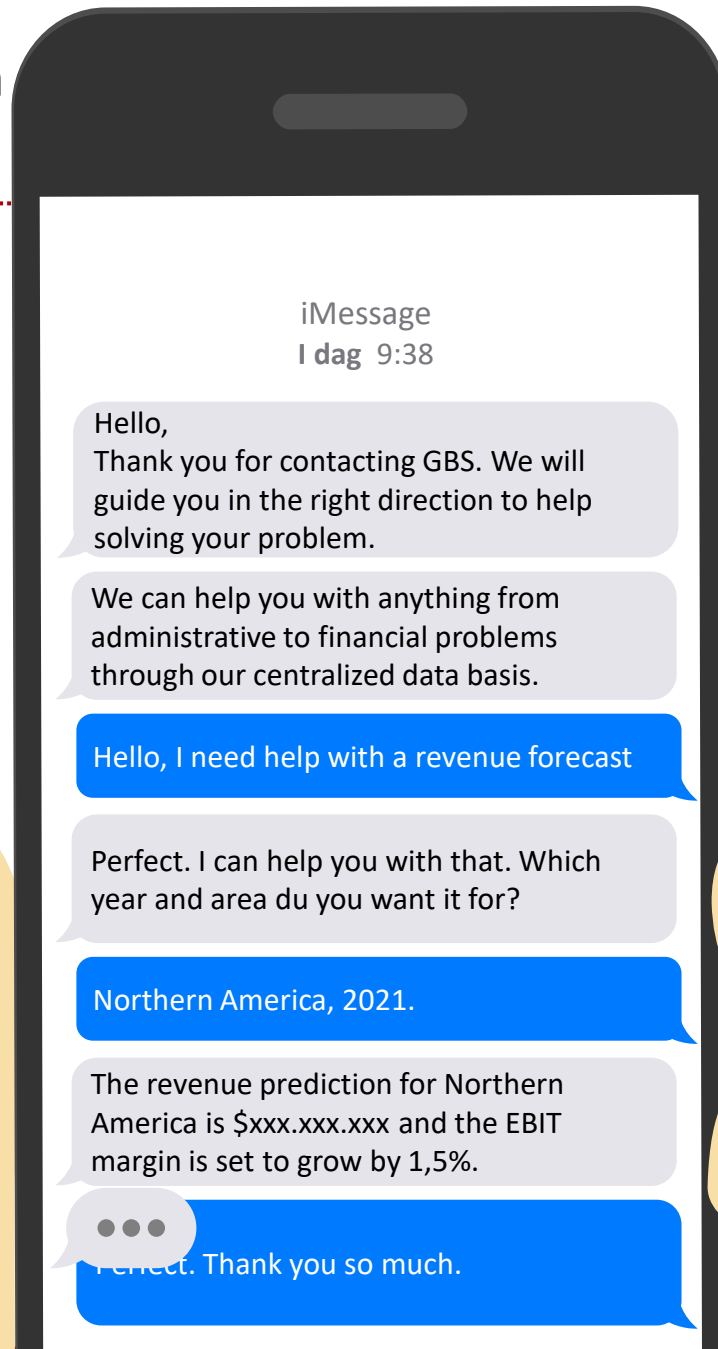The SAP, RPA, and Machine Learning wil help creating a great database of financial information. This database can **create real time data and provide valuable insights to Finance Group employees of Lundbeck**.

This can lead to even more automization by creating AI features such as chatbots:

iMessage
I dag 9:38

Hello,
Thank you for contacting GBS. We will guide you in the right direction to help solving your problem.

We can help you with anything from administrative to financial problems through our centralized data basis.

Hello, I need help with a revenue forecast

Perfect. I can help you with that. Which year and area du you want it for?

Northern America, 2021.

The revenue prediction for Northern America is $xxx.xxx.xxx and the EBIT margin is set to grow by 1,5%.

Perfect. Thank you so much.

This will further contribute to the possibility of **allocating people from Operational Finance (IT and Business Process System Support) to more specialized personal**, who can contribute to value driving activities

Automation allows Lundbeck to allocate specialized personal to value-adding functional finance areas and be more cost-efficient

Finance 2020

Business Finance (21%)

Specialized finance (21%)

Operational Finance (59%)

Future finance

Business Finance (40%)

Specialized Finance (35%)

Operational Finance (25%)

Before
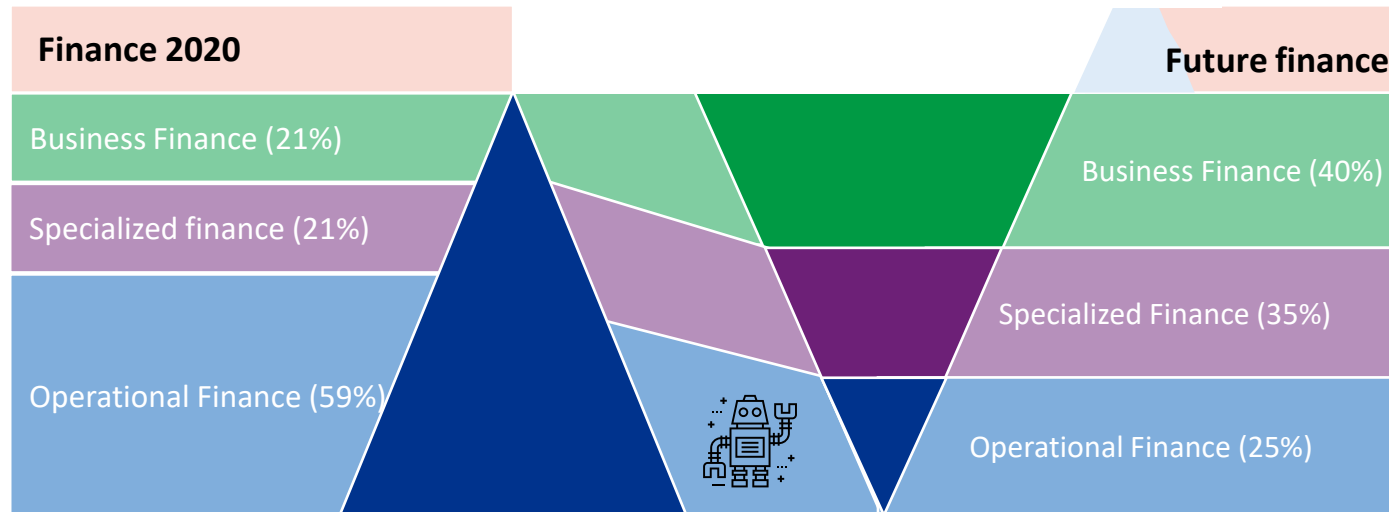
Operational finance is making up a great part compared to the industry top performers, while business finance is making up a too little part of the finance organization compared to top performers

After

The automatization by artificial intelligence will allow Lundbeck Finance Group **to allocate people from Operational Finance to Specialized Finance and Business Finance**, and thus creating more specialized personnel while letting the robots do more of the simple tasks. This will impact Lundbeck's finance positively since they will become more **cost efficient** and have **more enhanced business partnering**

Utilizing AI and simpler processes creates an efficient agile organization which is ready to support strategic business event

… utilizing digital solutions to optimize operations and resource allocation
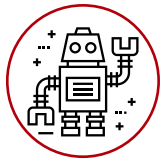
The streamlining of processes and implementation of automated systems will enable the company to **reduce human mistakes and valuable time spent on checking data and manual work**. Thus reducing cost.

The implementation of RPA and machine learning will enable the company to make decisions based on real time data. Hence **improving decision making and shortening the decision-making process**.

The finance organization can allocate resources to focus on enhanced business partnering and specialized finance tasks. Thus **supporting the organization better and improving overall organizational efficiency**.

Significant efficiency optimization and cost reductions are achievable through a Zero-Based operations model…

Cost of finance as a percentage of Revenue

-37.5%

Current cost base	Standardization	Smart processing	Automation	Target cost base
2.00%	-0.20%	-0.30%	-0.25%	1.25%
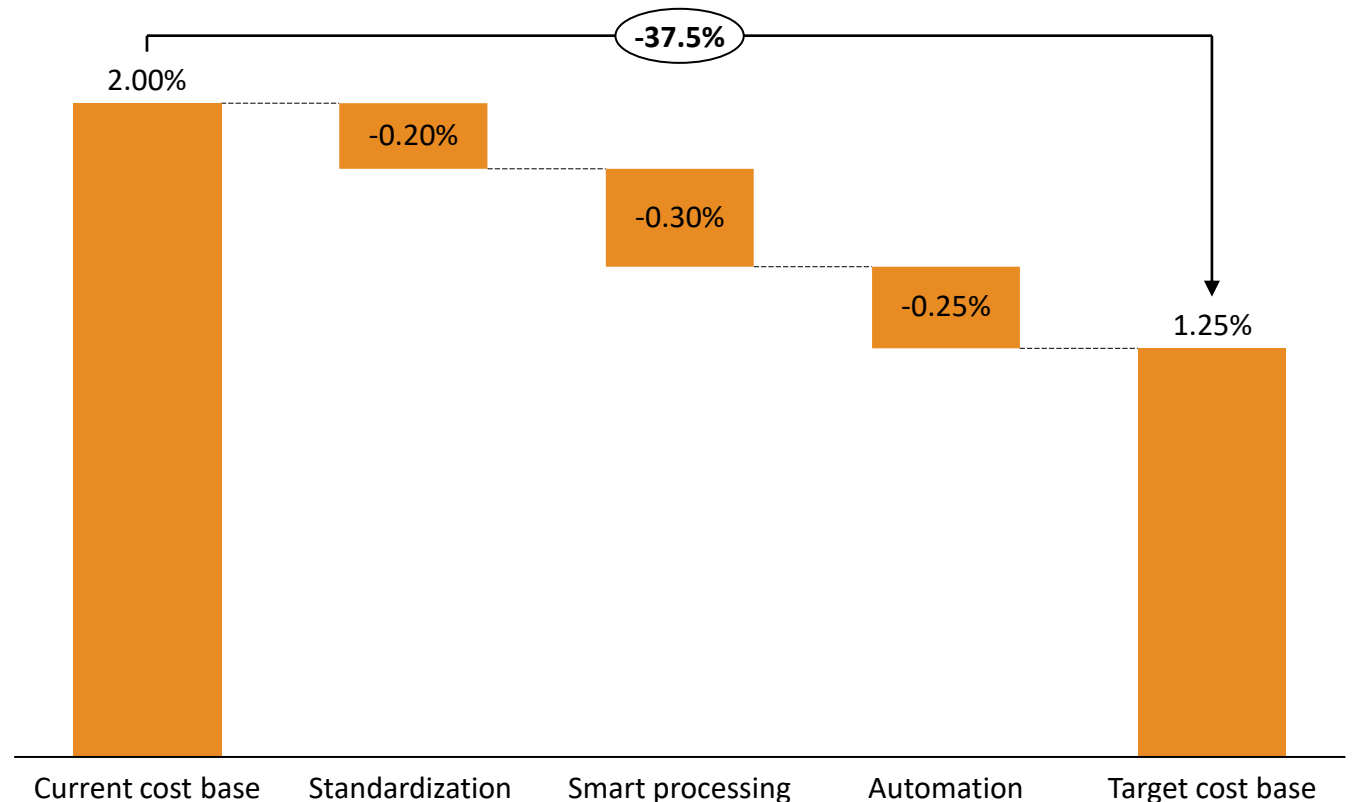
Investing in digital strategies will drive overall organization functioning, hence creating significant stakeholder value

The recommendation is expected to improve EBIT through improved operational efficiencies and enhanced business partnering...

The proposed recommendation´s Impact on EBIT from 2021-2027, DKK Million [1]

- Revenue growth EBIT impact
- Cost improvements
- Depreciation
- Total

Strong EBIT impact and **break even is expected in 2026**

	2021	2022	2023	2024	2025	2026	2027	Total
Total	11	38	75	112	149	187	225	796
Revenue growth	18	45	81	118	155	192	230	
Cost improvements	43	43	44	44	44	45	45	
Depreciation	-50	-50	-50	-50	50	50	-50	

... and is expected to generate significant return on investment over the coming years

The proposed recommendations Return on Investment DKK Million [1]

- Continuing Free Cash Flow to Firm
- Budget Free Cash Flow to Firm
- Net Present Value
- Total investment

+320,1%

Total investment	Budget Free Cash Flow to Firm	Net Present Value	Total investment
508	1.592	2.100	500

1 See Appendix A for calculation of expected impact
SOURCE: BCG; McKinsey

Executive   Insights   Recommendation   **Impact**   Implementation

Risks of being overambitious with critical stakeholder buy-ins poses as threaths to the recommendations

Stakeholder buy-in

Difficult to align imposed solution to stakeholder expectations. Limited stakeholder buy-in disables a full top-down implementation.

Solution:

- Align stakeholder expectations early in the process and clearly state objectives and goals

Implementational complexities

Difficult to integrate AI tools (RPA, ML, Chatbot) with existing SAP system and data pool.

Solution:
- Experienced tech consultancies will be included in the implementation process

Cost/benefit

Lundbeck has previously experienced lacking results when trying to automate processes with RPA.

Solution:
- The combination and technological development of ML, RPA, and Chatbots will create more value than earlier experienced.

Stakeholder buy-in

Implementational compexities

Cost/benefit

A step-wise implementation process of the proposed recommendation ultimately leading to success

2. Stakeholder alignment
Expectations, possible pitfalls and goals are aligned before implementing initiatives

4. Integrate SAP and own data with new tools
Cooperation with consultancy about integrating new tools (AI, RPA, ML) with existing data and systems

6. Allocate people
People within Operational Finance will be allocated to more value driving activities in other departments based on cost- and labor efficiencies causes by new tools

8. Successful implementation and integration of automation tools

1. Strategy
Based on internal research and previous experiences, a concept and suitable implementation strategy is created

3. Contact consultancies
Reach out to market leader consultancies within AI and automation

5. Implementation phase and proof-of-concept
The implementation of systems will happen over a one-year period, where proof-of-concept will be assessed

7. Use new specialized personal efficiently
Lundbeck needs to utilize the potential of allocating people to new value driven functional areas in order to cut costs, increase efficiency, and succeed

Executive   Insights   Recommendation   Impact   **Implementation**

Digitalization can generate operational and business support efficiencies, thus driving profitability and organizational agility

The recommendation is expected to have a positive impact on the functioning of Lundbeck´s Global Finance Enabler model

Generating significant positive value creation for stakeholders and shareholders

SYSTEMS
Digital solutions will be upgraded to follow market and global trends by implementing data gathering processes and automation through AI (RPA, ML, and Chatbots).

PEOPLE
System implementation supports the organization by allowing it to allocate people to specialized tasks.

PROCESSES
Our recommendations willl create more streamlined and efficient processes.

Optimize the allocation of resources and thus business support function of the finance organization is **expected to increase revenue with 1% per annum from 2024**

The recommendation is estimated to create significant efficiency optimizations and **reduce the cost of the finance department with 37.5%**

Strong shareholder value creation with **a NPV of the investment is estimated to be 320% higher than the total investment**