navify® Integrator

Case Study: Optimizing operations at the Institute for Infectious Diseases (Switzerland) through navify Integrator and comprehensive financial services integration

Executive Summary

This case study explores the implementation of Roche's Lab module for **navify** Integrator and end-to-end financial services at the Institute for Infectious Diseases (IFIK), Faculty of Medicine, University of Bern. The **navify** Integrator securely connects multiple data sources, allowing seamless extraction of Price-Per-Reportable (PPx) data into digital solutions and other analytical tools. This integration reduces the need for manual data collection, enabling precise customer billing and accurate reimbursement processes. The case study highlights significant improvements in data management and operational efficiency achieved through this advanced digital infrastructure.

Cost savings with Lab module for **navify** Integrator

3,739 CHF

Connections reduction with Lab module for **navify** Integrator

50%

Time saving with Lab module for **navify** Integrator

95%

The pressing need for integrated, secure, and efficient solutions in modern labs

Modern laboratories often grapple with challenges stemming from **manual data collection processes**, leading to increased workloads, inconsistencies in data interpretation, and the need for labor-intensive post-billing audits. The implementation of the Lab module for **navify**® Integrator and end-to-end financial services directly addresses these issues by seamlessly integrating with existing lab systems*. This integration enables automated customer data collection, allowing Roche to generate highly accurate bills, thereby reducing the risk of post-billing disputes. By streamlining data flow and ensuring precision in billing, the solution significantly reduces manpower requirements and enhances operational efficiency, ultimately improving overall lab performance.

Current Challenges:

Complex data management: Health management handles data from various sources like patient records, test results, and external databases, which can lead to data silos and inconsistencies. Effective data management is crucial for accurate diagnostics and smooth operations.[1]

Cost reduction: High operational costs for equipment, consumables, software, and hardware strain healthcare budgets. Labs need digital solutions that cut costs, reduce manual work, and fit their workflows.[2]

Improving efficiency: Inefficiencies in workflows and underutilized resources contribute significantly to rising operational costs. Healthcare organizations often face challenges in streamlining administrative functions, such as billing. Fragmented data systems further hinder operational efficiency by creating silos that make it difficult to get a comprehensive view of patient care and organizational performance.[2]

This case study aims to demonstrate how the integration of Lab module for **navify** Integrator and the financial services can improve the precise billing without collecting data manually.

*In other use cases, the Lab module for **navify** Integrator can also incorporate non-Roche devices and services

Lab module for **navify** Integrator as the enabling platform

The Lab module for **navify** Integrator is a seamless, secure platform that enables end-to-end integration by connecting to data sources within the customer's IT environment and digital applications with ease. This simplifies the addition of new digital solutions, making them more secure and reducing both time and cost when the infrastructure is already in place. It also resolves data formatting and interoperability challenges, supporting the implementation of financial services and ensuring accurate PPx billing at the customer's end.

Lab module for **navify** Integrator at the Institute for Infectious Diseases

The Institute for Infectious Diseases at Inselspital Bern (IFIK) [3] is a leading center for diagnostic microbiology in Switzerland, covering virology, bacteriology, mycology, parasitology, and immunological infection clarification. It's one of the few Swiss university institutes that combines all microbiological specialties under one roof.[4]

Key facts:

- **Over 60 researchers in 12 groups** [5]
- **About 400 clinical microbiology tests offered** [6]
- **Provides training for students in medicine, dentistry, pharmacy, and cell biology** [3]

Use of Lab module for **navify** Integrator led to **cost and time** savings as well as to reduced number of system connections

IFIK sought to streamline their data integration processes, reduce costs, and improve operational efficiency. Their existing financial services infrastructure relied on multiple platform connections, leading to increased complexity, higher costs, and prolonged data collection times.
By implementing Lab module for **navify** Integrator, the provider was able to simplify their infrastructure, reduce costs, and achieve time savings.

The implementation of the required system configuration consisted of the following steps:

- Digital infrastructure set up
- Data mapping
- Connectivity and automation
- End-to-end test
- Go live

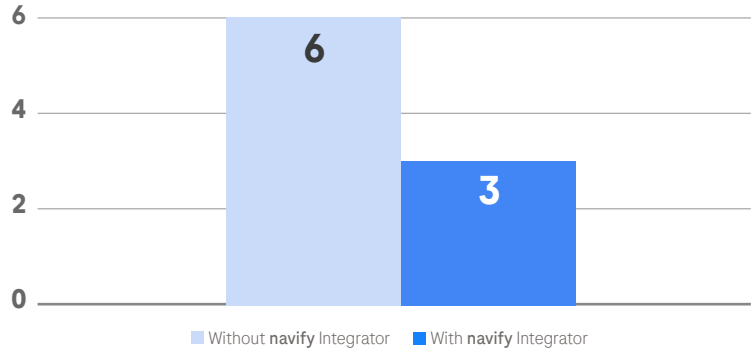
Specialists involved in the implementation included IT manager and Lab IT specialist.

Efficiency Gains

The integration significantly reduced the complexity of IFIK's digital infrastructure by **reducing the total number of system connections by 50%.** The number of required connections dropped from six to three, streamlining processes and minimizing potential points of failure.

	Without **navify** Integrator	With **navify** Integrator
Labratory Information System (LIS) <> Billing system	1 connection	0 connections
navify Lab operations (nLO) <> File export	3 connections	1 connection
Per Instrument <> File export (e.g. an XML file)	1 connection	0 connections
Validation software	1 connection	1 connection
navify Integrator <> CommServerLite (CSLite)	0 connections	1 connection
TOTAL	6 connections	3 connections

Required connections *



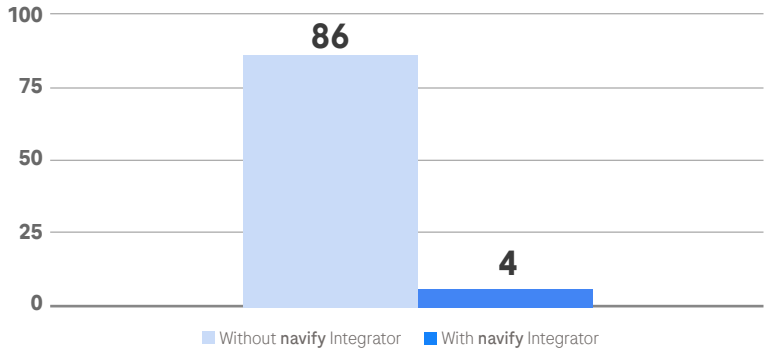
*Between lab, 3rd party, other data sources and **navify** applications

Time Savings

Without the implementation of the Lab module for **navify** Integrator, the customer required 86 hours to get the required system configuration compared to the effort to enable financial services without **navify** Integrator. After implementing the Lab module for **navify** Integrator, these time requirements **were drastically reduced.** The system configuration setup took only 4 hours, resulting in **a total time savings of 82 hours for IFIK staff.**

The time savings were calculated considering the work hours required by the specialists mentioned above.

Hours spent on system configuration

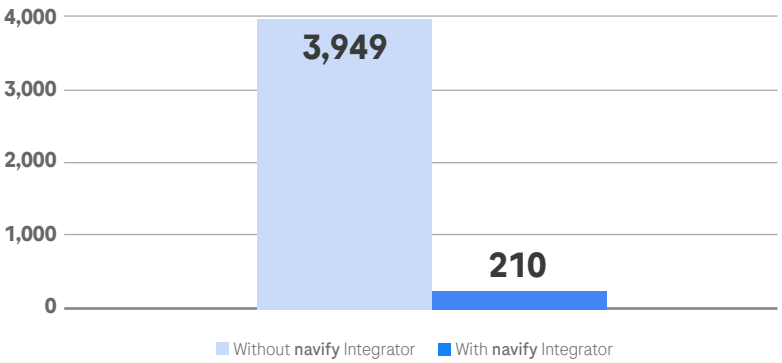


Cost Savings

By implementing the Lab module for **navify** Integrator, **IFIK saved CHF 3,739, reducing the total cost** from CHF 3,949 to CHF 210, **an improvement of 95%.**

The costs were calculated considering the time required by the specialists mentioned above. For the hourly fee values the respective average salaries from jobs.ch were used. [7]

Implementation costs, CHF



> *"I think the whole Roche solution we are running is the best [...] compared to other ones we have in-house from competitors."*
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> **Daniel Schüler**
> IT Manager, IFIK Bern, Switzerland

Integration potential within lab institutions

The Lab module for **navify** Integrator offers significant benefits to lab hospitals by:

- **Streamlining IT systems:** Reduces the number of required connections, simplifying management and enabling scalable operations.

- **Enhancing focus:** Frees up labs and IT teams to concentrate on core tasks, supported by robust data colle ction capabilities.

- **Improving efficiency**: Saves time and resources, leading to more streamlined workflows.

- **Fostering innovation:** Encourages a forward-thinking approach, enabling labs to adopt innovative practices.

- **Driving better healthcare outcomes:** Demonstrates how advanced solutions can optimize lab operations and positively impact patient care.

> *"I like the idea that we're working with a company with different devices for different usages, may it be point of care, high throughput, STAT, transplant, emergency, that all of this then unified in one digital platform, [...] whatever applications are built on top of that."*
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> **Dr Pascal Bittel**
> Head of Molecular Analytics, IFIK Bern, Switzerland

References

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