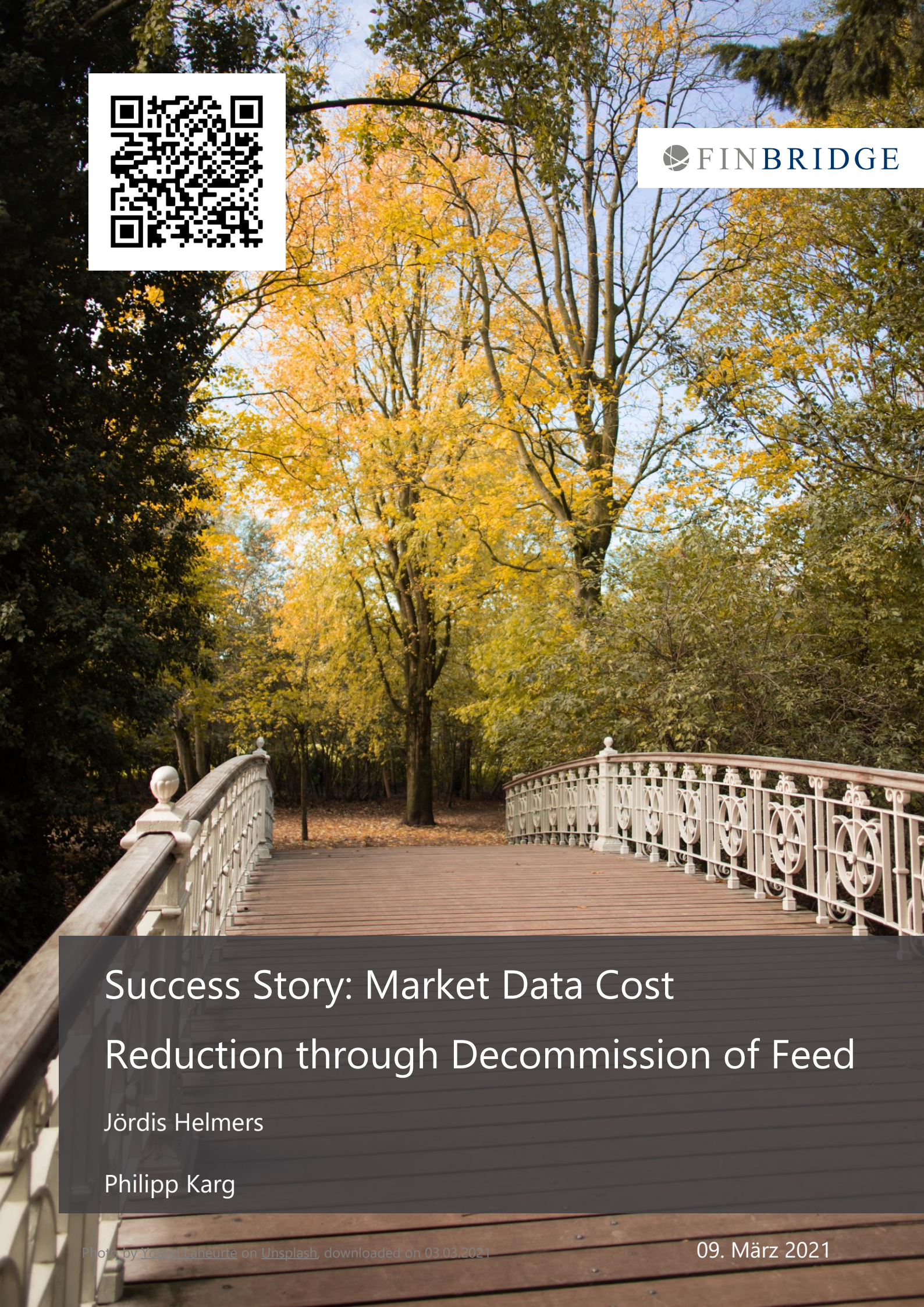

FINBRIDGE

Success Story: Market Data Cost Reduction through Decommission of Feed

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09. März 2021

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Introduction

The difficult market situation in a low-interest rate environment with low hopes of improvement is forcing many banks and financial institutions to lower their costs. In addition to labour and IT costs, market data is increasingly proving to be an important avenue for cost savings. Even though it is vitally important in trading, risk measurement, and valuation, there is still an opportunity to save costs if one takes a closer look at what kind of market data is really needed.

In the following, we will demonstrate how our customers, through optimisation of their market data acquisition, were able to cut their long-term market data costs by up to 90% per annum, while maintaining the same data quality.

Goals

The primary goal was to significantly reduce the market data license costs, of which the lion's share were due to the real-time feed. Therefore, as part of a preliminary study, Finbridge worked with the client's relevant departments to see if and how a stable supply of quality-assured market data could be provided without a feed and to see what such an implementation of the supply with alternative market data could look like. The preliminary study concluded that from a business perspective the real-time data was no longer necessary and that the business market data requirements could in principle also be met with snapshot data.

By obtaining snapshot data directly instead of deriving it through feed data, it was not only possible to save costs amounting to several hundred thousand Euros per

annum; it was also possible to disable a maintenance-intensive in-house solution that processed feed data. This meant that it was no longer necessary to maintain or service the solution, simplifying the overall system landscape.

When changing the market data supply, however, the high quality of the market data used was to be maintained and any potential professional or technical limitations caused by the switch had to be avoided.

Initial Situation

To obtain their market data, our customers mainly used a Bloomberg Feed: market data was fed in throughout the day for all instruments, which were set up in the market data system. One record per instrument was selected each day by a snapshot logic from this time-series for further processing: it was stored in the golden copy and sent to downstream systems (e.g. for valuation, risk measurement, etc.). All other quotes within the time-series were only used for validation, especially in cases where the markets were very volatile, and outliers needed to be flattened. Furthermore, the feed was connected to the market data system by an in-house solution that required more and more maintenance over time.

Beside the feed, a file-based interface was already in use to retrieve snapshot data via Bloomberg Data License, especially to access BVAL pricing for illiquid bonds.

Solution

For a lean, low-risk, and efficient change of the market data supply from feed to snapshot data, the customer's existing implementation of Bloomberg Data License was adapted and extended to supply the whole portfolio with market data.

Bloomberg Data License (or Data Scope Select from Reuters/Refinitiv) is based on a request-response mechanism: the desired data is requested and only the requested data is data is sent back. In contrast to this, the feed provides a constant stream of all available market data.

The use of Bloomberg Data License for the entire portfolio streamlined the data acquisition process: market data was only requested when it was needed, and the number of contributors was narrowed down, so that only high-quality quotes were obtained which could be processed further. However, deviations from the data obtained from the feed should be minimised during the change.

In addition, the generation of the request files should be kept as dynamic as possible, especially regarding the instruments contained. Business should be able to independently configure the individual instruments included in the requested market data, in order to be able to react to changed business requirements, such as new instruments, a change in contributor, changed time availability, etc. Moreover, adjustments regarding the queried price or data fields should also be easy to implement.

Challenges

Although the existing interface to Bloomberg Data License was used as a basis, it was necessary to analyse the instruments for which the feed had been used thus far regarding the following points:

- Which price fields and further information are required?
- At what times is the data needed?
- When is the data available via Data License?
- Which contributors are necessary for each instrument?
- How to establish a mapping between Bloomberg's and the customer's data models? (e.g. to standardise different Bloomberg price fields for different instrument types).
- How can data acquisition be made as efficient as possible, e.g. by combining individual queries of similar instruments according to Bloomberg classification?

In order to obtain data via Data License, the identification of the respective Bloomberg instrument type was required, as this decisively determined how the request was made. The portfolio analysis identified a total of six different required

request types and subsequently assigned each instrument its respective request type. The request type determined the details of the request file, for example the relevant price fields.

One challenge in this context was to generate the daily data requests as dynamically and flexibly as possible. To this end, a basis request was created containing all the information which the different data license requests shared. The remaining differing characteristics were defined as parameters in a type-specific request and are thus easily configurable in case of necessary adjustments.

Since it was not desirable for cost and processing reasons to always request the entire portfolio, the times at which a data request should take place were identified for each instrument. In addition to the relevant main request time, another time was chosen as a back-up, so that this data could be used if the data were unavailable at the normal request time.

For a specific data license request at a specific time, all instruments for which this time is configured are collected. Subsequently, the instruments are clustered with respect to their request type and for each type a request file is generated. This parametrisation allows the business department to curate the individual request times for each instrument and allows them to include or exclude new or omitted instruments via configuration of the time.

Factors for Success

The two key factors in the successful execution of this project were, on one hand, the composition of the project team with Finbridge experts and competent employees from all necessary fields in the bank and, on the other hand, the agile project approach.

Thanks to the market data expertise of their consultants, Finbridge was able to act as a mediator between the market data team and the IT department. Through their comprehensive professional as well as technical expertise and detailed knowledge of the relevant processes, Finbridge’s consultants were able to ensure excellent

communication between all relevant parties. Our consultants worked together with the market data team to determine the relevant specifications and communicated these to the IT department, whereby their requirements were also reflected back and incorporated. Finbridge also performed quality assurance of the implementation specification. In addition to their technical expertise in conceptualising and executing the test cases, the consultants at Finbridge also brought with them their know-how in test and defect management.

The second key factor was the agile project approach following the SCRUM Model:

The direct exchange between all project participants ensured a deeper understanding regarding the interaction of the business's processes on the IT side as well as a deeper understanding of the limitations and needs of the IT department on the business side. In particular, the bi-weekly "Show & Tell" meetings, in which the developments of the last sprint were presented and eventual questions could be directly answered and discussed, helped foster good communication between business and IT as well as a stable reliable solution.

Continuous dialogue and the early testing of individual elements led to defects being identified and removed early in the project. This meant that during the integration tests after the development phase there were hardly any defects. It also meant that the final user acceptance tests were completed significantly ahead of schedule.

In addition to the technical implementation and knowledge transfer to the internal teams, the preservation of the quality of the market data during a seamless transition from feed data to snapshot data was also a primary goal. A two-step testing approach was used to ensure that there were no discrepancies between the feed and snapshot data.

Conclusion

The change of the market data supply was completed successfully. Thanks to the robust solution developed and implemented with the combined efforts of business

and IT, the acquisition of data requests in the lower five-digit range per day through Bloomberg Data License runs just as problem free as the subsequent further processing in the downstream systems; all instruments are priced and there were no deviations in the downstream valuations caused by the change of the market data supply.

As planned, the market data licensing costs were reduced by several hundred thousand Euros per annum, which meant that the project expenditures were also amortised within a few months. Furthermore, our customers continue to receive high quality market data through significantly leaner and more robust processes.

Our Offer

The change from feed data to snapshot data is just one of many ways to significantly cut market data costs in the long run. However, the target of a cost-efficient supply of market data and the corresponding implementation depends on various individual factors. Our extensive experience and expertise allow us to work with you to create your individual solution. Our range of service includes:

- Preliminary studies and analyses of the status quo for licenses and all related processes covering acquisition, quality assurance, and further processing,
- Identification of optimisation and savings potential in licensing and the process chain,
- Development of corresponding implementation concepts,
- Implementation of adaptations, including specifications and tests.

A successful implementation is the result of the comprehensive experience and competence of our colleagues:

- Great professional and technical expertise in the subject of market data,
- Business side accompaniment of IT-projects in market data, for example in the introduction of a central market data system, migrations, or software upgrades,
- Rapid, thorough, and comprehensive process analysis,
- Professional and technical problem-solving know-how across the financial sector,
- Development of outcome oriented and easy to integrate methodological approaches.

We would gladly advise you in a preliminary study on possible solutions, and furthermore assist you in the development of an individualised solution, which would be tailored to the professional and technical specifications of your company. Following this, we would also be pleased to support you in the technical implementation of the solution and updating the existing processes to conform

with the changes. The training of internal employees and a demand-oriented approach to application support are just as important to us as a customer-oriented approach to solving problems and the implementation of any individual designs that may be required. We would gladly further assist you in projects as well as in your regular day-to-day business.

We hope we have sparked your interest in our consulting services and look forward to hearing from you!

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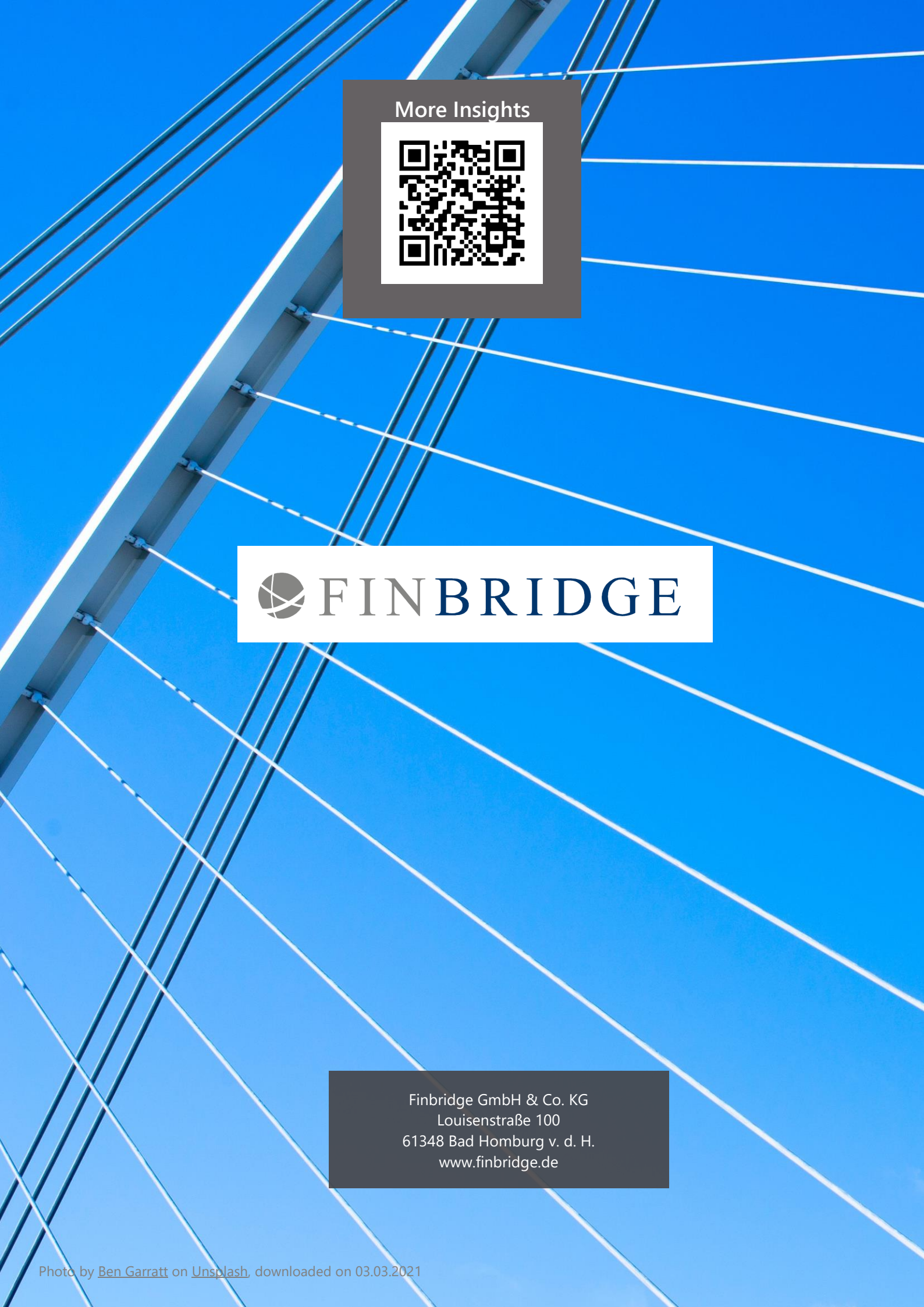
About Us

Finbridge GmbH & Co. KG is an independent, specialised consulting firm in the financial services industry and supports the entire process chain of financial products in credit, capital markets, treasury, risk controlling, compliance, accounting, and regulatory reporting.



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