

# 5 Überlegungen bei der Verwendung von Kl in der Analytik



# **Die evolution von Kl in Bl.**

Seit der Entstehung in den 1990er Jahren hat sich Business Intelligence erheblich weiterentwickelt. Was als ein hoch technischer Prozess begann und auf wenige Spezialist:innen im IT-Bereich beschränkt war, hat sich zu einem weitaus zugänglicheren und intuitiven Bereich entwickelt, der sich auf Nutzer:innen in allen Bereichen des Unternehmens ausdehnt. Und dank des Aufstiegs von KI (künstliche Intelligenz) und maschinellem Lernen (ML), sind Organisationen mehr denn je bestrebt, das volle Potenzial von Daten zu nutzen.

#### **1<sup>ST</sup>-GENERATION ANALYTICS: REPORT-CENTRIC**

In den Anfangstagen verwaltete ein erfahrenes Team innerhalb der IT eine komplexe Gruppe von Technologien, die vordefinierte Berichte und spontane Antworten auf Datenanfragen des Geschäfts lieferten. Ein Benutzer würde eine Frage formulieren, sie an einen Datenanalysten weiterleiten und dann (manchmal wochenlang) auf eine Antwort warten, normalerweise in Form eines neuen Berichts.

#### 2<sup>ND</sup>-GENERATION ANALYTICS: **VISUALIZATIONS & DASHBOARDS**

With the advent of user-driven analytics, business users were given the power to prepare data, load it, and interact with it in intuitive, visual ways. And while the benefits are clear, many lightweight visualization tools present challenges around governance and scalability, and their focus on content authoring limits adoption to power users.

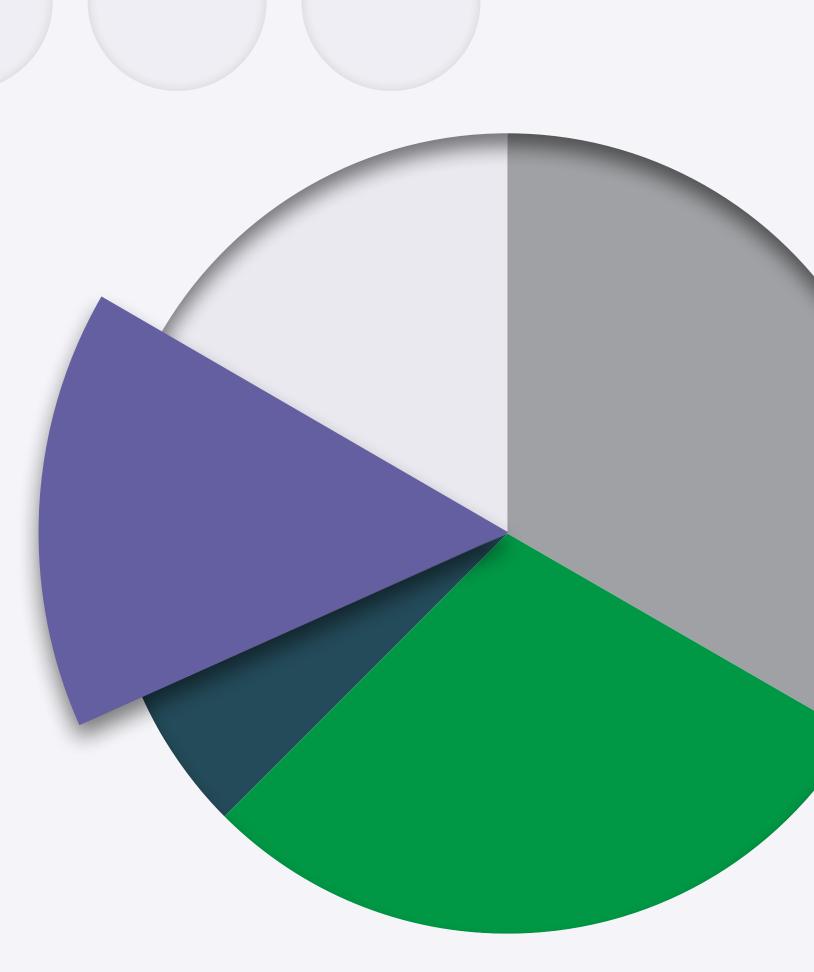
#### **3<sup>RD</sup>-GENERATION ANALYTICS: AUGMENTED ANALYTICS**

Now we're experiencing the third generation of analytics, where AI is augmenting the entire analytics lifecycle. Today, organizations can serve all users and use cases with the right experiences, such as automated insight generation, natural language interaction, and machine learning. And with large language models like OpenAI's ChatGPT, the possibilities are limitless.

## What to consider when you're evaluating Al in analytics.

AI can deliver deeper, more meaningful insights; provide natural language interaction; and automate manual tasks such as analytics creation – all of which will greatly boost adoption and data literacy.

In the following pages, you'll find five key considerations to make sure your current solution – or the one you're evaluating – provides the most possible value from AI.



## Does the solution leverage AI to augment the full range of analytics capabilities?

- Can the solution enable complex data problems to be addressed with traditional human analysis alongside machine augmentation?
- Can the solution support natural language interaction including search-driven insight generation, conversational analytics (chat), and natural language generation (NLG) on dashboards - using internal data?
- Can users leverage AI to generate a full range of advanced analyses - such as clustering, forecasting, period-over-period, etc. in a few clicks, complete with AI-generated visualizations and NLG?

- Can the solution integrate natural-language insights and data and support real-time Q&A from generative AI sources, including OpenAI/ChatGPT?
- Does the solution support integration with data science platforms such as Amazon SageMaker, Azure ML, etc. to deliver real-time calculations within dashboards as the user explores?

## **Does the solution have AutoML and predictive analytics capabilities?**

Can analytics users easily generate ML models and make predictions  $\checkmark$ through a simple yet powerful no-code experience – without having to be data scientists?

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- Do the predictions include full explainability data (SHAP values), allowing you to understand not just what might happen but why, so you can take the best action?
- Can users quickly publish the data and/or directly integrate models into your analytics platform for interactive exploration of predictive data?
- Can you perform what-if analysis to test hypotheses with real-time predictive calculations on subsets of data defined by user selections?

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## Does the system allow you to actually take action?

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Can you drive intelligent alerts based on advanced and predictive insights?

- Do you have automation capabilities to trigger action in downstream systems and workflows?
- Is there a fully interactive mobile app with alerting capability supporting action at the point of decision?
- Does the system include changing data through a real-time data pipeline that drives immediate action?

## **Does the platform include AI and ML as foundational services?**

- it rely on SQL and query-based architectures that limit insight?
- Are AI and ML built into the platform at a foundational level, supporting a full range of analytics experiences?
- analytics with AI and ML to engage the user, instead of taking a "black box" approach?

Does the solution include a purpose-built analytics engine, or does

Does the solution combine interactive, engine-driven discovery

### Are you running on a powerful, extensible platform?

- Does the solution offer a full set of open APIs and platform capabilities, allowing developers to build new capabilities and extensions?
- Does the solution give you the ability to embed fully interactive analytics in your applications, allowing users to get insights wherever and however they work?
- Does the solution have an active partner ecosystem that drives innovation for AI-powered capabilities?

- Can the system integrate with third-party analytics engines in realtime, sending only small subsets of data for in-the-moment calculations as the user clicks, vs. expensive batch queries?
- Does the solution include a high-performance, purpose-built engine that responds at the speed of thought, even when challenged by a large number of users, massive data volumes, and unanticipated questions?

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#### **Start Exploring**

# Why choose Qlik?

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Bring actionable data into every business decision

- Give everyone at any skill level the power to explore data with our unique Associative Engine
- Take action on your data with an agility that balances risk and reward

With Qlik, you can empower your data users to follow their curiosity, explore their data freely, and make transformative discoveries.

Explore our unique approach to AI, ML, and data >

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