Birst Networked BI

For Companies Creating Analytic Applications and Data Products

birst | TECHNICAL BRIEF

CONTENTS

BIRST NETWORKED BI:
A TECH BRIEF FOR COMPANIES WHITE-LABELING BIRST TO CREATE ANALYTIC APPLICATIONS AND DATA PRODUCTS

Creating a great analytic product means much more than white-labeling a set of dashboards. As a strategic product owner you have big ambitions for your product. You want to attract new customers, make existing ones happy, and possibly build a new data product that generates additional revenue. So, you think about scale and a rollout plan that can be accomplished fast and maintained easily and without a team of additional resources.

Built on top of Birst's modern, multi-tenant cloud architecture, Networked BI gives you that ability. You can create and roll out new, virtual instances of your analytics to expand your product across a broad user base without having to physically recreate metadata, data and BI infrastructure for every one of your customers. With this, you will extend analytics to new and existing customers fast and at scale.

Additionally, Networked BI allows your users to augment your BI and analytics, with their local data and definitions without impacting other users' or tenants' data or metadata.

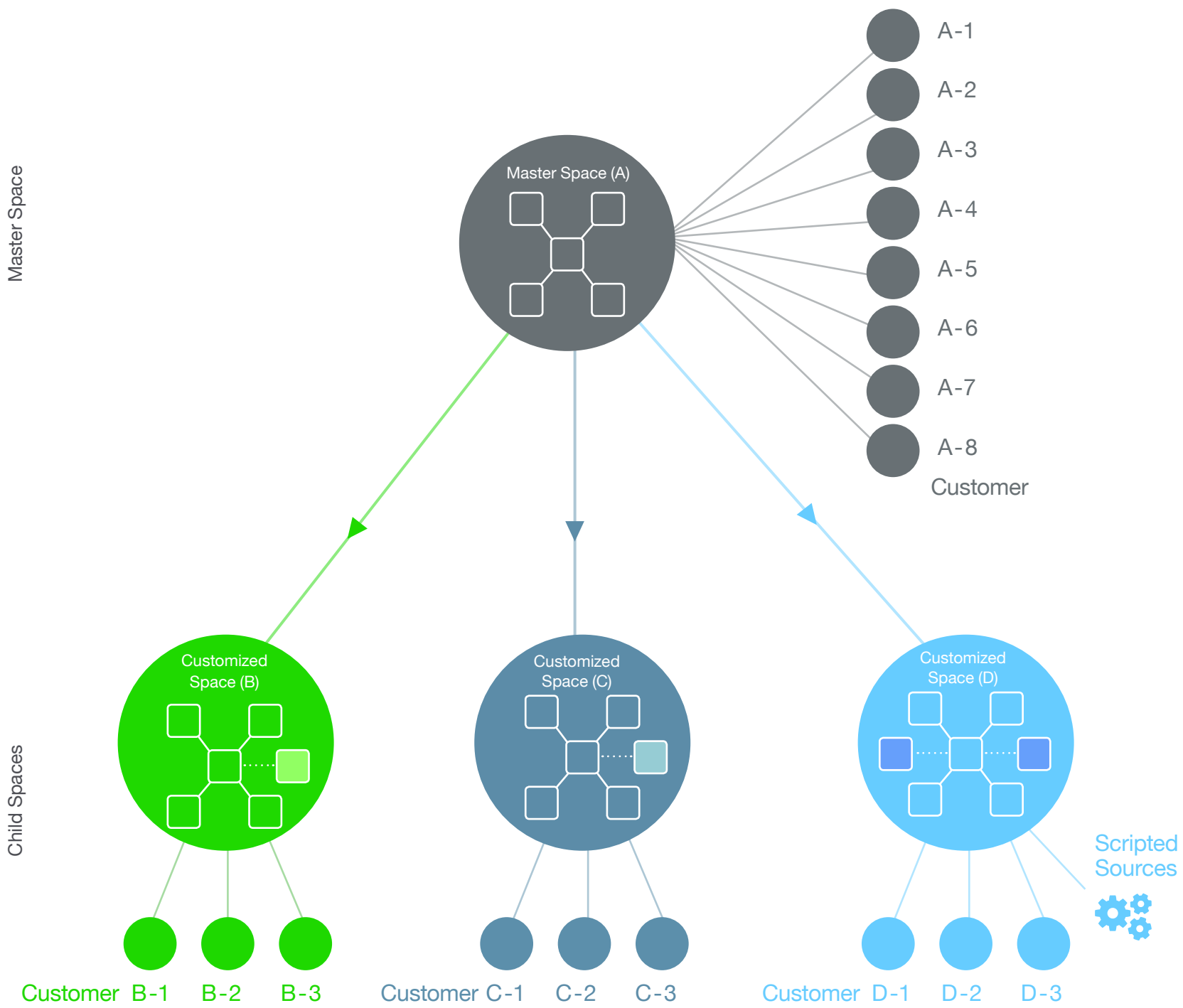
TOP USE CASES FOR NETWORKED BI:

1 Most of your customers require standard analytics, but some require customization

For example, if you have a retail analytics solution and your customers are online or e-commerce providers yet some have physical stores, your core analytic model will contain data such as top selling products, best performing regions, campaign scorecards, customer demographics, and cost per incremental shopper. However, you need to extend this with additional metrics such as foot traffic vs. sales per zone, store performance, and total cost per incremental shopper, but this time including staffing and operational costs specific to physical stores, in addition to marketing costs that applies to all shoppers.

In this case, you can create different Birst spaces with the same underlying enterprise data. One is your master space that applies to all your customers and the other is an augmented version of that master space with specifics for brick and mortar customers. Using Birst's scripted data source capabilities you can create complex data transformation logic such as multi-pass bucketing, exchange rates calculations, internationalization for different locales, hierarchy flattening, and snapshotting, in order to extend the original data model further to create more value for specific customers, geographies, and requirements.

The diagram below illustrates this example. All spaces will leverage the data extraction and loads from your backend database and provide common metrics such as those pertaining to products, regions and customers across all your users. However, child spaces B, C, and D will inherit the data model from the master space, but will have specific data manipulation, metadata and metrics that apply to only a subset of customers. For example, space B is extending the common data model of space A, with metadata that only applies to brick and mortar customers, and spaces C and D might serve two different sets of international partners that like to develop their own region-specific metadata. Their usage of data and their requirements are so unique that you don't want to pollute your main space with those details. You can either create these various data models for the partners, or provide administration rights to them, so they can further develop these models according to their own specifications. The big benefit is that as items change in the master, child spaces get these changes without having to do anything. This helps you keep everything consistent across unique environments without any overhead.



2 Most of your customers get information from the same data source, but you want to augment that with other data

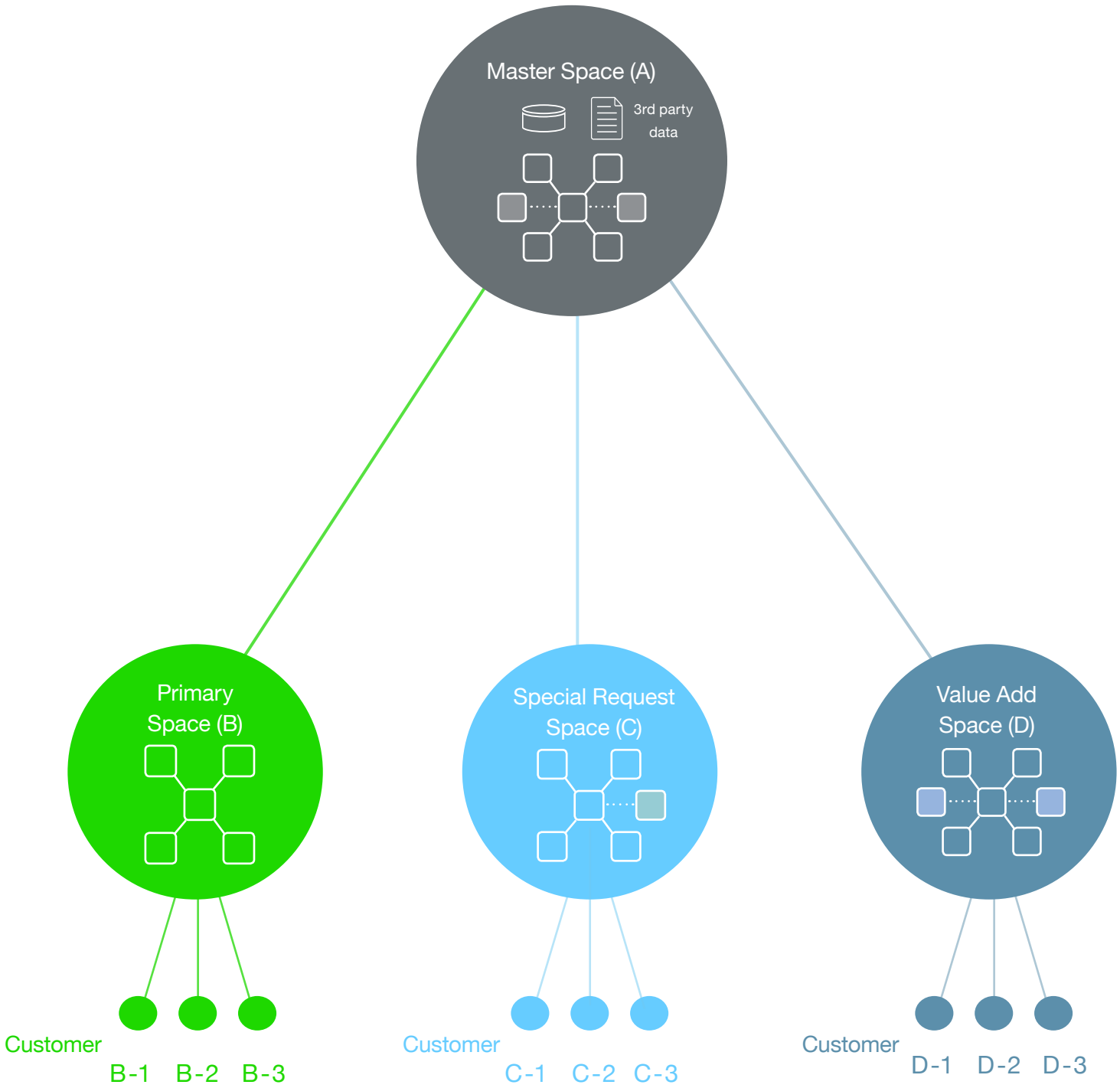
This is the case where most of your data is modeled from your core application. However, you may want to enrich that data with 3rd party information (e.g. industry or market data) and offer that as a value-add module to some of your customers.

In this case, your master space is a super set of all your other spaces. It has modeled data from your core data source, as well as 3rd party data that augments and enhances that information with additional context.

To roll this out to your customers you create a series of sub-spaces, such as a value-add space or a special request space. You use the security features of Birst to expose only certain parts of your master space to these individual sub-spaces.

For example, as a retailer you can get retail per capita sales figures at local, regional and national levels and merge that with the information captured in your application to provide performance benchmarks against local and national averages. You develop the master data model with these value-add data sets, but you would only serve them to your premier customers.

This scenario is the reverse of what we covered in the first use case. In this use case, your master data model is comprehensive and ultimately something that all your customers can use. However, you choose to limit certain attributes for some customers in order to create simplicity or an opportunity for future upsell. In the first use case, your master data model is the standard and you further develop that in your sub-spaces to avoid polluting the master space with specifics that only apply to a small portion of your customers or partners.

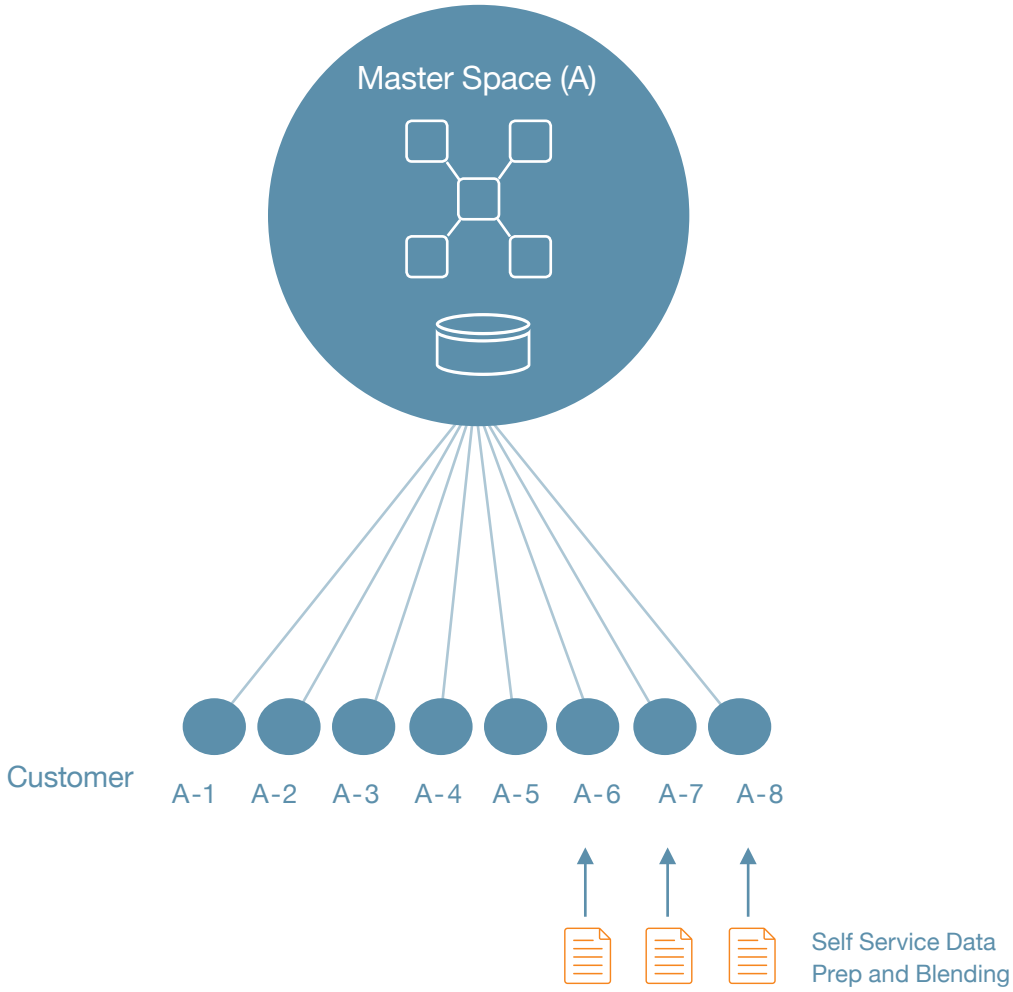

Master Space (A)
3rd party data
Primary Space (B)
Special Request Space (C)
Value Add Space (D)
Customer
B-1 B-2 B-3
Customer
C-1 C-2 C-3
Customer
D-1 D-2 D-3

3 Your customers want to blend your application data with their own local data sets

In this case, you are providing a global view of information. You want to allow (some of) your customers to blend their data that is specific to them with the information that you are exposing in your application.

For example, if you offer a supply chain application your analytics provide KPIs and metrics such as inventory turnover, inventory to sales ratio, or return rates. However, each of your customers may need to upload their own inventory levels and join that with the global model that you provide. They might even have to enter their inventory numbers at local or regional levels.

Another great example for this use case is when your customers want to add their own target data. Targets vary from customer to customer; they even vary from department to department within each customer. Birst allows your customers to blend their own data with your application data, as opposed to extracting data from your application into Excel and performing analysis outside the app. Leveraging end user data prep and blending will increase the adoption and the stickiness of your application and will keep your customers coming back to it more and more.

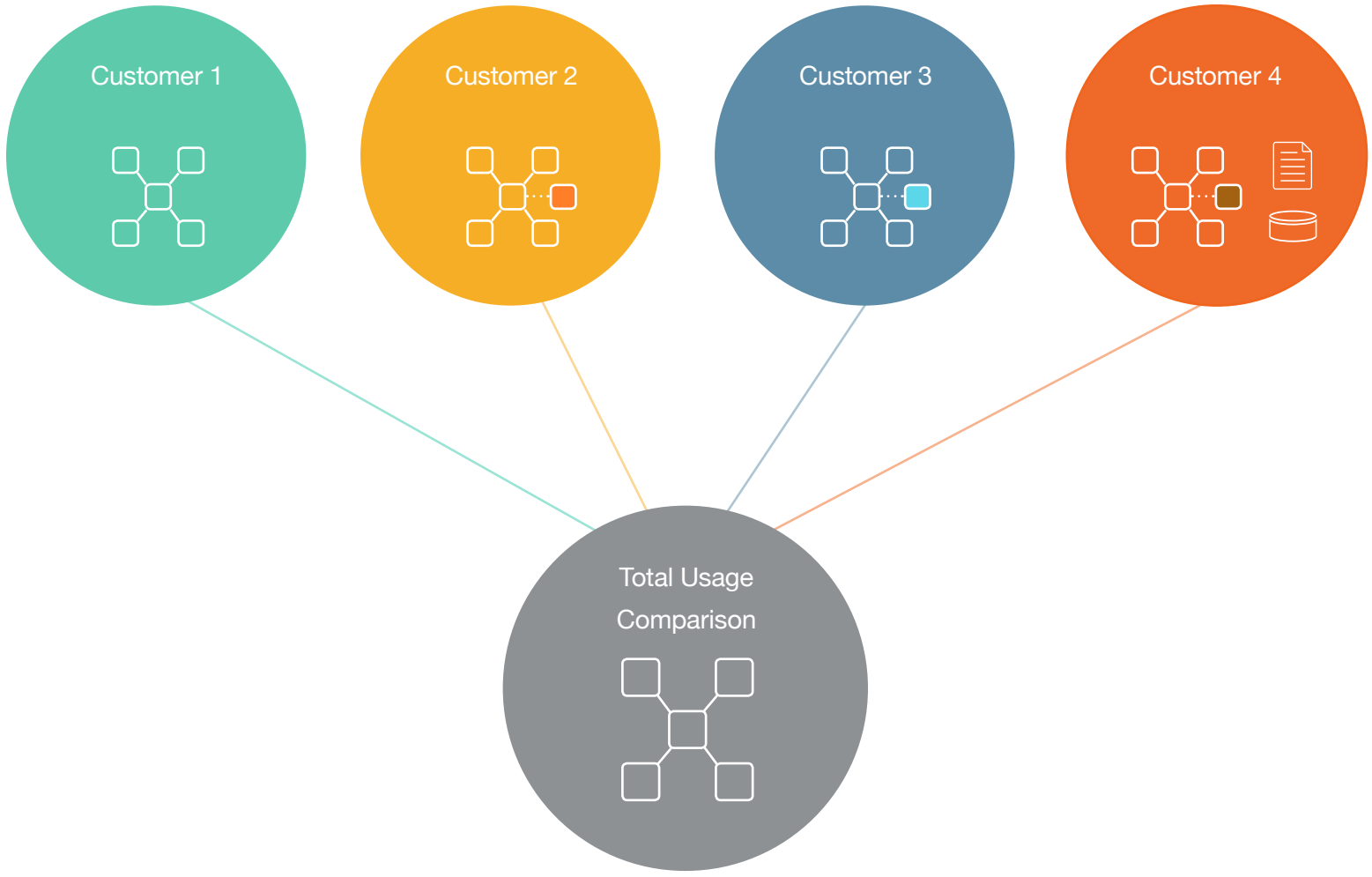


4 You would like to offer benchmarking as a value-add service to your customers

Birst Networked BI capabilities allow you to network your product usage back into a single environment to create benchmarks. Your customers are looking to you to provide them with competitive understanding of how their performance compares to others in the same market, region, or specialty trade.

In this scenario, you can bring the usage data from different customer spaces into one space and start segmenting the data by region and time. Additionally layer in industry data and start segmenting your customers by their size, type of business, and other classifications to create accurate insights for peer-to-peer comparisons.

You can offer these benchmarks in tiers as well. For example, one benchmark measures company's internal performance and compares one team or department against another. Yet, another benchmark compares a company to others in their size and region, and the third benchmark offers insights against the entire market segment or offers comparisons against industry averages.



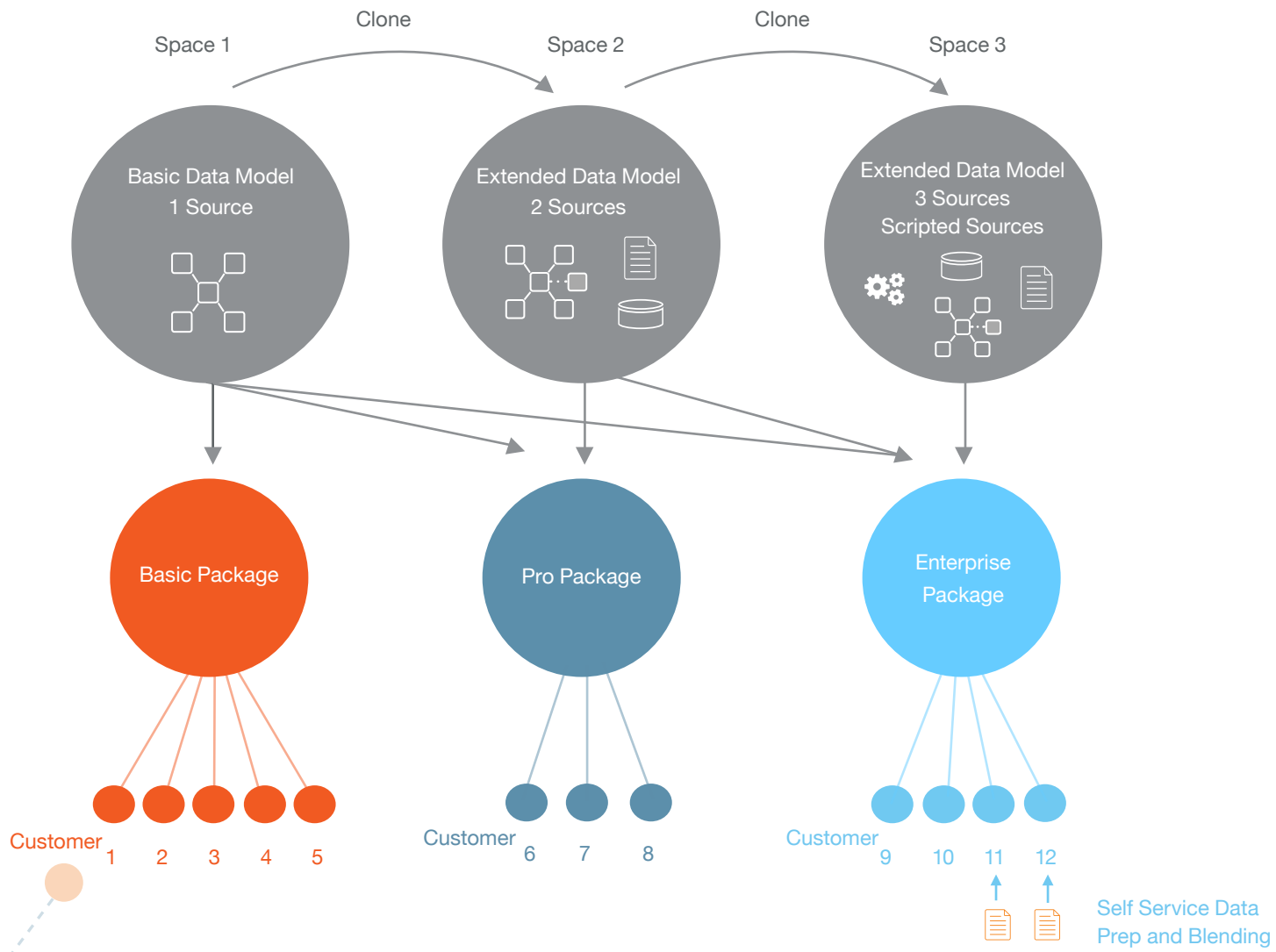
5 You want to create a modular, tiered product pricing and packaging

Birst Networked BI capabilities are also useful for developing a pricing strategy for your analytic product. This scenario builds on the previous four use cases to create tiered pricing and packaging. You may want to create a baseline package that contains a single data source and a basic data model. From there, your advanced packages layer the base package with additional data sources, advanced analytics such as time series or scoring, or allow end users to mash up their own data sets with your application data.

For this, you create a set of virtual spaces: one for your main package, and others that further enhance the core data model with additional dimensions and measures, or enrich it with more data sources and scoring algorithms.

The derivative spaces can be created easily by cloning the main space. The beauty of this architecture is that any change made to the main space is automatically populated in the derivative spaces, cutting down administrative and change management tasks. Yet changes to the derivative spaces, do not affect the main space, ensuring data integrity and governance of the master space.

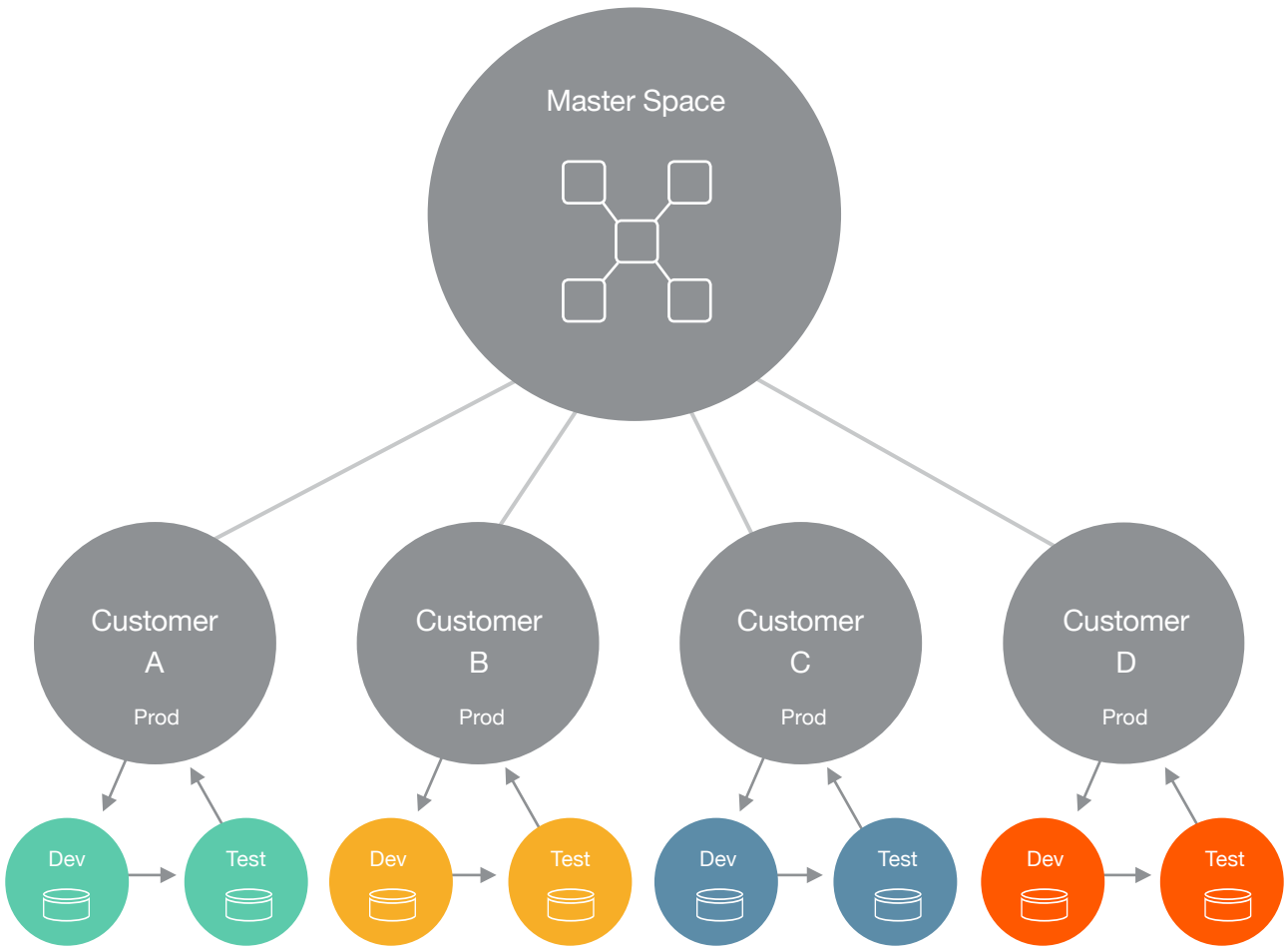
For example, you may have a marketing application where things such as conversation rates and campaign performance are provided in the Basic package, but historical analysis of campaigns and customer lifetime value are offered in Premium or Enterprise packages. You can integrate predictive capabilities such as lead scoring, or prescriptive capabilities such as product upsell and cross-sell recommendations, and offer those in your advanced packages.



6 Your production environment should mimic your development or test environment

Birst Networked BI is also useful for when you need to emulate your test environment as close to customer environments as possible, visualize exact test scenarios, gauge what features are used the most, and identify the bottlenecks.

Birst allows you to create an exact same copy of your production environment for testing and development with just the click of a button. All the configurations, settings, data flows, analytic models and reports will be copied over instantly. Once you have run your test and made modifications to correct any issues, you can swap your development or test space with your customer production space and provision those changes to your customer instantaneously, and without any interruptions to their workload. Furthermore, you can automate this entire process through web service APIs, increasing your speed to market and reducing overhead of development life cycles.



BENEFITS OF NETWORKED BI:

With Networked BI, you can create a single, repeatable system that is constantly delivering reliable and up-to-date information to your users. As a result, customers will use your application more often and more effectively, and gain value from both the information you are exposing through analytics and the information they can blend-in to add context and personalization.

Accelerate your development, product iteration, and release maintenance cycles: Leverage the network effect and data virtualization capabilities of Birst to free up your developers from constantly managing separate environments, data loads, data transformations, and customization for each customer. Quickly create additional development, test, and backup spaces of your environment without any physical replication.

Rapidly roll out analytics to your customers, both for standard as well as customized deployments: Establish a core data model and a set of common business definitions, metrics and KPIs across your customer base, and at the same time allow parallel model development by each one of your customers.

Empower your customers to personalize analytics by blending their data with your application data: Enable your users to easily create their own analytic views by connecting to the Networked BI environment you provid. Allow them to blend their own data to add context and targeted views.

Differentiate your products and create pricing tiers by co-hosting different data sets for different user groups: Create a core analytic environment and populate it with your main data source. Create virtual copies of that environment, and layer in additional data sources or new dimensions and measures of the data, to define different data facets for different users and authority levels. Differentiate your offerings by restricting some of your users to view only the core data set and enable others to report on both the core and the enriched data sets.

HOW IS BIRST'S NETWORKED BI PLATFORM DIFFERENT FROM THE OTHER BI TOOLS?

Traditionally, supporting multiple customer sets using legacy, on-premise, or open source solutions has involved time-consuming and expensive efforts that rely on physical replication of the BI infrastructure across different customers. These solutions require locally dedicated environments for each customer. This results in restricted, out-of-date views of information and long wait times when creating new analytics - ultimately, limiting self-service, customer happiness and adoption.

With Birst there is no need to physically replicate the BI infrastructure for each customer. Birst Networked BI offers the ability to virtualize your entire BI ecosystem. This modern, multi-tenant cloud architecture will completely transform the way you build and deliver analytics.

Additionally moving from development, to test and production, or backing up your environment does not require a physical replication of efforts, and frees up your IT from constantly managing data loads, transformations and report creation.

From a self-service perspective, other BI and Data Discovery products that offer end user data prep and blending create isolated data silos that store data separately for each user. As your customer base expands, these isolated data silos can proliferate and introduce a serious risk of data inconsistencies.

Birst Networked BI, on the other hand, enables self-service data blending to become part of your global BI network. Each data blending points to your global data model, and therefore contains common business definitions that are shared across all your tenants, without impacting the integrity of that global model, changing or updating it. With this paradigm you ensure consistency of information across all your users, yet allow true end user self-service. This truly unique paradigm enables you to accelerate your product roadmap, scale across many customers, and stay competitive in your marketplace.

About Birst

Birst is the global leader in Cloud BI and Analytics. The company helps organizations make thousands of decisions better, every day, for every person. Birst's patented 2-tier data architecture and comprehensive BI platform sits on top of all of your data, to unify, refine and embed data consistently into every individual decision—up and down the org chart. Thousands of the most demanding businesses trust Birst Cloud BI to make metric-driven business execution a reality. Learn more at **www.birst.com** and **@birstbi** to join the conversation!