



Using **trusted data**  
for business-ready  
decision-making

How to ensure data  
management processes  
help you deliver correct  
and pertinent information  
to consumers

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# Introduction

Organizations use data every day to make critical business decisions. Employees, customers, prospects, and partners alike rely on trusted data – that is, data that has undergone a rigorous process to ensure its integrity.

Most organizations' trusted data resides in a system of record, such as enterprise resource planning (ERP), human resources (HR), customer relationship management (CRM), and financial systems, as well as their transactional applications.

Most organizations assume that data in these systems of record has been:

- > Integrated from all data sources
- > Cleansed for accuracy
- > Mastered for common meaning
- > Modeled for a specific purpose

Enterprises depend on the data that resides within these systems as managed, governed, and secure.

However, there is another type of data that companies are using and want to use more pervasively across their ecosystems for decision-making. This data exists in data warehouses, Microsoft® Excel files, external databases, real-time data sources, and big data lakes as well as other repositories. But organizations can't rely on it because the processes that allow companies to trust the data in their systems of record are specific to those purposes and the data now exists independently from those constraints, allowing for a wider – and potentially incorrect – context.

This data must become trusted for companies to use it pervasively; otherwise, it is merely anecdotal. However, with the array of data visualization tools and digital transformation capabilities, many of these non-vetted data sources are now more pervasive than companies had planned or anticipated. Over the last three years, the data democratization movement has liberated data, visualized it across a variety of business functions, and distributed it across the enterprise as accurate – when, in fact, it is not.

This practice can become problematic when detrimental decisions impact the customer experience, corporate performance, and other key enterprise initiatives. We've seen instances where executives show up at senior-leadership or board meetings with different answers to the same questions – all supported by what they believe to be accurate data.



What's more, some companies are creating real-time data analytics and applications and using them for strategy and decision-making. However, these companies hesitate to make such tools ubiquitous across their ecosystems because the data hasn't gone through a process or vetted in a manner similar to the data in their systems of record.

ibi and ASG Technologies have developed not only a process to enable trust in previously unvetted data, but the automation required to implement that process. (See Figure 1)

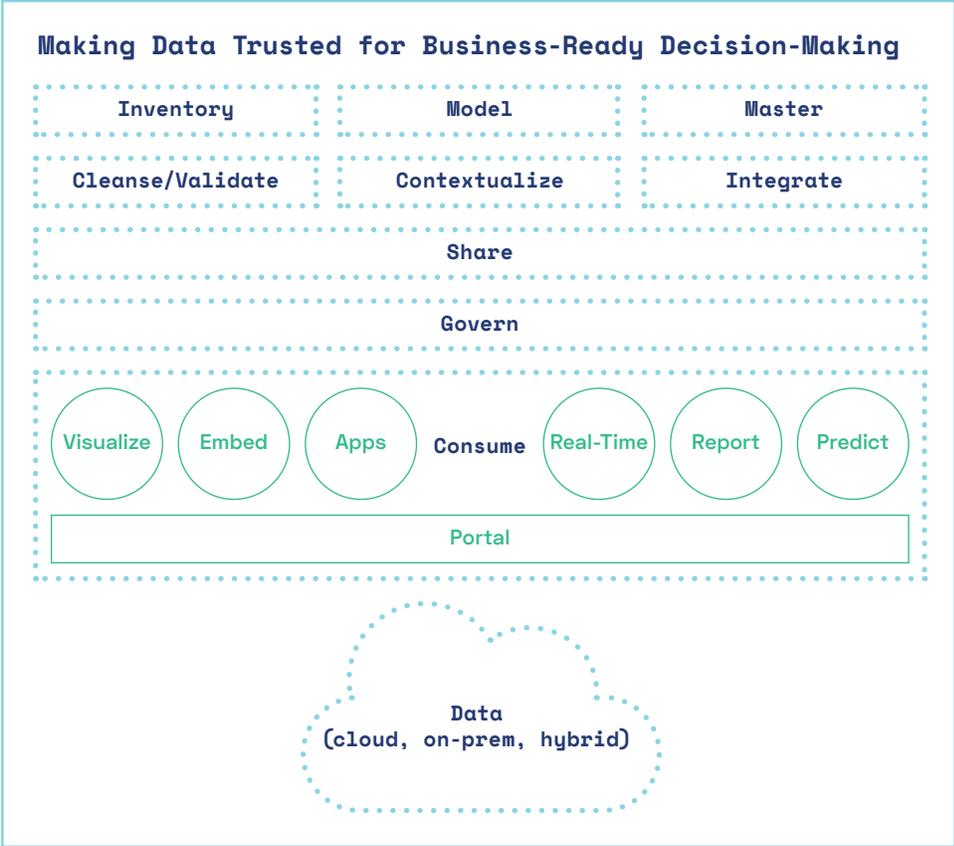


Figure 1. Data needs to go through a trusted process before it can be trusted.

As Figure 1 shows, business-ready data is critical to many key initiatives that drive core business value. Yet, few organizations realize that they must apply the same process by which they create, manage, govern, and share information in their systems of record to the data that they will systematically use. The systemic use of this data for decision-making is what drives value throughout the entire ecosystem. We live in a digital world. The speed at which you deliver correct and pertinent information to consumers – whether within or outside of your company – is directly related to the success of your business.

# Know the power of your data

Your enterprise has invested in systems, whether in CRM, supply-chain management (SCM), ERP, data warehouses, or other applications. Your company depends on these systems and the automation they provide to run your business. But what about the information that lives outside of these systems and, in many cases, outside of your firewall? Customers and employees use data contained in other databases, spreadsheets, and computer-based files – coupled with external data – but these sources are difficult to leverage across your ecosystem. They can't be depended on for accuracy or purpose because they haven't undergone the same scrutiny as the data in your systems of record.

The bottom line is that while there is a wealth of information in these sources, it is not trustworthy and, therefore, you cannot strategically leverage it across your ecosystem. But once it's transformed, you have a high-value, strategic asset that gives your business a tremendous advantage. Everyone throughout your ecosystem – not just a few analysts or departments – can use that data to spawn innovation and power growth and profit.

When customers, prospects, partners, and employees have more actionable insights, they tend to take more action. But data stored across multiple silos and formats is prone to inaccuracies and numerous meanings. No one will vet it, and it will not be modeled for anything beyond a business silo or a departmental project.

Data that has a common meaning, is accurate, and contextually understood can be combined with other trusted as well as real-time sources. This capability allows you to create new applications and analytics insights, and more self-service options for your prospects, customers, and partners. You can share, manage, and govern this data in the same way you do the data in your systems of record.

When used in the right way, trusted data helps create competitive advantage, re-engineered processes, regulatory compliance, and more robust risk controls. It also supports less obvious operational cost savings because failing to tackle this issue as a company risks creating multiple systems along with layers of duplication and unpredictable outcomes.

The convergence of data security, governance, and analytics hinges on having business-ready, trusted data. Each year, every executive in all public companies signs off on documents that attest to their trust in their data.

But often, the data these executives are referring to is the data in their systems of record. The data that lives outside those systems isn't as trustworthy, yet there tends to be a lot more of it. It's also likely that an organization will derive its next great idea or innovation from this kind of data. The information that exists in real time, coupled with the insights that live in the data outside of your systems of record, is often the key to unlocking better customer experiences and more efficient operational performance.

Data is the foundation of every organization, but actionable information that powers innovation is the key to survival in today's digital world. How quickly and easily a company's ecosystem can consume data and take action will be one of the most important drivers of its competitive and overall growth and prosperity. Organizations that understand this equation are prepared to grow and prosper in the digital age.

# Make data trustworthy for business-ready decisions

The first problem with data that lives outside a company's systems of record tends to be its sheer volume and disparity. This data is virtually everywhere, and it also tends to be redundant and error-prone. How can you use that data strategically?

## Step 1: Find and inventory this data

You can complete this step using automation. Products that can read metadata (which is data about data) can easily and quickly catalog your data.

## Step 2: Understand your data's lineage

Once you know where all the data is, you need to understand where it came from, how it's used, where it's used, and what it means when it's used. Where did it start and how has it evolved? This step is critical to making your data trustworthy and ready for business decisions. You cannot strategically leverage data without knowing what it means or in what context it's used.

Think of having a conversation with just a few of your friends, with the words everyone is using having a slightly different meaning to each of you. Everyone would be taking others' comments out of context. Now imagine leaders of nations addressing their countries and having every citizen taking their words out of context. This example is analogous to your company putting up a portal and having the information that's deployed taken out of context or used improperly to make decisions. This problem is one of the main reasons companies fail to strategically leverage critical information.

## Step 3: Once you understand the data and how it's used, make sure it's accurate

When data is replicated or entered by humans through data entry, it often contains errors. Cleansing the data removes these inaccuracies. The accuracy of the information itself is key to using it pervasively. Although you may understand the meaning or context of data, if its field content isn't accurate, then you can't depend on it. For example, you may understand what 'customer name' means, but if the name in the field is incorrect, you can't rely on it for decision-making.

## Step 4: Master your data for added benefits

What is master data management (MDM)? Mastery is the simple process of combining multiple data records into one master or "golden record" that accurately depicts a comprehensive view of that item. Some people may think it's a long process that takes months or even years to complete. But that isn't the case when you have the automation to make it happen. Accessing, comparing, and cleansing the data are key components of mastery. When there is an automation platform to perform these activities, data mastery becomes much less time-consuming and challenging.

➤➤ **Data quality, lineage integration, and MDM each represent a leg of the data management chair. When any of these legs are defective, the business will become less stable, thanks to multiple concurrent challenges.**

When you combine mastery with accuracy and lineage, you can be more confident that your data can support compliance initiatives and that it is governable. Here's a summary of how these elements work together and the benefits they can deliver:

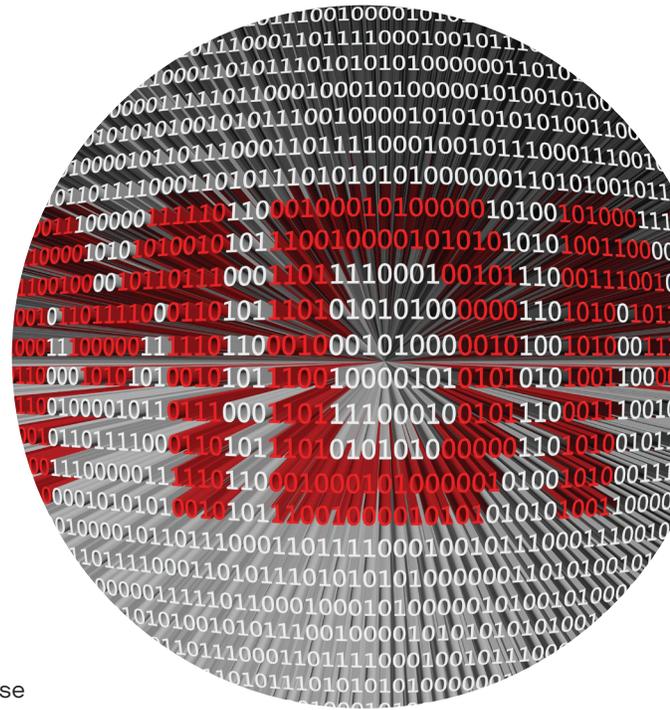
## Data lineage and MDM

- > Data lineage captures the flow of data from its source through a series of transformational and processing stages to its final target
- > MDM helps ensure that your data is accurate, cleansed, standardized, and de-duplicated before it reaches its final target, whether that's an enterprise data warehouse (EDW), ERP, CRM, or database application. You can now use this data to make decisions, and it is business-ready. You can now integrate it into your systems of record to enrich the information that is already there. You can transform the data into analytics, embedded into your existing applications. Or perhaps you want to create new applications that combine data from these formerly non-trusted sources with data from historically trusted sources. Your company now has many more options to strategically leverage data and information

## MDM and data cleansing

When integrated with data lineage, MDM and data cleansing provide deep insights into your data, including the ability to:

- > Uncover details regarding data transformation at the attribute level, which helps data quality analysts determine the root cause of bad data
- > Determine why an error occurred in the root-cause analysis by examining the transformation, standardization, or data quality rules applied to the data
- > Enable data stewards to review and determine if the attribute definitions are inconsistent with definitions of business terms
- > Audit and gain visibility into data pipelines and data quality metrics to support compliance processes or a set of defined data policies
- > Use mastering information, such as the golden record and related instances, and the lineage from the golden record to the source records



In summary, the combination of data lineage, data cleansing, and data mastery delivers the elusive 360-degree view. The roadblock to creating it hasn't been not knowing what to do. The problem has been leveraging automation that was scalable enough to deal with massive amounts of data, coupled with the lack of an integrated solution that shortened the time to complete projects, such as this one from weeks, months, or even years ago. Now you can achieve the value of combining these disciplines.

Once you have completed the mastery step, you may want to write some rules around the data to maintain its accuracy. You will require notification as new data comes in that does not meet the standards for quality and mastery that you have built, so you can either reject or repair the data and leverage it.

Finally, the ability to model data to support new business goals becomes an option that gives your organization the ability to support a variety of innovative initiatives. You may want to build a new application, or a set of reports, or analytics. You may decide to make these capabilities available via a portal or embed them in an application. Or you may want to consolidate or modernize existing applications or add capabilities to existing infrastructure. But regardless of what you want to do, now you have a larger set of information and more assets to leverage.

When you think about it, the process for creating trusted data is essentially the same process that the data in your systems of record has gone through. That data is integrated, understood, and contextualized. It is clean and accurate, mastered for single views, and modeled to support the application with which it runs. The data in your systems of record is also business-ready and strategically leveraged, yet it accounts for a small percentage of the information in your organization. But when you apply the same process to the other data in your organization, you're positioned to gain tremendous competitive advantage.

**>> Modeling data is simply organizing it in a way that allows a particular application to use it for a specific purpose.**

# Share and govern your data

To start using data strategically, you must share it across your ecosystem. Making data shareable means making its full context, accuracy, and meaning shareable, and organizations often use a repository of some kind to enable this.

There are many ways your organization can make its data shareable. Since you are now sharing data across your ecosystem and using it strategically, choosing the repository is not the most important aspect for sharing. Instead, the most critical factors are the process by which you allow data into the repository, the data's accuracy and meaning, and the rules you use to maintain it. A repository that doesn't contain the correct data is dangerous because it allows much wider use of the information and certifies it as accurate. The key takeaway in this era of data democratization is to remember that accuracy matters now more than ever.

Management and governance are the final keys to fully leveraging business-ready data. When you use data strategically, its auditability becomes far more important. You will likely have cases where federal, state, or industry regulations will set a standard for this data that you will need to maintain. Therefore, the ability to document and preserve meaning, context, and accuracy is critical to using the data as a strategic asset.

In addition to reporting on these items, you'll need to show that you have the automated processes and assigned tasks to ensure that your organization has the infrastructure and focus to justify the strategic use of the data. In essence, you are demonstrating your confidence that the data is as dependable as the information contained in your systems of record.

# Understand the true cost of bad data

Since the quality of what is in a shareable repository is so much more important than the repository itself, let's consider the cost of bad or poor-quality data.

Organizations pay a heavy price when their data is not of a high quality. Hard dollar costs can include lost sales, failure to maintain regulatory compliance, and diminished customer engagement. It can also negatively impact employees by creating frustration and extra work.

IBM has estimated that poor data quality costs the U.S. economy \$3.1 trillion annually<sup>1</sup>. But the biggest financial impact on any business by far is the opportunity cost of pursuing ineffective strategies based on bad information, which can have a lasting – and sometimes terminal – impact.

To build trust in data, it needs to meet multiple quality criteria: completeness, consistency, conformity, accuracy, integrity, and timeliness. Decisions made based on bad data are bad decisions you may not yet know about. The danger is that organizations are no longer only using data to observe trends; they are using data to run operations, predict trends, create new business models, and even disrupt entire industries.

As organizations seek to monetize data by sharing it with customers or business partners through digital services, the potential risks of misinformation escalate. Failure to verify data exposes businesses to new kinds of vulnerabilities, from misinterpretation to manipulation and misuse. And if you can't trust your insights, how can you maintain the trust of your customers and partners?

<sup>1</sup> "Extracting Business Value From the 4 V's of Big Data," IBM, 2018.

# Get in front of data quality issues

The cost of bad data escalates over time, so it's much more cost effective to manage data quality up front than to try to fix problems after analysts, applications, and end users have begun using it. Yet, the rate at which we are generating data today doesn't allow humans to manually check and ensure the validity of data flowing around the organization.

Many companies are taking a reactive approach to tackling data quality – locating and cleansing dirty data after it's already been in place for some time. But businesses need to employ proactive monitoring to get in front of data quality issues before they can negatively impact downstream processes or the entire company.

Data governance and compliance programs require an understanding of what information is available, who uses it, where it comes from, and how systems process it. Data trust, governance, lineage, and rule management become increasingly important as systems transform data. A holistic view of data lineage must include data quality – ensuring compliance with accuracy and data traceability standards to ensure impactful business analytics that immediately identify necessary action.

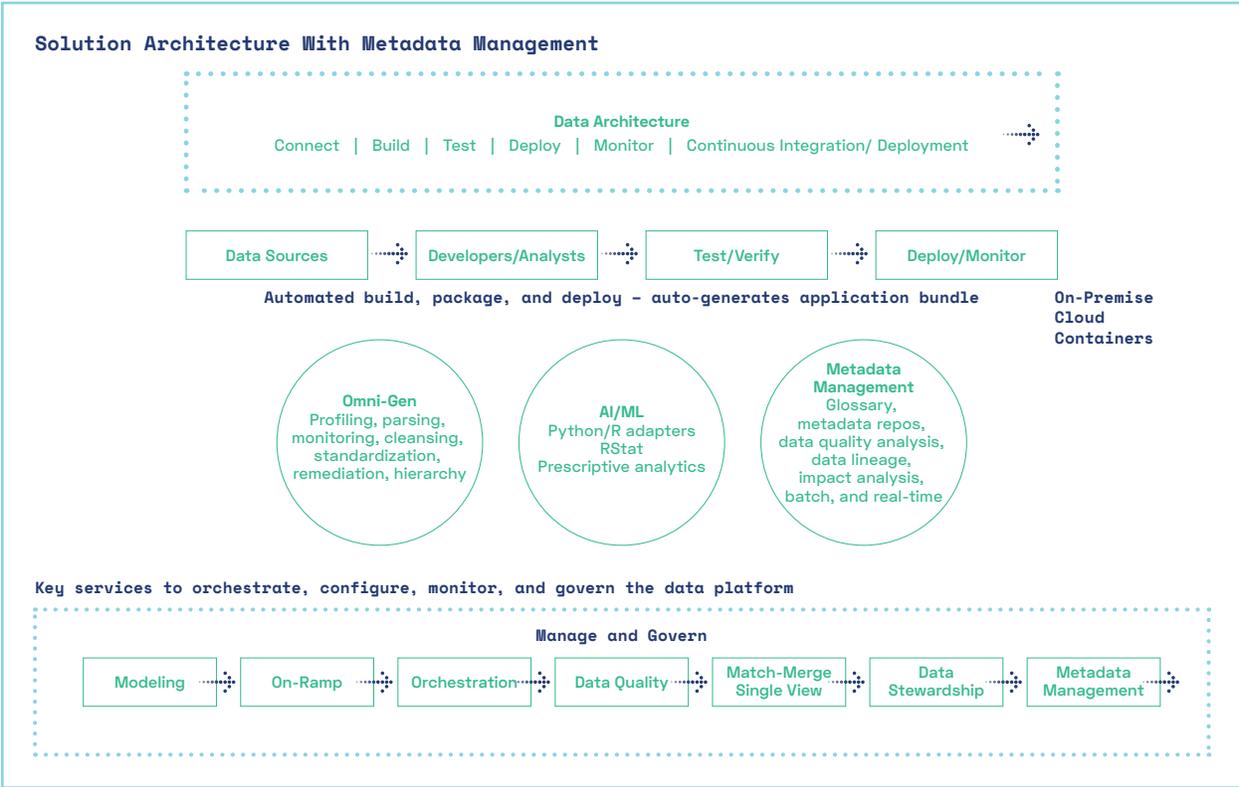


Figure 2.

# Attain the two biggest benefits of trusted information: data monetization and customer experience

Whether you want to instantly deliver personalized reports to thousands of users, empower business users with self-service analytics, or boost analytics adoption to 100 percent across your enterprise, Trusted Digital Analytics provides the technology to make it happen. ibi offers this powerful analytical platform to ensure that you have everything you need to extend access to analytics across every team and business function – inside and outside of your organization.

## Data monetization

There's significant financial value locked within your enterprise systems. The explosive growth of big data coming from sources such as mobile, social media, devices, and the cloud presents even more opportunities for your business to increase revenues and reduce costs. Realize the highest possible returns from your technology solutions by harnessing the full value of the data they contain. Improve your ability to monetize your system data to maximize business impact by delivering insights that increase operational efficiency, drive higher market share, improve customer loyalty, and more.

Companies analyze data from the processes that enable their organizations to run properly. Because organizations store and spread information across multiple applications, it's often difficult to get an accurate picture of data. When you collect, integrate, and dig deep into the data, you can uncover processes to help cut costs, either through increased efficiency or reduced waste.

## Customer experience

Trusted analytics and applications, delivered digitally, offer a single trusted view of customer data. Now you can empower customers with self-service access and create rich analytics experiences for customers and partners. When organizations have a single source of trusted information that is truly actionable, they can distribute this data to all stakeholders. In turn, stakeholders can make informed decisions and assist with analysis, job management, and MDM. Adding technology can drive processes forward so users can harness this data to deliver tangible results.

Your success depends on the ability of all those who execute key activities to benefit from data and insights. (See Figure 3 for examples of primary use cases.) ibi and ASG promote a data-driven culture that enables employees at all levels to tap into operational information to identify and solve problems, make decisions, and seize opportunities.

Great things happen when information meets opportunity.

# Why ASG Data Intelligence and ibi data management solutions?

The combination of ASG Data Intelligence and data management solutions from ibi helps ensure that your business has reliable data inventory, data lineage, data quality, and analytics capabilities. ASG and ibi manage the increasing complexity, volume, and variety of data and rules.

The partnership helps you create business-ready, trusted data that you can use across your entire ecosystem to drive better customer experiences, operational efficiency, and increased market share and profitability.

The platform is the first integrated platform to bring all of the elements required to create and consolidate business-ready data into a single automation platform. Integrating tools that aren't meant to work together is not the way to leverage data for competitive advantage. The answer to automated data management and governance lives in the integration and automation of the required disciplines.

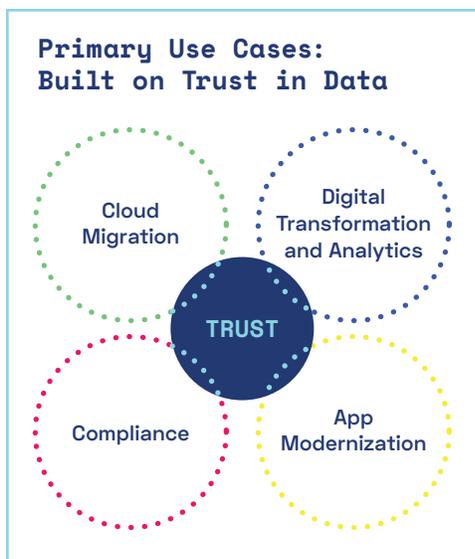


Figure 3.

## About ASG Technologies

ASG is a Global Enterprise Software vendor, providing solutions for some of the world's largest businesses. ASG is the only solutions provider for both Information Management and IT Systems Management. ASG Information Management solutions capture, manage, govern, and enable companies to understand and support all types of information. ASG IT Systems Management solutions help ensure that the systems and infrastructure supporting the information lifecycle are always available and performing as expected. ASG's unique approach to Information Management enables business agility without compromise. We provide the only integrated platform and flexible end-to-end solution for the information-powered enterprise. We offer a complete set of modular components that your organization can mix and match to enable faster business adaptation.

## About ibi

ibi is a data and analytics company that embeds intelligence into — everything. From the beginning, ibi has known the importance of data and insights to make better decisions. We help organizations get their complex and disconnected data in order, so they can build, embed, and automate intelligence into everything they do. By preparing organizations for the future and turning them into builders – information builders – everyone can use enterprise trusted data at scale to drive their growth. Whether our customers use pre-built applications or build their own solutions for their data and analytics challenges, ibi powers their innovation and reinvention. ibi's open platform and industry-specific building blocks accelerate speed to market, improve operational efficiency, and enhance their customers' experience.

**ibi. build a better future.**

### Request a demo

See ibi in action and  
imagine what you will build.

[ibi.com/request-a-demo](https://ibi.com/request-a-demo).



Contact us at [ibi.com](https://ibi.com) or email [askinfo@ibi.com](mailto:askinfo@ibi.com).

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