Delivering business insight with fast-track analytics
In every field of business and government we are witnessing a previously unimagined explosion in data. Across every sector, people are asking how to turn new volumes of data into true assets. Business leaders want to know how they can gain timely and differentiating insight from their data – the insight needed to define winning strategies, to reach new heights of customer experience, and to continually refine and optimize operations.

If you are going to make data-driven insight the foundation of winning professional behavior from now on, you need access to new skills and new approaches.

Over the last five years, Atos has made continuous and significant investment in the competencies, technologies and resources needed to help you embrace this data-driven revolution.

These investments now come together in Atos Codex – a portfolio of solutions and services designed to enable you to accelerate adoption of business focused data analytics in practical yet transformational initiatives.

“The 21st century will be the century of data.”

**Thierry Breton**
Chairman and CEO, Atos
The biggest changes in business practice and technology rarely happen with a bang. This is certainly true for business analytics. Waves of development overlap with different organizations showing significantly different levels of experience and maturity.

Many of our clients have been keen advocates of the Business Intelligence systems which first began to gain serious traction back in the 1990s. Atos itself has been particularly focused on helping streamline and consolidate complex multiple data flows to reveal actionable business intelligence.

While continuing to support established Business Intelligence practices, we now need to work together to prepare for a radically different analytical landscape.

From a technology perspective, this new landscape is characterized by big data and real-time insight systems, by cognitive computing and robotics, and by the continual rise in mobile and machine-to-machine communications.

In this new landscape, the ability to derive insight from massive volumes of structured and unstructured data is made possible by systems which learn as they perform.

Atos Codex gives you the techniques, tools and processes you need to make this business-changing step from Business Intelligence to agile analytics while preparing for a future built on Robotic Automation and Cognitive Computing.

The change will not happen overnight, and it will be influenced by numerous parallel developments along the way ...

### Analytics in evolution

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### Three Clear Commitments

The ability to derive business insight from agile analytics will become a characteristic of every successful enterprise within the next five years. As your partner for this journey, we make three categorical commitments.

**Continuity**

We support enterprises in existing Business Intelligence initiatives - ensuring continuity while streamlining systems, protecting investments and delivering essential performance intelligence.

**Transition**

We will guide you in your evolving journey in analytics, ensuring that focused initiatives deliver the benefits of immediately usable business insight.

**Innovation**

We will deliver innovation ourselves, while scanning the horizons of both technology development and business best practice to ensure that you are always in position to make informed decisions.
A collaborative approach is evident in all Atos Codex activity. A deep understanding of the industries we serve makes an essential contribution to the quality of the resulting business insight.

In the new world of agile data analytics, there are more opportunities than ever before to benefit from cross-industry collaboration: insurance, automotive and transport companies, for example, have much to gain from working together.

In any data-sharing venture, the management of compliance and confidentiality become central to success.

On the following page, we provide examples of recent Atos data analytics projects.

**Groundbreaking Partnership**

Atos and Siemens have been working in close research and development collaboration on business analytics since 2014. This activity is partly financed through a joint investment fund. Atos Codex is a direct result of these advanced research initiatives.

The collaboration was closely linked to the development of Siemens own Industrial Analytics Services proposition to turn machine data into business outcomes across multiple sectors.

Our joint research targets now put Machine Intelligence, Cyber Security and Cognitive Computing center stage.

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**New Digital Landscapes deliver New Business Value**

Every enterprise in every sector will soon come to regard agile analytics as an essential business tool. The success of adoption will often be measured in terms of the tangible business results of individual landmark initiatives.
Realtime Traffic Forecast
Continually improved understanding of traffic flows minimizes congestion and urban pollution.

Coastal Border Control
A growing repository of marine intelligence boosts the success rate of limited coastguard resources in protecting life and deterring criminality.

Smart Manufacturing
Manufacturers can radically improve demand forecasting and optimize production by exploiting comprehensive realtime intelligence.

Smart Metering/Smart Grid
Unprecedented clarity of usage optimizes load forecast to ensure effective continuity of supply.

Smart Automotive Insurance
Insurers gain actionable intelligence based on roads, car models and driver-profiles while automotive companies gain insight for model design and evolution.

Sub-surface 3D Mapping
Oil and gas companies gain a clear understanding of the potential return from a field site before spending money on drilling or physical exploration.

Data-driven Civil Security
Automation and robotics combine with advanced image recognition systems to provide security services with both actionable information and formal records.

Telco Network Demand Management
Only by using Network Function Virtualization can telcos provide affordable scalability, and this in turn is only possible through predictive analytics.

Regulatory Reporting for Banking
By continually monitoring financial and transactional data, banks can be ready for anytime reporting – with accurate and timely evidence.

Urban Transport
Base urban transport management on fluctuating demand – even in the case of exceptional events – using the full spectrum of public data sources, from ticketing to CCTV.

Smart Healthcare
Continuous monitoring, aggregation and analysis of previously siloed healthcare data becomes key to effective resource management across the service.

Demand Management in Retail
By combining data from multiple sources – including weather forecasts and even school vacation times – retailers improve forecasting to optimize stock levels and meet consumer demand.

Codex
Atos Codex is a comprehensive suite of analytics services and solutions. It is designed to give enterprises rapid access to actionable business insight and value. Atos Codex is modular in approach: our clients have differing requirements, and can select from the portfolio according to maturity, priority and need.

Atos Codex follows the complete journey to becoming a data-driven enterprise and is structured in five focus areas.

If your enterprise is seeking to define, test, implement and sustain its data-driven business strategy, Atos Codex provides a complete framework for action. If, on the other hand, your enterprise is seeking to refine existing data-driven business initiatives, Atos Codex allows you to focus on specific areas of opportunity – such as migration to an “analytics-as-a-service” model.

**Atos Codex Consulting**

Atos has a deep business knowledge of the sectors we serve – whether manufacturing operations or banking product sales.

Our industry specialists help apply best practice and identify opportunities for innovation that deliver a clear return-on-investment for our clients.

Our analytics consulting is driven by use cases to deliver early value. We will guide you through the complete digital transformation journey. We draw on the expertise of the global Atos scientific community, particularly with regard to innovation outlooks and market-specific value maps and propositions.

In data analytics initiatives, the Atos Codex consulting team will work with you to establish governance models for a continuous maturity assessment and decision management.

**Atos Codex Labs**

You want things to happen fast. With our Analytics Accelerator program, you gain immediate benefit from our Atos Codex Labs and a growing repository of use cases.

Working with co-innovation teams, use the Atos Codex Labs to take ideas and business priority areas and develop robust working pilots in a matter of weeks. Proofs-of-concept will be carefully matched to business models to reveal the quantifiable benefits of adoption.

**Atos Codex Platform**

Atos Codex provides immediate access to an industrial-grade, agile, powerful and affordable analytics platform. This allows you to take ideas from pilot and proof-of-concept to operational reality with confidence.

You can exploit the Atos Codex Platform in the way that suits you best – working with either Atos or your own data scientists.

We offer maximum flexibility. You can take advantage of the Atos Codex Platform either as-a-service or on premise.

**Atos Codex Industry Solutions**

Leveraging best practice is central to the Atos Codex proposition. We have a growing repository of use cases from which you can draw.

Our use cases naturally have a clear focus on the different priorities and practices of the diverse industry sectors in which we operate.

As strong believers in the advantages of cross-industry collaboration and inspiration, however, we will always encourage clients to consider the potential impact of solutions from outside their own sphere of expertise.

Our emphasis on the importance of use cases is not just to inspire, however. The Atos Codex Solutions approach also accelerates development, and reduces cost and risk.

**High Performance Computing**

The new wave of business-analytics has only become possible through access to high-performance computing platforms, designed specifically to deliver the highest level of performance through massive parallel processing.

Atos Codex gives you access to the full breadth of the Bull HPC systems portfolio. Bull is the Atos brand for its technology products and software.

Bull HPC systems are already being used to generate finer-grained weather forecasts, to design cleaner aircraft engines, and to leverage genomics for personalized medicines.

With Atos Codex, you can eliminate CapEx by choosing hosted HPC resources for computing power on-demand through the Bull extreme factory.

The Bull Data Lake and Analytics Factory provide a secure, high-performance analytics platform and a fully integrated, easy-to-deploy turnkey solution.

**Analytics and Digital Transformation**

Digital transformation is taking place across every public and private sector organization. For Atos, advanced data analytics is central to the four foundation elements of our vision for digital transformation.

- **Customer experience** - Data analytics becomes key to understanding how your clients behave – about what attracts them to your business, and equally important, what lures them away. Analytics will also increasingly underpin your initiatives in new product development.

- **Business reinvention** - The clues to discovering entirely new avenues of business are hidden in both your own proprietary information and open market data. right now, most organizations gather value from less than 20% of the data they own.

- **Business analytics now becomes key to developing both more efficient and more innovative business models – especially in the light of new opportunities for cross-industry collaboration.

- **Operational excellence** - Ever since mass-production became part of our industrial culture, we have understood the need to measure performance in order to improve it – opportunities to refine and indeed revolutionize performance will increasingly be revealed by analytics.

- **Trust and compliance** - The burden of compliance is continually shifting, and meeting regulatory obligation is a prerequisite for public trust. Data analytics helps enterprises remain permanently positioned for compliance.

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Inside Atos Codex

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Atos Codex provides a practical and agile framework for any enterprise seeking to accelerate time to business value using advanced analytics.

As Business Technologists with genuine depth of expertise in all the industry sectors we serve, we have designed Atos Codex to give you payback in the shortest possible time while minimizing business, technology and regulatory risk.

Atos Codex offers business analytics as-a-service and on-premise, both for development and delivery. This flexibility means that your choices regarding analytics experiment and implementation can be made to suit your strategy.

Cloud features prominently allowing you to minimize development and deployment times and costs. Private cloud adoption is also an option where exceptional security and performance are a business prerequisite. A growing repository of industry-specific use cases makes the journey even more productive - allowing you to model your own data analytics initiatives on existing examples of best practice. This in turn, reduces the need to develop analytical algorithms from zero: re-use becomes a key to acceleration and rapid payback.

The shift to data-driven business is not something any of us can usefully pursue alone - and Atos maintains an extended ecosystem of alliances with a broad range of technology and business leaders.

These alliances also make a crucial contribution in all aspects of integration - your shift to data-driven business increasingly demands integration with multiple heritage data sources.

With a growing resource of 10,000 analytics specialists, Atos has invested in the skills and high performance computing resources needed to help our clients to gain business value through data analytics.

Next steps

Atos Codex is about action not theory.

If you have an immediate and specific demand for High Performance Computing resources or for an analytics development platform, then we are ready to help.

If your priority is a specific analytics initiative, then we can get right down to work with our Atos Codex Consulting and Atos Codex Labs – setting aggressive targets for development, delivery and trial.

But perhaps the best place to start is with the big picture - with sharing and envisioning your overall ambitions as a data-driven enterprise.

Our Business Technology Innovation Centers make ideal locations in which to share ideas and experience - to start your journey to entirely new levels of business insight.

Let’s bring our experts together and explore the implications of data analytics – in terms of your current position, your immediate tactical opportunity, and your longer-term strategy.

Discover Atos Codex, for differentiating business value through accelerated analytics.
About Atos

Atos SE (Societas Europaea) is a leader in digital services with pro forma annual revenue of circa €12 billion and circa 100,000 employees in 72 countries. Serving a global client base, the Group provides Consulting & Systems Integration services, Managed Services & BPO, Cloud operations, Big Data & Cyber-security solutions, as well as transactional services through Worldline, the European leader in the payments and transactional services industry. With its deep technology expertise and industry knowledge, the Group works with clients across different business sectors: Defense, Financial Services, Health, Manufacturing, Media, Utilities, Public sector, Retail, Telecommunications, and Transportation.

Atos Codex is a suite of business-driven analytics solutions and services. It supports public and private sector organizations in the quest to transform data into actionable business insight. It provides analytics consulting services and labs for rapid prototyping and proof-of-value. With cloud-based development and delivery platforms, it offers both a repository of active use cases and affordable access to High Performance Computing resources. Exploiting cognitive computing, it actively encourages co-innovation with both partners and clients. Atos Codex benefits from a worldwide network of 10,000 data scientists and analytics experts.

Find out more about Atos Codex
atos.net/atoscodex

Let's start a discussion together

For more information: dialogue@atos.net