Atos Codex for Telecommunications
Transforming data into business outcomes

From now on, data-driven intelligence - often real-time - will underpin sustained success for every telco. It’s true for customer experience, for agile operations, and for innovative and winning product development.
Until now, many telco data assets have been siloed. Their potential value remained largely untouched. Customer account and billing data; network configuration and operational data; business development and marketing data – nothing really connected.

This must change - but without compromising the integrity and security of either process or data.

**Atos Codex for Telecommunications is a business accelerator**

Atos Codex puts telcos on the fast-track to value with data analytics, cognitive computing, deep learning and the Internet-of-Things.

We have the skills, the resources and the specialized knowledge of the telco industry you need to explore, adopt and manage these transformational business practices.

We’re ready to help you combine intelligence from previously siloed systems to create new and valuable business insight into what’s happening right now.

With Atos Codex for Telecommunications, our telco clients gain direct access to extensive resources and investments. Data analytics requires massive storage and computing capacity, for example, and we offer this as a service for both development and ongoing operations.

**Connect, converge, create.**
Best practice and use-cases

Our telco clients are looking for near immediate benefit and return in their analytics initiatives: no one has the time or the money for lengthy strategic investigation and analysis.

That’s why we put use-cases and proofs-of-concept at the core of Atos Codex for Telecommunications.

Four use-cases Atos Codex for Telecommunications are already generating plenty of interest …

**Quality-of-Experience**
Whether watching a movie or downloading a new app, nothing impresses your customers like superfast streaming.
Realtime analytics show whether you are meeting customer expectations, whatever the stream.

**Realtime Network Tuning**
If streaming experience is under-par, this automated analytics service immediately remedies the dip in quality.
Tune and balance network operations to deliver service according to customer expectation.

**Contextual Marketing**
Add value to customer experience with realtime contextual marketing.
You’ll boost revenues too, for yourselves and for your B2B clients.

**Crowd and Movement Analytics**
This B2B use-case gives telcos a ready-to-go service for retailers, transport hubs and sports and cultural events.
Pinpoint crowd patterns and behaviors – and hook up to subscribers with additional contextual services.
Use case: Quality-of-Experience

Why?
For every telco, streaming performance is critical in meeting client expectations.

To deliver the best quality-of-experience, however, you need to know what, when and how your customers are using streaming services: while nobody wants to miss a frame in a live sports broadcast, they are happy to wait a moment for a full movie or application download.

What?
This Atos Codex use-case delivers real-time analysis of the individual customer’s streaming behavior and experience.

This experience profile is used primarily to ensure that customers get the quality they expect. The business insight from this use-case is also invaluable in both business-development and in the positioning of appropriate product and service offers for contextual promotion.

How?
We extract value from OTT services. Using the F5 Application Delivery Controller (ADC), we gain real-time insight into customer usage patterns for OTT services. This simplifies the presentation of value from complex internet traffic.
**Partners and core technologies**

F5 BigIP load balancer

**Business benefits**

- Gain customer insight based on actual behavior and experience
- Minimize churn and raise Net Promoter Scores
- Usage patterns prompt accurate cross-selling.
Use case: 
Realtime Network Tuning

Why?
Our Quality-of-Experience use-case provides a clear real-time picture of streaming performance. We now need to turn that information into corrective action – and the Atos Realtime Network Tuning use-case allows you to do exactly that.

Now that telcos are turning to Network Function Virtualization, we can use software to automate network tuning. With this capability in place, telcos can maintain their reputation for quality-of-service without over-extending network management teams.

What?
This Atos Codex use-case analyzes the customer quality-of-experience data, identifying any anomalies in streaming quality. These may be the result of either increased load or network events.

The Realtime Network Tuning engine then automatically initiates the required remedial action. Prediction algorithms and full automation mean that telcos can realistically aim to complete corrective intervention before the customer is even aware of the dip in service quality.

How?
Atos Codex drives a continuous cycle of improvement in combination with the BluePlanet NFV real-time orchestration tools from Ciena. This enables telcos to deliver the right service to the right place at the right time at the right quality.
Partners and core technologies
BluePlanet from Ciena

Business benefits
• Optimize network performance without overengineering
• Boost productivity and reduce stress for network management teams
• Maintain quality reputation amongst both consumers and service providers.
Why?
People now take contextual marketing for granted on their smartphones. It’s an option, however, that plenty of people keep turned off when the irritation is greater than the benefit.

Get it right, and contextual marketing brings value to consumers, telcos and their business customers.

What?
The Atos Codex Contextual Marketing use-case is designed for pinpoint personalization. The consumer knows that everything is automated, and they want that automation to deliver personal value. Granular analysis of consumer interests and preferences combined with clear and no-nonsense delivery maximizes success.

In parallel, the continual flow of information back up the chain gives marketeers, product development, and finance professionals an invaluable stream of actionable intelligence on both individual customer and community behaviors.

How?
By integrating the Flytxt Intelligent Customer Engagement product, we use advanced analytics and machine learning to create the customer profile. Based on usage patterns, device, location and network data, the profile drives relevant and personalized marketing.
Partners and core technologies

Flytxt Intelligent Customer Engagement Product

Business benefits

- Get closer to customers with relevant personalized messaging
- Increased engagement means increased revenue
- Realtime insight into campaign and product marketing performance
- Individual and community profiling for precise and adaptive marketing.
Why?

Our cities are bustling, with continuously changing crowd behavior. In shopping malls and transport hubs, in sports stadia and cultural venues, crowd analysis can help us manage space more profitably, more efficiently and more securely.

What?

The Atos Codex Crowd and Movement Analytics use-case gives those who manage our public spaces and private venues actionable insight into the way people behave.

This intelligence contributes both to realtime adjustment, and to longer term planning and operations. Analytics contributes to safer, happier and more profitable use of shared space - whether optimizing entry to events, delivering snacks by drone, or speeding intervention for incidents.

How?

3D cameras from Amoobi provide an accurate people count and movement log for the specified space.

In parallel, the IPAccess presence sensor uses GSM, WiFi and Bluetooth signals to identify devices within the specified location.

Atos Codex for Telecommunications combines this data to provide realtime insight into visitor rates, segmentation and movement. When combined with realtime marketing, this enables innovative B2B services for event organisers and retailers and small businesses.
Partners and core technologies

3D camera systems from Amoobi and presence sensors from IP Access.

Business benefits

• Presents new and compelling B2B propositions for telcos
• Raises the standard for management of public space
• Effectively balances anonymized and personal data for business advantage.
A network of expertise

The power of our Atos Codex for Telecommunications proposition is thanks, in part, to the strength and breadth of specialist partners.

Our 3D people trackers continuously track 24/7 movements with centimeter level precision, providing meaningful insights into movement behavior.

“By combining our insights with Atos’ data and systems, we can go beyond people tracking, and provide more insights that enable companies to make faster and better decisions every day.”

Ralph Robinson, Sales & Marketing Director

Service and NFV orchestration maximizes streaming quality across a multi-vendor network.

“Together, Atos and Ciena ensure optimal quality-of-experience for mobile customers.”

Frank Miller, CTO EMEA

Managing and securing real-time data traffic for applications, analytics and Quality-of-Experience analysis.

“Atos Codex and F5 unlock the value of customer and network services and applications by delivering unique end to end advanced analytics solutions.”

Damir Vrankic, Sr. Director Product Management

Flytxt supplies real-time, intelligent digital customer engagement technology.

“Together with Atos, we aim to accelerate the adoption of analytics and artificial intelligence to transform how telcos engage with customers in real-time across their digital touchpoints and lifestyles.”

Dr. Prateek Kapadia, CTO

The Presence solution enables mobile data monetisation with location insights to less than 5m accuracy from all handsets without needing end-user apps installed.

“Presence Sensors gather visitor count and demographic profiling from passing handsets to enable enriched analytics solutions.”

James Harrow, CTO
Cloud and beyond

Telcos are at a crossroads with cloud.

Until recently, many telcos have been reticent about using anything other than private cloud platforms. This must change for three reasons:

• The business value to be derived from analytics now depends on data streams from multiple sources.

• Analytics initiatives will often be collaborative ventures between telcos and independent third-party specialists.

• Access to massive, and massively scalable computing power and storage makes reliance on private cloud resource prohibitively slow and costly.

Atos Codex for Telecommunications benefits from tight integration with Atos’ extended cloud service delivery models.

We also have significant resource in high-performance computing and, more recently, in quantum computing.

Not only are we equipped technologically to deliver telco analytics through secure and responsive cloud models. We also have the industry and business technology expertise you need to take informed decisions regarding hybrid cloud delivery models for your analytics initiatives.
The use-cases summarized here are the early entries in a growing portfolio of telco-specific analytics resources. They exist to help our telco customers get on the fast-track to analytics and actionable business insight.

Not surprisingly, everything is virtualized. You can work with our specialist teams online or on-site.

At the 2018 Mobile World Congress, for example, crowd analytics are conducted with an event in Barcelona; realtime processing in London; display and integration managed in Zurich; and the dashboard displays on stand back in Spain. And all that happens faster than you can say, “Wow!”

We are eager and ready to engage right now …

• With marketing and business development teams
• With the telco CIO and CTO teams
• With network architects and operations experts

We can start with the wider dialogue – with your vision for digital transformation and analytics.

But let’s get practical quickly. We would love to welcome you to our specialist Atos Codex labs in Zurich, in any one of our worldwide network of Business Technology Innovation Centers – or in virtual space, if you prefer.

Get hands-on with our use-cases. Set ambitious targets. Explore and experiment.


Book now
Atos supports telecommunications clients around the world in key digital transformation initiatives.

Our activities span both operational and customer-facing business processes, and are increasingly focused on:

Data analytics, cloud, service orchestration and the digital workplace are all key business technology themes.
About Atos

Atos is a global leader in digital transformation with approximately 100,000 employees in 72 countries and annual revenue of around €13 billion. European number one in Big Data, Cybersecurity, High Performance Computing and Digital Workplace, the Group provides Cloud services, Infrastructure & Data Management, Business & Platform solutions, as well as transactional services through Worldline, the European leader in the payment industry. With its cutting-edge technologies, digital expertise and industry knowledge, Atos supports the digital transformation of its clients across various business sectors: Defense, Financial Services, Health, Manufacturing, Media, Energy & Utilities, Public sector, Retail, Telecommunications and Transportation. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, Unify and Worldline. Atos SE (Societas Europaea) is listed on the CAC40 Paris stock index.

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Let’s start a discussion together

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