

Quality Manual

Revision History

Version	Reference	Author	Date	Comments
1.0	M_QMS_001_E	Anabela Marques	2002-04-01	First Version
2.0	M_QMS_001_E	Fernando Videira	2002-04-03	Description of the Mobileum Risk BU Structure
3.0	M_QMS_001_E	Anabela Marques	2002-04-05	Detailed description of processes
4.0	M_QMS_001_E	Nuno Homem	2002-04-15	Global Revision
5.0	M_QMS_001_E	Rui Paiva	2002-04-29	Final Revision
6.0	M_QMS_001_E	Anabela Marques	2002-05-07	Introduction of Auditors' comments
7.0	M_QMS_001_E	Rui Paiva	2002-05-09	Approval
8.0	M_QMS_001_E	Paula Ferreira	2002-09-19	Update of the detailed description of processes
9.0	M_QMS_001_E	Cristina Carvalho	2002-11-26	Update of image and organisational structure
10.0	M_QMS_001_E	Anabela Marques	2002-12-19	Revision of Content
11.0	M_QMS_001_E	Anabela Marques	2003-11-30	Change of internal structure
12.0	M_QMS_001_E	Anabela Marques	2004-11-30	Revision of the quality system
13.0	M_QMS_001_E	Rui Paiva	2005-01-05	Final revision and approval
14.0	M_QMS_001_E	Paula Gaspar	2005-10-24	Revision of the mission, vision and structure of the Document
15.0	M_QMS_001_E	Anabela Marques	2005-11-20	Revision in accordance with feedback from audit
16.0	M_QMS_001_E	Anabela Marques	2005-11-30	Revision in accordance with feedback from audits
17.0	M_QMS_001_E	Paula Gaspar	2007-08-23	Global Revision
18.0	M_QMS_001_E	Paula Gaspar	2008-02-11	Revision of Content
19.0	M_QMS_001_E	Paula Gaspar	2009-01-09	Replace Process name from Marcom to Marketing & Alliances. Merge RAD Methodology with Solution Development Methodology
20.0	M_QMS_001_E	Paula Gaspar	2010-01-15	Change of internal structure
21.0	M_QMS_001_E	Paula Gaspar	2010-02-11	Global Revision
22.0	M_QMS_001_E	Paula Gaspar	2010-07-30	Research, Development and Innovation activities included in WeDo Processes
23.0	M_QMS_001_E	Paula Gaspar	2011-03-07	Revision of the content
24.0	M_QMS_001_E	Paula Gaspar	2011-06-17	Revision of the content
25.0	M_QMS_001_E	Paula Gaspar	2012-07-20	Managed Services update
26.0	M_QMS_001_E	Paula Gaspar	2013-08-09	Integration between Quality Manual and Research, Development & Innovation Manual
27.0	M_QMS_001_E	Paula Gaspar	2013-09-20	Interface Management update
28.0	M_QMS_001_E	Paula Gaspar	2014-09-15	Update in Management, Innovation & Security Process and Global Organization update
29.0	M_QMS_001_E	Paula Gaspar	2015-08-05	NP4457:2007 Certification update (non-compliance) and global revision
30.0	M_QMS_001_E	Paula Gaspar	2016-09-08	Update to be compliant with ISO 9001: 2015 Standard
31.0	M_QMS_001_E	Paula Gaspar	2016-10-03	Update WeDo Organization
32.0	M_QMS_001_E	Paula Gaspar	2017-09-15	Update WeDo Organization
33.0	M_QMS_001_E	Paula Gaspar	2017-10-16	Global revision
34.0	M_QMS_001_E	Paula Gaspar	2018-09-28	Global Revision

35.0	M_QMS_001_E	Daniela Nunes	2019-09-17	Revision due to processes merge between Managed Services and Solution Maintenance. Logo update.
36.0	M_QMS_001_E	Daniela Nunes	2019-10-14	Corporate Profile update.
37.0	M_QMS_001_E	Lígia Marçal	2020-05-11	Corporate logo update.
38.0	M_QMS_001_E	Paula Gaspar/ Daniela Nunes	2020-06-19	General revision and update WeDo to Mobileum Risk BU.
39.0	M_QMS_001_E	Paula Gaspar	2021-10-25	Global update
40.0	M_QMS_001_E	Ligia Marçal	2021-11-15	Global update (corporate profile)
41.0	M_QMS_001_E	Paula Gaspar	2022-10-14	Global update (corporate profile and Organization)

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Introduction

This document describes Mobileum Risk BU's Quality Management System, according to NP EN ISO 9001 standard requirements and to the Quality management principles referred to in the ISO 9000 standards.

ISO 9001 management system (NP EN ISO 9001 "Quality Management System Requirements"), follows a PDCA approach- Plan-Do-Check-Act, directed linked with continuous improvement.

It presents Mobileum's processes, their relationships and interactions with the procedures that give substance to our business supporting activities, putting the spotlight on the following areas:

- Project Management
- Solution Development
- Production Support
- Product Support
- Tests
- Configurations Management
- Training
- Consulting
- Placement of skills
- Managed Services

1 Scope

Quality Management System applies to the following Risk Business Unit Mobileum's activities: Software Development, Consultancy of informatics Services, and Placement of competencies and Supply of informatics services, Managed Services including the maintenance of information solutions.

The goal of this Manual is:

- Document all activities associated with the company Management System;
- Determine how the company will meet the NP EN ISO 9001 standard -"Quality Management System Requirements";
- Increase the effectiveness of the company's Quality Management System performance;
- To be an evidence that the Quality Management System Policy is completely integrated with the Company strategic guidelines;
- Document the way Management is completely committed with the Quality Management System;

Customers, Suppliers, Partners, Employees and other stakeholders, can use this manual as evidence that the Quality Management System is structured and implemented in order to assure that Quality goals are established, implemented and measured every year.

2 Normative References, Definitions, Concepts

Normative References

NP EN ISO 9001 – ISO 9001 Quality Management Systems – Requirements;

NP EN ISO/IEC 27001-“Information Security Management Systems-Requirements”

3 Terms, Definitions/Acronyms

QMS	Quality Management System
PDCA	Plan, Do, Check, Act
HR	Human resources
ARP	Action and Resources Plan
CSA	Customer Satisfaction Assessment
SME	Subject Matter Expert
KPI	Key Performance Indicator
ISMS	Information Security Management System
RISK BU	Risk Business Unit

3.1 CONCEPTS DEFINITION

QMS:

The Quality management System (QMS) can be expressed by the Risk BU organizational structure, procedures, processes and resources needed to implement Quality Management.

4 Context of the organization

Action driven by Intelligence...

About Mobileum

Mobileum is a leading provider of Telecom analytics solutions for roaming, core network, security, risk management, domestic and international connectivity testing, and customer intelligence. More than 1,000 customers rely on its Active Intelligence platform, which provides advanced analytics solutions, allowing customers to connect deep network and operational intelligence with real-time actions that increase revenue, improve customer experience and reduce costs. Headquartered in Silicon Valley, Mobileum has global offices in Australia, Dubai, Germany, Greece, India, Portugal, Singapore and UK.

4.1 Fast Facts

Mobileum is a GLOBAL Market leader in several areas



**Mobileum is part of the H.I.G. Capital portfolio,
a leading global investment firm**



Global Platform with Purpose-Built Tech Expertise



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4.2 Customer References

Mobileum has a GLOBAL FOOTPRINT OF 1000+ customers...

A global footprint of 1,000 + customers



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4.3 Customer Testimonials

Mobileum is highly recognized by the market and by its customers.



Highly recognized by the market and by its customers

Leading Steering of Roaming Vendor MNO quote: "They are innovators & this is what MNO's need in this space"

#1



Leader in Innovation

Leading provider for **Steering of Roaming & Roaming Quality Testing Solutions**

Leading provider for **IRSF prevention solutions**

Tier-1 vendor for **Signaling Firewall**



Mobileum's **Signaling Firewall** as the Security Solution of 2019



Telecom roaming test and security Global Price/Performance Value Leadership

Financial Assurance for the Overall Revenue Assurance Market Leadership

Top Ten to Watch



Most Innovative Blockchain for Telecom



GSMA MWC Award (2019 Finalist)



Sample vendor in Gartner hype cycle for the future of CSP Networks

Sample vendor for 5G Security, in hype cycle for Identity and Access Management

Sample vendor in Market Guide for CSP Service and Network Assurance Solutions

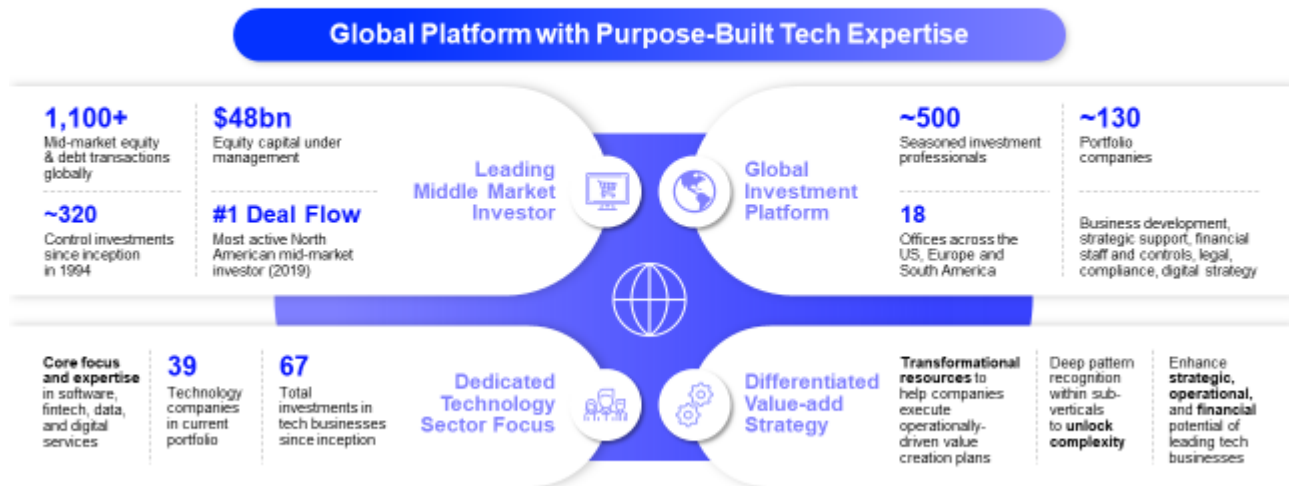


Kaleido Champion roaming vendor for Steering of Roaming, Roaming Hubs and Analytics and VAS

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4.4 ABOUT OUR SHAREHOLDER

Mobileum is part of the H.I.G. Capital portfolio, a leading global investment firm



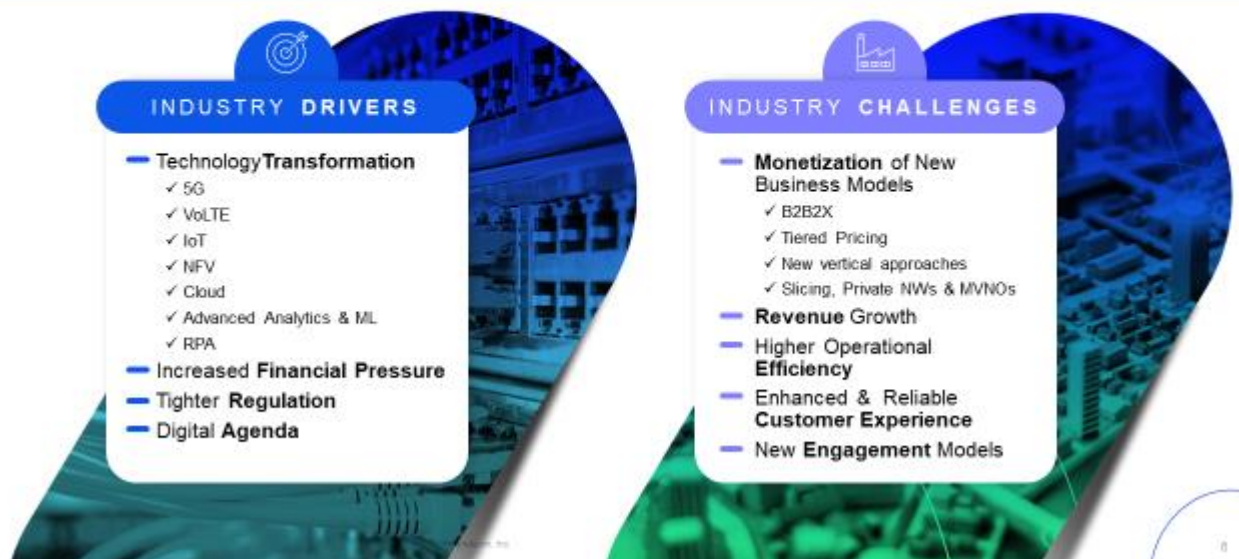
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4.5 Company Overview

Telecom Industry is facing a deep transformation.

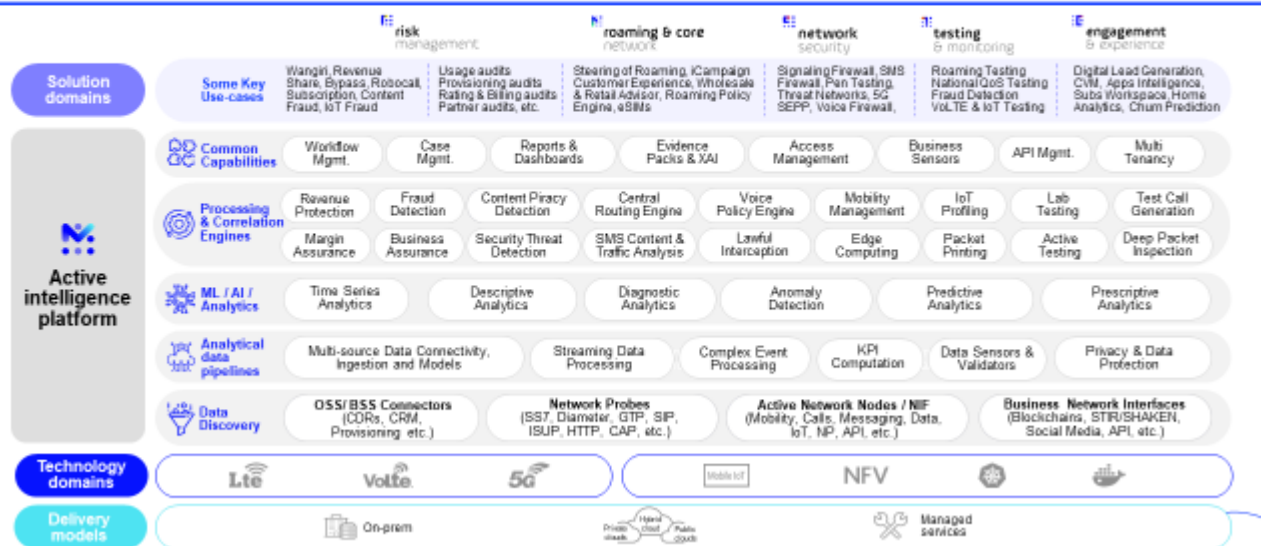
Telecom industry is facing a deep transformation



Mobileum's active intelligence platform helps customers dealing with the emerging industry challenges and opportunities.

Solutions built on our cloud-native Active Intelligence™ Platform

Embedded RAID, SITE and DNA capabilities, loosely coupled modular architecture



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Mobileum is uniquely positioned to support customers on their highest priority challenges...



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... with a set of deep tech integrated solutions that cover the entire telecom value chain



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Lines of Business (LOB)

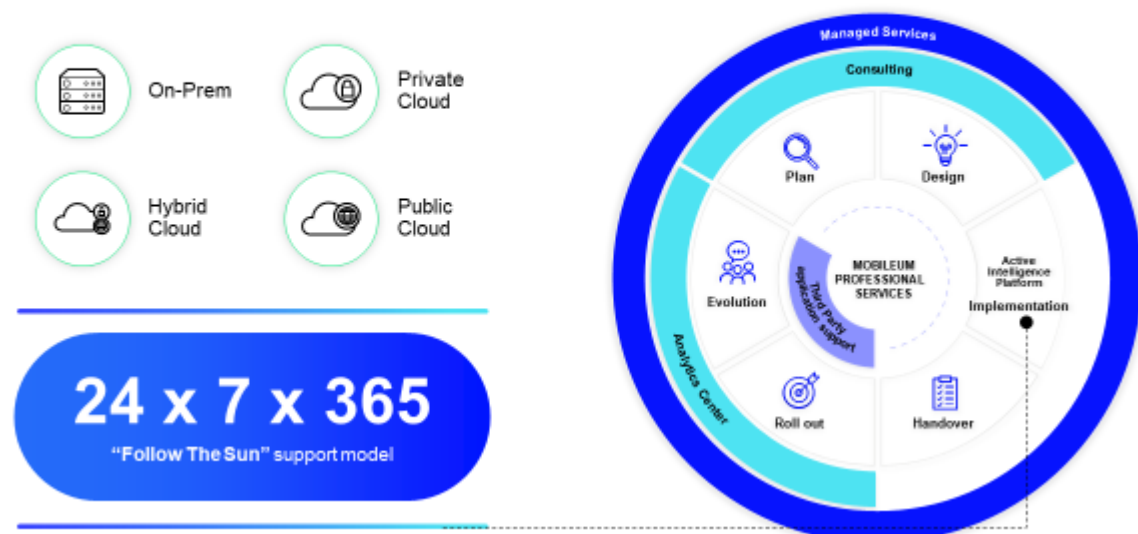
Mobileum has a comprehensive portfolio of solutions built on top of active intelligence TM Platform.

Detailed portfolio of solutions on top of our Active Intelligence platform




Mobileum also has a flexible catalogue of services and deployment models.

Flexible catalogue of service and deployment models





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We have built a unique value proposition:



We have built a unique value proposition

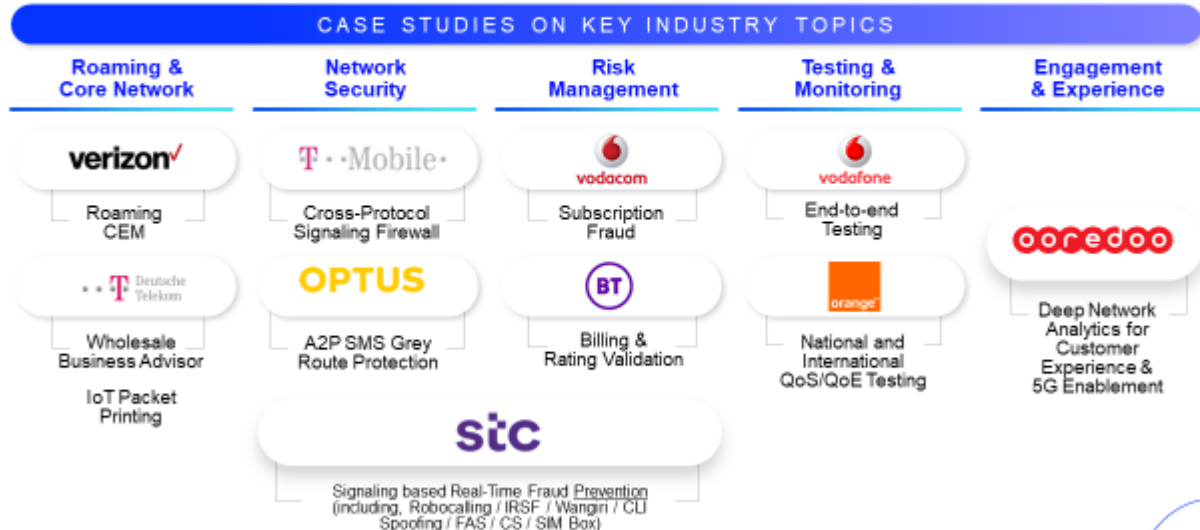
Telecom Analytics
framework that
links INSIGHTS
with **ACTIONS**

PAST		MOBILEUM TODAY
01	Roaming Connectivity and Partner Network Management >>	<ul style="list-style-type: none"> ✓ Monetization ✓ Value generation across services ✓ Core network intelligence elements
02	Security Threat Detection >>	<ul style="list-style-type: none"> ✓ Integrated real-time security response ✓ Automated network protection
03	Revenue Assurance Reporting >>	<ul style="list-style-type: none"> ✓ Proactive business optimization ✓ Automatic response to remediation
04	Fraud Prevention & Detection >>	<ul style="list-style-type: none"> ✓ Automated blocking ✓ Integrated real-time business response
05	Network Testing >>	<ul style="list-style-type: none"> ✓ Precise, reliable and integrated insights ✓ Full lifecycle coverage from lab to production ✓ End-to-end QoS solutions from core to edge
06	Customer Experience Management >>	<ul style="list-style-type: none"> ✓ Deep network analytics ✓ Enhanced experience and engagement ✓ Real-time, 360° customer view

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Products ready to tackle key industry hot topics



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Roaming

Roaming and Core Network: Overview and Key Trends



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Roaming and Core Network: Detailed Portfolio



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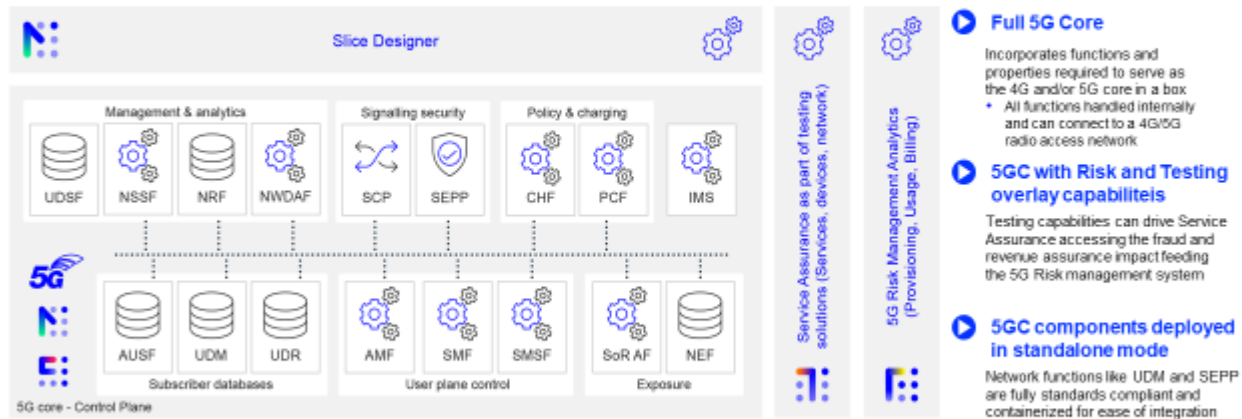
Roaming platform provides a central place to collect data, extract insights and automate actions in real-time



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Mobileum 5G core network capabilities to enable and optimize next generation network rollouts

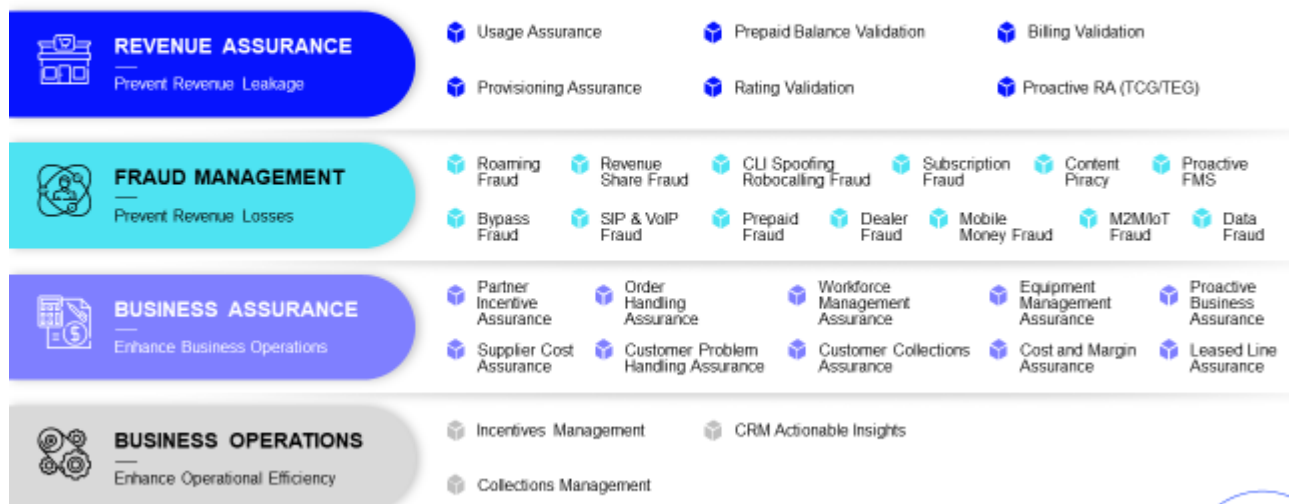


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Risk Management

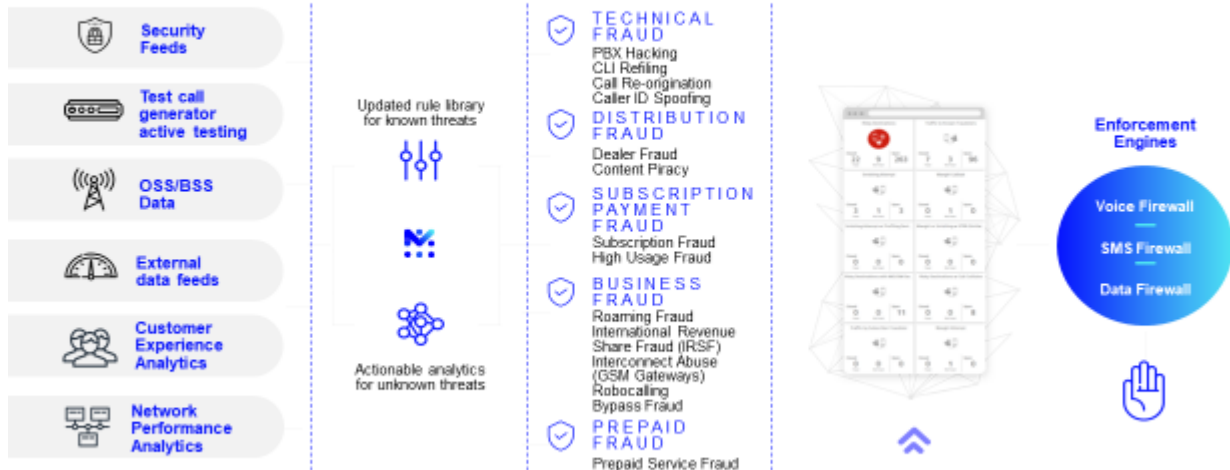
Risk Management: Detailed Portfolio



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Mobileum Risk Management solutions provide a combination of advanced ML algorithms, active testing and enforcement engines



We bring a unique offer into the market

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Security

Network Security: Overview and Key Trends



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Network Security: Detailed Portfolio



SIGNALLING SECURITY

Protect networks & subscribers

- Cross-Protocol Signaling Firewall
- Diameter Firewall
- SIP Firewall
- Threat Intelligence
- SS7 Firewall
- GTP Firewall
- 5G Security (SEPP, 5GFW)
- Penetration Testing



SMS PROTECTION

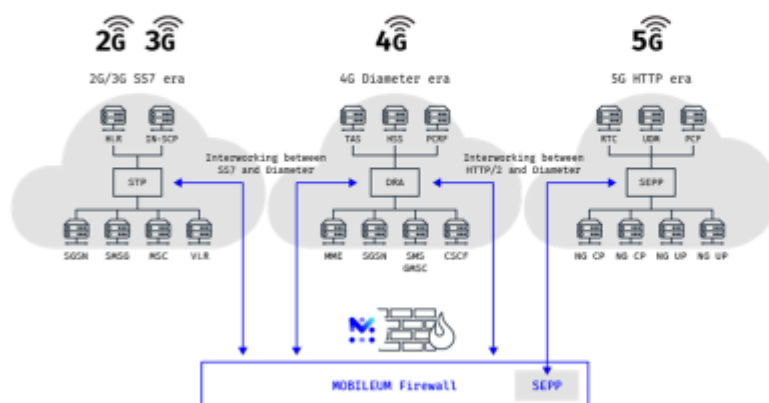
Protect networks & subscribers

- SMS SPAM Firewall
- A2P Grey Route Firewall

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Mobileum cross-protocol firewall combines all the existing signaling protocols with 5G HTTP and SEPP to protect interconnect links



Protection across generations

- ✓ For several years **5G will coexist with previous mobile generations**
- ✓ Attacks to previous generations may impact 5G security
- ✓ A multi-protocol firewall correlates threats across all generations and interconnects for **Signaling, Voice, and Messaging**

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Testing and Monitoring

Testing and Monitoring: Overview and Key Trends



IoT Testing

IoT device and network testing in all phases of the product lifecycle ensures performance, reliability and fast time to market

Roaming CX

Deliver the best roaming experience creates a 2% increase in customer retention and has the same effect as decreasing costs by 10%

5G & Digital Transformation

A well-performing network is critically important to digital business projects. Real-time performance and behaviors, which are essential for troubleshooting in the current state of the environment.

DUT Will Go OTA

As 5G technologies and standards evolve, they'll continue to drive new testing methodologies, most notably a shift from attaching a device under test (DUT) to a cable, to using over the air (OTA) instead.

TESTING

VoLTE Roaming & 3G Sunset are demanding more testing services for improved CX

IoT TESTING (CAGR) of 35.4%

IoT is being adopted by different industries as a result of increasing daily business operations

Tighter Relationships Between Field Technicians and NOC's

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Testing and Monitoring: Detailed Portfolio



NATIONAL QoS/QoE

Ensure Domestic NW Experience

5G Testing

Lab Testing

Service Assurance

Video Testing

IMS Testing

Core Network Testing

IoT and eSIM Testing

Mobile Money Testing

Automation Framework

Emergency Service Testing

Voice, Data and Messaging Testing

Smartphone and App Experience



INTERNATIONAL QoS/QoE

Ensure International NW Experience

Roaming Quality Testing

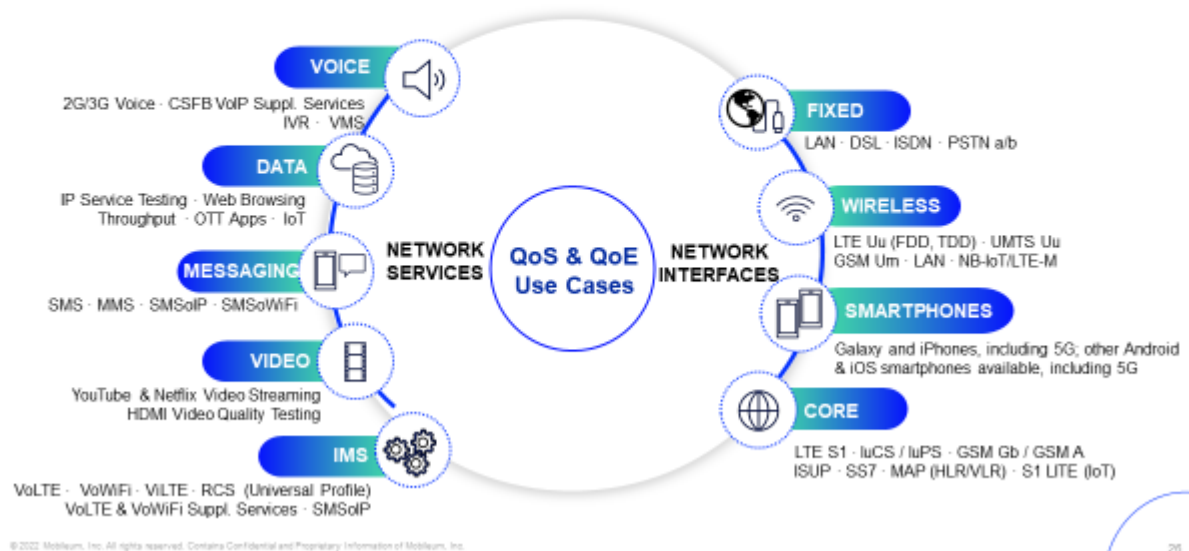
VoLTE Roaming Testing

International Carrier Quality

IoT and Connected Cars Testing

Performance Intelligence

Domestic Testing | Our SITE platform covers a wide range of network services and interfaces



International Testing | Global Roamer offers the world's largest cloud testing infrastructure for International QoS/QoE



Central SIM Multiplexer with a SIM Pool from 415 MNOs



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Engagement & Experience



Action driven
by intelligence

Mobileum

M_QMS_001_E – Quality Manual – Risk BU

Public

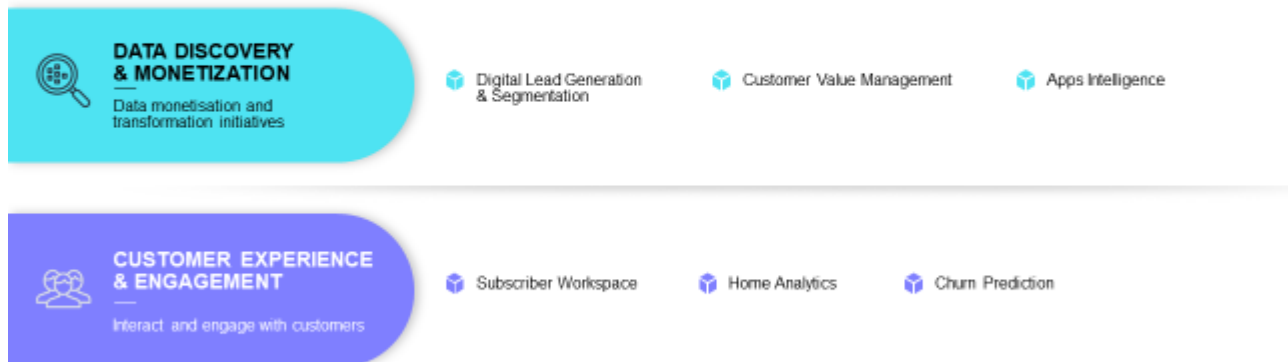
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Engagement & Experience: Overview and Key Trends



Engagement and Experience: Detailed Portfolio



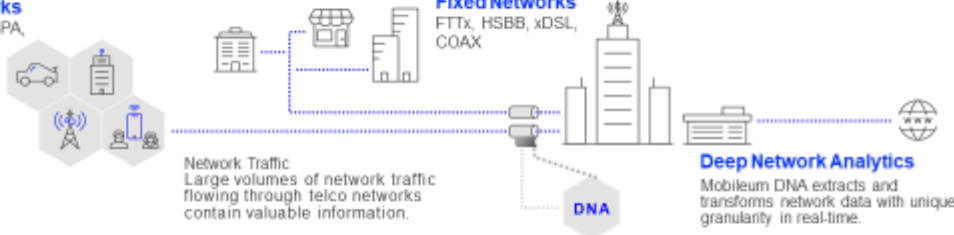
Mobileum Deep Network Analytics (DNA) software produces insights while analyzing data traffic in massive networks



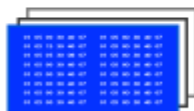
Transforming Network Data Packets into Valuable Insights for Cyber Security, Telco Business & Digital Markets

Wireless Networks

5G, LTE, NB IoT, HSPA, GPRS CDMA,



DATA PACKETS



META-DATA

Apps & Devices

Applications
Devices
Web Traffic
Vendors
Voice
SMS
USSD
VAS...

Subscriber

Prepaid
Post Paid
VIP, VMP
Roamers
Segments

Network & Location

Network Elements
(SSSN, GGSN, RNC, SPSN, MME)
Interfaces (U, Gn, Gy, Gx)
Location (Regions, Site, Cell)
Transport Nodes (Routers, J)
Vendors

Technology

Radio Access
Technology (2G, 3G, 4G, 5G)
Fixed IP Network (Fibre, xDSL)
Vendors

APPLICATIONS

Cyber Security & Threat Intelligence

Telco Network, Business & Digital

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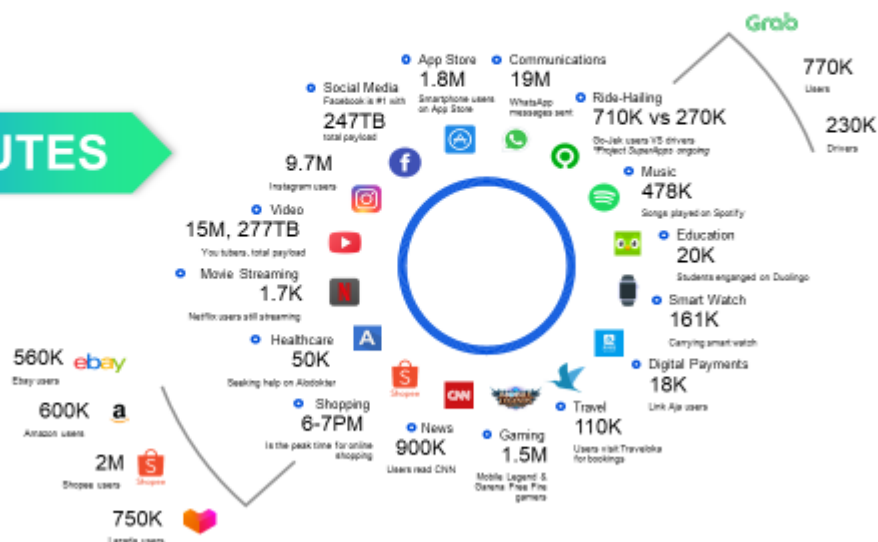
DNA generates a comprehensive picture on all end-users' interactions with data applications



What happens over

60 MINUTES

in a mobile operator



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Action driven
by intelligence

Mobileum

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DNA drives two major use case families in network operators: network and business applications



USE CASE FAMILIES DRIVEN BY DNA



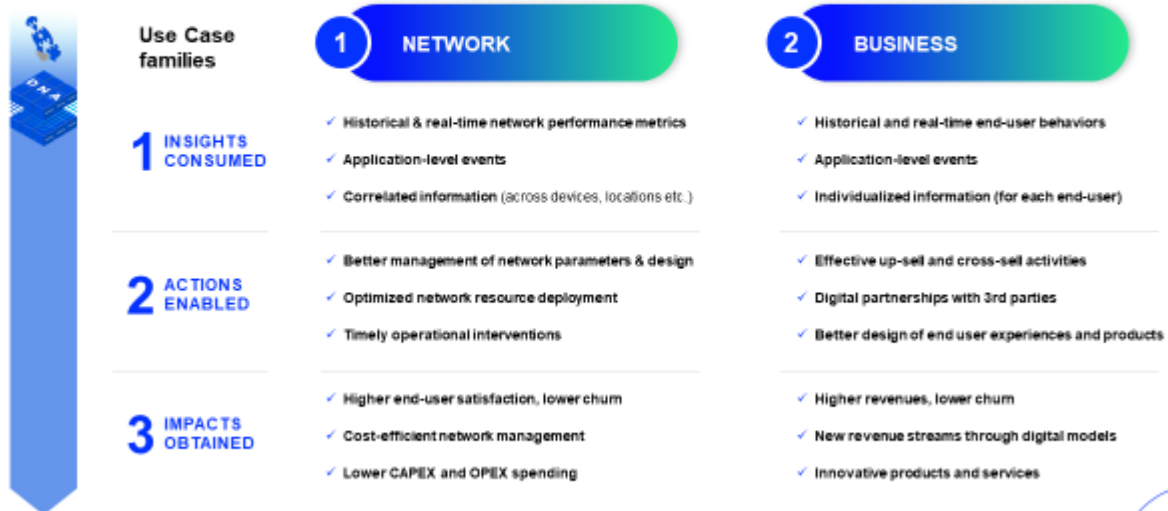
DELIVER BETTER NETWORK CONNECTIVITY AND
ACHIEVE HIGHER CUSTOMER SATISFACTION

ANALYZE ONLINE BEHAVIOURS AND ACHIEVE HIGHER
RETURNS FROM BUSINESS PLANS AND CAMPAIGNS

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Our insights make new or better actions possible for both use case families



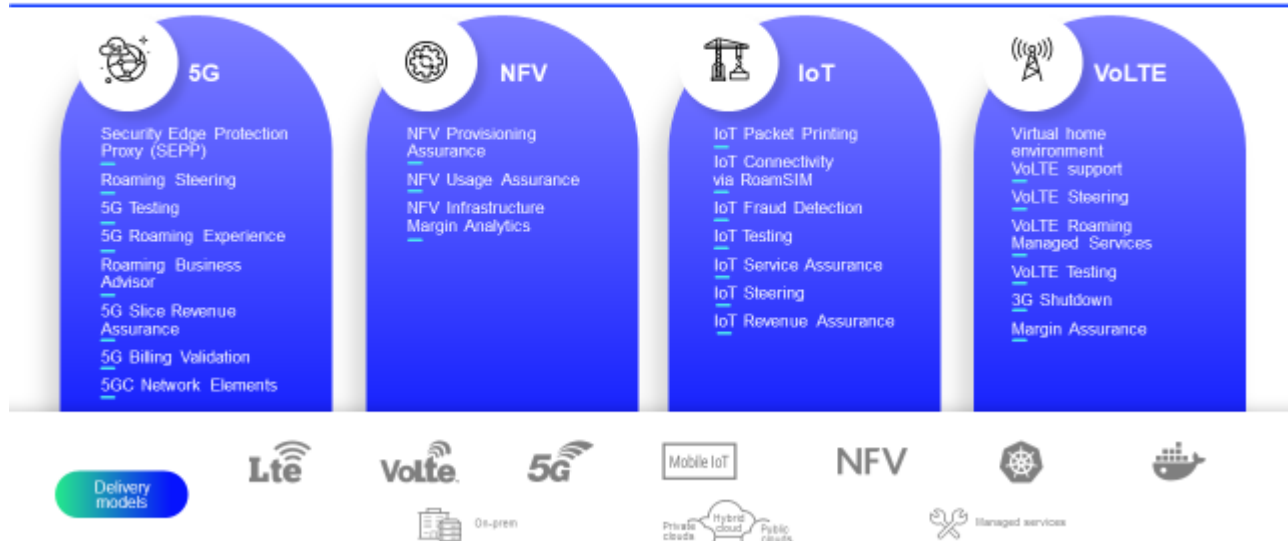
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Why Mobileum?

Mobileum's solutions cover several technology domains.

Mobileum solutions cover several technology domains



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Positioned to support Telecom operators' along their entire value chain



Chief TECHNOLOGY Officer		Chief FINANCIAL Officer		Chief INFORMATION Officer		Chief COMMERCIAL Officer		Chief MARKETING Officer / Chief DIGITAL Officer		VP Roaming / Wholesale / Enterprise	
Interconnect Routing	IX Routing Management	Revenue Protection	Revenue Assurance	Data Protection Office	Crypto ID	Sales	Digital Leads Generator	Core Product	Explorer Reports	Roaming Management	Retail Busin. Advisor
Security	Signaling FW SMS FW	Margin Protection	Cost & Margin Assurance	Info Security	Access Right Controls	Sales	Home Analytics (CVS)	Customer Lifecycle Management	Churn Prediction	Roaming Management	iCampaign
Security	5G SEPP 5G FW	Fraud Protection	Fraud Management	Info Security	User Monitoring	Customer Care	Subscriber Workspace	Marketing Campaign	Intelligent Triggers	Roaming Management	Roaming Analytics
International Network Testing	Global Roamer	Collections	Collections Management			Customer Care	Crisis Management	Customer Experience	Video Streaming Analytics	Wholesale Management	Steering of Roaming
National Network Testing	SITE dTest (lab)					Enterprise Account Management	5G Edge Analytics	Customer Intelligence	Super Apps Intelligence	Wholesale Management	Wholesale Busin. Advisor
Network Service Quality Management	xAnalyzer Tracing					Sales Incentives	Incentives Management	OTT Content	Digital Content Intelligence	Roaming Operations	Roaming CEM
Network Service Quality Management	xAnalyzer Tracing							IoT	Device Analytics	Roaming Product / Enterprise	eSIM Monetization
Network Operations	MapView Alerts IWW Workspace										
Core Network	HSS MWDAP										

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Why Mobileum?



best-in-class,
award-winning
portfolio of solutions



Rich innovation –
200+ patents



A world-class
Machine Learning and
Analytics framework



Global, skilled
team with
deep domain focus



Industry-leading
customer footprint
across verticals –
3 in 4 operators
now use Mobileum



Financial
Strength
and Leverage



Efficient delivery,
and 24/7 support and ops,
via 25+ global locations



Rich cloud
and managed operations
and services capabilities

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5G Solution Strategy

Cloud-native, Container, and Micro-service technology



	 Evolution to 5G GA 2021	 New 5G products GA 2021	 In development
 network & roaming intelligence	Traffic Steering – for 5G NSA, SA, OTA iCampaign (with SIP, RCS) Roaming Replicator (piggyback roaming)	Roaming Customer Experience Management Wholesale Business Advisor incl. BCE Retail Roamer Analytics and RoamWallet	NWDAF++ : Network Data Analytics Function UDSF : Unstructured Data Storage Function Slice Designer & Manager
 security intelligence	5G support in Cross Protocol Firewall Threat Intelligence for 5G	Vulnerability Assessment Services SEPP	SCP (Service Comm. Proxy) NEF (Network Exposure Function)
 testing & monitoring intelligence	5G Remote Radio Testing 5G, IoT & eSIM E2E Testing	5G SA Core n/w testing 5G Lab Testing	CI/CD – Automation Framework 5G Service Testing (Roaming, Natl., UE, IoT)
 fraud & risk intelligence	5G Provisioning Assurance 5G Data Fraud Mgmt. Content Piracy Detection	5G Service Assurance 5G Rating and Billing Assurance 5G IoT Assurance	5G Closed Loop Service Assurance 5G SLA/QoS Assurance (incl. Edge)

Mobileum Risk BU's WE Meet Series



4.6 AXES OF MOBILEUM'S CULTURE

4.6.1 WHY DO WE EXIST?

We're committed to thinking ahead, guiding them on their next steps. We're committed to show them how to get there first... and Act!

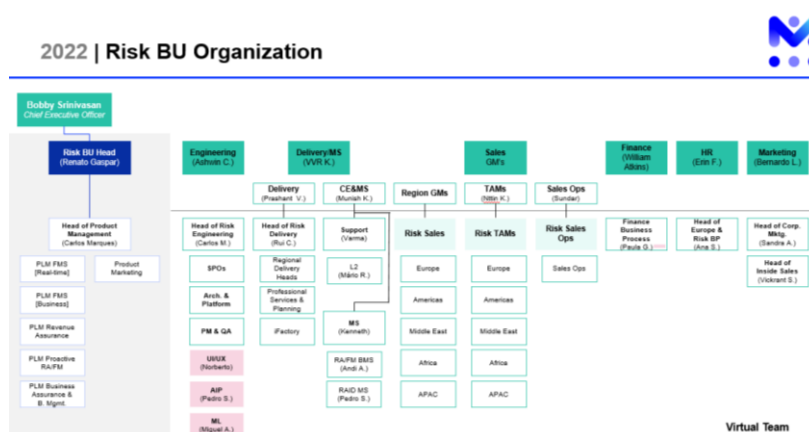
We believe in a world where people make decisions based on facts and truthful data. We believe in a connected, transparent and sustainable world. We optimize roaming, protect networks and improve customer experience across the board for telecom operators around the world – all through our Active Intelligence Platform.

4.6.2 WHAT IS OUR MISSION?

Be the leading operational intelligence platform for the telecom industry, offering customers cutting-edge analytics based solutions, from roaming, security to risk and business management and allowing customers to connect intelligence with real time actions on the core network. We help CSPs to grow and protect their revenues, innovate new business models and digitally engage with their customers.

We leverage our unique technology platform - Active Intelligence to deliver innovative analytics solutions in focused areas: Roaming, Fraud & Risk, Security, and testing & monitoring.

4.7 Mobileum Risk BU's INTERNAL ORGANIZATION



4.8 CERTIFICATIONS & MEMBERSHIPS

At Mobileum we are focused on following the most advanced industry standards and best practices that guide us during the design of a resilient and flexible architecture, accommodates change while being intuitively understandable, and are capable of company tackling future challenges.

Based on this statement, we can ensure that is our priority to adopt methodologies and follow standards and best practices capable of excelling Risk BU's quality management system and setting the path to continually improving them.

Mobileum Risk BU Certifications & Memberships

Mobileum Risk BU's Quality Management System was conceived in order to respond to all requirements of the standard NP EN ISO 9001 (International Standards for Business, Government and Society).

The certification audit took place on June 2002 and covered all activities related with software development, consulting, placement, Managed Services product management.

Mobileum Risk BU is also certified in NP EN ISO/IEC 27001-"Information Security Management Systems-Requirements"- Certified.

Information Security management System is integrated in Quality Management System, M_QMS_036_E-Information Security Management Manual describes in detail how Mobileum Risk BU's Information Security Management System is implemented, according to NP EN ISO 27001 Standard requirement and to the Security Management principles and vocabulary referred to in the ISO/IEC 27000 standard.

Mobileum Risk BU's is also SOC Type II Certified in the USA.

Most Project Managers are certified with the International Project Management Association (IPMA) and Project Management Institute (PMI).

Mobileum Risk BU is an active Member of the GSM Association and of the TeleManagement Forum.

We are focused on following the most advanced industry standards and best practices that guide us during the design of a resilient and flexible architecture accommodates change while being intuitively understandable, and are capable of tackling future challenges.

Certifications & Memberships

Certifications — Memberships



Quality Certification - ISO 9001



Security Certification - ISO 27001



SOC 2 Type II Compliance



Certified Project Managers



Oracle Optimized Certification



Business Process Framework 9.0 and Information Framework 9.5 Certification

4.9 ALLIANCES & PARTNERSHIPS

For the past 10 years, Mobileum Risk BU built a solid footprint of successfully delivered projects and technologies due to powerful solutions and strong partnerships. The company has shown in multiple projects the capability to work and support our partners during the entire sales, implementation and support cycle. For the past 10 years, Mobileum Risk BU established partnerships and alliances with major providers of information systems and integration services. The company was able to follow an internationalization strategy where working with partners with vision, complementary offer and the same approach to doing business delivered win-win-win results – for our customers, for our partners and for Mobileum Risk BU.

Through Mobileum Risk BU, the business partners gain access to leading specialists and leading technology in Business Assurance software and in niche Business Support Systems software. Partners gain the opportunity to leverage on Mobileum Risk BU world-class software products.

Mobileum Risk BU is strongly committed in delivering best-of-breed services and solutions to enhance and optimize our customers' business processes. Mobileum Risk BU believes that combined expertise and technology lead to better solutions delivered to customers.

The company recognizes in our business partners a strategic contribution to our growth.

4.10 NEEDS AND EXPECTATIONS OF INTERESTED PARTIES

The Quality Management System is intended for all involved parties, participants in the Quality Management Scope, Customers, Employees, Shareholders, Partners and Suppliers, Regulators, Media.

All the Participants have their role in assuring the appropriate and efficient interactions within Quality management system in order to provide and support Mobileum Risk BU's activities in an effective way.



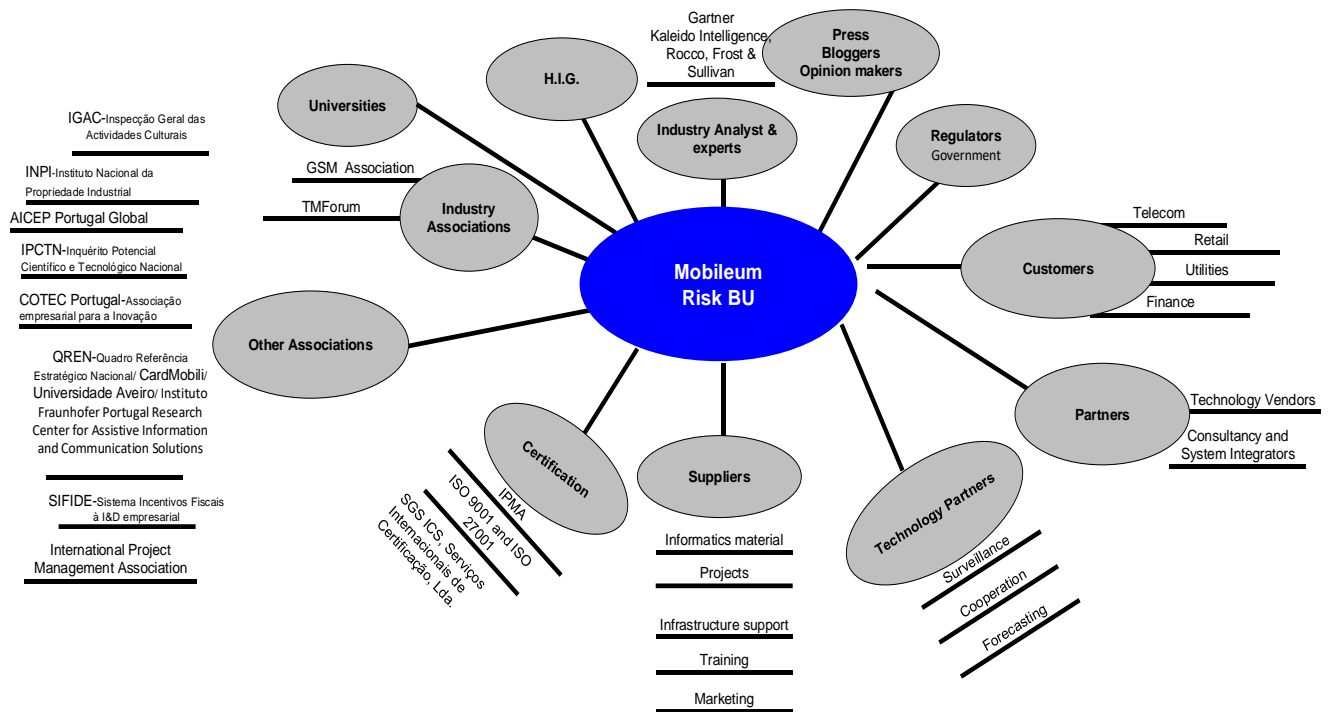


Figure 1 - Interface Management Model

Here we have the Interface Management relation model where we have all the associations, certification entities, industry associations, shareholder, partners, suppliers, customers, universities, etc., that belong to our interface management.

5 Methodologies

The creation, internal diffusion and use of methodologies are critical agents for the success of projects developed by Mobileum Risk BU. To this end, a number of methodologies were created from the beginning to support the following activities:

- Project Management
- Solution Development
- Production Support
- Product Support
- Tests
- Configurations Management
- Training
- Consulting
- Placement of skills
- Managed Services

To ensure the awareness and correct application of the above by all company consultants, a continuous internal training program was established, covering all employees.

The use of methodologies enables Mobileum Risk BU:

- to have a unique way of working with any type of customer;
- to rapidly integrate new employees;
- to use a language common to all company employees;
- to expand and replace project teams;
- to easily control its projects;
- to easily communicate with all its customers.

5.1 PROJECT MANAGEMENT METHODOLOGY

All Mobileum Risk BU projects follow a common Project Management methodology that guarantees the follow-up of all project activities, from the awarding of the proposal to final project acceptance by the customer.

All the activities foreseen in this methodology aim to guarantee that:

- Customer requirements are correctly stated, implemented and tested;
- The chosen team has all the necessary skills for project execution. All projects involving software development include programmers, a testing team and people responsible for configuration management;
- The deadlines agreed on with the customer are met and the project requirements fulfilled;
- The project runs within the quality parameters specified by the applicable methodology;
- A reporting mechanism is implemented with the customer that includes periodical meetings with the customer and project status reports;
- The customer accepts the solution delivered

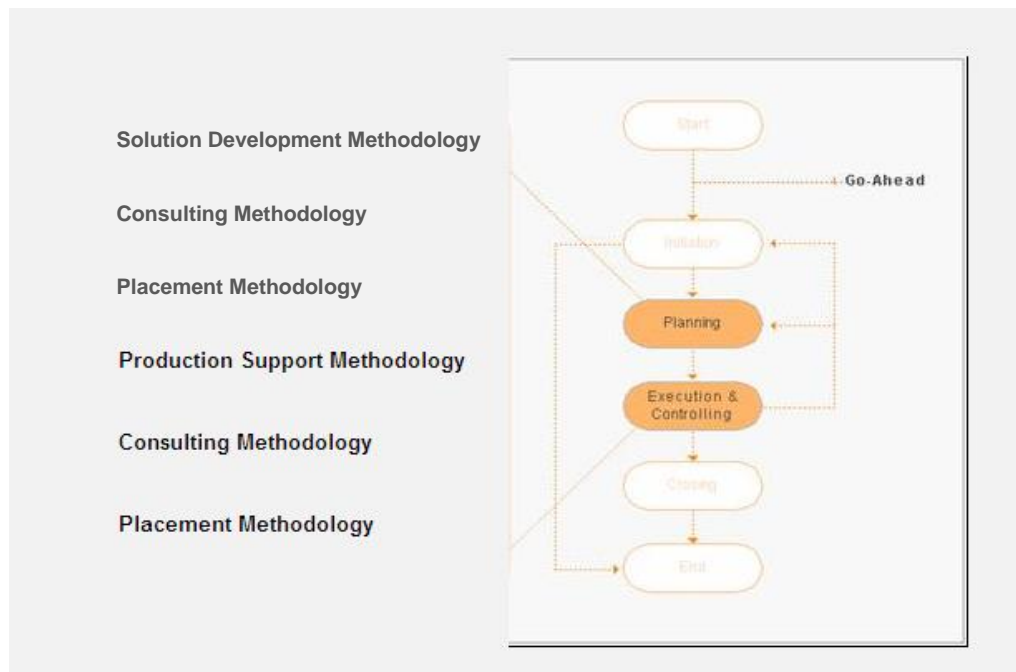


Figure 2 - Project Management Methodology

5.2 CONSULTING METHODOLOGY

All projects involving systematic information surveying, knowledge transmission and technical audit activities follow the consulting methodology described in the following figure.

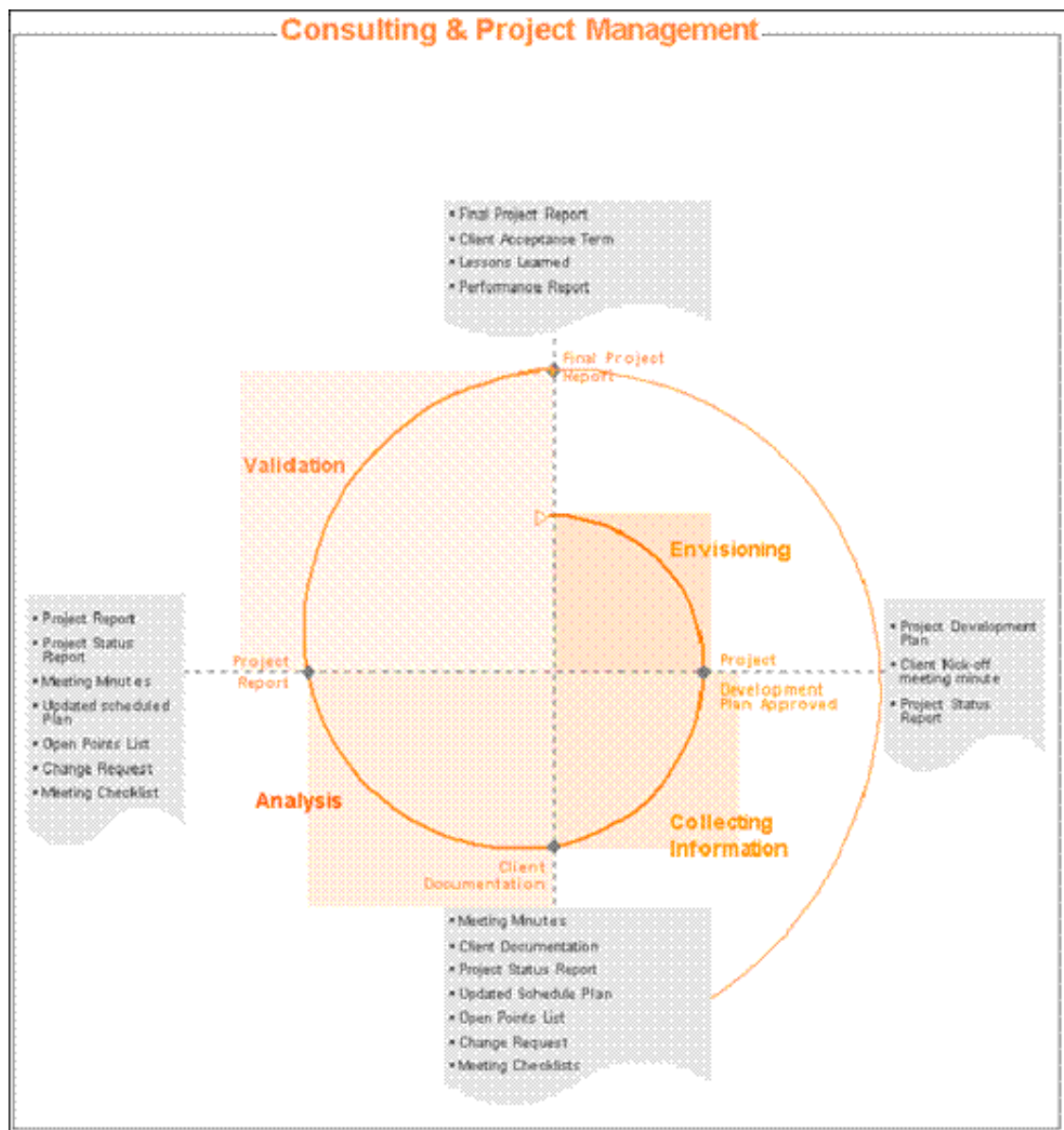


Figure 3 - Consulting Methodology

5.3 SOLUTION DEVELOPMENT METHODOLOGY

In all software development or package customisation projects, Mobileum Risk BU applies the methodology shown in the following figure.

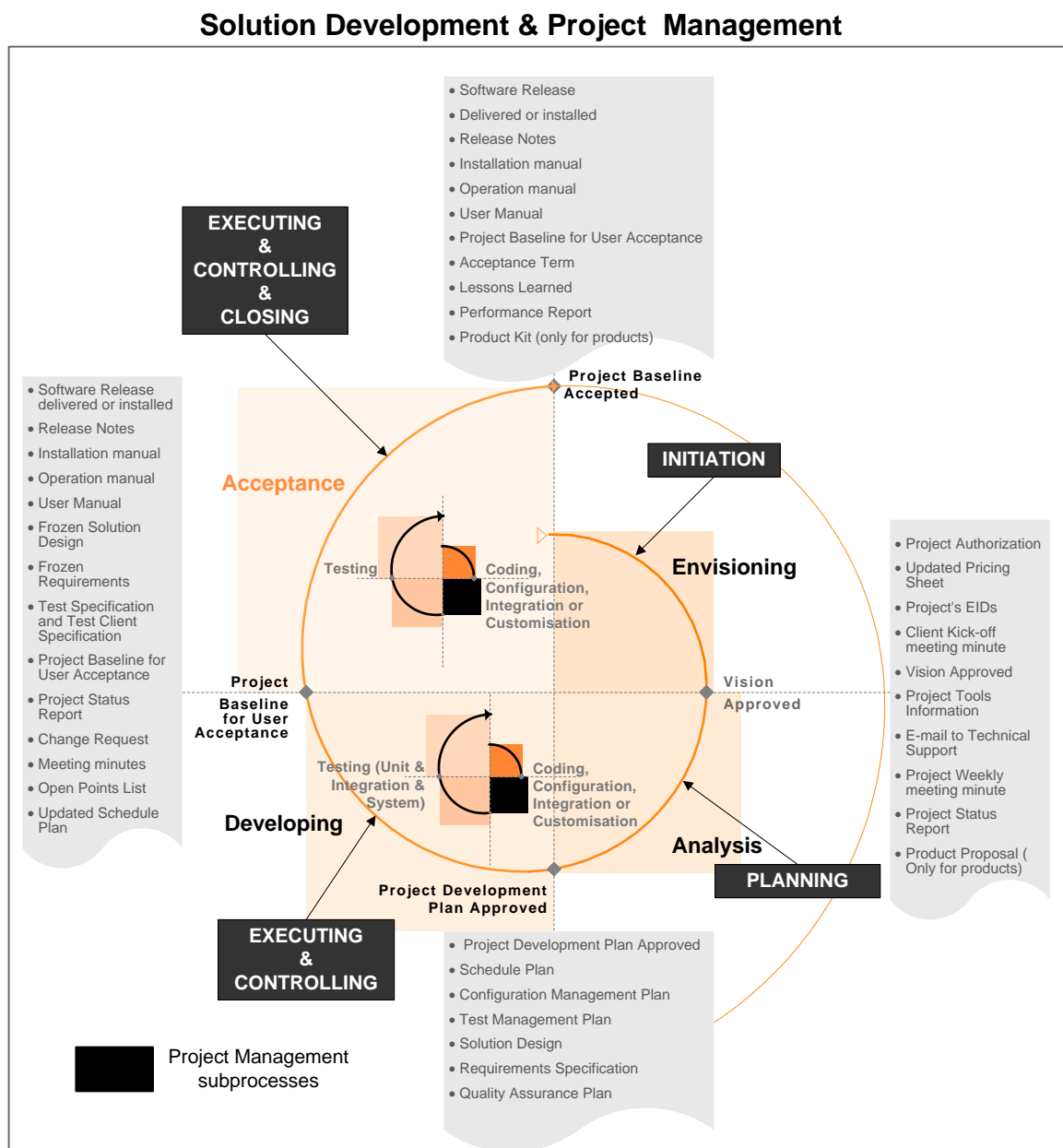


Figure 4 - Solution Development Methodology

The designation of the various phases and deliverables are in English because it is the company's base language. Nevertheless, it is worth pointing out that all documents referred to herein are supported by models with Portuguese and English versions. Furthermore, the above figure represents not only the documents to be made

available to the customer but also internal documents, namely those concerning project management, testing, configurations management and quality control activities.

5.4 TESTING METHODOLOGY

All software development projects involve the participation of a testing team whose function is to guarantee the planning, execution and register of problems detected during software testing.

The phases of the methodology and their correspondence with the Solution Development methodology are described in the following figure.

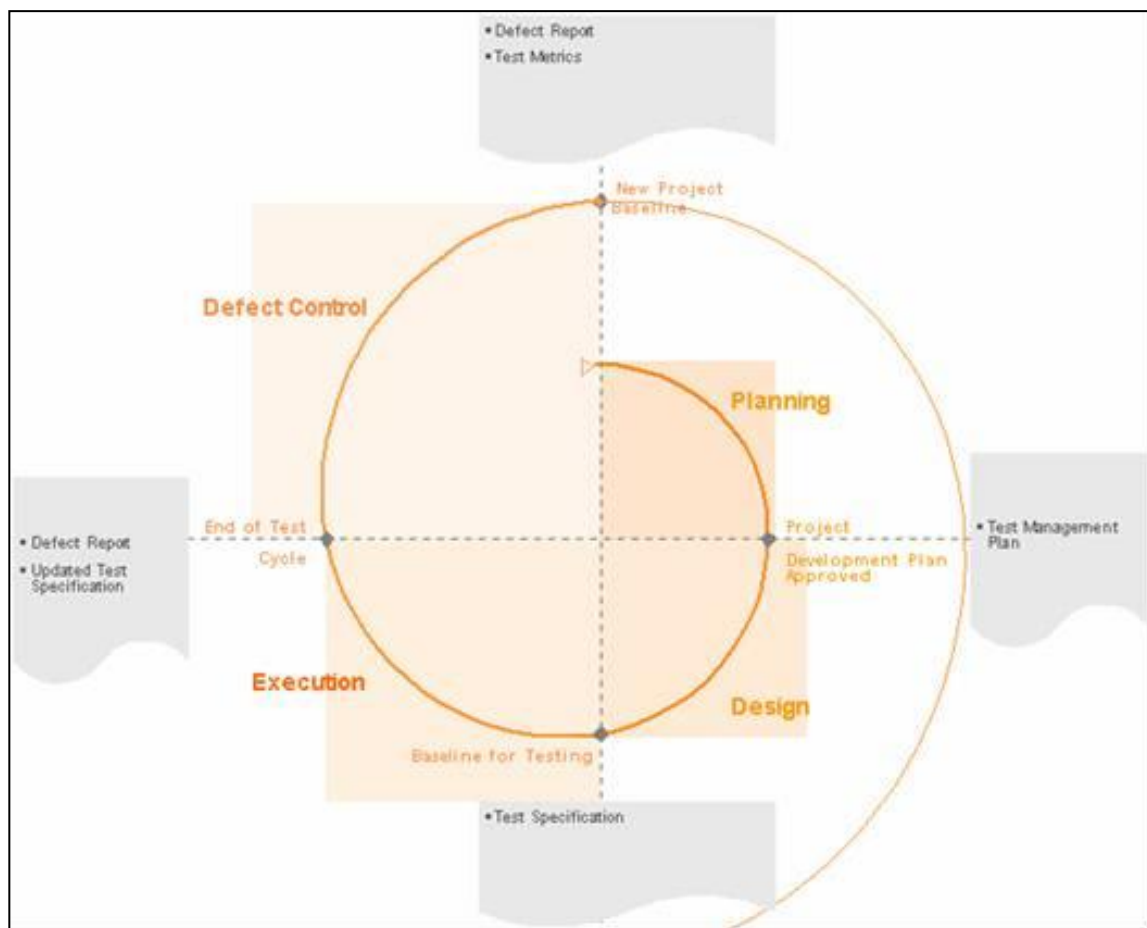


Figure 5 - Testing Methodology

5.5 MANAGED SERVICES METHODOLOGY

Managed Services Methodology is an umbrella term for third party monitoring and maintaining of computers, networks and software. The actual equipment may be in-house, at the third-party's facilities or even at customer facilities, but the "managed" implies an on-going effort; for example, making sure the equipment is running at a certain quality level or keeping the software up-to-date.

In every project whose main goal is the maintenance of a Customer solution, including the management activities of a software maintenance team, the implementation of improvements and problem solving, Mobileum Risk BU follows the methodology shown in the following figure, in association with the Solution Application Development methodology.

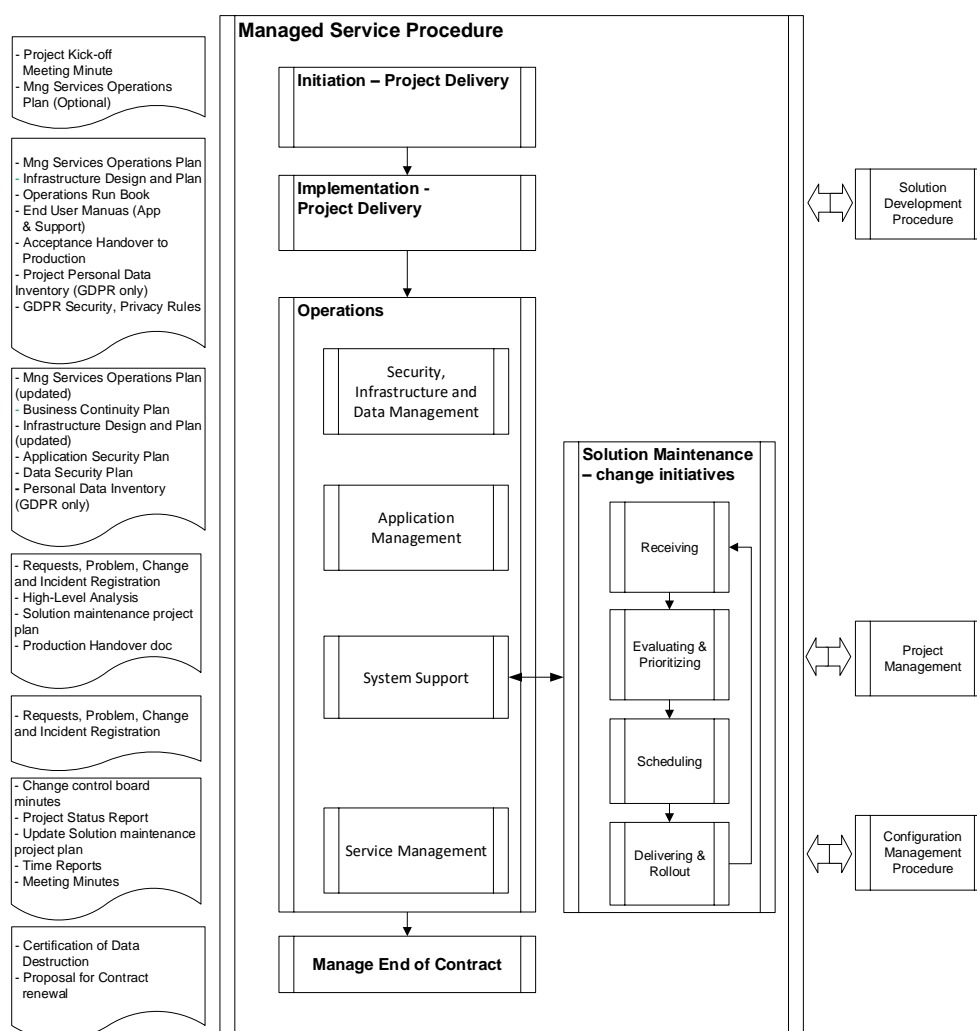


Figure 6 - Managed Services Methodology

5.6 SUPPORT TOOLS

In order to guarantee an effective control over the implementation of the described methodologies, the company has equipped itself with a set of tools that enable it to automate its Solution Development methodology, by implementing an integrated solution or requirements management, testing (HP Quality Center/ SmarteQM) and configurations management (SVN).

The aim for implementation of this solution was to:

- Guaranty the automation of the software development methodology;
- Guaranty the integration and tracing of the available repository information for every tool;
- Facilitate project control;
- Enable and facilitate metrics extraction

6 Quality Management System

Mobileum Risk BU's Quality Management System was conceived in order to answer to all the requirements pertaining to the NP EN ISO 9001 reference standard, and has been certified since 2002.

6.1 DOCUMENTARY STRUCTURE

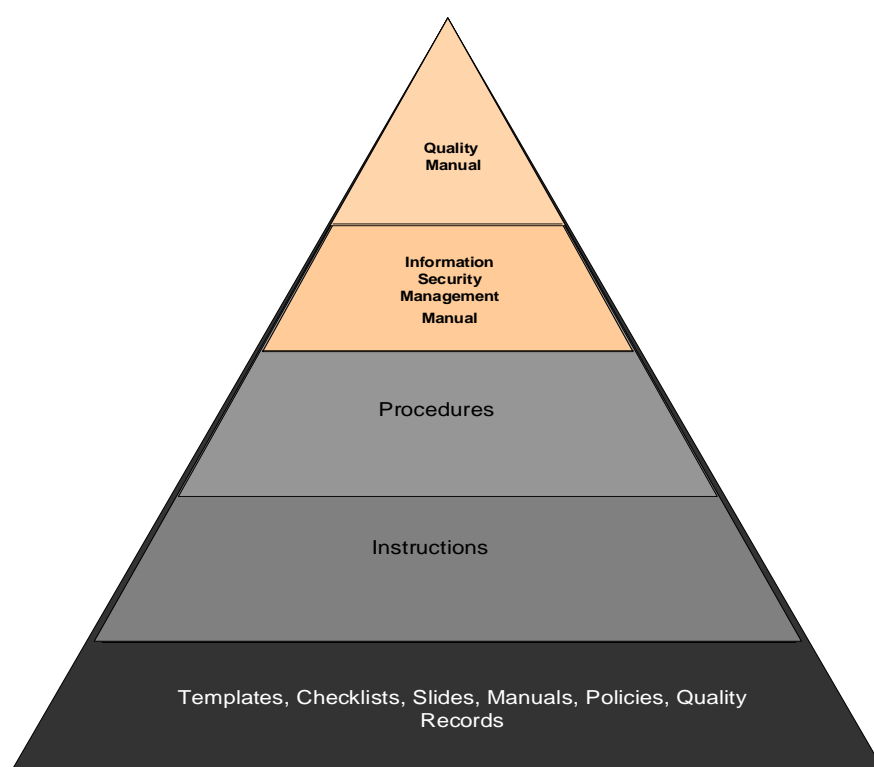


Figure 7 - Documentary Structure

The Quality system documentation is organised according to the above figure.

All documents are created, revised, approved and published according with the layout of procedure *P_QMS_004_E – Document Management*.

Documentation supporting the company core business is written in English, whereas the support models are in both Portuguese and English. Internal instructions and activity support procedures can be found in Portuguese or English.

6.2 PROCESSES MAP

The system is organised by processes, as shown in the following figure. Business support processes – Project Management, Solution Development, Production Support, Consulting, Placement, Managed Services are supported by particular methodologies that guarantee uniformity and quality in their execution.

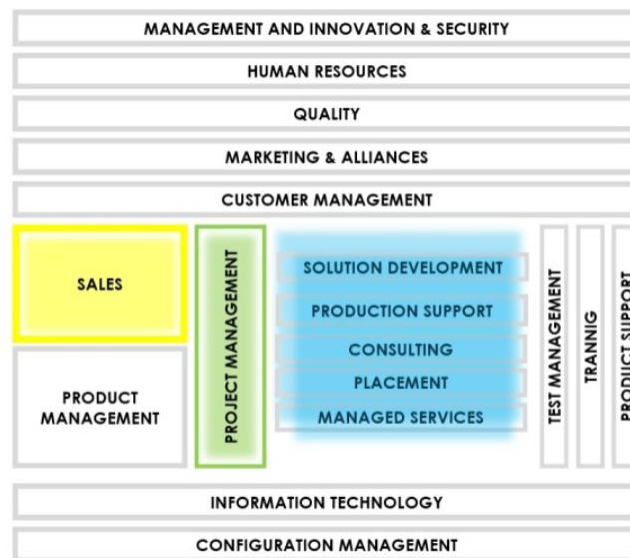


Figure 8 – Mobileum Risk BU's Processes Map

All documents associated to processes are in English. Support models are both in English and Portuguese.

The **Management, and Innovation & Security** Processes comprises all activities related to:

- The strategic planning cycle;
- The control and reporting of company performance indicators;

Information Security management activities:

- Security Policy;
- Organization of Information Security;
- Human Resources Security;
- Asset Management;
- Access Control;
- Physical and environmental security;

- Operations security;
- Communications security;
- System acquisition, development and maintenance;
- Information security incident management;
- Information security aspects of business continuity management;
- Compliance.

The **Human Resources** process comprises all activities related to:

- Human resources planning;
- Recruitment and selection;
- Integration of new employees;
- Performance evaluation;
- Employees training;
- Skills management;
- Management of indicators related to human resources;

The **Quality** process comprises all the necessary activities to guarantee the fulfilment of NP EN ISO 9001 standard requirements, particularly:

- Process identification;
- Determining process sequence and interaction;
- Planning and revision of the quality management system;
- Definition of rules for document control;
- Definition of rules for register control;
- Quality Audits;
- Corrective and preventative actions;
- Management of quality-related indicators;

The **Marketing & Alliances** process comprises all activities related to:

- Marketing:
- Support the regions with pre and post-sale efforts and all marketing activities, creating content and promoting it.
- Alliances:
- Manage the relationship with a set of named technical global partners.

The **Customer Management** process comprises all the activities related to the:

- Collection and processing of Customer satisfaction evaluation;
- Surveying of needs;
- Garnering of feedback from the projects under development
- Key Accounts management

The collection and processing of the Customer satisfaction evaluation is managed by the person responsible for the quality process. Management of other activities is the responsibility of the account managers .

The **Sales process** comprises all activities from the identification of a business opportunity to the awarding of the proposal by the customer.

The **Product Management** process encompasses all activities related to Mobileum Risk BU's product management namely the planning of the conception and evolution of our products.

The **Project Management** process encompasses all operational activities from the start of the project until its acceptance by the customer, namely:

- Establishment of the project team;
- Project planning;
- Management of the team and planned activities;
- Management of the relationship with the customer;
- Project status control and reporting;
- Guarantee of the garnering and implementation of all the customer's requirements.

The responsibility of fulfilling all steps of the process is incumbent on each project director.

The **Solution Development** process defines the methodology to be applied by company consultants in projects implying software development or package customisation.

The responsibility of fulfilling all steps of the process is incumbent on each project director.

The **Consulting** process defines the methodology to be applied by company consultants in projects that imply information surveying activities, recommendations, information transmission, process surveying and improvement and impact analysis.

The responsibility of fulfilling all steps of the process is incumbent on each project director.

The **Placement** process defines the methodology to be applied by company consultants in projects involving the placement of skills during a determined period.

The responsibility of fulfilling all steps of the process is incumbent on each project director.

The **Managed Services** process defines the methodology to be applied by company consultants in all projects involving the delivery of solutions on a Managed Services Model as well as projects involving system maintenance, whether or not the company develops the systems.

The responsibility of fulfilling all steps of the process is incumbent on each project director.

These solutions may be delivered with different service layers:

- Technical Managed Services;
- Business Managed Services;
- Business Process Outsourcing.

Depending on the service level layer the company will provision the customer in the Managed Services infrastructure and will operate the system in terms of Security, Infrastructure and Data Management, System Support and Service Control.

The Production Support process defines the methodology to be applied by company consultants in all projects involving system production support, whether or not the company develop the systems.

The responsibility of fulfilling all steps of the process is incumbent on each project director.

The **Test Management** process defines the methodology to be applied by company consultants in software testing activities.

The responsibility of fulfilling all steps of the process is incumbent on each project director.

The **Product Support** process is applicable to all situations where the company assumes a contractual commitment with a customer to supply Maintenance services for products developed by the engineering team.

The **Training** process defines the methodology to be applied by company consultants in all projects involving the training of Human Resources in the solutions developed by the company.

The responsibility of fulfilling all steps of the process is incumbent on each project director or Delivery training team.

The **Information Technology** process comprises all the activities needed for the company's physical resources management, namely:

- Backups;
- Workstation definition and installation;
- Security;
- Anti-virus Maintenance;
- Register of software licences;

The **Configuration Management** process comprises the activities of:

- Version management;
- Changes management;
- Configuration management;
- Baselines creation;
- Packaging of the solution to be sent to the customer

A structure exists with persons responsible for processes, who guarantee that all NP EN ISO 9001 standard requirements consistently comply with, implemented and monitored.

The garnering of feedback, changes and the monitoring of processes, as well as their documentation and maintenance, is the responsibility of each process manager.

6.3 INTERRELATIONS BETWEEN PROCESSES

6.3.1 VALUE CHAIN

Mobileum Risk BU's value chain is shown in the following figure, reflecting the linking of processes.

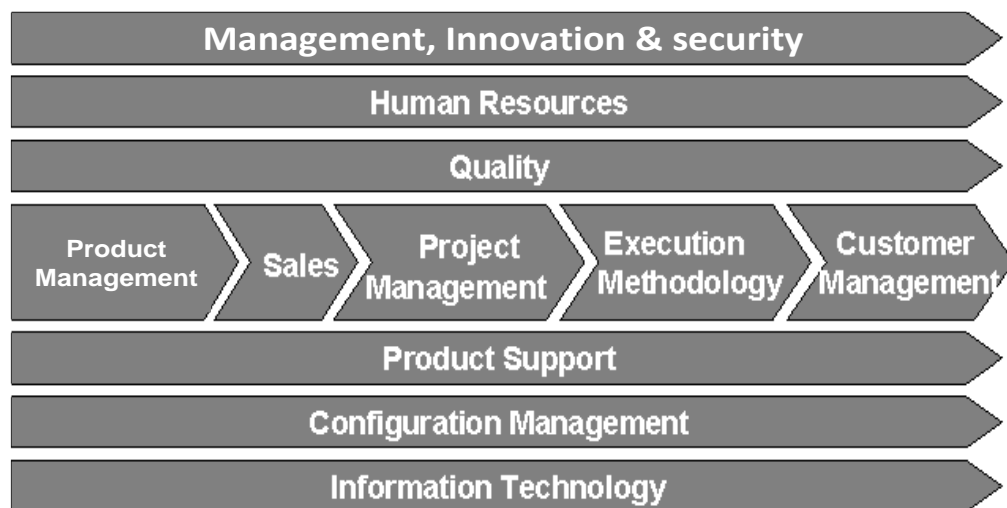


Figure 9 - Value Chain

6.3.2 RELATION BETWEEN PROCESSES

The processes described support Mobileum Risk BU's activities in an integrated way. The sequence of processes and the information flow between them is shown in the figure below.

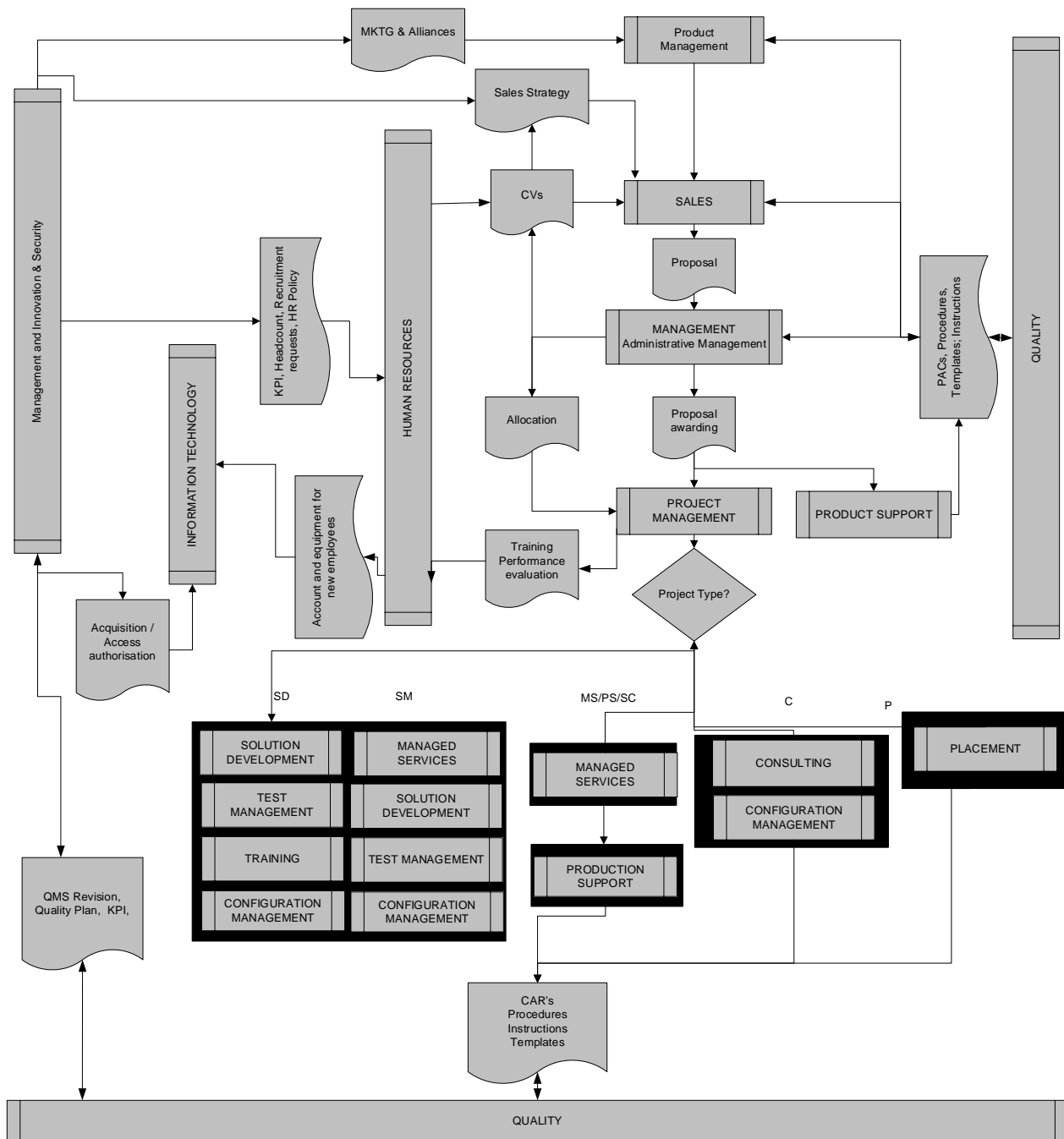


Figure 10 - Relation between processes

6.4 APPLICATION OF THE 8 QUALITY MANAGEMENT PRINCIPLES

For the definition of the Quality Management System, Mobileum Risk BU's considered as a presupposition compliance with the 8 quality principles:

- Focus on the Customer
 - Importance attributed to the garnering and management of the customer's requirements
 - Usage of a requirement management tool
 - Initiation of requirements garnering during the proposed solution elaboration
 - Detailed requirements document in all solutions supplied by the Software Development area
 - Customer feedback collection
 - Claims collection and handling
 - Customer satisfaction evaluation collection and handling
 - Project management methodology contemplating the existence of periodical meetings, situation status reports and a project acceptance term signed by the customer
 - Supply of a company cell phone to all employees, the number of which is provided to customers.
- Leadership
 - Mission, vision, company values definition and reporting to all the team
 - Clear and unequivocal definition of each employee's responsibilities
 - Definition of company, business unit and individual goals for some function levels
- Employee involvement
 - Annual inquiry to employees to measure satisfaction and the level of involvement in the organisation, and to identify aspects to be improved.
- Process by process approach
 - The processes are perfectly identified
- Systematic approach
 - Interrelations between processes are identified.
- Continuous improvement

- The rapid processing of corrective and preventive actions resulting from audits and from customer and employee feedback is a constant concern
- Monthly measurement of the defined goals
- Decisions based upon facts
 - The definition of processes, together with the investment in and implementation of a support infrastructure based on the using of tools, has enabled employees to create an information base that allows a more efficient control of projects, and the creation of a history used in support of decision-making.
- Mutually beneficial relationships with suppliers and partners
 - Employment of suppliers selection criteria
 - Identification and systematisation of relationships with partners

7 Management Responsibilities

The Management process encompasses all activities related with:

- Strategic Planning Cycle
- Administrative Control of Projects
- Control and Reporting of the company's performance indicators
- Purchases
- Selection and Evaluation of suppliers

The Sales process encompasses all activities related to the initial garnering of the customer's requirements, with the objective of elaborating the proposal.

7.1 MANAGEMENT COMMITMENT

The decision to implement a Quality Management System was taken by Mobileum Management, all means being made available forthwith for the execution of a project that would enable the fulfilment of this objective.

Mobileum Management has backed the revision and adaptation of the Quality Management System on a periodic basis, in accordance with the company's internal needs and strategic changes.

7.2 FOCUS ON CUSTOMERS

All projects are developed in three major steps:

- Sales
- Management of the project and its execution
- Gathering and processing of data regarding the evaluation of customer satisfaction

The appraisal of the customers' requirements begins at the sales phase during the elaboration of the tender, as described in procedure *P_QMS_018 – Sales*.

For any type of project, there occurs, after awarding, a phase wherein the global vision of the project is synchronized with the details of its requirements, as described in the following procedures:

- P_QMS_001_E – Project Management

- P_QMS_002_E – Solution Development
- P_QMS_030_E – Production Support
- P_QMS_036_E – Product Support
- P_QMS_031_E – Training
- P_QMS_014_E - Consulting
- P_QMS_016_E - Placement
- P_QMS_039_E - Managed Services

In order to guarantee that all requirements are implemented and delivered without any problems, all solutions developed by Mobileum Risk BU are subjected to a systematic testing process, as described in the procedure.

- *P_QMS_005_E – Test Management*

Following the customer's acceptance of the project, the process is initiated whereby data regarding the evaluation of the customer's satisfaction is gathered and processed, as described in procedure *P_QMS_011_E – Customer Management*

7.3 QUALITY POLICY

It is incumbent on the Management to review the Quality policy, during the annual Strategic Planning Cycle , in order to guarantee that it:

- Suits the organization's objectives, is appropriate to the purpose and context of the organization and supports its strategic direction;
- contemplates the fulfilment of the Quality Management System's requirements and the continuous improvement of its efficacy;
- Supplies a framework for the establishment and review of the objectives of quality ;
- Is communicated and understood within the organization;
- To ensure product, solutions, processes, marketing and organization innovation;
- Strong collaboration with Partners and with the environment where the company is incorporated ;
- Employees as part of the Quality Management System ;
- Focus on internal training ;

- Encourage, promote communication and constant feedback between employees and Top Management
- Promote continuous improvement of the effectiveness of the QMS Management System;

Top Management presents to Mobileum Risk BU the Company strategic plan, each year to all employees.

Mobileum Risk BU's Quality Policy is completely aligned with those company strategic guidelines.

Mobileum Risk BU guides its innovative activity on the grounds of its mission and strategic vision, which continually seeks to add value to their customers and partners.

The mission of Mobileum Risk BU is reflected in the commitment to contribute to the business success of its customers.

Guarantees it together with its partners, through aligning their solutions with the business challenges of clients and through his own knowledge.

Customer satisfaction allied with the motivation and excellence of Mobileum Risk BU's people are key for an effective and results driven management of QMS System.

Mobileum Risk BU strategy from start included an aggressive internationalization based on the competitive advantage resulting from this innovative, distinctive and competitive range of products and solutions, which led the company to become a global market leader in Telecom Revenue Assurance Software.

Mobileum Risk BU strategic vision of being a global market leader in Business Assurance solutions will allow the company to reach a new development stage and maintain the innovation path.

Mobileum Risk BU's target industries (originally Telecommunications, but currently investing in its expansion into the Retail, Energy and Financial) are highly dynamic and high tech driven industries where the capacities to innovate and to keep up with the market are key success factors for any solution provider.

For this reason R&D cannot be seen as a conquered success factor but as a vital and continuing challenge to ensure its continuing success demanding constant experimentation, analysis, research, prototyping and development of new features and solutions that retain Mobileum Risk BU's products, marketing, processes and organization at the forefront of the market.

Consequently Mobileum Risk BU encourages the incorporation in their values and working practices the appreciation, generation, management, analysis and application of innovative ideas, as well as monitoring the markets for the detection and evaluation of business and technology trends.

Based on them, Mobileum Risk BU draws up its technological evolution plan. This plan is re-evaluated periodically and is adapted to external conditions, always aligned with Quality Management principals and with Mobileum's strategy.

7.4 PLANNING

7.4.1 QUALITY OBJECTIVES

One of the results of the Strategic Planning Process is the establishment of the company's annual objectives. In order to ensure that they comply, these objectives are extended to all relevant business units, processes and functions within the organization. QMS objectives are defined each year completely aligned with the strategic guidelines defined by the company as defined in the QMS policy.

7.4.2 PLANNING OF THE QUALITY MANAGEMENT SYSTEM

Ever since the birth of Mobileum Risk BU concerns existed with regard to the definition and implementation of a Quality Management System capable of enabling:

- The establishment of methodologies in support of the company's core business activities;
- The systemization of activities related to the company's on-going management; the fulfilment of the requirements pertaining to the NP EN ISO 9001 standard.

An initial plan was elaborated in order to reach these objectives, which has been the object of revision with the aim of guaranteeing the fulfilment of the annually defined company objectives and the follow-up of the company's strategy.

Quality Management System Planning takes in consideration the company context and interested parties and Risks and opportunities related are taking in consideration in this planning as well actions to mitigate those risks.

7.5 RESPONSIBILITY, AUTHORITY AND COMMUNICATION

7.5.1 RESPONSIBILITIES AND AUTHORITIES

Mobileum Risk BU has defined a career plan for its employees. A detailed description of each function's responsibilities can be found in instruction I_QMS_012_E – Job Descriptions.

Within the scope of project execution, the following functions have been defined:

- *Project Director* – Performed by an employee whose category is higher than or equal to that of Manager

- *Project Manager* – Performed by an employee whose category is higher than or equal to that of Senior Consultant
- *Tester* – Performed by one of the elements of the testing team. This function applies only to projects of the Solution Development variety.
- *Configuration Manager* – Performed by one of the elements of the supporting Technology team

The description of the responsibilities associated to each of these functions can be found in T_QMS_005_E – Proposal and in T_QMS_014_E – Project Development Plan.

This model is the basis for the elaboration of tenders and project planning, and is used for conveying these responsibilities to the customer.

7.5.2 MANAGEMENT REPRESENTATIVE

The Management deliberated that Quality is one of the concerns at Mobileum Risk BU and has selected a team responsible for guaranteeing the maintenance and continuous improvement of the Quality Management System.

It is incumbent on the person responsible for the Quality process to elaborate the quality plan, identify processes, and ensure that the quality system meets all the requirements of the NP EN ISO 9001 norm and guarantee the performance of internal audits and respective corrective measures.

7.6 MANAGEMENT REVIEW

One of the following events (inputs) can trigger the annual revision of the Quality Management System:

- Changes in company strategy
- Review of the supply of products and services
- Interface Management analysis:
 - Competitive analysis (Strategic Plan, Marketing Plan, Mobileum's Portal Market analysis (SPC, AOP, Mobileum's portal) ;

- Knowledge production and Management:
 - Customer feedback analysis;
 - Lesson learned analysis (QMS Revision analysis and Services Survey);
- QMS Management System analysis & Management:
 - Internal Audits results (P_QMS_013_E – Quality Audit, P_QMS_017_E – Corrective and Preventive Actions);
 - Results from the Management System analysis – Quality Management System Revision;
 - Results from Processes monitoring

Quality system revision is made by the Quality Process Owner in order to analyse the essential key points for the innovative activity of the company.

Quality system review is presented, and approved, by the top Management.

As outputs of the QMS Management System, review is considered:

- Actions to be implemented with the aim of improving the effectiveness of QMS Management System;
- Possible need for Human resources, financial or technology resources to ensure the adequacy of the QMSI Management System to the Company practice and adequacy with NP EN ISO 9001 “Quality Management System Requirements;
- Changes in Policies, goals, key performance indicators, processes or other elements associated with the implemented QMS Management system.

8 Resource Management _ Support

The Human Resources process includes all activities related to:

- Hiring and Selection
- Integration of new employees
- Skills Management
- Performance Evaluation
- Training
- Administrative Management

The Information Technology process encompasses all activities related to the:

- Definition and implementation of the policy of backups
- Definition and implementation of the anti-virus policy
- Management of the Hardware and Software register
- Guarantee of information security
- Creation and maintenance of workstations for all employees
- Maintenance of facilities

The annual resource plan containing the definition of the headcount per business unit results from the strategic planning cycle described in the Management process.

8.1 PROVISION OF RESOURCES

The annual resource plan per business unit results from the strategic planning cycle.

The selection and recruitment of new employees is in accordance with the content of procedure P_QMS_008_E – Hiring and Selection.

The integration of new employees is in accordance with the content of procedure P_QMS_007_E- New Hires Integration.

Mobileum Risk BU has implemented a fixed workplace philosophy for employees that are permanently based at the company. There exists a set of mobile workplaces not attributed to any specific employee, and which can be used by anyone who occasionally visits the office.

With Technological Renovation in 2010, all employees have a laptop.

In order to guarantee that all employees are permanently contactable, the company ensures that a company cell phone is available to all employees.

8.2 HUMAN RESOURCES

8.2.1 OVERVIEW

Aims to ensure the correct mapping and adaptation of employees' skills to the company business needs and demands, acting on new employees hiring and selection process and a close guidance during boarding and integration period, continuing on, throughout each employee's professional cycle within the company through a continuous training process (described in procedure P_QMS_006_E – Internal Training)

The company Annual Training Plan is built upon external and internal approaches, allowing a better and more complete access to different training areas from company's employees and consequently serving as a learning and career accelerator for each individual.

As previously mentioned, apart from external training sessions/partners, Mobileum Risk BU fosters a set of internal training sessions, using and engaging employees with a proven track record and skills set in their area of expertise and therefore recognized as practice leaders, reinforcing our belief in leveraging and capitalizing our internal know how. These trainings aim to better prepare company's employees in several areas

8.2.2 COMPETENCE, AWARENESS AND TRAINING

For a better and more user's friendly access to Mobileum Risk BU team's skills and experiences, a CV template was created and its fulfilling is mandatory for all employees. Each employee's CV is available on the intranet allowing an efficient skills database management, enabling Project and Team Managers to better adapt and match each project skills and seniority need's to suitable consultants/employees. This database update and management is in accordance with procedure P_QMS_015_E – Skills Management.

The Annual Training Plan deployment is as described in P_QMS_006_E – Internal Training.

People Culture team is responsible for ensuring compliance with our training process, including participants and program management, and respective logistics (when/if necessary).

8.3 INFRA-STRUCTURE

Since the Technological Renovation in 2010, all employees have a laptop and all the corporate Systems around the world were centralized on a unique Datacentre (NOS' DC).

All Employees have remote access to those centralized systems through VPN (according to Security Policy's in place)

The availability to all employees of the necessary conditions for the performance of their tasks is an ongoing concern at Mobileum.

All laptops have a set of software applications installed as part of the standard image, and which contain all the necessary tools for the performance of each employee's functions.

Suupport, IT & Facilities area ensures all infra-structure support.

This area has the further responsibilities of:

- Defining and managing the implementation, operability and support of the backups policy
- Defining, ensuring the implementation, operability and support of the anti-virus policy
- Defining, managing and guaranteeing the operability and support of all systems
- Defining, managing and guaranteeing the operability and support of all laptops and Printers
- Defining, managing and guaranteeing the operability and support of the Network (WAN&LAN)

- Defining, managing and guaranteeing the security of all Infrastructure (Physical and Logical)
- Keeping the equipment and software register updated
- Defining, managing and guaranteeing the operability of the company's Facilities

8.4 WORK ENVIRONMENT

As a SW company, the result of the company work depends on the work carried out by its employees, and consequently on their level of motivation.

In order to ensure a high level of motivation and a positive working environment, a great investment in employee follow-up is made by all managers. There also exists an informal relationship between all organizational levels, as well as work in an open-space environment, teamwork, semi-annual performance appraisals of employee motivational and involvement levels.

9 Product and Services Realization

The Project Management process encompasses all activities related to:

- Project start-up
- Project planning
- Execution and control
- Project closure

Mobileum Risk BU's projects are segmented into 7 different types, each one corresponding to a company process:

- Solution Development – Development of tailored software or customization of packages
- Production Support – Activities providing support to Production
- Consulting – Consulting projects
- Placement – Placement of skills
- Managed Services - Delivery of solutions on a Managed Services Model and maintenance of solutions

The Sales process encompasses all activities related to the initial gathering of the requirements needed for the elaboration of the proposal.

The Customer Management process follows up on the execution of the whole project through the gathering of feedback by the customer managers, the gathering of end-of-project feedback and the provision of customer support after project delivery.

All products developed internally have an associated life cycle, which is included in the Product management process.

9.1 REALIZATION PLANNING

As one of the activities of the Project Management process, the planning of the realization of the product or service begins after the start-up decision of the project, as is described in procedure *P_QMS_001_E – Project Management*.

The plan, the project requirements, documentation made available during the project's life cycle, the team, the activities of verification and validation, as well as other information relevant to both internal and customer project management, are described in detail in the Project Development Plan, based on model *T_QMS_014_E*.

9.2 PROCESSES RELATED TO CUSTOMERS

9.2.1 DETERMINATION OF REQUIREMENTS RELATED TO THE PRODUCT AND SERVICES

Activities related to the determination of project requirements begin during the qualification phase of the proposals, as described in procedure *P_QMS_018_E* – Sales. After the decision to begin the project, whatever its kind, an alignment and refining of its requirements is carried out with the customer. These activities are described in detail in the following procedures: *P_QMS_002_E* – Solution Development, *P_QMS_030_E* – Production Support and *P_QMS_014_E* – Consulting, *P_QMS_039_E* – Managed Services .

The determination of product requirements is carried out by the Product Maintenance Team and is described in procedure *P_QMS_021_E* – Product Management.

This team has the responsibility of identifying, for each product/ project, statutory and regulation requirements related to it.

In projects developed internally, only the solutions developed for Roaming Management Systems are regulated on a worldwide basis by the standards of the GSM Association. These solutions comply with the standards (Permanent Reference Document) mentioned in the GSM Association website.

9.2.2 REVISION OF PRODUCT & SERVICES – RELATED REQUIREMENTS

The revision of customer requirements can be carried out either during the proposal negotiation or after its awarding, during the Envisioning phase, the main objective of which is to ensure the alignment of the project vision shared by the customer and Mobileum.

Whenever the initial proposal is revised, a new version is produced and kept in its repository.

With respect to new product versions or releases, the revision is carried out based on the suggestions and problems registered on the Support Site (WOSS) relative to each product – both by customers and by the product development team. Improvements suggested by the Testing team and registered in the QualityCenter and SmarteQM are also analysed.

9.2.3 COMMUNICATION WITH THE CUSTOMER

Communication with the customer is carried out through meetings, information exchange via email or through the availability of information on the company internet page.

Any customer may register suggestions and complaints in relation to the work carried out by Mobileum Risk BU, using the email address indicated on the company Internet site, which can also be found in our proposals. The customer can also do this by means of project control meetings, where he can communicate his suggestions and complaints to the Project Leader or the Project Director, or by resorting to meetings with the accounts manager.

These manifestations of dissatisfaction are registered and processed in accordance with the following procedure: P_QMS_023_E – Claims and suggestions_*Risk BU*.

9.3 CONCEPTION AND DEVELOPMENT

9.3.1 PLANNING CONCEPTION AND DEVELOPMENT

The planning of the conception and development of services rendered within the scope of projects is carried out in accordance with the layout of the following procedures

- P_QMS_001_E – Project Management
- P_QMS_002_E – Solution Development
- P_QMS_030_E – Production Support
- P_QMS_014_E – Consulting
- P_QMS_016_E – Placement
- P_QMS_039_E – Managed Services

The planning of the conception and development of products developed and supported by Mobileum Risk BU is carried out in accordance with: P_QMS_021_E – Product Management

9.3.2 INPUT TO CONCEPTION AND DEVELOPMENT

In the services rendered by Mobileum's Risk BU, the proposal and documents pertaining to the envisioning and specification of requirements represent a work base for conception and development, as described in the following procedures:

- P_QMS_002_E – Solution Development
- P_QMS_014_E – Consulting
- P_QMS_036_E – Product Support
- P_QMS_039_E – Managed Services

Regarding new product versions, these are prepared based on the information registered in the support site of each product and on the information contained in the QualityCenter/ SmarteQM.

9.3.3 OUTPUT FROM CONCEPTION AND DEVELOPMENT

The results of conception and development are laid out in detail in the support methodology for project execution, namely:

- P_QMS_002_E – Solution Development
- P_QMS_030_E – Production Support
- P_QMS_014_E – Consulting
- P_QMS_036_E – Product Support
- P_QMS_039_E – Managed Services

9.3.4 REVISION OF CONCEPTION AND DEVELOPMENT

All project teams developing highly complex solutions include an element responsible for Quality, a task normally undertaken by the Project Director and/or Leader, whose main function is to ensure the end quality of the documentation and solution delivered to the customer, as well as traceability among documents produced during the various phases of methodology. The project leader reviews all documents produced by the project team, before delivering them to the customer.

9.3.5 VERIFICATION OF CONCEPTION AND DEVELOPMENT

The verification sessions, whose purpose is to ensure that the results of a given methodology phase comply with its input requirements, are guaranteed by the project leader and the testing team, as described in the following procedures:

- P_QMS_001_E – Project Management
- P_QMS_002_E – Solution Development
- P_QMS_030_E – Production Support
- P_QMS_014_E – Consulting
- P_QMS_005_E – Test Management
- P_QMS_036_E _ Product Support
- P_QMS_039_E _ Managed Services

9.3.6 VALIDATIONS OF CONCEPTION AND DEVELOPMENT

All solutions developed by Mobileum Risk BU are subjected to a quality control process, the main objective of which is to ensure that all requirements have been implemented and that there are no flaws. This process is detailed in procedure P_QMS_005_E – Test Management.

9.3.7 CONTROL OF CHANGES IN CONCEPTION AND DEVELOPMENT

The following issues may trigger the process of change control:

- Change requests made by the customer
- The detection of problems/flaws by the internal or the customer's testing team
- Changes aiming at solution improvement, carried out by the development team

These activities are supported by the following procedures:

- P_QMS_005_E – Test Management

- P_QMS_003_E – Configuration Management
- I_QMS_041_E – Change Management
- P_QMS_001_E – Project Management

9.4 PURCHASES_EXTERNAL SUPLIERS

Mobileum Risk BU carries out its purchasing processes, for products or services that affect the quality of its final product, based on instruction I_QMS_042 _E– Suppliers Rules.

9.5 PRODUCTION AND SUPPLY OF SERVICE

9.5.1 CONTROL OF THE PRODUCTION AND THE SUPPLY OF SERVICE

All solutions developed by Mobileum Risk BU have associated to them a set of standardized documentation, delivered to the customer, as is described in the methodology support procedures on which the product's execution was based.

For projects of the Solution Development type, the customer is given the documentation identified below, as described in procedure P_QMS_002_E – Solution Development:

- User manual
- Operations Manual
- Installation Manual
- Release Notes

9.5.2 VALIDATION OF THE SERVICE PRODUCTION AND SUPPLY PROCESSES

For projects of the Solution Development type, Mobileum Risk BU supports all activities from the delivery of the solution to the customer, to the start of its production, as described in procedure P_QMS_002_E – Solution Development.

All activities related to product maintenance are described in procedure P_QMS_036_E – Product Support

9.5.3 IDENTIFICATION AND TRACEABILITY

The identification and control of the versions of the items comprising the solutions provided by Mobileum Risk BU are carried out using the PVCS Dimensions tool, or, if this development is carried out at the customer's installations, using tools provided by the customer. This is described in procedure P_QMS_003_E - Configuration Management.

9.5.4 CUSTOMER PROPERTY

The documentation provided by the customer is processed according to the layout of procedure P_QMS_004_E – Document Management. Real customer data is accessed sporadically and only in cases where the customer provides a username and password to that effect.

9.5.5 PRODUCT PRESERVATION

The products of Mobileum Risk BU, "source code" of SW produced under the products marketed by Mobileum Risk BU, are stored on a central server, to which the backups are secured according to the statement I_QMS_045_E - Politics Backups.

The availability of products to customers is done through "object code", using one of the following methods:

- FTP Site Mobileum Risk BU isolate internal network (DMZ specified for this service) Public access to only port in FTP Server with Windows Integrated authentication on the FTP Server, which is available in a "user" folder and temporary Customer for this make the Download SW.
- CD sealed and delivered personally to the Customer by Mobileum Risk BU or shipped to customers by providers of transport services

The fact that the SW is available in "object code" means that does not allow the adulteration of the product by others.

9.6 CONTROL OF MONITORING AND MEASUREMENT RESOURCES

This requirement is excluded from the scope of the audit, since none of the activities developed by Mobileum Risk BU need to resort to this kind of devices / resources.

10 Monitoring, analysis and improvement

10.1 OVERVIEW

Mobileum Risk BU monitors the KPI defined annually for the company, and the results, are monitored and shared by Mobileum Top Management to the Board .

10.2 MONITORING AND MEASURING

10.2.1 CUSTOMER SATISFACTION

The garnering and processing of data regarding the satisfaction of Mobileum Risk BU customers is carried out in accordance with the layout of procedure P_QMS_011_E – Customer Management.

10.2.2 INTERNAL AUDIT

Internal audits are carried out with the frequency defined in the Quality plan and in accordance with procedure P_QMS_013_E – Quality Audits.

Internal audit results are processed in accordance with the layout of procedure P_QMS_017_E – Corrective and Preventive Actions.

10.2.3 MONITORING AND MEASURING OF PROCESSES

The KPI defined annually and monitored monthly enable Mobileum Risk BU to monitor its processes.

10.2.4 MONITORING AND MEASURING OF THE PRODUCT

In order to control and continuously improve the solutions development process, Mobileum Risk BU has identified a set of metrics that enable the measuring of the efficiency and operability of those solutions, and which are described in procedure P_QMS_034_E – Measuring Analysis and Improvement.

10.3 CONTROL OF NON-CONFORM PRODUCTS

All solutions developed by Mobileum Risk BU undergo a rigorous testing process in accordance with procedure P_QMS_005_E – Test Management and I_QMS_041_E – Change Management. This process enables the identification and correction of flaws in the solution, prior to its delivery to the customer. No product is delivered to the customer without first being subjected to system tests by an element unattached to the development team. Any detected errors are registered and communicated to the development team for correction.

10.4 DATA ANALYSIS

The garnering and analysis of data is carried out monthly, for the monitoring of the company KPI, and at the end of the project, for product and customer satisfaction index Indicators.

After each internal audit, the results are evaluated in order to equate the corrective and preventive measures to be taken.

10.5 IMPROVEMENT

10.5.1 CONTINUOUS IMPROVEMENT

Mobileum Risk BU strives to continuously improve the efficacy of its Quality system through the use of the Quality policy, the performance analysis of the company KPI, audit results, the analysis of relevant data, corrective actions and through management revision.

10.5.2 NON CONFORMITY AND CORRECTIVE ACTIONS

Identified corrective actions are identified and implemented in accordance with procedure P_QMS_017_E – Non-conformity and Corrective Action.