altitude IN THE KNOW Bytes worth their weight in gold IN THE LABS Integrating diversity: the key to innovation P. 6 IN THE LOOP Reliable intelligence > Corinne Jouanny, Altran Pr[i]me

altran.com

altran

02 | CONTENTS & CONTRIBUTORS CONTRIBUTORS | 03



altran

96, avenue Charles de Gaulle 92200 Neuilly-sur-Seine France www.altran.com altitude@altran.com Altitude n°23 Publishing Director: Philippe Salle Editorial Director: Frédéric Fougerat Editor in Chief: Kaling Chan

Frédéric Fougerat
Editor in Chief:
Kaling Chan
Editorial content:
Denis Baudier, Martin
Bellet, Louis-Antoine
Mallen, Pierre Michaud,
Gilmar Sequeira Martins
Contributors:
Miguel Ariona Villanuey

Contributors:
Miguel Arjona Villanueva,
Florence Barré, Emilie
Bartier, Anisha
Damodaran, Thomas
Duperret, Julien Esposito,
Léa Kim, Christian Le
Liepvre, Adrien Lerquet,
Clara Lorentz, Michaël
Mardyks, Debbie Mayhew,
Susanne Merbold,
Nathalie Pichery, Pascal
Poublan, Alex Prompsy,
Markus Ross, François
Verez, Yannick Waller
Design and page layout:

CITIZEN PRESS

0177458686 **Publishing Manager:** Martin Bellet Art Director: David Corvaisier Page lavout: Marion Stepien Editorial secretary Corporate Editions Translation: Corporate Editions Cover credit Marc Bertrand On the cover: Corinne Iouanny Managing Director of Altran Pr[i]m **Production:** Sylvie Esquer Print by: Design Color Copyright: January 2013 ISSN: 1767-9974 Altitude (Paris 2003)



Becoming a strategic partner

Altran has extraordinarily talented and highly qualified employees, capable of adapting to a wide variety of situations and driven by a strong entrepreneurial spirit. This key advantage will help the Group move forward on three priorities. The first is to enhance our brand visibility, particularly in Germany. Altran as a whole will grow stronger by becoming a major player on the world's largest engineering market. The second priority entails creating centres of excellence, and will help us combine expertise and agility to meet transnational demands. The third is to transform our approach to our clients, as we still do not do enough to anticipate their needs. The Group knows how to react quickly and offer high-quality services. In the future, it must learn to move beyond merely stated needs and analyse the client's industry, strategy and timeline. Teams will thus have the benefit of more information, but also more time to offer solutions that are better suited and more effective. In so doing, Altran will strengthen its prospects of becoming a long-term strategic partner.



04 | IN THE AIR

Altran saves a lifesaver: IV infusion bags

Maco Pharma called upon Altran in 2011 to drastically reduce the manufacturing cost of its IV infusion bags.

Energy management: moving towards an intelligent network

In the future, intelligent networks will be able to provide customers with a way to manage local energy consumption.

06 IN THE LABS

Integrating diversity: the key to successful innovation

Today, innovating successfully requires a more holistic approach to design focusing on integrating diversity of thought. Mastering this initiative is one of the strengths of Altran Pr[i]me.

08 I IN THE KNOW

Bytes worth their weight in gold

With the advent of the digital age, protecting data has become a critical issue. To ensure security, simple reflexes are used in conjunction with complex methods. Individuals, businesses, governments: everyone is affected by this new social concern.

12 | IN THE LOOP

Reliable intelligence

The International SKA Project aims to build an extraordinarily powerful radio telescope within the next 15 years. Cambridge University called upon experts at Cambridge Consultants for help moving ahead from the prototype phase to large-scale production.

14 | IN THE WORLD

France: sharing innovation

For many years, Altran has been working with the most important players in the banking, finance and insurance industries. Today, the Group is a key partner in this market.

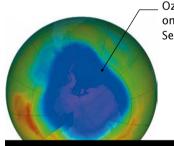
04 | IN THE AIR | 05

AIRCRAFT AROUND THE WORLD will feature standard wireless in-flight entertainment by 2021 (source: IMS).

€3,879,032

IS THE TOTAL COST OF THE EUROPEAN ECOSHELL

PROJECT, in which Altran Research is involved. It aims to develop ultra-light electric cars that use bio-composite materials with low environmental impact.



Ozone hole, on the 22nd of September 2012.

The average size of the hole in the ozone layer during the months of September and October 2012 was 17.9 million square kilometres (6.9 million square miles), the second smallest measurement NASA has recorded for the past 20 years. 22 September marked the annual peak, an area of 21.2 million square kilometres or 8.2 million square miles (see photo above). Paradoxically, globa warming is the cause of this reduction.

14,000

LAMPS illuminating the streets of Westminster, in London, will be replaced by intelligent lighting controllable via iPad.

HEALTHCARE

Altran saves a lifesaver: IV infusion bags

hen Maco Pharma called upon Altran in 2011, its goal was clear: the French company wanted to drastically reduce the manufacturing cost of its IV infusion bags to resist a severe market attack on prices.

"Negotiating the purchase price of components, even with supplier resourcing, is not enough to come out on top. The product and manufacturing instrument must also be entirely redesigned", explains Rithy Tep, Manager of Economic and Purchasing Performance Services at Acsience by Altran.

Maco Pharma successfully rose to this challenge by drawing from our "Design to Cost" proposal, the fruit of joint efforts by teams at Altran Pr[i]me and Acsience. "The innovative redesign approach that we are developing and combining with Acsience's cost analysis methods allows us to identify levers for optimising manufacturing costs from the very start of a project", says Christian Halconruy, Head of the

Systems Engineering Practice at Altran Pr[i]me.

With its design expertise, Altran Pr[i]me did not settle for simply reducing the manufacturing cost of the bags, but also sought to add value to the project through improving their shape, grip and the clarity of information displayed on the product. The experience was conclusive for Maco Pharma, which has entrusted a new project to Altran.



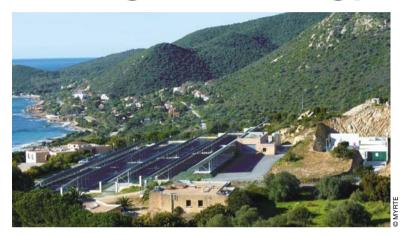
ENERGY

Transparent solar panels, an energy revolution

Placed on the screen of a mobile phone or on a skylight at home, the transparent and flexible photovoltaic film developed by the French company Wysips could become the benchmark for a world switching to green energy. Although its yield is relatively low – 100 watts per square metre, 30% less than a traditional solar panel – this technology increases independence and improves comfort for cellular phones. Only 0.1 mm thick, the film does not interfere with the use of touch screens. Eventually, car windows, computer screens and even clothing could be transformed into miniature solar power plants!

ENERGY

Hydrogen in the service of green energy



e all know the downside of renewable energies such as wind or solar power: the amount of power produced depends on the weather. To avoid wasting surplus energy produced, instead injecting it into the power grid in the event of heightened demand, several European energy players have decided to use the properties of hydrogen to store electricity.

Such is the case for German energy champion E.ON, which started building a pilot site for storing hydrogen in gaseous form. In the future, it plans to use this process to store significant volumes. In Corsica, a similar project called MYRTE is already being tested. Part of the electricity produced by the site's 3,700 square metres (39,800 sq. ft.) of solar panels is converted into hydrogen, and the energy is then restored through a fuel cell in periods of lessened demand.

The only downside to storage in gaseous form is its relatively low yield – about 35 to 45%. Meanwhile, liquid storage requires complex installations, as the hydrogen must be brought to -252.8 °C (-423 °F). Perhaps storage as a solid could be the solution: McPhy Energy is offering a process that has already caught the attention of two companies in Italy and Japan.

SMART GRID

Energy management: moving towards an intelligent network

uring the latest Pollutec exhibition on environmental technologies and services in November 2012. Altran demonstrated its expertise in terms of energy efficiency and local energy production. "This concept is currently being developed, particularly in Northern Europe. It is in line with the trend of optimising use of resources", explains Renaud Delmas, Altran Marketing Manager for Energy. "With the rise of wind, solar and biomass, local energy production is expanding. It is important to manage the highs and lows of this intermittent method of production to ensure that supply meets demand". In the future, this intelligent network will be able to provide customers with a way to manage local energy consumption, while also shrinking their energy bills.



Online

EQUIPPED WITH A ROBOTIC PROSTHETIC LEG, an American was able to walk up the 103 flights of stairs in the Willis Tower. The brain controls the movements of the leg via nerve endings in his thigh muscles.



THE ROVER CURIOSITY HAS BEEN ROAMING MARTIAN SOIL and analysing the air and the ground under its wheels since the beginning of August 2012. A photomontage of images transmitted by its cameras offers a 360° view of Mars around the rover.



GOOGLE STREET VIEW IS NO LONGER LIMITED TO THE STREETS OF MAJOR CITIES, and is now allowing users to explore the seas. Dive into the Great Barrier Reef... without getting your feet wet!



IN THE LABS | 07 06 I IN THE LABS

PROCESS

TODAY, INNOVATING SUCCESSFULLY REQUIRES A MORE HOLISTIC APPROACH TO DESIGN FOCUSING ON INTEGRATING DIVERSITY OF THOUGHT. MASTERING THIS INITIATIVE IS ONE OF THE STRENGTHS OF ALTRAN PRITIME. SPECIALIST IN INNOVATION AND "DESIGN THINKING" MANAGEMENT.

Integrating diversity:

The key to Successful innovation

o succeed, an innovative service or product must possess three essential qualities: feasibility (from a technical point of view), desirability (i.e., a useful, ergonomic, attractive item, a source of pride, etc.) and viability (economically profitable for the manufacturer and situated in a promising growth sector). "In a globalised and saturated market, companies are forced to innovate to grow and ensure their sustainability", explains Corinne Eliminating blind spots Jouanny, Managing Director of Altran Pr[i]me, the Altran entity specialising in innovation management. "But faced with ever more rapid changes in needs and constraints, creative companies are now

1982

Aviation: Altran develops several

key features of the Airbus A320.

including data processing and

visualisation in the cockpit.

obliged to innovate differently. Technological innovation in and of itself is no longer enough; innovation must respond to an increasingly complex set of limitations on new value chains. They are both technological and economic in nature, as well as social, societal, environmental and even emotional". Forgetting the "go-to-market" principle could be fatal. A pioneer in the photography industry, Kodak failed to manage the transition to digital and has now disappeared.

1989

Automotive: Altran makes

electric vehicles more intelligent

(information on remaining battery

power, heat control, power cut-off in the event of violent impact, etc.).

develop this comprehensive approach, due to lack of awareness, time or adequate internal expertise. Altran's strength lies in its ability to incorporate these three ingredients - feasibility, desirability, viability - into joint creation or innovation projects, to the benefit of our clients. "It's a real savoir-faire, a combining of tools, methods and processes that Altran has developed over time and gathered together in a Design Thinking approach", says Corinne Jouanny. The key is to build multidisciplinary teams capable of providing this threefold integration. Diversity is the key word: diversity of expertise, experience, age, gender, culture, etc. Only with this wide variety of profiles can a team cover all dimensions of innovation, from the traditional aspects of functionality, cost, and marketing to the unusual ones (perception, pleasure, etc.). The goal is to eliminate blind spots. "Our clients and partners are

Industrial companies are struggling to

2003

1995 • Transit: Altran develops positioning and autopilot systems

for stops in Meteor metro stations.

• Space: Altran develops

the attitude control system

for the Ariane 5 launcher.

Altran joins Solar Impulse, a highly multidisciplinary project working towards aviation without fossil fuels.

EXPERIENCE **BUSINESS** THE DESIGN THINKING OBJECTIVES Create new experiences that are desirable, economically viable and also technologically feasible.

Our clients and

surprised when we

offer to integrate

atypical skills 99

integrate atypical skills and profiles, but the results in terms of creativity and relevance are always there", she explains.

"It means devoting everything we have to thinking differently". For example, have a young video-game tester within a team of financial and

embedded systems experts to develop a new trading platform. partners are sometimes Or put associate automotive designers and specialists in with aeronautical experts to create an innovative aviation system, or

add an ethnologist and environmentalist to a group responsible for imagining new, more environmentally responsible banking services.

Mobilising talent at the right time

"Managing this diversity is in itself an innovative professional practice, often underestimated and sometimes perceived as a risk", adds Corinne Jouanny. "The Design Thinking approach Altran

sometimes surprised when we offer to established for its joint innovation projects lets these diverse teams work in synergy to achieve the delicate balance of desirability, feasibility and viability". Effectively steering an innovation plan is also paramount. Altran sees itself as a movie director who knows how to mobi-

> lise the diverse talents necessary for the production at just the right time. This is especially important as the innovation process is a lengthy one: after analysing the problem

and the constraints, the creation phase includes multiple facets; then comes testing and improvement cycles, the decisive phase of launching industrialisation, and finally bringing the item to market. Altran Pr[i]me's role is to build the best team possible, establish effective Design Thinking methods and tools, and ensure, throughout the process, that no step or feature of innovation is neglected.



"INNOVATION: A QUESTION OF TRUST. LIBERTY AND DIALOGUE"

In your opinion, what is the best way to ensure successful

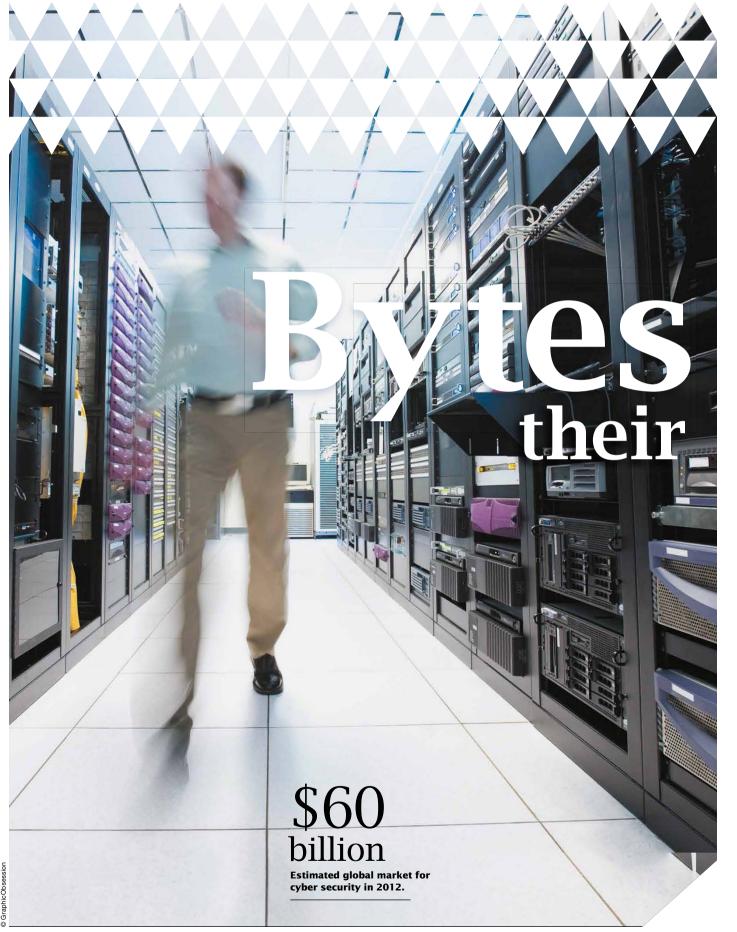
Innovating effectively is a lot like raising a child: we are never sure of the outcome, and luck undeniably plays a role. Successful innovation is not so much the fruit of a specific procedure as it is the result of a long-term vision and a favourable environment that combines a spirit of listening, trust. respecting differences, recognising the qualities and the creativity of each contributor, etc. Areva has numerous experts in a wide variety of fields, from nuclear power to chemistry, renewable energies, radiotherapy, etc. The culture of innovation we try to foster aims to encourage our employees to feel free to express their opinions, even if they are not specialists. The most original and innovative ideas often arise from the exchange of different - and even opposing - points of view.

How is Altran's experience useful to vou?

Altran assists us particularly with our "Marie Curie" in-house training programme designed for Areva experts. The goal of these sessions is to take experts out of their comfort zone by having them problem-solve in a team setting and in a field that is not necessarily their own. Such a challenge forces them to interact and brainstorm to find the optimal path towards innovation, going beyond their everyday practices to become real driving forces for ideas.

#23 | altitude altitude | #23

08 | IN THE KNOW | 09



DIGITAL SECURITY

WITH THE ADVENT OF THE DIGITAL AGE, PROTECTING DATA THAT TRAVELS OVER NETWORKS HAS BECOME A CRITICAL ISSUE. TO ENSURE SECURITY, SIMPLE REFLEXES ARE USED IN CONJUNCTION WITH COMPLEX METHODS. INDIVIDUALS, BUSINESSES, GOVERNMENTS: EVERYONE IS AFFECTED BY THIS NEW SOCIAL CONCERN.

weight in gold

nstant communication, online payment, information retrieval, remote systems management: digital technology continues to revolutionise our daily lives. Dynamic competition in this market tends to reduce costs and provide an everwidening range of services. However, the way these new systems interconnect is growing increasingly complex at the same time. It is thus becoming more difficult to effectively control and monitor data that is transmitted over networks, to know who has access and what use is made of the information. Paradoxically, for something so virtual it is remarkably human; ignorance of the risks inherent to the system's tools is generally the downfall of digital security.

PROTECTING DATA

A company's value depends on how well it protects its assets, which are primarily human resources, computer hardware and information. The means of protecting company data must be adapted to new



PASCAL POUBLAN
Information Security
Manager, Altran

RAISING AWARENESS AMONG EMPLOYEES

One of Altran's distinctive features is that we must protect not only our data, but also information with which our clients entrust us. As most of our employees do not necessarily work directly in our offices, we chose to use an online awareness tool to assess their understanding of digital data protection risks and inform them of best practices. Every new Consultant takes a quiz and participates in role-play exercises to better comprehend the core principles of information protection. The goal is not for employees to memorise a set of rules, but rather to become aware of threats and modify their behaviour to reduce these risks.

INSIGHT

uses. Proliferating means of exchange and the extension of the circle of users beyond those generally involved in the everyday organisation of the company's divisions and departments are making controlling interactions and access more difficult... Data security depends on the way employees use the information.

Often underestimated, the risk of industrial espionage or simple malice is no less real. To minimise such risks, those responsible for data security focus their efforts mainly on prevention and disseminating best practices to colleagues. For example, the user must understand that the password he or she chooses is personal and must be kept secret; it involves a commitment to protecting access to data. This advice may seem obvious, but it is not always followed in practice!

Moreover, the rise of professional social networks like LinkedIn and Viadeo leads users to unknowingly divulge information that can prove valuable to competitors.

10 | IN THE KNOW | 11



▶ PROTECTING ONE'S IDENTITY

Professional information is not the only data to attract the attention of third parties. Facebook and Google are regularly the subject of controversy about the way they use information collected about their users. Analysing browsing habits, recovering keywords in private messages and even tracking movements: all this information is passed on to agencies responsible for suggesting advertising content targeted to each user's behaviour.

While these practices remain legal, others are much shadier. Take phishing for example. This technique uses fake emails and fake websites of trusted organisations such as banks to get hold of passwords and even credit card numbers.

1970

The Echelon network was created in the early 70s. Its existence was not discovered until 1988.

If vigilance is the primary means of keeping data safe, there are other ways to protect oneself and one's information. For instance, encryption prevents data exchanges from being read by anyone other than authorised recipients. In the near future, the human body will be the key to security: biometrics will be used, for example, to confirm online transactions. This revolution has already begun, as digital fingerprinting is now used to unlock

computers or authenticate a user on a secure network.

HEADING TOWARDS CYBER WARS?

Decrypting data is a colossal task that only governments are able to undertake. But first, they must succeed in capturing the messages! To do so, the United States, the United Kingdom, Canada, Australia and New Zealand have invested in a tool capable of intercepting and analysing faxes, telephone conversations and emails around the world. Dubbed Echelon, the system relies on a network of satellites, ground stations and even a nuclear submarine.

These methods seem pretty expensive, however, next to the solution that China may have chosen to spy on its neighbours. China's two network infra-

DIGITAL SECURITY: A QUESTION OF TRUST

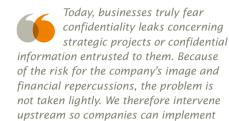
"At PSA Peugeot Citroën, we want to be sure that all our suppliers meet a high and consistent level of security", explains Pascal Duverger, Head of Information Control at the Group Security Department. "As innovation contributes to our products' competitive value, it is vital to uphold confidentiality in the sensitive phases of projects. We share this concern with our partners. For example, we ask them to comply with the ISO 27001 standard to establish objective benchmarks for information security" (see box below: "A Secure Data Centre").



structure champions, Huawei and ZTE, are suspected of having hidden access ports allowing them to retrieve data passing through their devices. While a White House-commissioned study was not able to prove this allegation, Australia - followed by Canada last October – chose to exclude Chinese equipment manufacturers from their list of authorised suppliers for public networks. This was unacceptable for China, despite its particularly nefarious reputation in the digital world: the country is suspected of carrying out numerous cyber attacks in recent years. Yet in this realm, Americans and Israelis are not exempt from criticism either. There is little doubt as to the origin of attacks against Iranian nuclear facilities with the Stuxnet and Flame virus... The data war is just beginning.



> Michaël Bittan Information System Security Manager, Altran



risk prevention processes.



> Henri de la Motte Rouge Lawyer, member of the Paris bar specialising in intellectual property and new technologies

One common practice in the digital world is to use law as an anti-competition weapon. This technique, which consists of using patents to obstruct competitors, is widespread in the United States, where the legal definition of a 'patentable invention' is less stringent than in Europe. Excessive litigation in the digital R&D sector is harmful for innovation. Moreover, financing costly legal battles takes funds away from research budgets!



> Marc Deheinzelin Information System Security, Altran

In digital security, one of the major difficulties is distinguishing legitimate access and data processing from actions that could be unlawful or malevolent. The principle of monitoring relies on knowledge of the company's organisation and the roles associated with each individual, as well as on the business's control of the corresponding rights. Altran uses the ISO standards to define its rules and best practices in information security for the Group.

A SECURE DATA CENTRE

CORAL (Altran Remote Operations Centre) is a data centre surveillance system operating 24 hours a day, 365 days a year. When Altran Spain teams set their sights on meeting ISO 27001* standards, they had to overcome numerous challenges.

"We fully analysed the threats to and vulnerability of the system. We then developed and executed a risk reduction plan, which involved modifying some of our infrastructure", explains Miguel Arjona Villanueva, Director of Knowledge Quality and Management. "We now offer our clients a highly secure remote surveillance and maintenance system for their infrastructure. They are thereby able to reduce costs and improve the security of their data".

 $\ensuremath{^*}\xspace$ A standard dedicated to information security management systems.

INSIGHT

altitude | #23

Reliable intelligence



THE INTERNATIONAL SKA PROJECT AIMS TO BUILD AN EXTRAORDINARILY POWERFUL RADIO TELESCOPE WITHIN THE NEXT 15 YEARS. AS PART OF THIS AMBITIOUS PROGRAMME, CAMBRIDGE UNIVERSITY CALLED UPON EXPERTS AT CAMBRIDGE CONSULTANTS FOR HELP MOVING AHEAD FROM THE PROTOTYPE PHASE TO LARGE-SCALE PRODUCTION.

What exactly is the SKA Project?

> Andrew Faulkner: SKA was born in the 1990s as an innovative concept of next-generation radio telescopes. The acronym SKA – Square Kilometre Array –, which gave the project its name, refers to the total surface area of one square kilometre of several thousand networked parabolic antennas; this is a huge "collecting area" and makes the telescope incredibly sensitive. To avoid interference from telephone and radio signals. Wi-Fi, etc., this radio telescope will be built far from populated areas. on two isolated sites in Australia and South Africa. It should be fully operational around 2025.

Why did you turn to Cambridge Consultants?

> Andrew Faulkner: In 2006, we called on Cambridge Consultants to see if and how the medium frequency all electronic antenna arrays could be mass-produced. Their input proved extremely useful. We are currently working on low frequency antenna arrays; 2.5 to 3.5 million units or "elements" will be built for the SKA project. Given these quantities, we decided to call upon Cambridge Consultants' expertise once again in 2011 for help designing for an optimised manufacturing process. > Gary Kemp: Andrew's team started by presenting us with a real challenge: based on the prototype they had built, we had to develop a low frequency antenna that could be mass-produced for the lowest

possible cost. We put together an ad hoc team and came up with various solutions. In the end, we opted for a design that uses bent steel wire components rather than aluminium sheet, which was used for the prototype. This technical choice will considerably cut down on the amount of metal required and use a cheaper process, thus reducing the cost of each receiver without affecting its technical performance.

How did you work on this project?

> Gary Kemp: To develop this industrialised antenna, we were in regular contact with the manufacturers and Andrew's team. We proposed modifications through discussion with manufacturers and the University used computer simulations to ensure that performance remained in line with project requirements.

How is the project coming along?

> Andrew Faulkner: Very well! We took delivery of several antennas on December 2011, which we have tested throughout 2012, and they work as predicted.

The Cambridge Consultants team also worked on electronic equipment, particularly to design the broadband amplifier that will be linked to each antenna. We successfully combined the engineering and technical expertise between Cambridge University and Cambridge

SKA: A TOOL TO UNDERSTAND OUR UNIVERSE



Not only will the SKA radio telescope offer a glimpse into the very origins of the creation of the universe, when the stars and galaxies took shape, but it will also serve to study pulsars, highly dense and stable stars that are putting the theory of relativity into question. More broadly, astronomers will surely pick up unexpected signals thanks to this equipment.

At an overall cost of €1.5 to €2 billion, this extremely ambitious project is bringing a number of countries together: the United Kingdom, Australia, South Africa, Canada, Italy, China, Sweden and France are soon to be joined by India and Germany.

INSIGHT

Consultants, which has delivered a world class design.

> Gary Kemp: Once again, we carried out several adjustments as part of an optimisation loop, to achieve the best possible cost/performance ratio. To do so, we held regular meetings with Andrew's team. The fact that our teams were located close to one another helped us collaborate closely.

#23 | altitude

We successfully combined the engineering and technical expertise between Cambridge University and Cambridge Consultants.

> Andrew Faulkner, SKA Project Engineer, University of Cambridge.

© SKA Organisation / TDP / DRAO / :

·

FINANCE

France Sharing innovation

finance and insurance industries. Today, the Group is a key partner in this market, recognised by its clicapacity for innovation (Design Thinking - see page transformation projects (operational efficiency, busi-

For many years, Altran has been working with ness process management, business process outsourcthe most important players in the banking, ing. setting up of service centres, activity outsourcing, nearshoring, offshoring). One illustration is the Group's wide ranging collaboration with BNP Paribas, for which ents for its unique positioning. Altran offers them its it puts all areas of its expertise to work in the client's various subsidiaries. Stanislas Chevalet, Chief Operat-6, creativity, cross-industrialisation, etc.) in addition to ing Officer of BNP Paribas Cardif, and two Altran Conits experience and savoir-faire acquired in other sectors, especially when it comes to industrialisation and and BNP IRB (International Retail Banking) tell us about their experiences.

BIO

1984 Graduate of **EM Lyon Business** School (École de Management et de Commerce) 1985 French Navy **1986** Joins the banking division of Paribas 1994 Head of the Retailing and Leisure Industries at Paribas Affaires Industrielles 1998 Head of Procurement at Paribas and then BNP **Paribas 2005** Head of the Operational Efficiency Unit 2007 Joins the **Executive Committee** of BNP Paribas Assurance Head of the Cardif network and relations with external partners 2009 Head of Digital & Brokers Channel Technology and Operations



Altran could bring even more to the table in the future ...

he insurance business is constantly evolving, but the pace of change has grown even faster in recent years, due to both regulatory and fiscal legislation, as well as to changing client behaviour. It is therefore critical for our company to undertake transformation projects methodologically and at an appropriate pace. Altran helps us by contributing to upstream discussions and then providing Project Managers and Consultants to steer and carry out the change. Built upon a clear organisation and a strong understanding of the client, Altran is one of our leading suppliers of intellectual services. The more we work with them, the more we realise that Altran provides priceless expertise, for instance concerning management of medical data subject to patient confidentiality, an extremely important question for an insurer.

I am confident that Altran could bring even more to the table in the future, thanks to its work in other economic sectors.

Data can be shared more easily and effectively.

e are accompanying BNP Paribas Securities Services in a study on the implementation of a product lifecycle management system, which would be a first in the world of banking. A proven solution in industrial sectors, these tools enable companies to gather together in a single system extensive information pertaining to a product throughout its lifecycle. Data can thus be shared more easily and effectively among different players in the company. Product Lifecycle Management has significantly reduced time-to-market in manufacturing and industry. The stakes are high for BNP Securities Services, which develops customised solutions for its clients while at the same time seeking to standardise its products





RENÉ RIBOT Senior Consultant, Altran CIS

IN THE WORLD | 15

1986 Engineering degree from Supeled 1986 Development engineer at SEMA **1992** Head of a development team at Marconi Engineering in Italy 1996 Manager of an R&D team for Orange and ABB in Denmark **Since 2003** Project and Programme Manager at Altran, Senior Consultant (since

Help the client draw up a contractual framework •

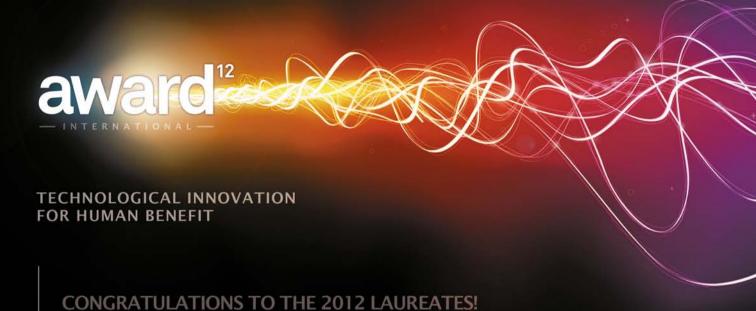
worked with BNP Paribas International Retail Banking for a programme to implement a new version of their banking ERP (Enterprise Resource Planning) in eight subsidiaries located in emerging markets (North and Sub-Saharan Africa). The particularity of this programme was that BNP Paribas called upon a systems integrator based in India to configure and test the software. My initial role was to help the client draw up a contractual framework for this service that would define the relationship with this systems integrator. Once the governance was in place and the methodology for implementation was established, the programme was divided into eight projects. For each of these implementation projects, BNP Paribas was able to take advantage of the previous country's experience with the project, cutting costs, optimising the timetable and reducing risks. In the end, the banking ERP was incorporated into the eight subsidiaries on time and within budget.

ALTRAN FINANCIAL SERVICES

Since 2008. Altran has featured a division dedicated to financial activities. Altran Financial Services has a staff of 2.000 employees and accounted for €160 million in activity in 2012. This entity serves over 150 clients in the banking. financial services, investment and insurance sectors, mainly in France, Benelux, Italy, Spain and Portugal. Strengthened by the experience of the Group, Altran Financial Services already works to help clients meet the strategic challenges of this new decade: industrialising successfully and transforming their activities.

INSIGHT

#23 | altitude altitude | #23





BELGIUM BE PARK (JULIEN VANDELEENE AND DAVID MILLAN MENÉ)

The aim of this project is to improve mobility in towns and reduce CO₂ emissions by providing motorists with under-exploited parking areas.



FRANCE SPECTROSCOPY 2.0 (MEJDI NCIRI)

This spectroscope helps to improve the quality of life of people suffering from chronic diseases and going through recurrent examinations, by enabling easier biological analysis.



GERMANY THINK BLUE. FACTORY. (VOLKSWAGEN)

This project will reduce the consumption of energy and waste of the Volkswagen Group's worldwide production sites



ITALY GEL WITH STEM CELLS FOR REGENERATIVE MEDICINE (FABIOLA MUNARIN)

This gel composed of injectable pectin loaded with stem cells will improve the life of patients suffering from severe lipoatrophy.



PORTUGAL WI-GO (LUIS DE MATOS)

This shopping cart can follow people with reduced mobility, the elderly or mothers carrying a baby buggy, in an autonomous and safe way.



SPAINAIR PURIFYING TECHNOLOGY (ERNEST MENDOZA)

This project is based on the use of gold atoms as catalytic converters to remove toxic or undesirable compounds, especially carbon monoxide emissions.



UNITED KINGDOM

TRACKSAFE PROJECT (BOMBARDIER TRANSPORTATION)

TrackSafe is a Bombardier turnkey solution that creates improved location awareness for track workers and train operators through the use of Radio Frequency Identification (RFID) and other advanced technologies.