



Is the only BBBEE, virtual telecoms company, providing voice and data services to the Southern African markets.

Smartel Communications aims to provide cost-effective, innovative telecommunications solutions to end user consumer and business customers whilst ensuring the delivery of outstanding customer service. With branches in Cape Town and Gauteng, and growth plans to expand to Durban and Port Elizabeth in the next 6 months, Smartel Communications will be able to reduce clients' communication costs by re-routing their voice, fax and data calls through alternative, cost-effective local, global and wireless communications networks.

Smartel Communications' singular focus is to provide our corporate clients with efficient, cost-effective communications solutions

We offer a "one stop" solution that includes a range of Least Cost Routing & VoIP technologies, bulk and corporate SMS products and a real-time call cost management system. The qualified technician that belongs to our consortium has a presence throughout the country and has a wealth of LCR & VoIP experience to draw from.

As such, Smartel Communications is uniquely positioned to understand the unique challenges of the industry, and has a history of success in meeting these challenges. In order to pre-empt potential problems and to ensure peak efficiency of each solution, our advanced in-house management platforms monitor all LCR & VoIP installations daily, while our countrywide dedicated technical team ensures immediate on-site problem response and resolution. All clients of Smartel Communications enjoy complete turnkey solutions that are managed in real time, giving them complete peace of mind and significant savings on their communications costs.

Commitment

We produce and deliver high quality South African products and services, and encouraging the wider use of these.

Quality

Providing high quality products and services to our customers, to a process of continual quality improvement in all aspects of our activities.

Human Resources

We employ fair labour practice in our organisation, to a process of continual improvement in our labour policies and practices.

Environment

We commit ourselves to employing sound and responsible labour practices in our organisation, constantly improving our environmental policies and practices.

Our Market Segments

Smartel has standing relationships and a performance history within various sectors.



Smartel Partners

The Orfeo Project

Research & Development Company established in 1999. Responsible for the creation of semantic enterprise management system. The research project started 18 years ago.

ThoughtExpress

A Services Company utilising Orfeo technology to deliver enterprise management on the internet.

Background

Traditional enterprise management software such as SAP and Oracle is based on predefined practices and processes that are shaped essentially by computer programming. It is currently widely recognised that such enterprise software is rigid, expensive and scales badly to complexity. Many are seeking solutions to these problems and numerous concepts have been introduced to address these issues, for instance SOA, BPM etc.

However, it is now recognised that the future lies in semantically based technologies. Such technologies, rather than expressing transactions and steps needed to be executed to update databases, allow for pure expression of meaning/knowledge and the resultant transactions/steps are automated. This results in a vast reduction in complexity and allows one to "talk" to a computer in more human terms. One should note the DIKW hierarchy.

Semantic technology allows one to move from information technology to knowledge technology. Also note the current interest in SBPM (Semantic Business Process Management) and more broadly the semantic web. SAP and Oracle are investigating these trends. Nine years ago we recognised that IT was missing this semantic aspect and proceeded to research and develop entirely semantically based enterprise management software. Furthermore, internationally, there is a very strong trend towards internet based systems that deliver software as a service. ThoughtExpress is a vehicle to deliver Orfeo semantic enterprise management on the internet.



Business Benefits of Semantic Technology

The most important difference between traditional systems and semantic ones is that one can express precisely the operations/business rules of an enterprise directly in business terms rather than having to convert these to computer programs.

- The system moulds to the business rather than the business having to change its practices as a result of system constraints.
- Extremely rapid development process - new products and changes can be introduced in a fraction of the time.
- Semantic technology is self-healing: it is simple to recover from errors and disasters.
- Quality assurance is almost automatic as one is able to model past, current and future behavior of changes before they are committed.
- Since knowledge of the business is fundamentally and unambiguously incorporated, one can very precisely model future behavior of the enterprise. The combined effect of these is that the enterprise management can be achieved at a fraction of the cost, with much greater agility and precision.

The Computing Model

ThoughtExpress makes available a semantic computing cloud to enable large enterprise computations. This cloud eliminates the need for clients to invest in expensive hardware and supporting management/maintenance structures.

Standard processing such as billing, commission, actuarial valuations, business modelling, business intelligence and all reporting utilise this computing cloud. Even a very large insurance enterprise with 10 million unit accounts (various risk charges etc) can be recalculated from scratch in under an hour. The cloud is load-balanced and nearly linearly scalable enabling us to deliver the performance that is demanded.



The Technical Aspect

Orfeo Web Client has the following built in features:

- Integrated telephony
- Integrated scanning, capturing, cut-outs etc.
- Business Process Management (Global Process Exchange)
- Remote document printing
- WebOS - Development of semantics/processes via Web
- Encryption/Compression – low bandwidth utilization
- Real Time interface

Semantic technology requires rebuilding underlying infrastructure. Traditional databases and tools are not suitable since the complexity introduced with them would be vast. Therefore, Orfeo, over last 18 years, has developed its own unified infrastructure, which includes a semantic database, operating environment, machine independent language, printing, forms, real time web protocol, knowledge and process development environments, controls etc. The end result of this is that the entire system is designed from top to bottom to work as a unified and efficient structures rather than traditional hodge-podge of applications glued together with middleware. Of course, the system has to live in the existing IT world and therefore it does have traditional interfaces to deal with external systems (XML etc.)

Financial Services Industry – Domain Expertise. Although our system can be applied to any enterprise or information/knowledge setting the greatest challenges managing complexity occur in the financial services industries. Two thirds of all IT spent is by the financial services industry.

The financial services industry is beset with a multitude of shortcomings in their IT infrastructures. The most apparent is that systems are line-of-business oriented – separate systems for Life Business, Pension, Medical Aid, Banking, Asset Administration, etc. Even within one line of business there are separate systems for design, quotations, administration, commission administration, CRM and actuarial work. This result in many interfaces and often the interfaces are larger than the systems themselves. All this means that it is difficult to manage complexity and processes. Often changing one small thing becomes a huge issue. To address these issues, Orfeo has designed, within its semantic structure, a generic financial contract framework that represents any financial contract and all stages in its lifetime. In this way, there is one structure and no interfaces.



Take – On

Orfeo has a large toolbox for handling the take-on of new clients.

Data is imported directly into the Orfeo platform and from there it can be cleaned and migrated into our generic financial contract framework. Orfeo's use of semantic technology allows business rules to be captured directly by experts in the business domain. We employ a team of such experts, mainly actuaries, to assist and consult in this process, enabling direct communication on a non-technical business level.

In particular we have a great deal of experience and success in converting old legacy systems. These often have data structures that are archaic and are full of holes that have to be filled-in or reconstructed. Furthermore, business rules are frequently not available as a result of lack of documentation or the people that created them having departed long ago.

The Future

The obvious question follows from the DKIW hierarchy. If knowledge/semantic technology is the next step after information technology, what is the following step?

The next step is in fact wisdom technology. Having solid foundations, theoretical and applied, in knowledge technology we have embarked on the study of wisdom structures. This needed a deep understanding and precise definitions of information, knowledge and wisdom and their boundaries. To give an example of wisdom operators there are: analogy & simplification. Just those two "simple" operators will have tremendous impact on managing complexity in knowledge.

For interest sake, knowledge technology is much more CPU intensive than traditional technologies and lately the introduction of inexpensive multi core processors makes semantic/knowledge technology extremely accessible. While wisdom technology and full AI will require large leap in computing power to be fully viable in commercial setting, some items from this field are achievable commercially now. All human activities occur inside a social graph – the basic structure of our system reflects that reality and thus we are busy incorporating UI for the social graph in Orfeo. However, the most important project that we are busy with (completion date August 2008) is the semantic human interface. This will completely remove the need for programming and enable us to launch a new kind of web.



Practical Experience

Among clients using our semantic technology (on site model) is an insurer that has 10,000,000 unit accounts and 6,000,000 parties on its insurance contracts. We are responsible for the entire development / configuration for this enterprise. Our company has replaced an army of 30-50 programmers with two actuarial resources that have no knowledge of IT and one process expert. Implementing new products or changing business rules takes now 2-3 days – including testing and QA.

Smartel Services

Call Least Cost Routing

Smartel Communication's market-leading Least Cost Routing service ensures that telephone calls cost the absolute minimum, by always taking the cheapest route available.

Call Center Equipment

Smartel Communications supply all call center equipments from Digital Phones, headsets, all types of PABX and more.

Call Center Software

Smartel Communications has dedicated software teams that are specialists in CRM and other Call Center packages. Smartel Communications has just recently partnered with advanced Software Company called ThoughtExpress and Orfeo to handle all our specialised Call Center Software to deliver enterprise management on the internet, for our International clients.

Savings from proper call management and private call prediction (TMT)

Smartel Communications Managed Telecoms (TMT) is a unique real-time management service. TMT Basic feeds all PABX data back to Smartel Communications for immediate analysis of PABX performance, health and routing status.

Savings from using SMS instead of calling (texSMS)

texSMS is software plug-in for Microsoft Outlook that allows you to send SMSs directly from your Outlook, in the same manner as sending emails.

Savings from call-back calls (CallTrigger)

The CallTrigger is a GSM-based call-back server that allows your users to trigger their own call-backs from the company switchboard when out of the office.

BPO Business Consulting Service

Smartel has the capacity to provide Business Processes, Business Analysis and Project Management through Affiliate Partners. Smartel and its Affiliates share a symbiotic relationship and this long standing relationship results in cost-effective, world class solutions.



Smartel Products

Inbound /Outbound Call Centre setup with full Voice Recording and following features:

- **Caller ID (requires subscription to IdentiCall)**

Call Waiting

Call Transfer

Call Forwarding

Call Parking

Call Reversion

Music on Hold

Office Directory

Message Waiting/Stutter

ToneMeetMe Conferencing; including Web interface

South African Voice Prompts

Operators panel to view extension status

"Head-up-display" for desktop PC integration

System monitoring

- **Voice Recording**

The Voice Recorder can connect to any Analogue or Digital PABX

No license fees

Unlimited recording

- **Voicemail Systems**

Voicemail can connect to any Analogue or Digital PABX

No License Fees

Unlimited mail boxes

Voicemail to email

- **Philips PABX**

Targeted at small to medium enterprises, Philips IPC

- **Call Centre Headsets**

Plantronics, GN Netcom range of headsets

VoIP Telephones

SNOM, Polycom

- **Wireless Broadband – Speeds from 1meg – 30 megs**

- **Video Conferencing**