

ElectraSwitch

Unified Channel Management

Opus
Software Solutions

Unified Channel Management

Today's Challenge

The global financial industry has been at the forefront of product service and technology innovation through the ages. The following market forces are influencing our industry, on an unprecedented scale.

- Consolidation (M&A / Strategic Partnerships)
- Entry of foreign players into local markets
- Entry of non-traditional players (TELCO's, Retailers)
- Technology used for product innovation in addition to process improvement/automation
- Outsourcing of non-core functions and strategic alliances to beef up non-strength areas

Impact to the traditional ATM-POS retail network

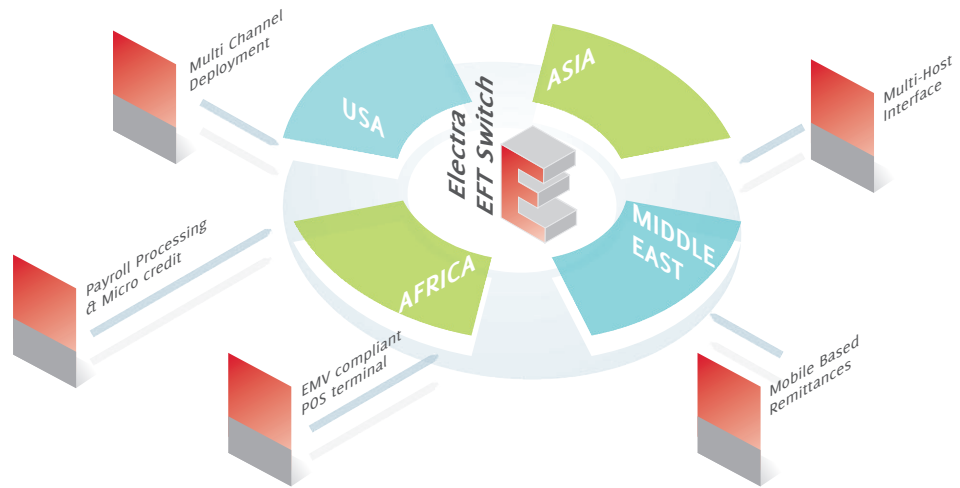
- Intense completion, low customer loyalty, similar product offering
- Need to provide customers access to all services across all channels
- Business and technical architecture that enables faster time to market new products & services
- Service newer growth markets: the unbanked customers, micro-finance, through electronic channels
- Focus on reducing risk: MIS needs to provide risk per customer across products across channels – on a real-time basis

Meeting the challenge

ElectraSwitch is a unified channel management system allowing our global clientele to be the quickest to market the most innovative – the most cost effective. With over a 100 Electra users within three years of its launch across USA, Asia, Africa and Middle East, our product and partner management practices are mature and trend setting.

ElectraSwitch from ECS enables customers to integrate all their delivery channels and payment on a single platform and provides a flexible, scalable software solution that seamlessly bridges real world, and virtual payment channels. The product provides financial institutions with an open platform based, robust, highly available solution to deliver services through ATMs, Kiosks, Pos terminals, Internet, telephone, and Mobile.

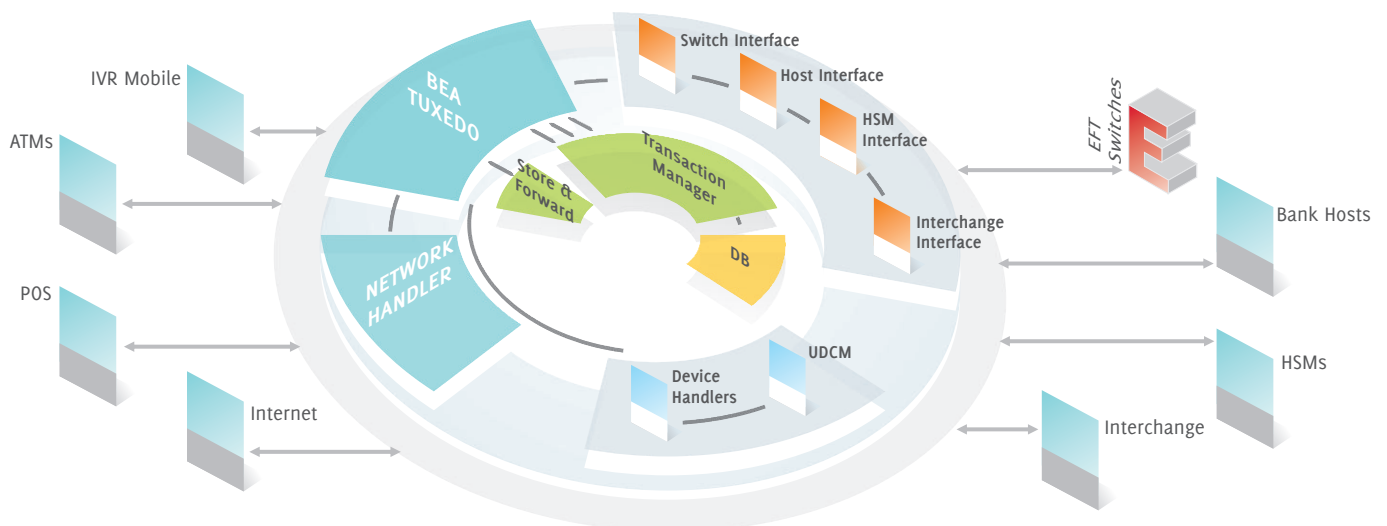
ElectraSwitch has been deployed successfully to address and meet some of the most complex business and technical challenges faced by the financial industry in recent times. A few notable successes are listed.



Technical Solution Benefits

Feature	Benefit
Open platform	ElectraSwitch uses BEA Tuxedo as the application infrastructure and is available on UNIX (SUN, IBM, HP)/LINUX using Oracle as the database. This provides industry strength, ElectraSwitch is the only product in the market using industry strength OLTP infrastructure – the rest of the notable players use proprietary code.
Highly scalable and Modular	Lower initial investments, scalability and modularity attuned to business plans
High Availability, Scalability and Interoperability	ElectraTM uses embedded BEA Tuxedo to deliver bullet-proof reliability, superb-scalable performance, simplified distributed transaction processing, message-based application development and standards-based interoperability.
Standard message format interfaces to back end host systems, interchanges, support for popular terminal protocols	Faster time to market
Highly secure EFT environment	Reduced risks and increased customer confidence
Powerful Monitoring and management of service terminals	Faster turnaround times for problem identification and resolution, proactive remedial actions

ElectraSwitch Architecture



ElectraSwitch Modules

- Channel Integrator – Integration and management of various self-service channels e.g. ATM, POS, Internet, Kiosk, Mobile
- Authorizing and routing Engine – Transaction authorization and routing between touch points and authorization destinations.
- Host and Interchange Interfaces – Interface services to all external systems, including customer back-end hosts credit card systems, interchanges (VISA, MasterCard)
- Monitoring facility – Systems monitor for the above services and components, including maintaining information on the switching operations and performance
- Security Infrastructure – Capability to transport transaction requests and response across channels and to authorization destinations in a completely secure manner
- BackOffice back office for card management, merchant management, interfaces to reconciliation and settlement with hosts, interchanges.

WORLD OF FEATURES

Multi Institution, Multi-product, Multi-Channels, Multi Currency, Multi-lingual

The Electra suite of products have been architected ground up to be multi-institution (supports multiple legal vehicles in the same installation), Multi product (supports EMV, credit card, debit card, stored value cards, value added transaction), multi-channel, multi-currency and multi-lingual systems.

Terminal and Multi Channels Support

Electra supports ATMs and POS terminals using industry standards protocols such as NCR NDC+, NCR Apra, Diebold D912, Diebold Agilis 91x for ATMs and Hypercom, ISO 8583 and VISA II for POS. Transaction from the web, phone, mobiles, and kiosks can be acquired by Electra and routed to back end hosts using account number or client id. Electra can communicate to these channels using XML or ISO 8583 messaging formats.

Comprehensive Transaction Set

A comprehensive cardholder transaction set is supported across the terminals and channels. This includes smart card

transactions, ticketing, person-to person/remittances, bill payments and alternate media dispense transactions.

Authorization and Routing

Electra's transaction engine is a powerful authorization and transaction routing system. ElectraSwitch supports issuer, positive, positive on balance and negative methods of authorizations are available. Flexible routing mechanisms are provided to support a variety of acquirer requirements. Card, client identification and account based transaction routing are an inherent part of the switching system so as to support transaction acquisition and routing from the various channels. This feature positions Electra as the only unified channel management EFT Switch capable of supporting card as well as non-card initiated payment transactions.

Hosts and Interchanges

Electra can effortlessly interface to hosts supporting the ISO 8583 interface, both 1987 and 1993 versions and supports communication protocols such as TCP/IP, X.25 and SNA. It is fully compliant with the online and batch requirements of

VISA and MasterCard. Interfaces to EFT switches and national switches supporting the ISO 8583 message formats are available.

Transaction Security

Electra insures transaction security through DES and 3DES – the industry standards for transaction security. EMV requirements of verifying the ARQC and generation of ARPC terminal and Electra and between domains can be endured optionally by usage of the message authentication mechanism. Electra provides interfaces to Thales RACAL, Atalla, Eracom and DEP range of HSMz.

ATM Management and monitoring

Electra RCW is a highly intuitive, GUI based software to manage ATMs from a central location. RCW provides real-time information on the status of the ATMs. It can be configured to send automatic event-based alerts. Administrative commands can be sent to the ATMs through RCW. Electra also interfaces to Gasper and like systems for 3rd party ATM management.

All registered and trademarked names are owned by their respective owners.

To purchase or obtain product information:
Email sales@opussoft.com Web www.opussoft.com

