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SQS India BFSI Limited – Corporate Presentation

Chennai, November 2014

SQS India BFSI –
The Global Specialist in Financial Services Testing

SQS India BFSI

- 100% Financial Services focus

  - 14+ Years in Business

    - 200+ client base across 23 countries

      - 80+ Active Clients

      - Offices in key Financial Centers: New York, London, Frankfurt, Singapore, Brussels, Dubai, Hong Kong, Mumbai and Sydney

    - Strong multi-country experience

  - 800+ People, 25% from Financial Industry

  - Over 14m person hours of track record in Financial services testing

- Is now part of the SQS Group, world's leading specialist in independent software testing with approx. 4000 people strengthening the industry coverage and focusing on BFSI

Benefits

SQS India BFSI offer local presence with strong experience in banking, global delivery and multi-country project experience.

There are three ways for testing on projects: Using a "pure play Test Specialist" is the most efficient way.

		1 One General Contractor (GC)	**2** Two System Integrators (SI)	**3** System Integrator (SI) and pure play Test Specialist (TS)
~75%	Develop-ment	GC	SI 1	SI 1
~25%	Test		SI 2	TS 1
Advantages		• Purchaser only deals with one party	• SI 1 and SI 2 are separated	• Parties can work on the same objectives with no hidden agenda • Independent view on the quality of developments • Insurance policy on the quality of the final result
Disadvantages		• General Contractors mark the own work – may be incentivised to hide defects to meet deadlines.	• Two contracts • Working on the same objectives can be a problem as many SI's use testing as a back door entrance to expanding scope.	• Two contracts

» *Much of the recent growth in outsourced application services has been fueled by customers engaging independent testing services where the development provider is separate from the provider performing the testing.* «

Bill Martorelli
Forrester Research

Our global locations

APAC Locations
- Chennai
- Mumbai
- Singapore
- Sydney
- Malaysia
- Hong Kong
- Pune

Locations

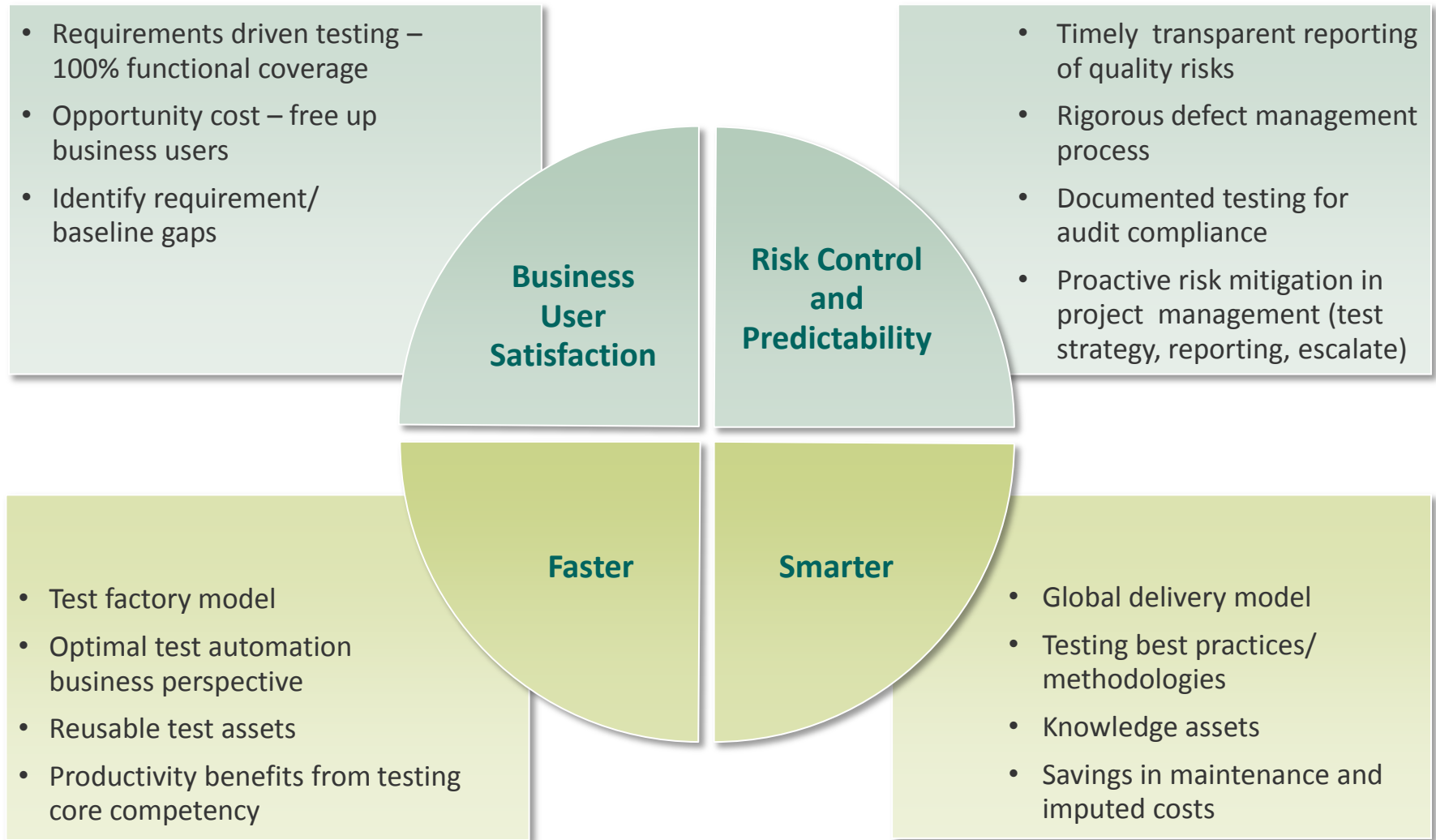|				
Austria	France	Ireland	Portugal	Switzerland
Egypt	Germany	Netherlands	South Africa	UK
Finland	India	Norway	Sweden	USA

Partnership
- Spain

Service offerings across Application Development Life Cycle

Objective	Comprehensive BR Documents	Seamless translation of BR to FS	Bridging Domain Gap, Establish Func. Coverage	Requirements Led Testing	End to End Business Process Focus	Quick Transition to Productive Use	Support 'Business as Usual'
Phase	Envision	Plan	Construct	Test	Accept	Roll Out	Business as usual
Services	• Business Process Mapping • Process flow Documen-tation • Business Requirements documen-tation & review • Parameter setup & Review	• Functional Specification Preparation • Review of FS/ Customization Documents • Fit for Purpose Testing • BR-FS Gap Analysis	• Review of Unit test plans	• System Testing • Integration Testing • Data Migration testing • Interface testing (Standalone)	• User Acceptance Testing • Automated Testing • Non Functional Testing (Performance, Security, Disaster Recovery, Failover)	• Network/ Scheme Certification Support (for Cards) • User Training • User Manual Preparation • Rollout Support • Functional Help Desk	• Automated Regression Test Packs • BAU testing • Release testing • Project Testing • Compliance Testing

Value Proposition

- Requirements driven testing – 100% functional coverage
- Opportunity cost – free up business users
- Identify requirement/ baseline gaps

- Timely transparent reporting of quality risks
- Rigorous defect management process
- Documented testing for audit compliance
- Proactive risk mitigation in project management (test strategy, reporting, escalate)

Business User Satisfaction

Risk Control and Predictability

Faster

Smarter

- Test factory model
- Optimal test automation business perspective
- Reusable test assets
- Productivity benefits from testing core competency

- Global delivery model
- Testing best practices/ methodologies
- Knowledge assets
- Savings in maintenance and imputed costs

Alignment to be a PARTNER of CHOICE for Business Assurance Testing

Banking

- Repository Assets: **35,000+ Test Cases**
- **6,000,000+ person hours** of testing

Cards & Payments

- Repository Assets: **30,000+ Test Cases**
- **7,000,000+ person hours** of testing

Insurance

- Repository Assets: **20,000+ Test Cases**
- **3,000,000+ person hours** of testing

Treasury & Capital Markets

- Repository Assets: **10,000+ Test Cases**
- **980,000+ person hours** of testing

Non-Functional Testing Team

Capabilities and Track Record – Banking

CBS Tested

- Legacy System
- T24
- Finacle
- Flexcube
- BANCS / Bancs24
- Bank Pro
- MidasPlus
- PROFILE Core

Interfaces

- SWIFT
- Payment gateways
- Card Networks
- Credit Bureaus / Payment Systems

Decision Support Systems

- Loan Originations
- Credit Scoring/ Decision Support
- Behavioral Scoring
- Anti Money Laundering
- MI/ Business Intelligence

Products

- **Retail:** Term Deposits / CASA / Lending / Bill Pay / Mortgages / Fund Transfer
- **Wholesale:** Commercial / Trade Finance / Guarantees / Syndicated Loans / Corporate Loans
- **Private Banking:** Structured Products / Equities / Bonds / Asset Management

Channels

- ATM
- Call Center/ IVRS
- Teller
- Internet
- Mobile

CRM

- Customer Information
- Sales Management
- Campaign Management

Core Banking Track Record:
YoY – Testing Services Track Record in Banking

Services	2007	2008	2009	2010	2011	2012	2013 (Ongoing)
Requirement Gathering/ GAP Analysis	1	2		1	1		2
Business Process Map	1	2					
System Integration Testing	1		5	2	4	2	17
UAT / Domain testing support	4	10	11	15	24	39	29
Automated Test Pack Creation		2	1	2	2	1	1
Performance Testing			3	2	1		3
Security testing			1				2

Banking Platforms

✔ Oracle FLEXCUBE

✔ T24

✔ TCS B@ncs

FINACLE

FIS Profile Core

Midas

Bankmaster

Equation

Newton

CS Eximbills

FinanceOne

Our Track Record covers*

- **5** leading products in International Core Banking
- All the **Top 3** Core Banking Products in the world
- **5 of Top 10** Core Banking Products in the world

*Source: Reports on core banking products from Celent & Gartner

Capabilities and Track Record – Cards

Card types

- Consumer & Commercial
- Credit & Charge
- Debit, Prepaid, PLC, Loans

Schemes

- Amex
- MasterCard
- VISA
- CUP
- Diners
- JCB
- Discover
- RuPay
- Domestic Networks

Card technologies

- Magnetic Stripe
- Chip & PIN
- Contactless

Terminals (POS & ATM)

- NCR
- Diebold
- WinCor
- Verifone
- Gemalto
- Spectra
- Zeta
- PAX
- Hypercom

Risk & Fraud Applications

- PROBE
- Falcon
- TRIAD
- FRAUDGUARD

Switches

- Connex
- Postilion
- PlanetPayment
- Base24-eps
- ITM

Protocols

- Message Protocol: ISO8583 (1987 & 1993), AS2805
- Communication protocol: TCP-IP
- Application protocol: NDC, NDC+, DDC

Applications

- PRIME
- TS2
- VisionPLUS
- HPS PowerCARD
- OmniPay
- Tieto Card Suite
- Asccend

Tools

- Simulators: Scheme & third party simulators
- Spy tools
- Open Source: JMeter, SOAPUI, JPOS
- Commercial: HP - QC, QTP, LR

Cards Track Record:
YoY – Testing Services Track Record in Cards

Description	2007	2008	2009	2010	2011	2012	2013
Rollout	4	11	3	4	11	1	9
Migration / Conversion	3	11	8	1	3	8	11
Releases / BAU / Enhancement / Regression	4	20	34	32	44	38	44
Card Scheme Compliance + Certification	3	11	10	11	15	18	13
Production Support / User Support / Functional Help desk	2	3	2		3	7	6
Performance Testing				1	4	1	1

Over 6 million hours & 450+ Projects of testing in Cards domain

Our Track Record covers

leading products in International Banking Cards System

Capabilities and Track Record – Payments

Payment Types

Retail, Corporate
- Domestic
- Cross Border
- High Value
- Mass Payments

- Straight Through Processing (STP) / Manual

Payment Systems

- FEDWIRE
- FPS
- CHIPS
- RTGS
- CHAPS
- NEFT
- BACS
- ACH

Protocols

- ISO20022
- ISO8583 (1987 & 1993)

Tools

- Simulators: FED & CHIPS
- GHT(stub): Message injection
- Macros: Validation

Messages & Files

- SWIFT
- FEDWIRE
- CHIPS
- PAIN
- PACS

Regulations

- SEPA-DD
- SEPA-CT
- EBA
- FATF
- RBI

Channels

- Mobile
- Internet Banking
- Payment Gateway

Schemes

- CORE
- CORE 1
- B2B

Applications

- GPP
- ACI

Risk

- Sanctions
- AML
- Case Management

Capabilities and Track Record – Insurance

LOBs Tested

- Life
- P & C
- Health
- Superannuation
- Takaful

Policy Types

- Retail
- Commercial
- Individual
- Group

Life Line of Business

- Protection
- Savings
- Investments
- Mortgage Protection
- Superannuation
- Funeral

P & C Line of Business

- Motor
- Property
- Marine
- Liability/ Accident
- Health
- Travel
- Hull

Module Tested

- Product Management
- Sales Management
- New Business Management
- Policy Servicing
- Claims Management
- Reinsurance Management
- Accounting
- Major interfaces related to insurance industry

Application Tested

- Guidewire
- eBao
- Siebel
- GENIUS
- BUKS
- Selfin
- Extranet
- IDIT
- Omega
- Procede
- Subscribe
- ISF
- E-Elixir & Elixir
- Select & Pure
- Premia
- Firstgen
- Salesforce

Capabilities and Track Record – Insurance

Testing Accelerators

- Functional Checklist
- Library of Business Processes
- Generic Test Repository for Insurance Business
- Test Artifact Generator
- Product Validator
- Risk Prioritization Matrix

Regulatory Test Pack

- Solvency II (Europe)
- Retail Redistribution Review (United Kingdom)
- PPACA (Obamacare) (United States)
- Prevention of Personal Information (South Africa)
- Goods & Service Tax (Malaysia)
- Financial Advisory Industry Review (Singapore)

Services Rendered

- Functional Testing
- Release Testing
- Security Testing
- Test Automation
- Performance Testing
- Asset Rationalization
- Documentation Services
- Test ware Audit
- Data Warehouse Testing
- Test Process Review

Treasury Dimensions Tested

Asset Class Types

- Money Market
- Fixed Income
- Equity [ETF, IDR and Securities Lending & Borrowing]
- Derivatives (Futures & Options)
- Credit Derivatives
- Commodities [Inclusive of Implied order]
- Interest Rate Derivatives
- Forex
- Mutual Funds
- Structured Products
- Exotics (Cap, Floor, Swaption)

Project Types

- System Integration Testing
- User Acceptance Testing
- Functional Testing
- Regression Testing
- Automated Regression Testing
- Performance Testing
- Data Warehouse Testing
- Data Migration
- Testing Centre of Excellence
- Requirement services
- Functional Helpdesk
- Release Testing

Applications Tested

- T24
- Kondor+ / Urbis
- Reuters Electronic Trading
- NEAT / NEAT+
- Eurex
- Syn~
- I-Deal and Quadryx (Credence)
- Intellect Suite
- Flexcube / Kastle
- Advent Suite
- Wall Street Suite
- DWH – Informatica

Tools

- Verifix for FIX based testing
- Dataflux, SkyReport
- Open Source: Selenium
- Commercial: HP - QC, QTP, Load Runner
- Source to Target Analysis and Reconciliation Solution (In house)

Dimensions tested – Capital Markets

Asset Class Types

- Equity [ETF and IDR and Securities Lending & Borrowing]
- Derivatives (Futures & Options)
- Commodities [Inclusive of Implied order]
- Fixed Income
- Money Market
- Interest Rate Derivatives
- Forex / Structured Products

Applications Tested

- Neat , Neat + , Neat Pro
- MIT – FO and BO Applications
- Syn~
- Stars
- NSDL – DPM
- Miles – MoneyWare FundWare
- AG | Capital
- Hi Portfolio / 5
- Eurex
- ACE Trader (Commodities)
- OFIS
- EMC Captiva
- EMC Documentum
- BF Midas +
- APX, MOXY & TRADEX [Advent]

Project Types

- Business Requirements Specifications Preparation
- System Integration testing
- User acceptance testing
- Regression testing
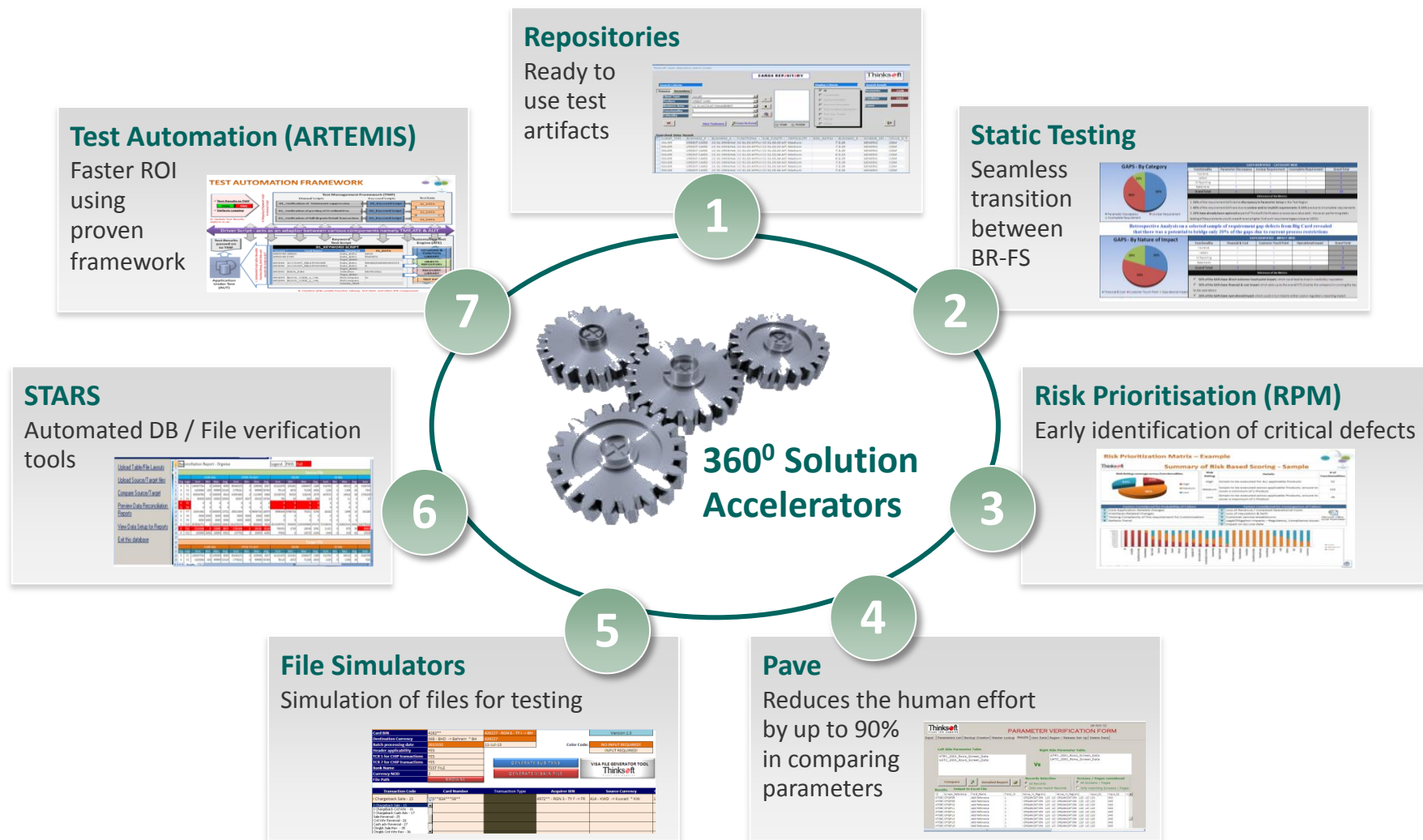- Automation & Non Functional testing

Tools

- Verifix for FIX based testing
- Open Source: Selenium
- Commercial: HP – QC, QTP, Test Complete, SILK

Message Format

- FIX
- SWIFT
- Proprietary Messages

Solution Accelerators:
Faster, Smarter and Better Testing

Repositories
Ready to use test artifacts

1

Static Testing
Seamless transition between BR-FS

2

Test Automation (ARTEMIS)
Faster ROI using proven framework

7

Risk Prioritisation (RPM)
Early identification of critical defects

3

STARS
Automated DB / File verification tools

6

360⁰ Solution Accelerators

360^0 Solution Accelerators

5

4

File Simulators
Simulation of files for testing

Pave
Reduces the human effort by up to 90% in comparing parameters

Thank you for your attention.