

# Customer Case Study

## Event-Based Systems Integration at QUT

Enhancing Student Service & Delivering Change Capacity

One vision. One vendor. One experience.

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## SAMS Implementation Program

technologyone

- SAMS - Student and Academic Management System
  - TechnologyOne Student Management
  - In production Oct/Nov 2010
- Replace existing Student Information System
  - Integration and connections to other systems
  - Rethinking technical architecture
- Key business objectives
  - Improve service to students
  - More efficient student data processing
  - Draw students into self-management online

Case Study: Event-based Integration at QUT

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**Deliverables** technologyone

- Tighten student facing University-wide web experience
  - Improve web interactions
  - Seamless
- Leverage Single Sign-On
  - Authentication (ESOE and SPEP)
- Reduce latency in integration
  - 'Real-time'
  - Web services, SOAP, XML messages

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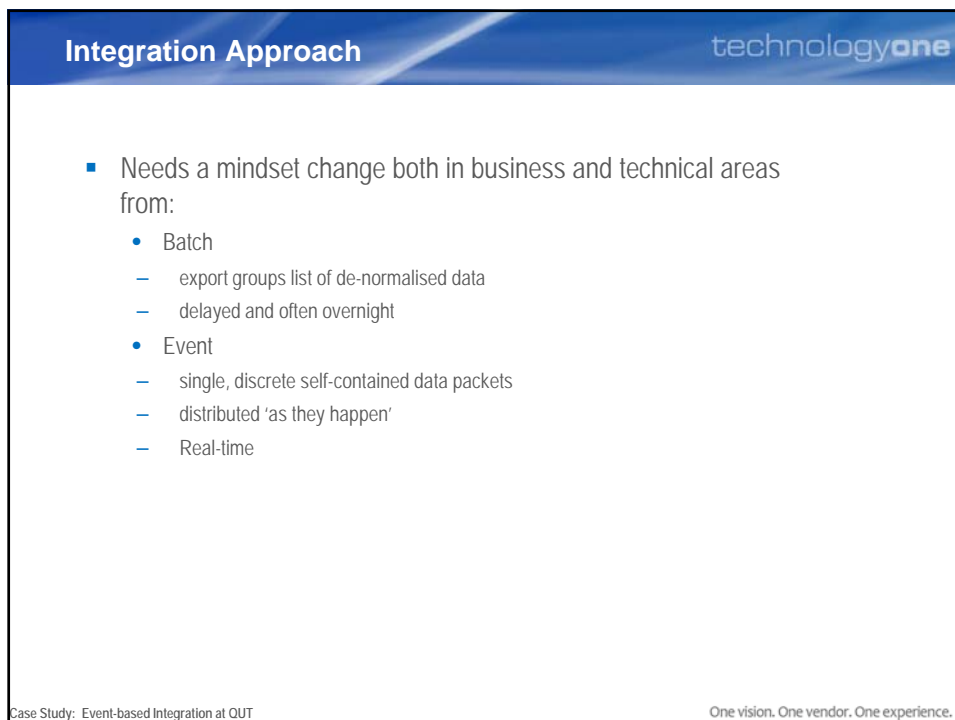
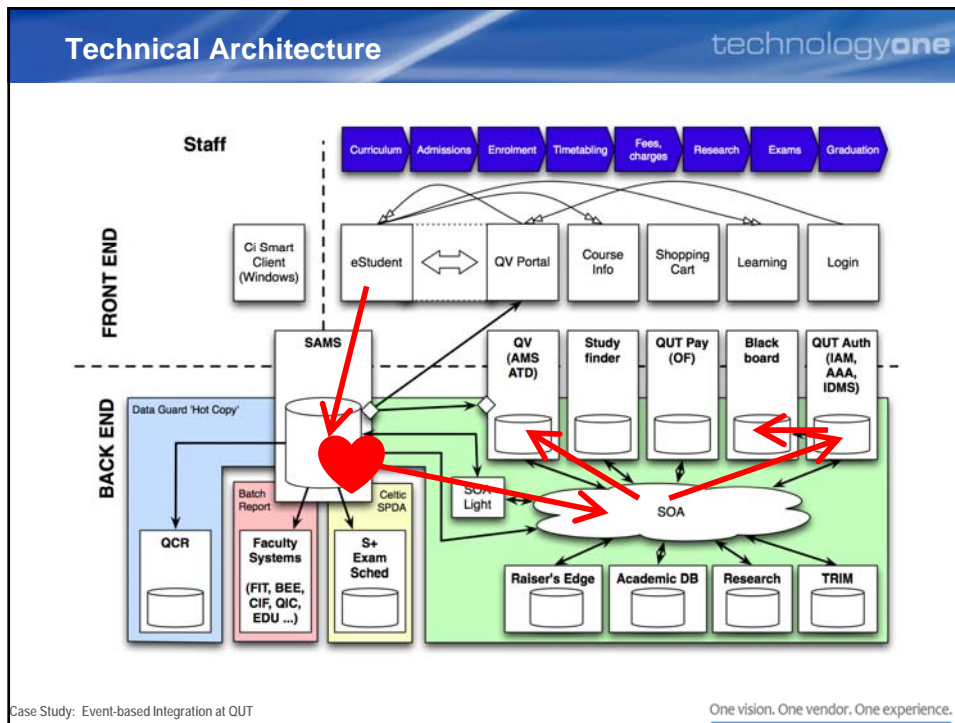
**Technical Architecture** technologyone

The diagram illustrates the technical architecture, divided into Staff and Students. On the Staff side, there is a 'Ci Smart Client (Windows)'. On the Students side, there are several front-end components: 'eStudent', 'QV Portal', 'Course Info', 'Shopping Cart', 'Learning', and 'Login'. A double-headed arrow connects 'eStudent' and 'QV Portal'. Above these components is a row of blue boxes representing backend services: 'Curriculum', 'Admissions', 'Enrolment', 'Timetabling', 'Fees, charges', 'Research', 'Exams', and 'Graduation'. Arrows point from each of these front-end components to the corresponding backend service they interact with.

**FRONT END**

**Staff**      **Students**

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**Important QUT Scenarios** technologyone

- Student Study Plan:
  - SSP\_SI\_01 Student applies for course
  - SSP\_SI\_02 Course application rejected
  - SSP\_SI\_03 Student offered a place
  - SSP\_SI\_04 Student accepts course offer
  - SSP\_SI\_05 Student admitted on course
  - SSP\_SI\_07 Student enrolls on unit
  - SSP\_SI\_08 Student withdraws from course
  - SSP\_SI\_09 Student withdraws/cancels unit
  - SSP\_SI\_11 Student goes under examination
  - SSP\_SI\_12 Student completes course
  - SSP\_SI\_13 Student completes unit

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**Important QUT Scenarios** technologyone

- Student Study Plan:
  - SSP\_SI\_16 Student graduates
  - SSP\_SI\_16 Student graduates
  - SSP\_SI\_17 Student core course details change
  - SSP\_SI\_18 Student core unit details change
  - SSP\_SI\_19 Student goes on leave with notice
  - SSP\_SI\_20 Student goes on leave w/o notice
  - SSP\_SI\_21 Student identified as potential graduate
  - SSP\_SI\_25 Unit removed from plan
- Curriculum:
  - 10 Course, 8 Study Area, 11 Unit

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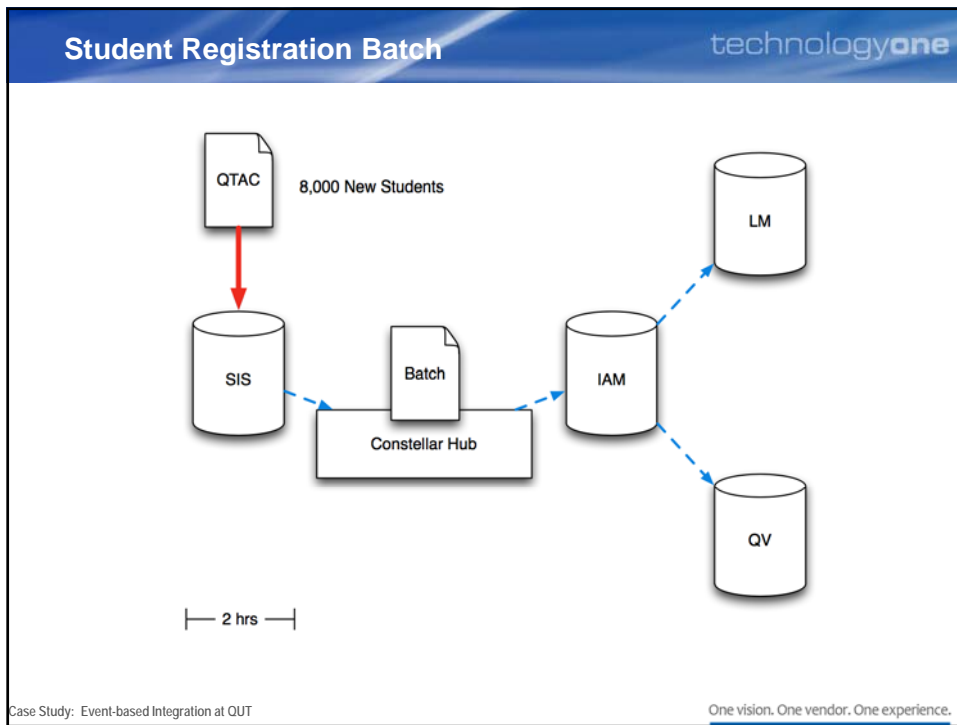
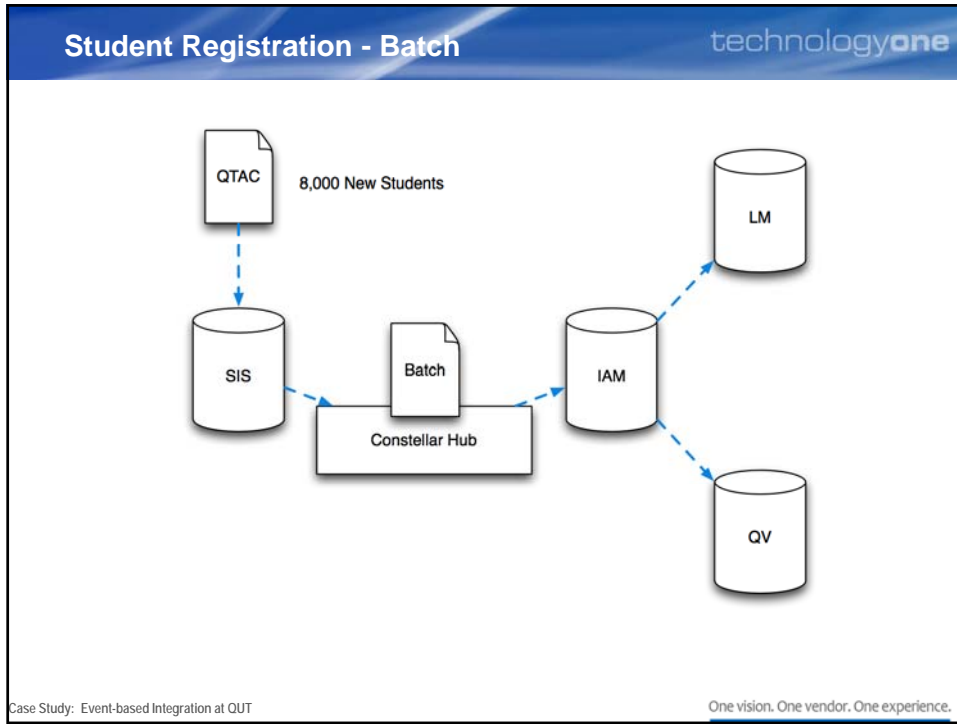
**Important QUT Scenarios** technologyone

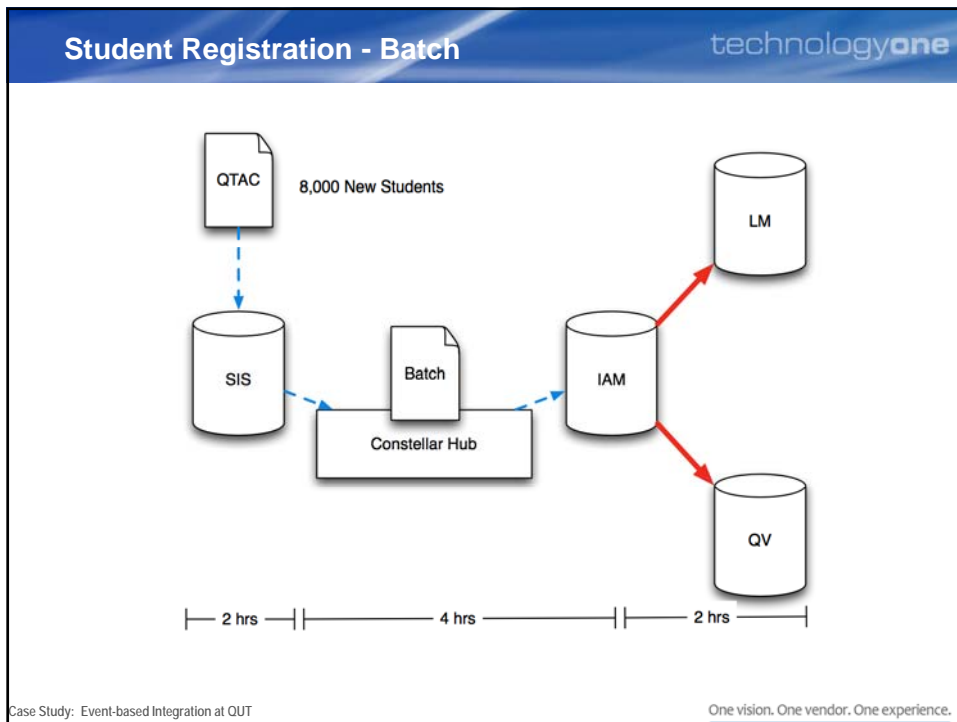
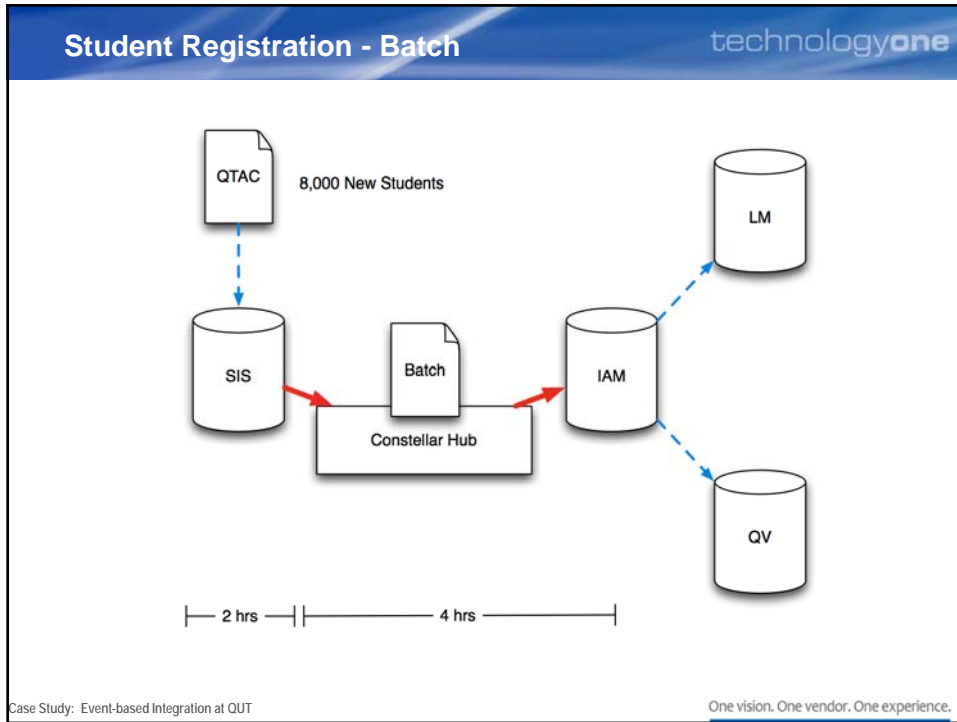
- Student Account
  - STA\_SC\_01 Sanction applied
  - STA\_SC\_02 Sanction lifted
  - STA\_SC\_03 Sanction changed
- Student Registration
  - STA\_SR\_01 Student registration\*

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**Student Registration - Batch** technologyone

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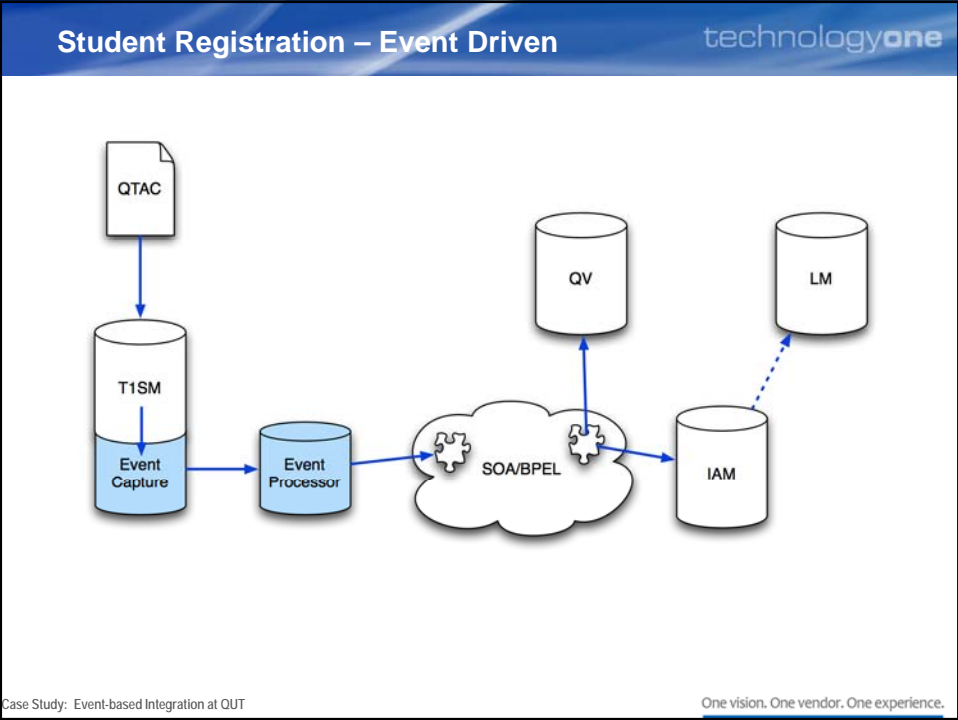


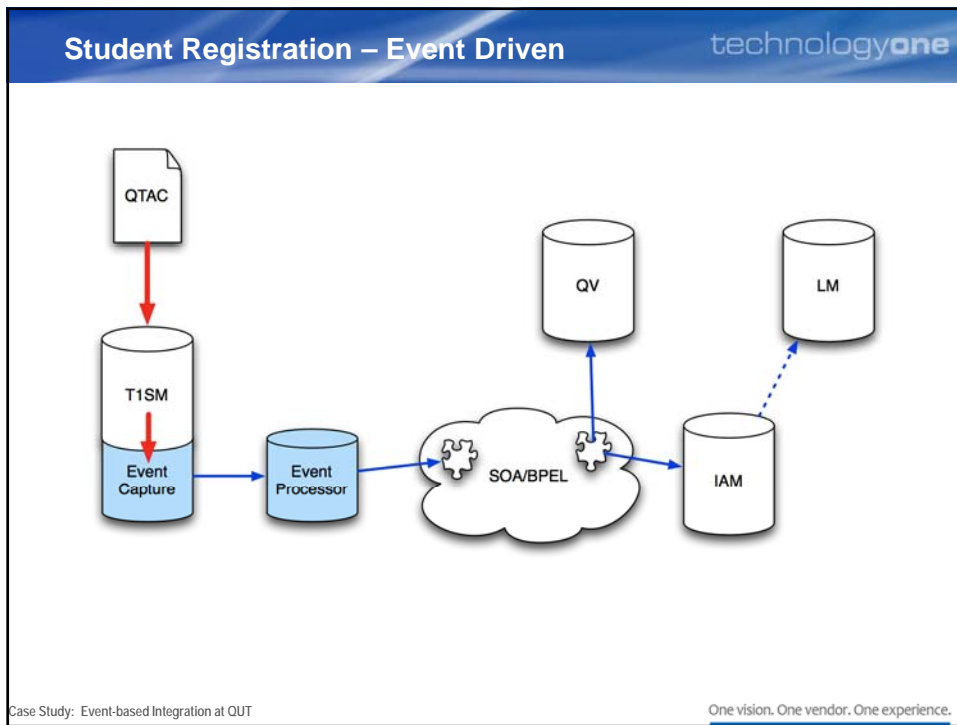
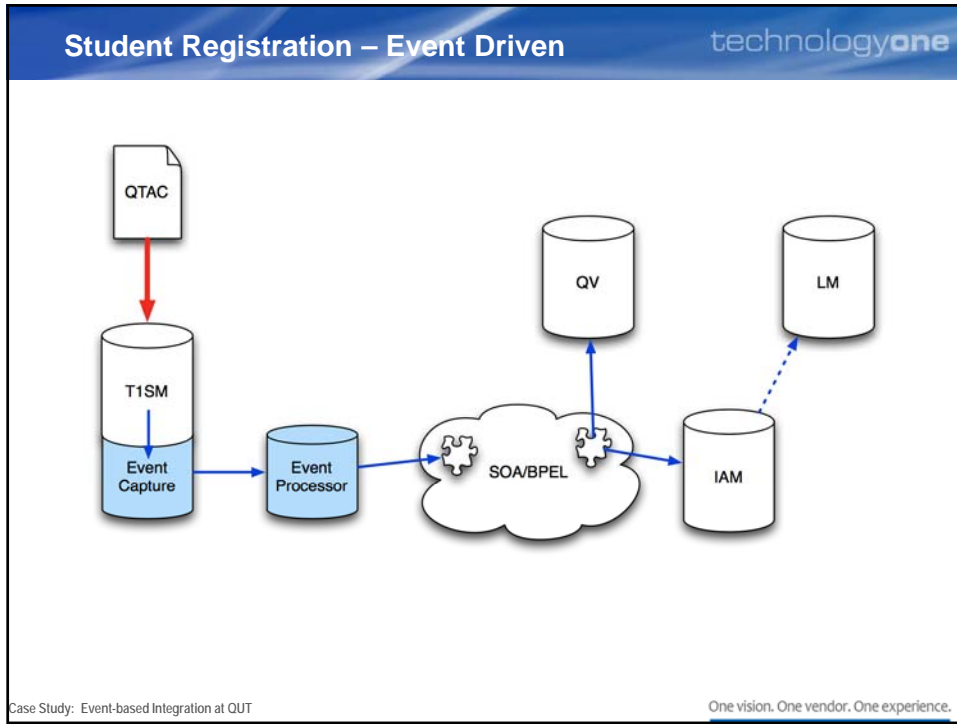


Student Registration – Event Driven technologyone

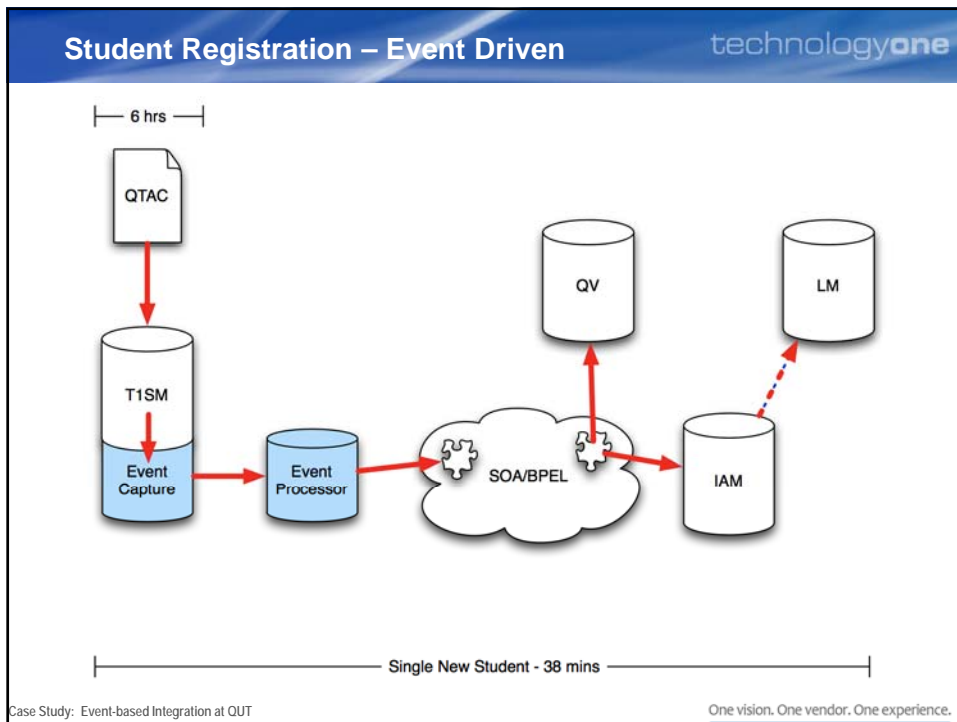
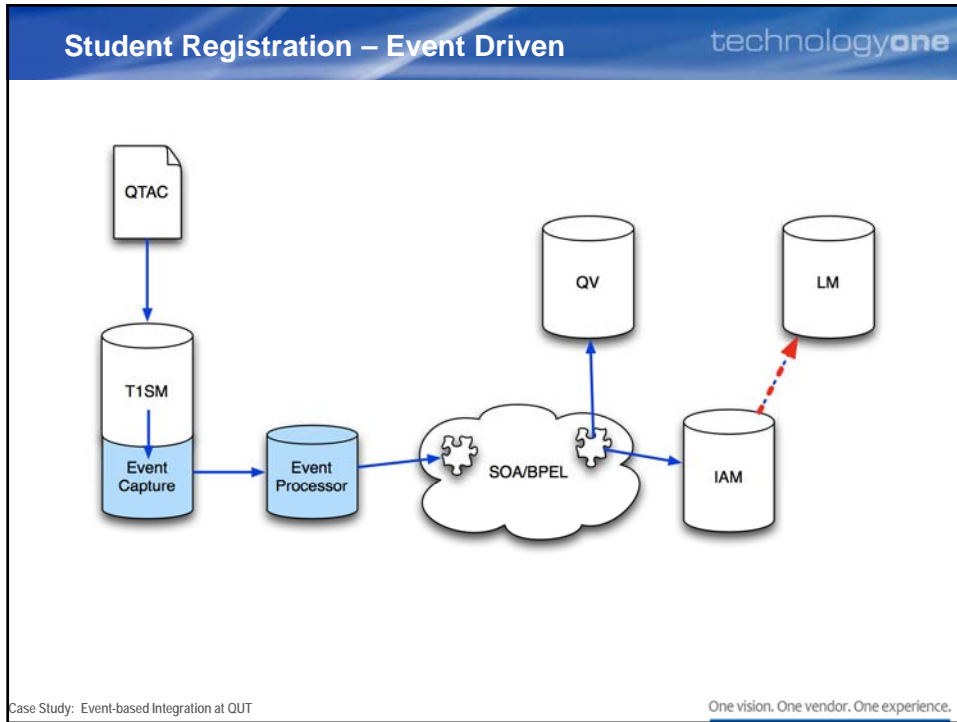
- STA\_SR\_01 Student Registration

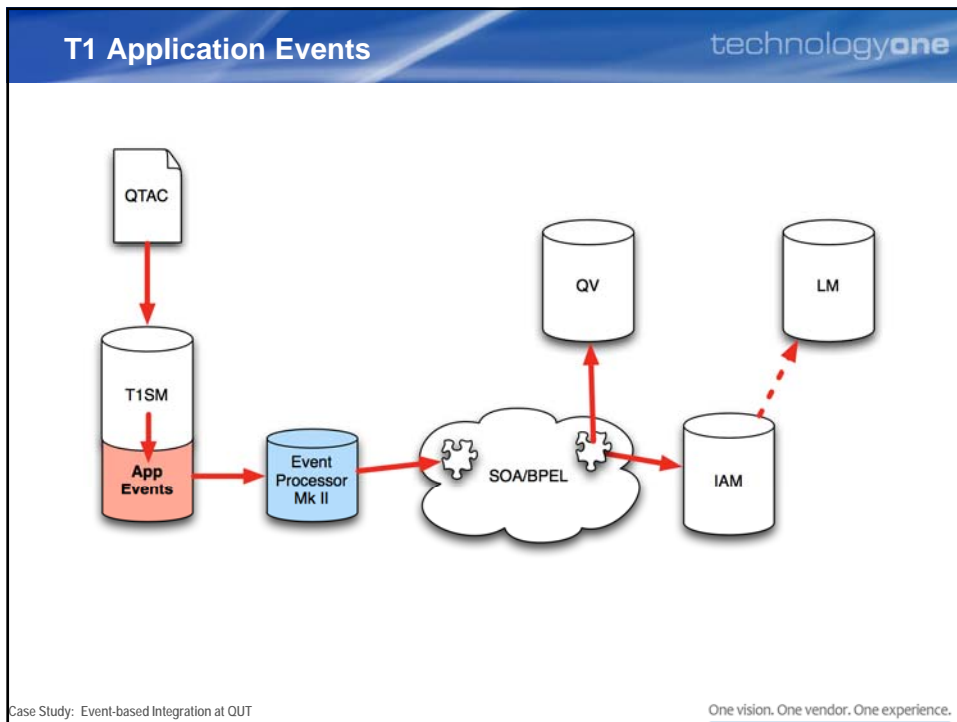
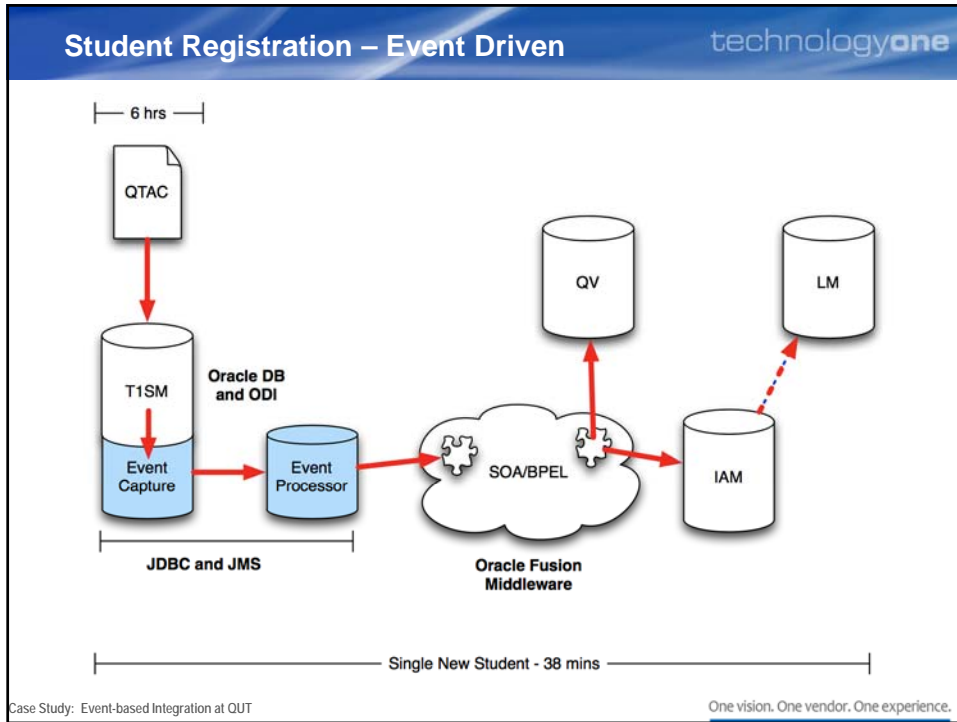
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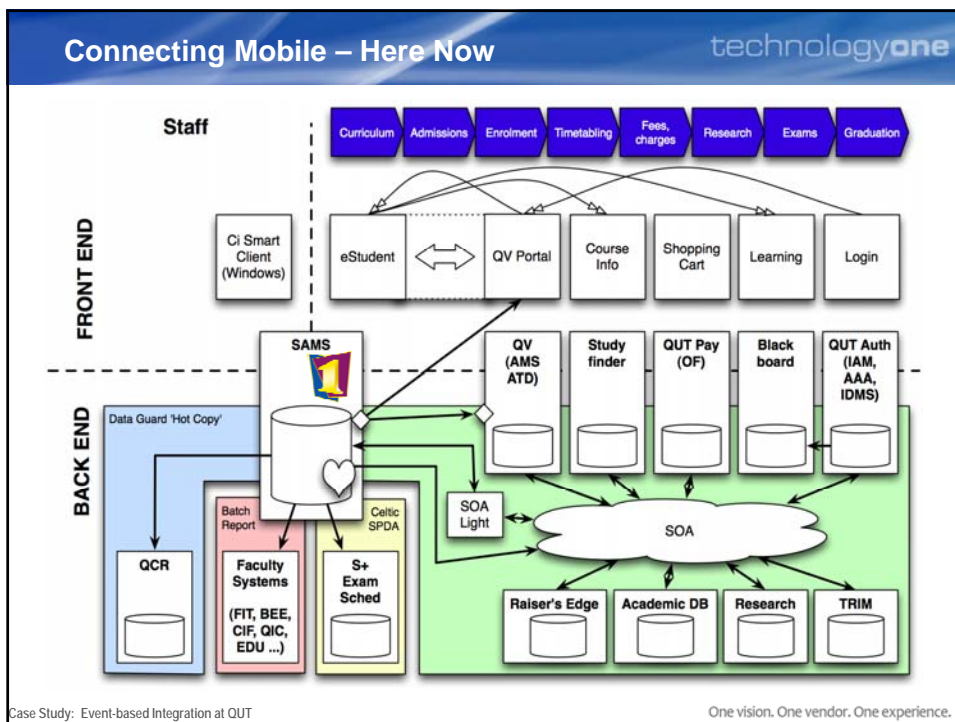




## Comparison technologyone

- Batch
  - One error may hold up entire batch
  - Many hands 'end-to-end'
  - First and last at same time
- Event
  - Error savvy
  - Single end-to-end process
  - Concurrent and recoverable
  - First complete before last started

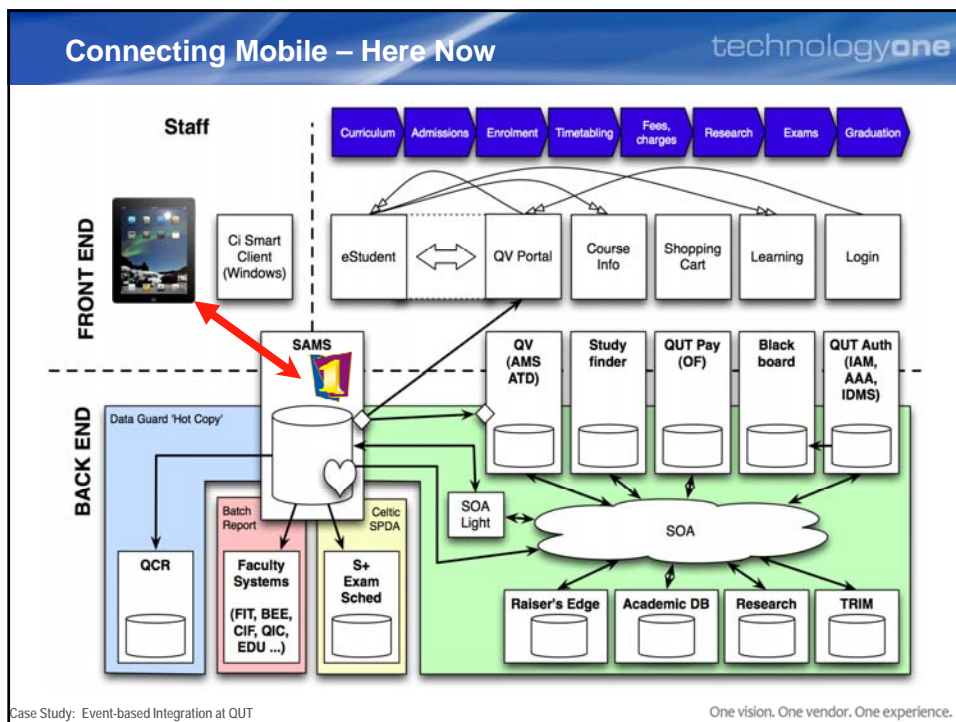
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## Key Connections & Convergence technologyone

- Improved Student Experience
- Enterprise Architecture Approach
  - Flexible architecture driven by business needs
  - Strategy and governance of data flow
  - Integration as a Service
- Cloud Computing
  - Loose connections between systems
  - Mix and Match future components
  - Challenge – Single Sign-On in the Cloud

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