

I-XCHANGE™: TELKOM's Solution towards New Era of Inter-Intra Enterprises Integration

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Background: Business Trigger

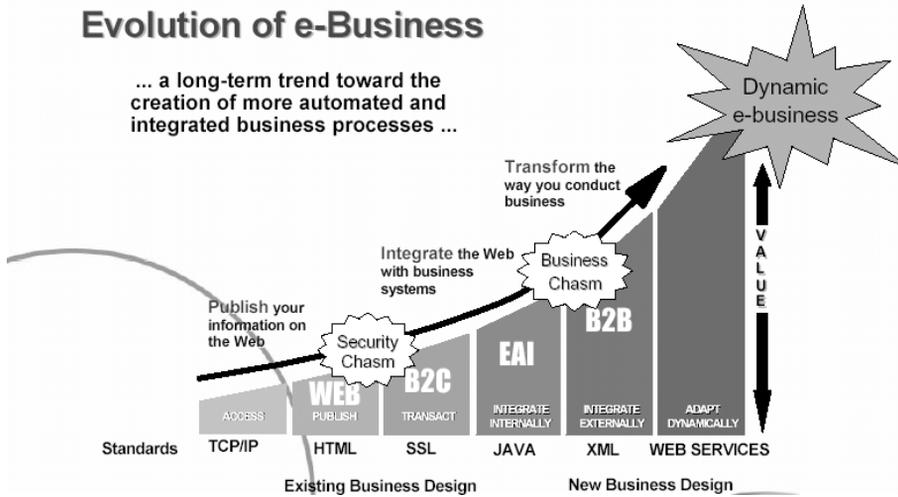
- The need for Telex replacement;
 - High O&M cost using analogue technology, but robust for B2B text applications;
 - Need renewal B2B solution that inherit telex characteristics.
- Trend of e-business toward “inter-intra enterprise integration” (B2B Integration):
 - Merger & Acquisitions;
 - Pressure on business consolidation;
 - Integrate diverse systems on various platforms;
 - Overcome complexity of interfacing to the legacy system while protecting the existing investment.



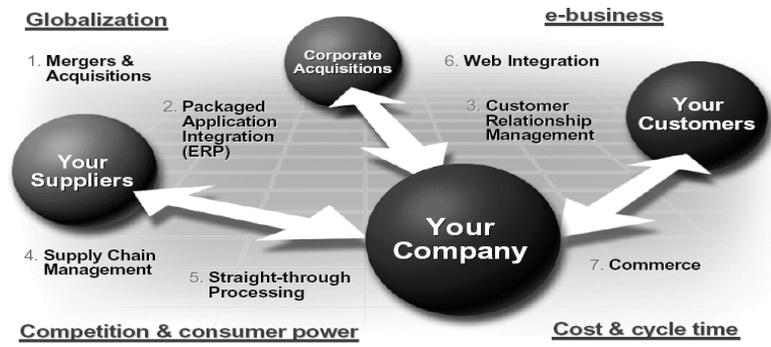
Industry Trend of e-Business

Evolution of e-Business

... a long-term trend toward the creation of more automated and integrated business processes ...



Industry of Integration



Integrating the entire Value Chain



Challenges of Integration

- Interfaces
 - Access to legacy system
 - Specific Interfaces
- Complexity
- Inflexibility
 - Once built, infrastructure difficult to change
- Maintenance
 - All of the above leads to high cost

Companies are spending 40% of development dollars on integration, and ...

it's difficult to maintain, doesn't scale, is hard to manage, and is unreliable, so ...

it takes too long to get information to the right place and the integration backlog gets longer

Source : Gartners

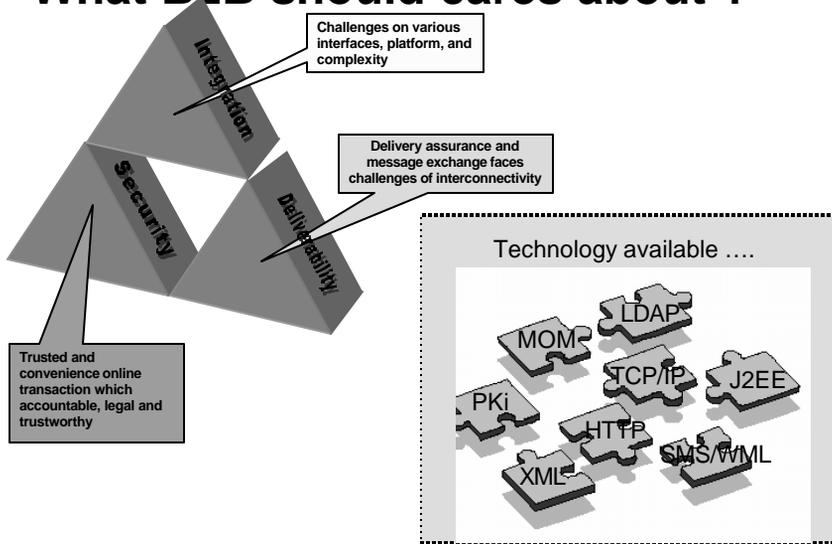


Strategy for Value Creation

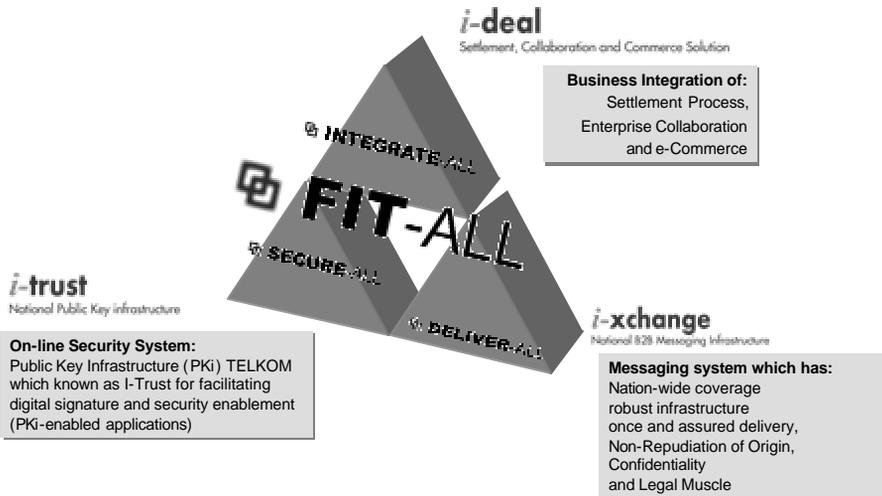
- Leverage TELKOMNET nation-wide data service coverage by acquiring “inter-intra enterprise business integration” capability.
- Focus on providing e-business software infrastructure as middleware to support Enterprise Application Integration and B2B Integration;
- Build robust and cross-platform industry standard for e-Business Infrastructure:
 - J2EE, MOM, XML, Public Key Infrastructure, etc.
- E-Business infrastructure should comply the most critical and toughest applications.
- Embracing a robust partnership in business and technology to strengthen the B2B solution.



What B2B should cares about ?

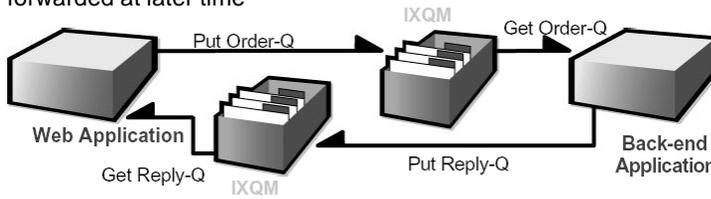


B2B Solution Framework

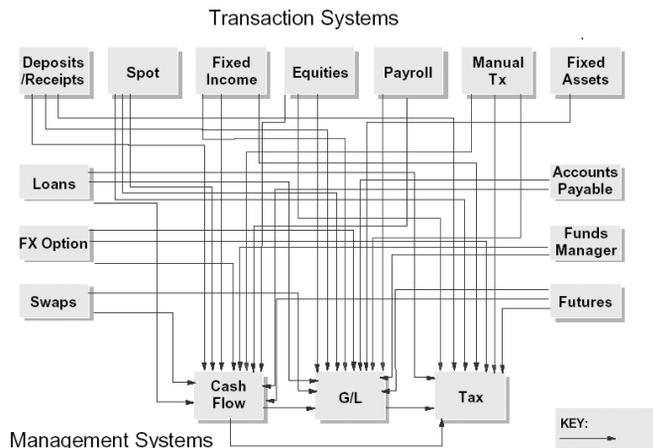


Messaging as The Foundation for Integration

- Loose coupling
- Enabled application to communicate asynchronously
- Simple programming model
- Application data represented as a message
- If the receiver or communication channel is unavailable, message can be forwarded at later time



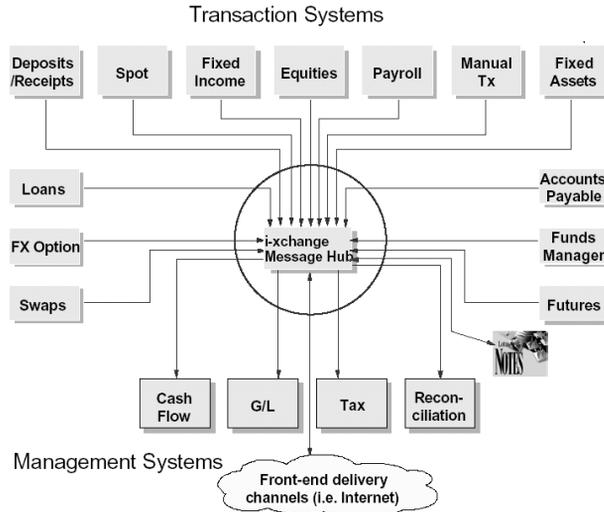
Case: Financial System Integration Before



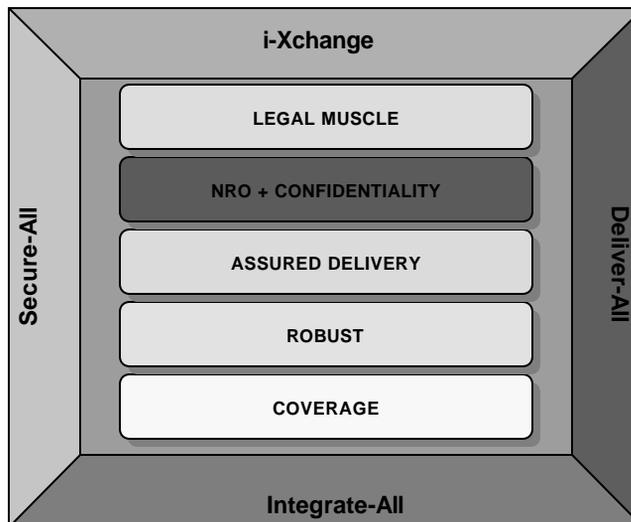
Automatic Feeds may be FTP, Batch, RJE, direct, realtime



Case: Financial System Integration After Integration with i-xchange



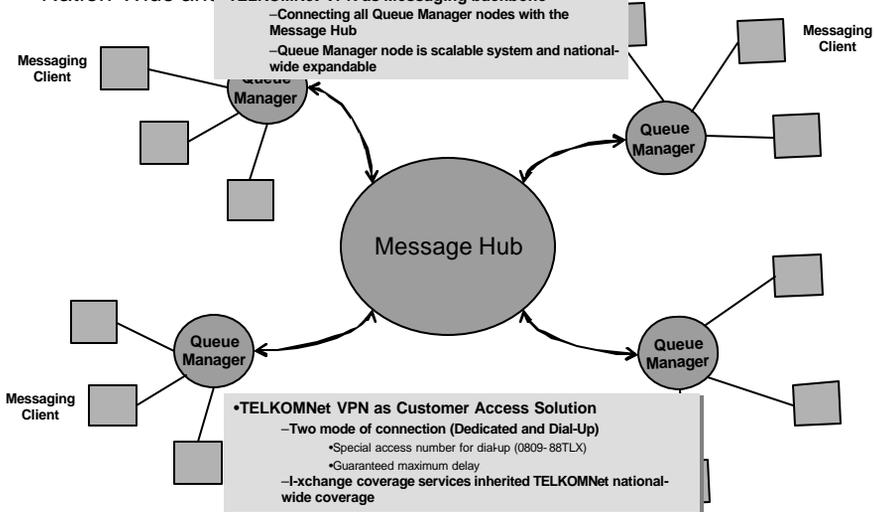
Framework for B2B Integration



Messaging Network

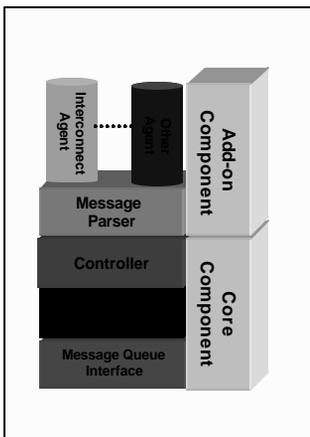
Nation-Wide and •TELKOMNet VPN as Messaging backbone

- Connecting all Queue Manager nodes with the Message Hub
- Queue Manager node is scalable system and national-wide expandable



Messaging Client Toolkit

Single Interface for Messaging Network



-PKI-Enabled Application

- Inherit PKI power with rich-set of cryptographic function

-Directory-Enabled Application

- Connect to up-to-date partner information

-Multi-Platform Adapter

- Connect to 35 types of platform, i.e. Dos, Windows, Unix, AS/400 up to Mainframe-based application

-Flexible Message Format Handling

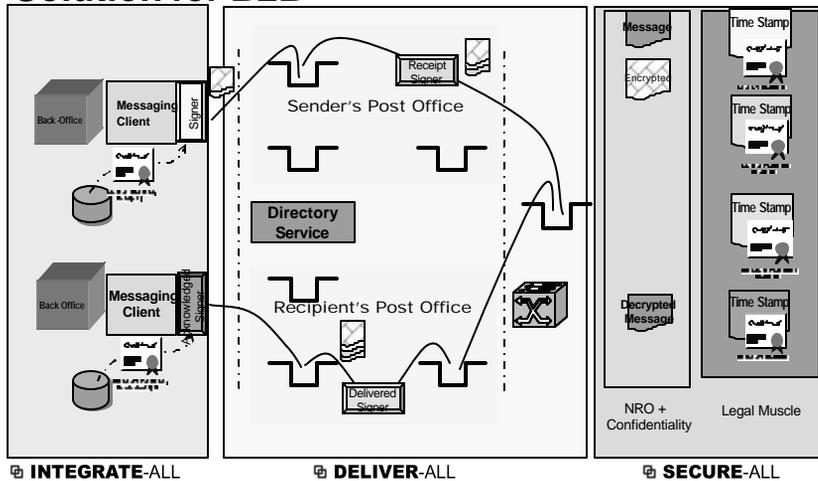
- Able to handling various format of message, i.e. Text, Binary, XML and EDI

-Component-based System

- Adding more future modules, i.e. workflow



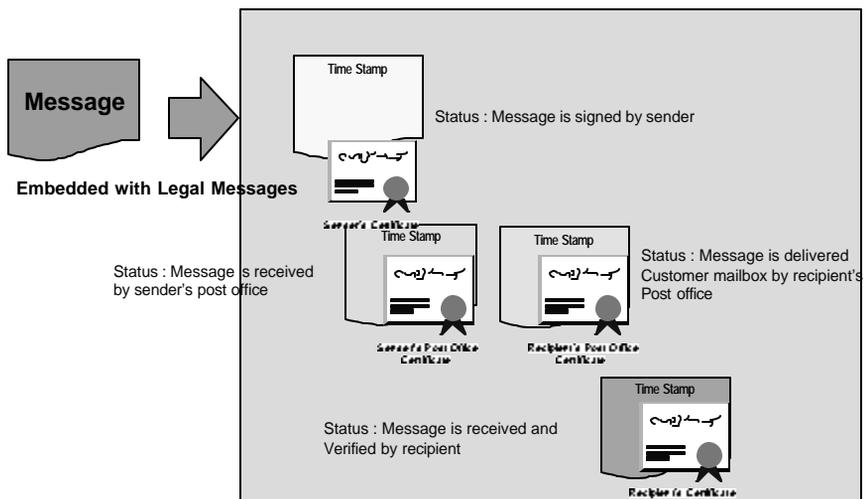
Messaging Flow Solution for B2B



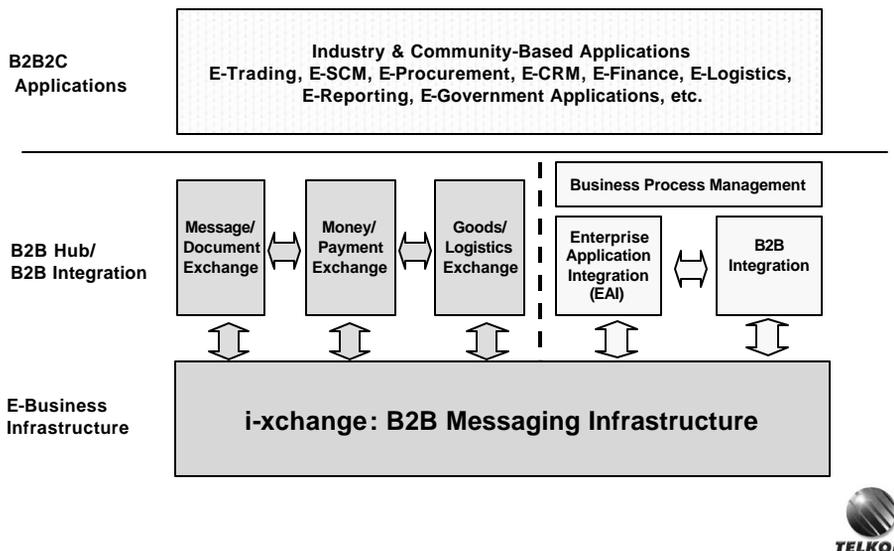
- Exposed secured messaging client adapter
- B2B messaging provider for intra/inter enterprise system



Legal Implementation in B2B Messaging Legal Muscle



I-xchange Potential Business Areas



Closure

- The ability to make and use production-level B2B connections is no longer optional. ***It is a strategic and competitive asset.***
- The emerging successful companies will be those that can rapidly form e-business relationship that:
 - ***enable them to collaborate electronically to deliver best-in-class product and services to their target market.***
- I-xchange, ***TELKOM's B2B messaging infrastructure, is believed potentially capable to become the backbone of all B2B activities in Indonesia.***