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Session 10017

Using SOA to Implement Cloud

---- *One Company's Modernization*

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Agenda

Complete IT transformation

- From business case to initial SOA implementation to Cloud
- Based on my experiences as a Business Development Executive for an IBM SOA innovation team

Review, from my perspective

- Executive decision process
- Technical features and Business influences
- Cultural dynamics
- Success / Failure factors
- Progress, outcomes and Lessons learned

Not a discussion of SOA concepts nor BPM technology nor value propositions nor products nor …

IT Modernization
My job? Make the project successful…

Understand organizational strength and weakness

- Budget allocations/process, territorials, job roles, departmental boundaries, NIH mentality, DIY hazards
- Corporate attention span is short

Risk and Reward are important to the executives

- Define *Success* early in their terms
- Know who will win, who will lose and how are they motivated

Look forward, look backward, absorb the whole picture

- Involve technical staff and less-obvious stakeholders

Personal Check List for Risk

- What is the Catalyst driving the project?
- Who owns the funding and how wide is sponsor's realm?
- Can this be successful? Is this a good idea or not?
- Is it possible to declare success quickly?
- Are there sufficient technical and business skills?
- If they attempt this, what are the odds of success?
- Will the sponsor still be employed after the 1st phase?
- Is the infrastructure or tooling multi-vendor?
- Is there a Strong Line of Business (LoB) involvement?

Beyond the Marketing and Benefits

Early projects bear a huge burden

- Design and architecture
- Tooling of life cycle
- Training and roles
- Policies and governance

Subsequent projects benefit from this foundation, reuse of services and flexible architecture, Cloud, and so on

Benefits such as Agility, time to market, blah blah blah

- *but… it'll take 5 years, and the budget is what ???*

SOA's deadly dozen

"The common mistakes in adopting a service-oriented architecture (SOA) are now well understood and, with a little effort, can be avoided."

"Ignoring (and therefore repeating) such mistakes can derail the entire effort you put into introducing SOA and lose you the benefits. Listed here are the 12 most common mistakes Gartner has observed in SOA implementations."

Massimo Pezzini

http://www.computing.co.uk/ctg/analysis/1844704/soas-deadly-dozen

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Financial Services Automation Provider

Financial Automation Provider
Business aspects

Customer profile

- Tens of 1000s of small storefronts using a fat desktop client
- Handful of corporate customers
- Sales model relies on heavy customer touch
  - Contracts customized to each customer

Growth Plan

- Grow partnerships
- Sell Corporate add-ons
  - Introduce Value-based pricing

Financial Service Provider
Business aspects

Core Business

Recognized lack of Industry's uptake of standards as an opportunity

- Automate the financial workstream
- Streamline data movement
- Efficiency is a strong selling point
- Deliver 1-2 new releases a year

300+ employees, privately owned

Financial Service Provider
Technical Aspects

IT grew organically, relying on point to point integration, custom scripts and gurus

- Central Inventory system made to perform unnatural acts
- No customer intelligence for Sales team
- Billing and revenue stream incomprehensible

No efficiency, no automation, slow to update

- Frustrated every facet of the company

Financial Service Provider
Cultural aspects

Young company run by college friends, including former IBMers

Sponsor is a very sharp VP

- CTO was aloof from the effort

Technical expertise was .net centric

Staff was stretched to their limits

- Absences caused processes to break down

Financial Service Provider
Technical Aspects

Where to start? Business process issues abound

- Front office stagnation
- Back office workflow
- Pragmatic problems
- Strategic actions

Oddly enough, no data problems since it was so inaccessible

- Never propagated nor mutated

Financial Service Provider
Cultural aspects

First attempt to architect IT to support the business

- Started with Business Pilot workshop
- Deep dive into Business Operations
  - Modeled and simulated the back office process
- Created architecture guidelines and business recommendations

Strongly recommended hiring experienced service teams to craft the architecture and initial deployment

Tell me your Modernization Objectives

“Increase departmental productivity, boost overall efficiencies, and simplify our processes”

Consistency, repeatability, scalability

- Focus on right things, not just easy or well understood factors
- Document and leverage for SOX compliance
- Move beyond organically growing current sales and operations models
- Complex business rules and sale variations cause downstream problems

Drivers

- Ad hoc fixes and enhancements
- Compliance and fiscal transparency are needed for an IPO
- Implementation of new sales models cannot be done on current systems
- Customer satisfaction vs. contract consistency

Tell me your Modernization Objectives

Efficiency

- Refocus high value people
- Reduce learning curve; less expensive resources
- Management by exception

Drivers

- Employee burnout
- Tribal lore
- Everything was an exception

Tell me your Modernization Objectives

Agility

- Virtualize business models to be independent of the underlying technology
- Allow change without breaking what works or forcing endless internal collaboration
- Future proof infrastructure to support agility plus NFRs
- Address and enable agility and innovation

Drivers

- Point to point integration is inflexible and unmaintainable
- Lack of architectural model to underlay updates
- How do you measure agility?

Interview Feedback

- What you said
- What we heard
- What we didn’t hear
- Undercurrents

Look at People, Process and Technology

Common themes

- Universal understanding of business information
- Focused on Process definition
  - Automate to provide consistency and repeatability
  - Streamline operations

Business people

- Increase revenue and scale the business
- Growth not matched by back office capabilities
  - Lack of streamlining and rules close to the decision point
- Point applications aren't robust or scalable
- Provide business intelligence

Technology people

- Reduce fragile application dependencies
- Resolve data inaccessibility

Common Requests from Business

Business intelligence based on customer, invoicing, behavior, etc.

One version of the truth

- Define your customer?
- Define customer satisfaction?
- How well is the business doing?

What happens if your orders double next month?

- So we ran a simulation…

Common themes from Technologists

One version of the truth

- Data exists
- High touch to generate reports

Tribal knowledge

Point to point application integration scripts

High touch for Sales Operations

- Every order is manually verified several times

Fix the symptom or fix the problem?

What we didn’t hear

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Think beyond current pain points

- New sales models and entry points
- Enable a new strategy

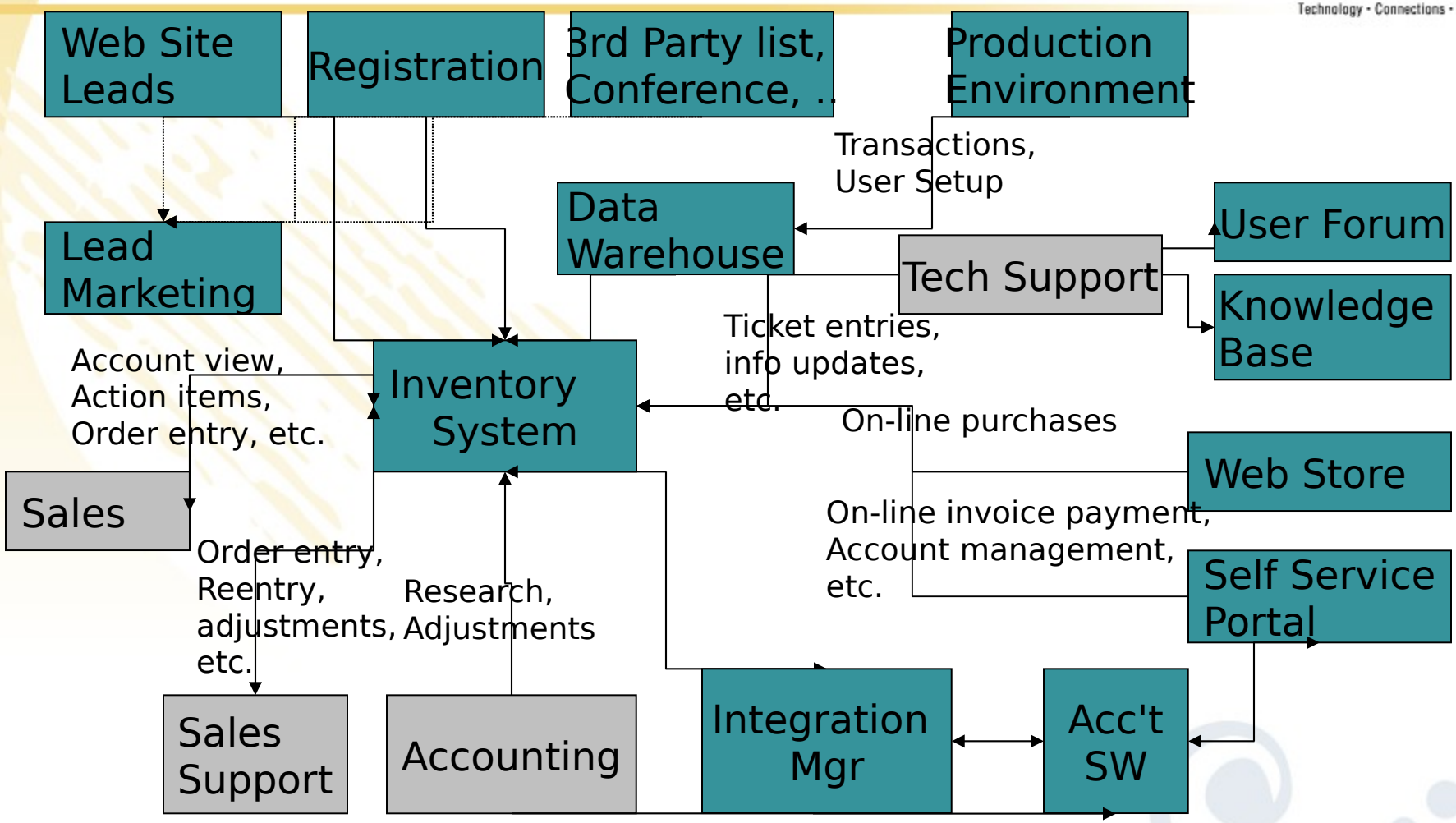
Capture the market

- Where is your innovation strategy?
- Think about business reengineering

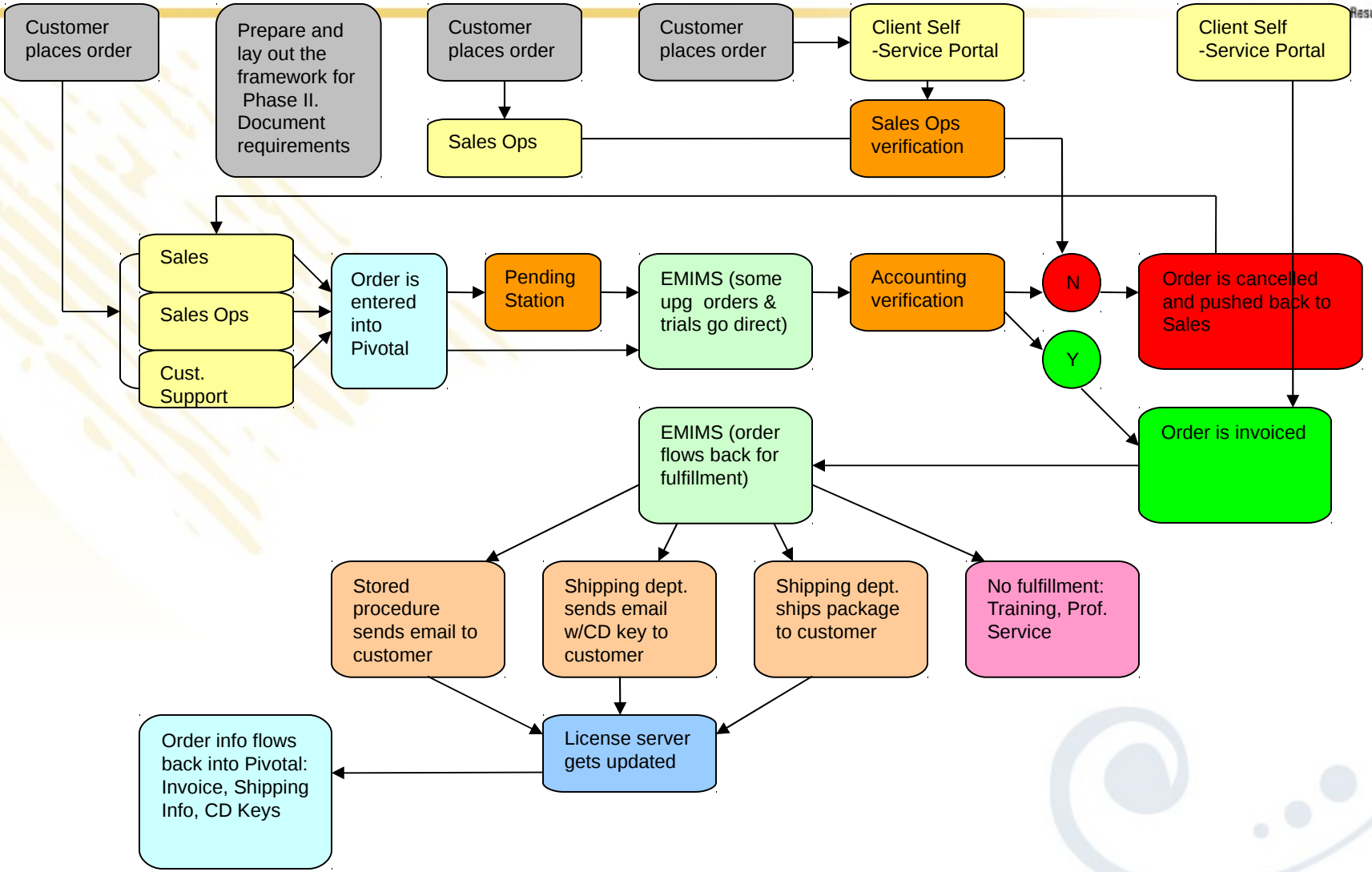
Metrics tell you where to focus

- Baseline info on process, people and technology
- Measure Business benefit
- Measure back office optimization
- Understand and prioritize improvements, measure the success

Today's Back Office view

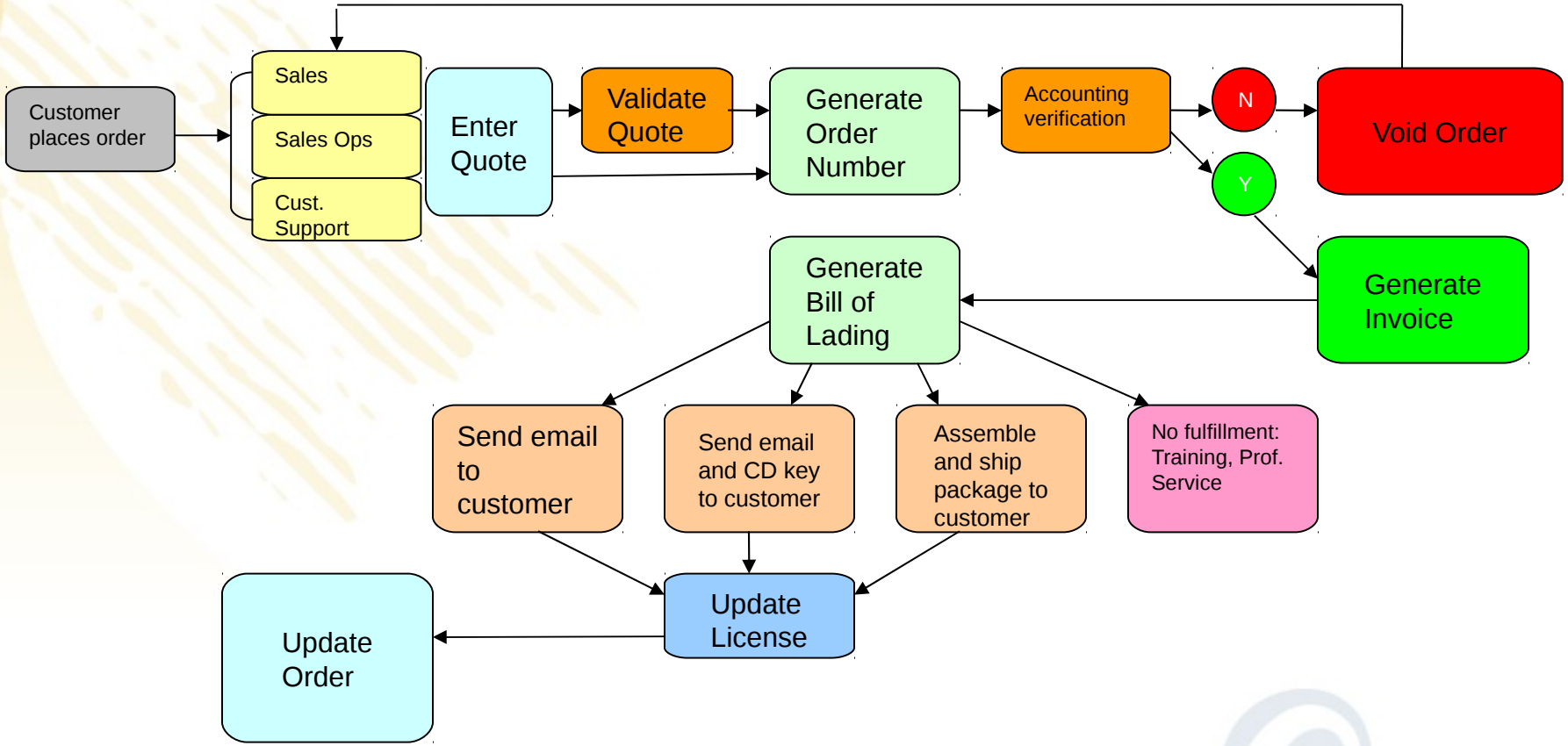


Modeled view of Contract Approval Process



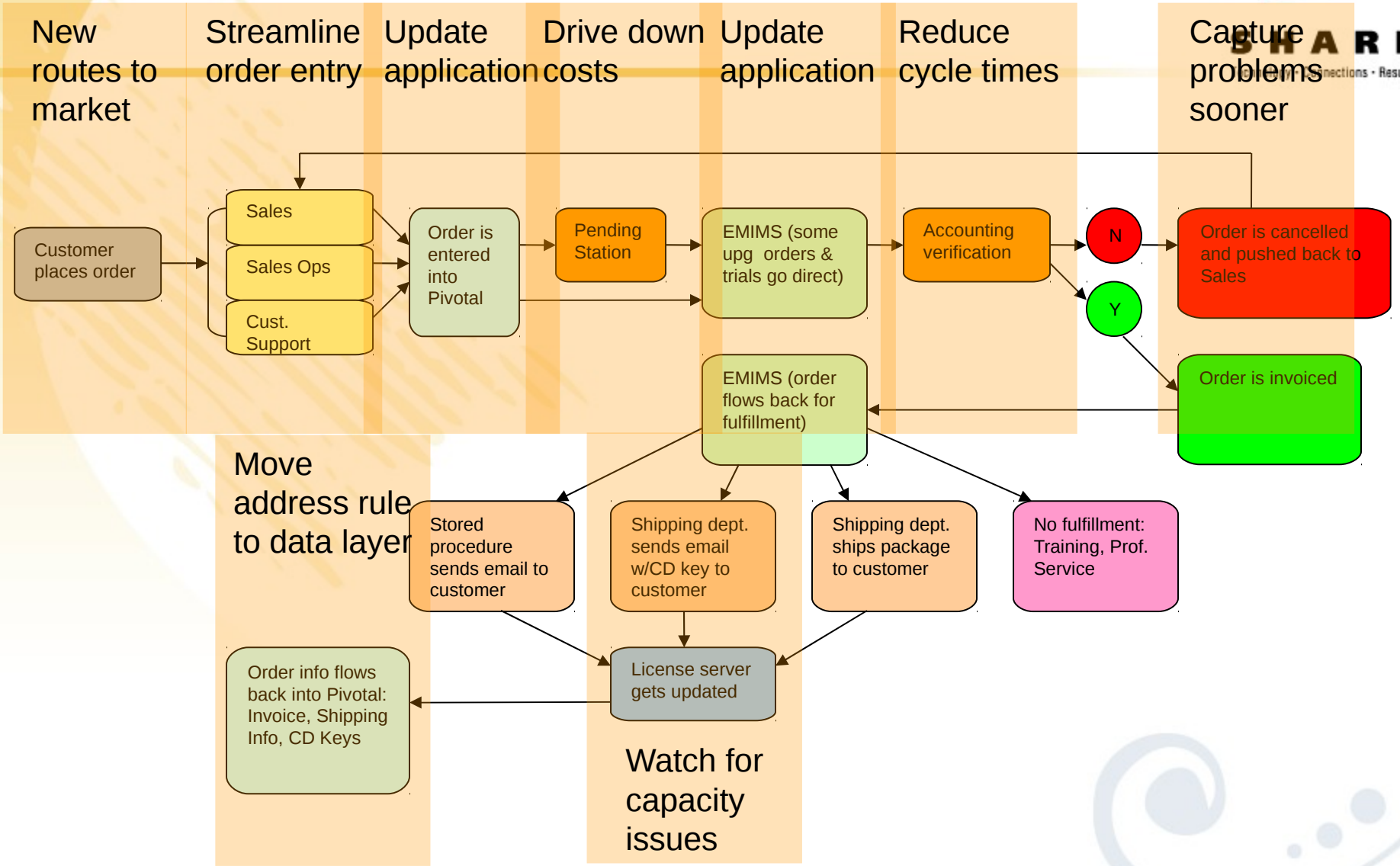
Think of tasks, not apps or technology

and flexible choreography of those services

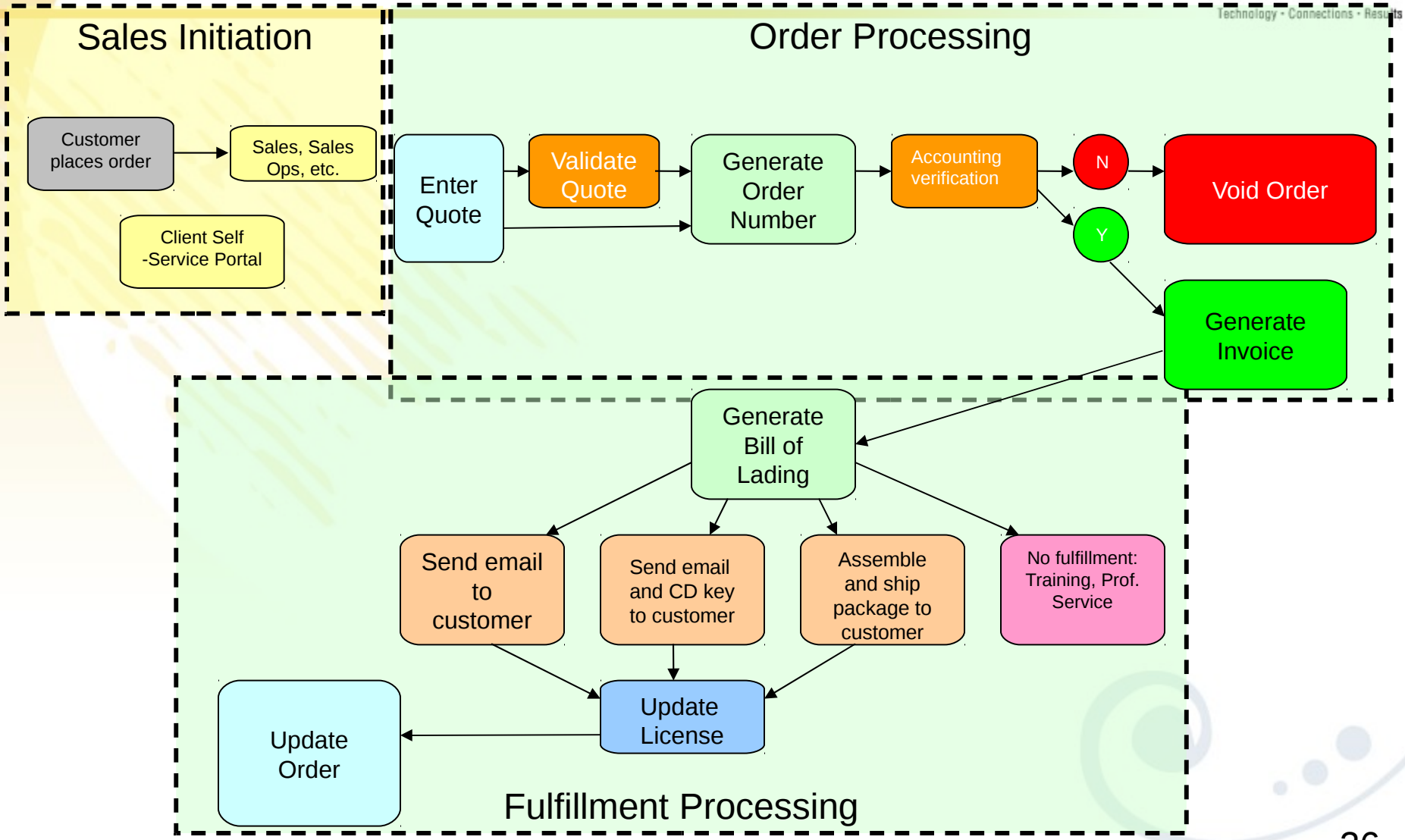


these can become loosely-coupled business service components

Apply the Business to the Model



Abstract to functional descriptions



Choreography as a Consumer of Business Services

independent of underlying technology, quick to change

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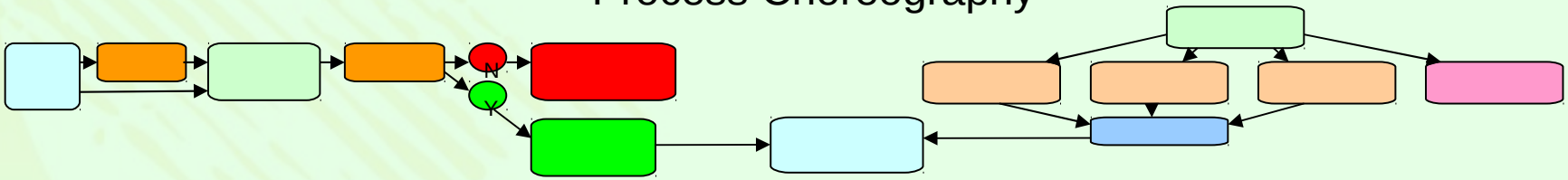
Presentation Layer

Sales

Client Self-Service Portal

Process Choreography



Operations within Business Services

Enter Quote

Validate Quote

Generate Order Number

Accounting verification

Void Order

Generate Invoice

Update Order

Generate Bill of Lading

Send email to customer

Send email and CD key to customer

Assemble and ship package to customer

No fulfillment: Training, Prof. Service

Update License

Recommendations

Low hanging fruit

- Replace bastardized inventory software with Salesforce.com

Pragmatic

- Automate the back office and document decision points

Strategic

- Appeal to corporations and partners by leveraging an SOA design and implementation; prepare for Cloud

Cultural

- Standardize and Govern the sales process
- Think BIG: Small company culture / methodologies can’t scale

Back to My Check List

Do they have both technical and business skills?

- No experience with SOA or process improvement
- Hired a business analyst

If they do this without help, what are the odds of success?

Low , due to highly stressed environment

Will the sponsor still be employed after the 1st phase?

Likely, since the senior management team is tight knit

Is the tooling multi-vendor?

Disconnect, as they are traditionally a .net shop

LoB involvement?

Small shop, good communication and agreement on objectives

Back to My Check List

What is the Catalyst driving the SOA effort?

- Couldn’t grow the business

Who owns the funding and how wide is sponsor’s realm?

- VP owns all infrastructure technology across the company

Is it possible to declare success quickly?

- Even small improvements will have impact

Can this be successful? Is this a good idea or not?

- Yes, but... Hazards !

Would you have made the same choices?

Strategic

- Move from .net to java on WebSphere platform

Funding

- Wait for switch to salesforce.com to request $$

Skills

- Rely on in house talent to design and build the new architecture

Expectations

- Delivery in one year

What actually happened ?

VP and his business case

- Early wins
- Early failures

IT department

First phase of design and implementation

- Development, tooling and skills

What actually happened ?

And when it was done 3 years later... the CEO said

'Resounding success for a broad IT initiative”

Roll the Clock forward

Transition to Saleforce.com from homegrown systems

- Complete in less than one year
- Success !

Data migration

- Informatica solution
- 3 years later
- Success!

Front Office Overhaul

SaaS offering based on their existing automation offering

- Easy transition for customers
- New sales models
- Profitable!
  - Enterprise licenses up 20%
  - Revenue up over 30% by quarter
  - Upsell added 15%
- SaaS licenses tripled the second year

Front Office Overhaul

IPO 5 years later

- Profitable even after the financial market collapse
- IT overhaul was an opportunity
  - Fashion a new sales model
  - Reconcile financial reporting

Observation: Make it Easy for Customers to do their Business

IT modernization was an essential step

- Catalyst for core changes
- Efficiency in the back office mirrors their software offering

Modernizing their desktop offering as a SaaS was extremely profitable

Some of the early pain was predictable and avoidable

- When venturing into new territory, get help

Thank You !