

Successfully Transforming B/OSS Ecosystems: A Cable Industry Case Study

Oracle OpenWorld

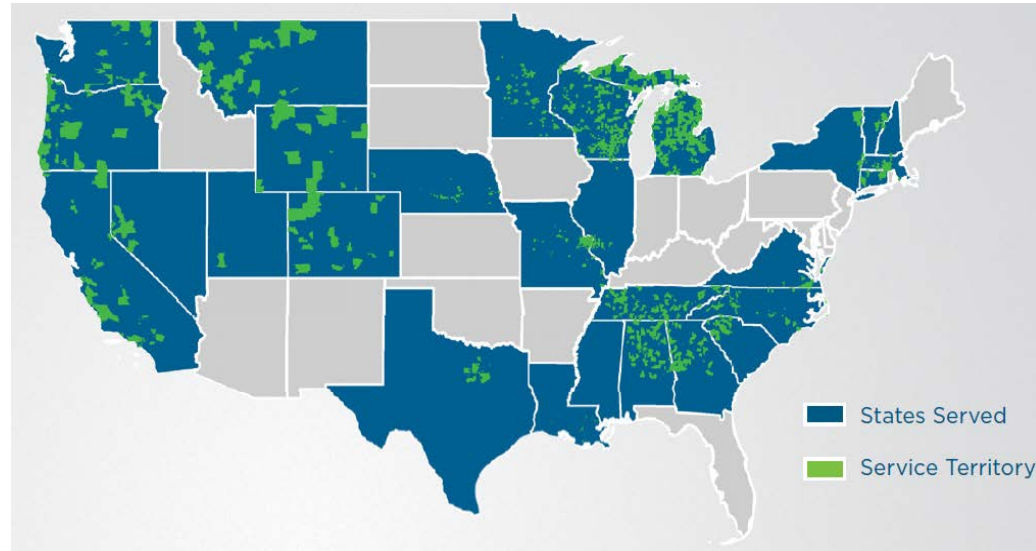
Monday, September 29, 2014

Don Poulter, SVP, Commercial Operations

About Charter Communications

Charter's Mission -- To integrate the highest quality service with clearly superior communications and entertainment products that consistently exceed customer expectations.

- More than 6.0 million residential and business customers in 29 states
- Fortune 500 company
- 4th largest cable operator in the US
- \$8.4B revenues in 2013
- Launched Charter Spectrum™ – new superior network of advanced services



About Charter Business

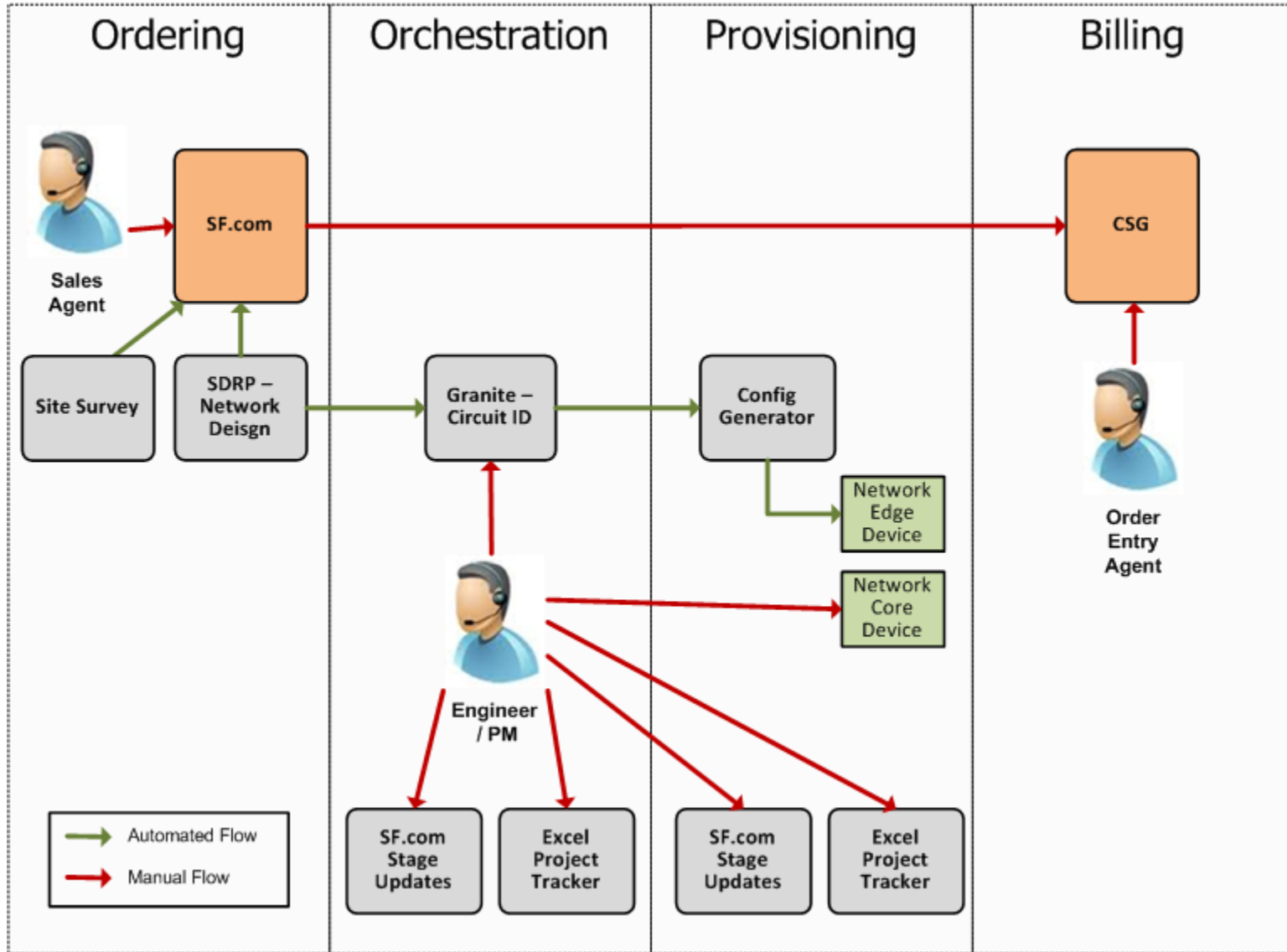
- \$790M revenues in 2013; Year over year revenue growth rate in excess of 20%
- Coax & fiber based products serving small, medium, large business & carrier segments

What Problem Are We Solving For

- Fiber based service volumes grew in excess of 35% in 2012 & 2013
- Order management system consisted of:
 - Spreadsheets
 - Swivel chairing order stage completion information in to Salesforce.com
 - Phone calls & emails to work teams
- The field set their own work flow standards in such areas:
 - Capital authorizations
 - Construction activities
 - CPE turn up & testing
- Order created in billing system only after all work was completed
- Rendering of a detailed invoice involved at least 3 different departments

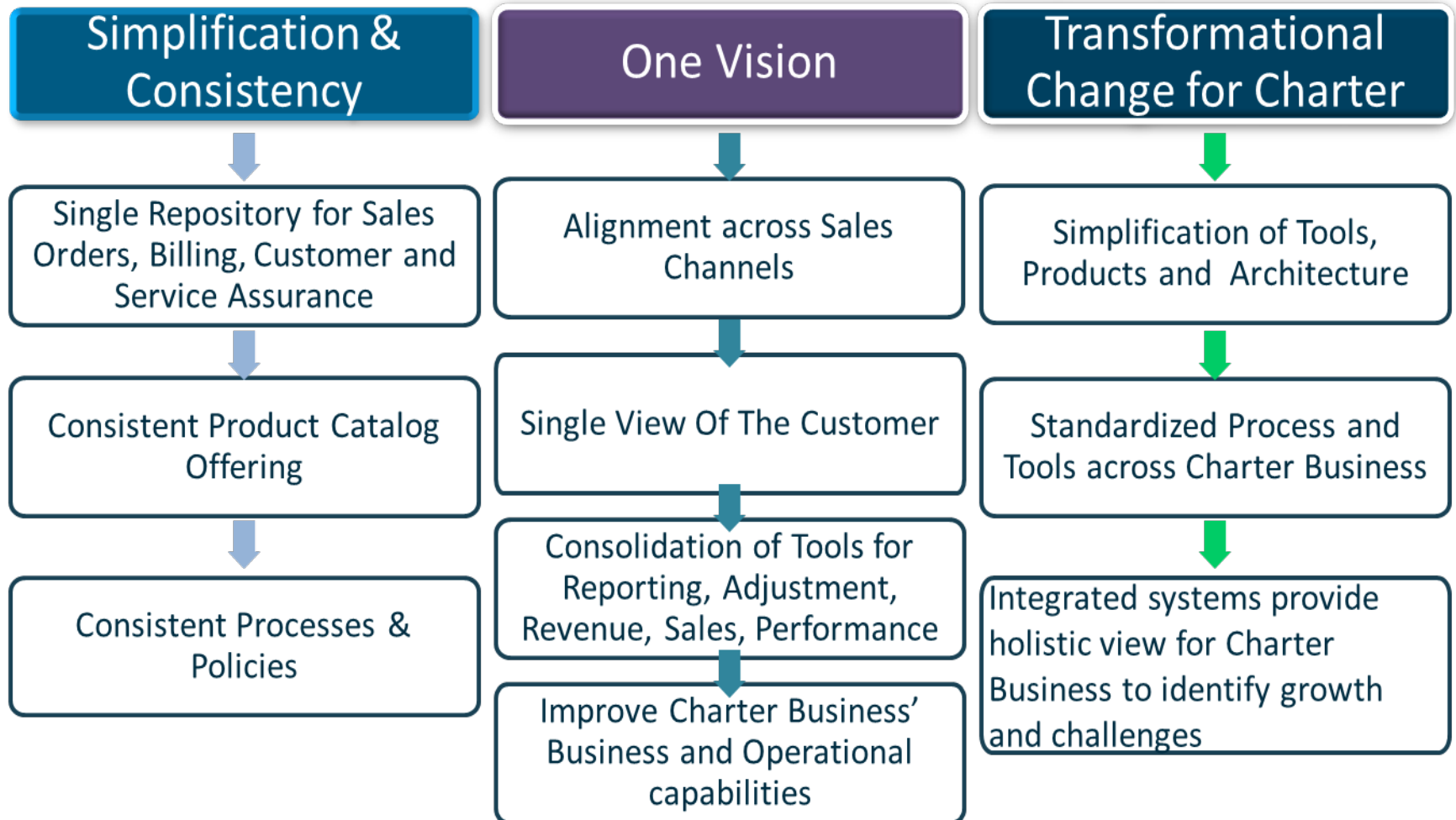
“Existing systems, processes & tools are not sustainable in a business that has experienced significant year over year volume growth”

What Problem Are We Solving For – A Visual Take

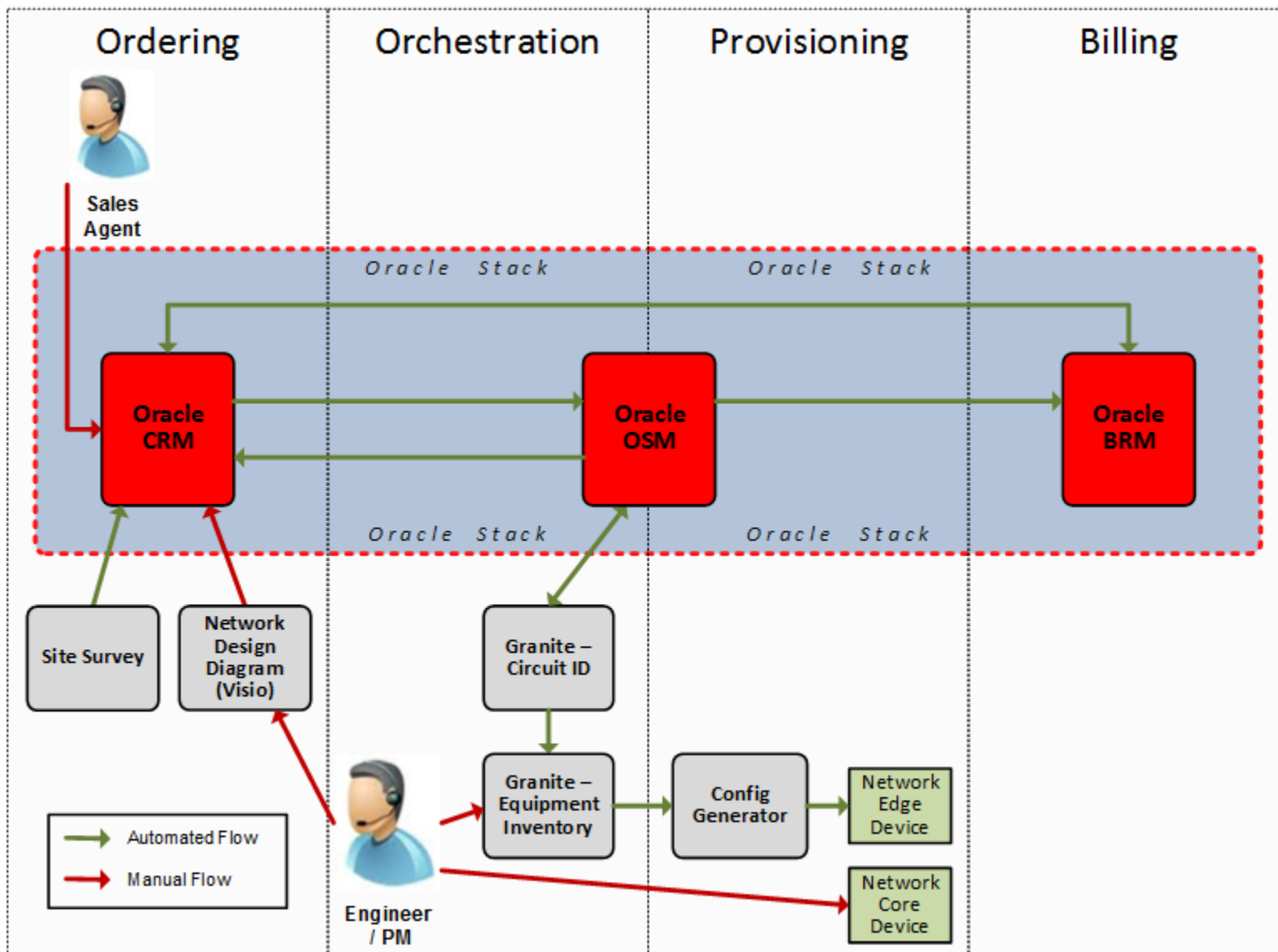


How Did We Solve For Our Problem

Charter is the first cable company in the world to implement the Oracle End to End (Order to Cash) System



How Did We Solve For Our Problem – A Visual Take

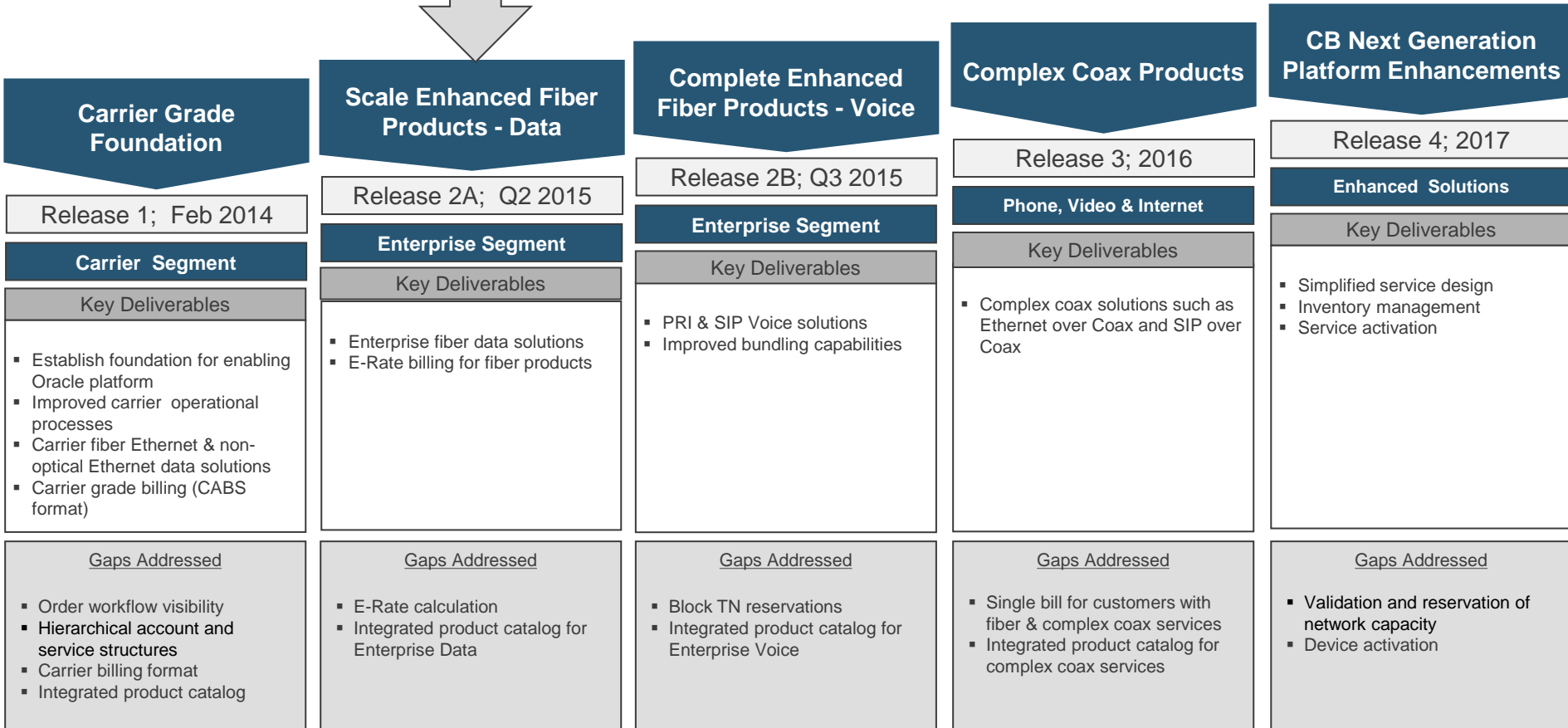
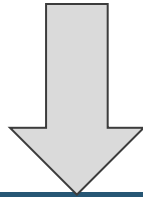


Implementation Strategy – Managing the Risks

- What business segment offered the most manageable risks towards a successful implementation?
 - Carrier segment = about 200 customers, many circuits per customer, data services only
 - Enterprise segment = about 5,000 customers, data and voice services, E-Rate billing considerations
 - Simple coax = about 300,000 customers, video, voice & data services, leveraging residential back office systems
- Go with the Carrier segment as the initial (Release 1) business segment;
 - Manageable customer base (fewer customers, data service only)
 - Minimal lead management issues allows for cleaner separation from SF.com
 - Customer expectation for CABS format billing
- Enterprise launch separated in to two sections:
 - Release 2A focuses on fiber data services (similarities to carrier fiber data solutions)
 - Release 2B focuses on fiber voice services (build Telephone Numbering tables)
 - Launch complete by Q3 2015
- Complex coax solutions (Ethernet & SIP over Coax) solutions follow Release 2 (2016)
- Focus future releases on additional system capabilities such as inventory management & automated service activations

Implementation Strategy – A Visual Take

Current Stage of Development



Assessing the Benefits Behind Release 1

- Overall assessment is more akin to a marathon than it is to a sprint; it will take time for the system to fully bear fruit:
 - Measuring financial benefits seven months post Release 1 launch is not realistic
 - 7 months in & the user community is moving along the learning curve (gaining momentum)
- Minor Releases (1.1,1.2) necessary to address certain functionality & process gaps
- Better billing details (CABS format) also means a learning curve for the customers
 - Initially met with a slower pay cycle
- With the Oracle stack “Stood Up”, other use cases underway across the company
- Measurable & significant operating cost savings likely not realizable until post Release 2 launch
- Nevertheless, immediate benefits have been realized across all modules

Immediate Benefits Received From Release 1

Oracle Module	Benefit
CRM	<ul style="list-style-type: none">• Create customer hierarchy by customer billing address, service accounts (sites), product offerings
CRM	<ul style="list-style-type: none">• Customer information (accounts, circuit ID's, trouble tickets, invoice details) available under one roof
OSM	<ul style="list-style-type: none">• Automated order flow• Development of Level 5 processes• Order visibility by individual task
Product Catalog	<ul style="list-style-type: none">• Catalog fully integrated with CRM & BRM• Detailed summary of product attributes
BRM	<ul style="list-style-type: none">• Carrier Access Billing System (bill format)• Billing flexibility based on account hierarchy structure

Future Benefits Expected Through Release Series

Oracle Module	Benefit
CRM/OSM/BRM	<ul style="list-style-type: none">Acceleration of time to revenue; minimum 10% reduction in average days order to bill cycle
OSM	<ul style="list-style-type: none">Reduce dependency on Fiber Project Managers to guide orders to completion (headcount and Opex reductions)
OSM	<ul style="list-style-type: none">Ability to define “jeopardies” by task; holding each task owner accountable (time to revenue)
BRM	<ul style="list-style-type: none">Create multiple billing cycles; stagger Enterprise customers billing periods to avoid month end billing crunch (reduce lumpiness of cash collections)
CRM/OSM/BRM	<ul style="list-style-type: none">Opportunity to leverage modules in other Charter business areas

Release 1 Lessons Learned

Lesson Category	What We Have Incorporated in to Release 2 Program
Business Requirements	<ul style="list-style-type: none">▪ No more “I did not get what I asked for” excuses▪ Gain each functional area’s ownership & commitment to the process▪ Promote the benefits of Conference Room Pilots▪ Create traceability matrices that detail design, development & testing outcomes
User Acceptance Testing	<ul style="list-style-type: none">▪ Separate development, testing & production environments▪ UAT environment must mirror production environment performance levels▪ Test business processes with same passion as system testing is performed▪ The traceability matrices noted above reduce gaps & confusion in testing
Program Governance	<ul style="list-style-type: none">▪ Expanded Executive Steering Committee to include other key leaders▪ Created Operational Steering Committee that includes all functional areas▪ Clearly defined roles & responsibilities for each Committee▪ We all share in the project outcomes; accountable for project successes/setbacks
Data Conversion	<ul style="list-style-type: none">▪ It is never too early to start the data clean up process▪ Determine what is the “source of truth”▪ Build automated conversion tool

Next Steps

- Continue to “fine tune” the solution as deployed today
- Deliver Release 2 on time and on budget
- Bring platform to current release level
 - Additional user interfaces to be leveraged
- Assess opportunity to accelerate implementation plan outlined in slide #8
- Begin to better understand future capabilities of the Oracle stack
 - UIM
 - ASAP
 - Sales Cloud
- Celebrate our successes; Reflect upon our missteps; Get better each & every day