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Services Strategies Summit
Inside/Out View into Delivering an Improved Customer Experience

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Agenda

- Presentation Objective
- Teradata Company Overview
- Support Academy
- Visual Workflows
- Incident Best Practices
- Customer Result

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Presentation Objective

- During this session, we will explore some of the introspective ways the Global Support Organization at Teradata Corporation is improving the customer experience. Every world class company needs to develop their associates skills, provide consistent process execution and review the quality of their service delivery

- In this presentation, you will learn more about:
  - > Teradata's implementation of Support Academy, a modern virtual learning environment
  - > Teradata's use of visual workflows to consistently deliver service
  - > Teradata's innovative quality incident review methodology.

What is Teradata?

- The Teradata Unified Data Architecture™ is specifically engineered to meet business needs for analytics – from data staging to data discovery to data warehousing – Any user, any data, any analysis
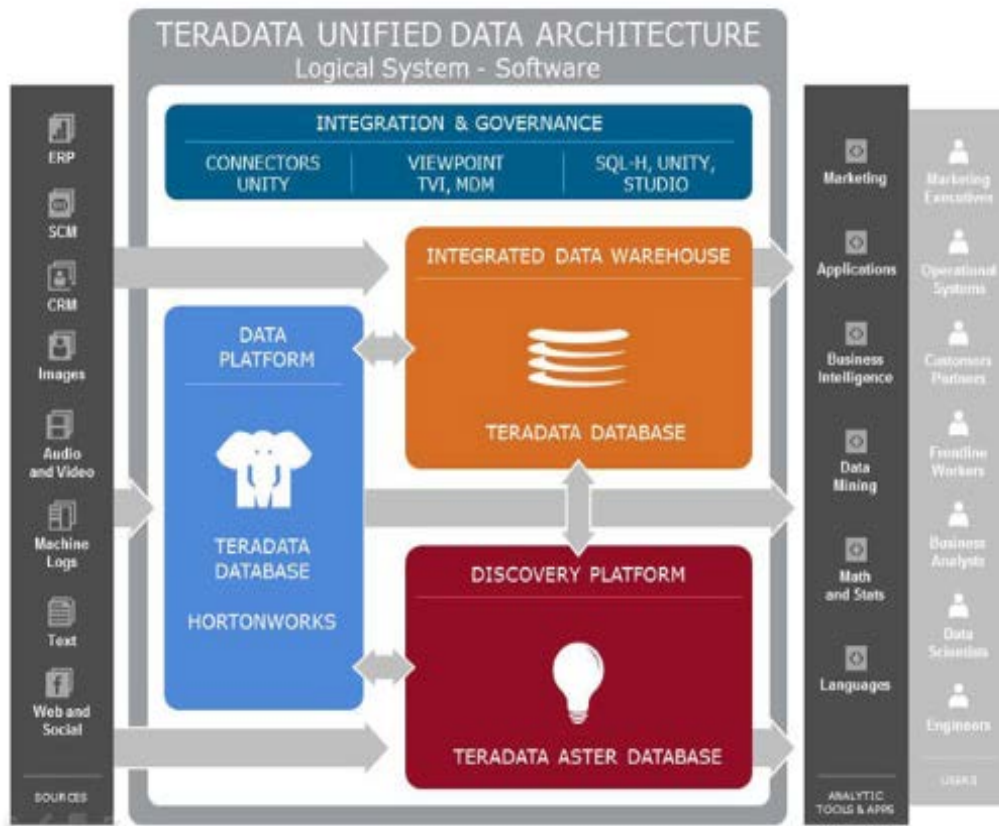
- Data Staging
  - > Loading, storing, and refining data

- Data Discovery
  - > Accessible by business analysts
  - > Rapid exploration
  - > Unlock insights from Big Data

- Data Warehousing
  - > Integrated and shared data
  - > Strategic/operational analytics
  - > Extended through the organization

Teradata's Global Industry Success

90% Top 20 Telecommunications

75% Top 20 Retail

70% Top 20 Financial

65% Top 20 Travel and Transportation

55% Top 20 Healthcare

50% Top 20 Manufacturing

Based upon 2012 Fortune Global 500 data released July 2013

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Teradata Customer Services Levels

- Level 1:   Field (Regional or Local)
  - > CSR: Customer Support Representative
  - > SSM: Site Support Manager
  - > AD: Area Director
  - > Hardware & Software Maintenance

- Level 2:   GTS (Global Technical Support)
  - > TSS: Technical Support Specialist
  - > Product Generalist; Incident Coordination, Dispatch, Knowledge Rediscovery

- Level 3:   GSC (Global Support Center)
  - > PSE: Product Support Engineer
  - > Product Specialist; Recovery, Deep Analysis (New Problems), Knowledge Development

- Level 4:   Sustaining Engineering
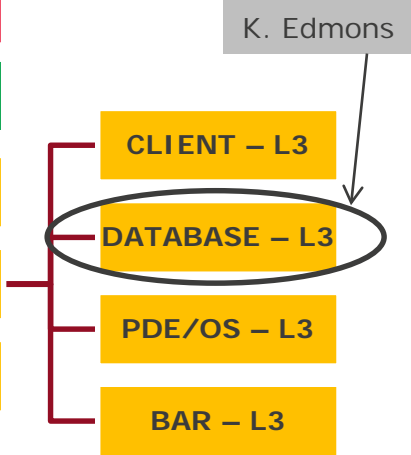 - > SE: Software Engineer
  - > Code Fixes

Global Support Center (GSC) Support Characteristics

- Very Complex System
  - > Many technologies & areas of expertise
  - > Average Incident = 6-8 hours TPI, several days duration
  - > Usually several teams & analysts collaborating

- Remote Support
  - > Most systems have high-speed connections
  - > Try to do everything remotely (except hardware maintenance)
  - > Interactive troubleshooting, analysis, recovery
  - > Offline analysis – dumps, logs, traces

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CUSTOMERS & CUSTOMER SYSTEMS

CUSTOMER SERVICES

- APRIMO APP – L3
- ASTER SW – L3
- HADOOP – L3
- HARDWARE – L3
- TERADATA – L3
  - CLIENT – L3
  - DATABASE – L3 — K. Edmons
  - PDE/OS – L3
  - BAR – L3
- SYSTEM CHANGE
- GLOBAL TECHNICAL SUPPORT - L2
- CRITICAL SUPPORT OFFICE
- FIELD SUPPORT/OPERATIONAL SERVICES
- CHANGE CONTROL
- PARTS AND LOGISTICS
- ACCOUNT MANAGEMENT – L1
- REVENUE MANAGEMENT

PHONE WEB ALERT

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Service Capability & Performance Certification

- **Teradata -** International Certification Recognition for 10 consecutive years

- **What is SCP Certification?**
    - > **Service Capability & Performance Certification** – International program that defines best practices for delivering world class support
    - > Provides framework for continuous improvement
    - > Requires comprehensive annual audits to confirm companies consistently meet program requirements

- **Why is it important?**
    - > Teradata Customer Support Certification Benefits
        - Drives Best Practices
        - Rigor, structure, up-to-date documentation
        - Process Compliance
        - Assurance of "Best-in-Class"…"World Class" service for our Customers
        - Investment in Operations

![Teradata](image of Teradata logo)

Support Academy & Skills

What are the Levers for Improving the Customer Experience?

Processes	Skills	Knowledge
Requirements	Staffing	Continuous Improvement
Quality	Globalization	Tools

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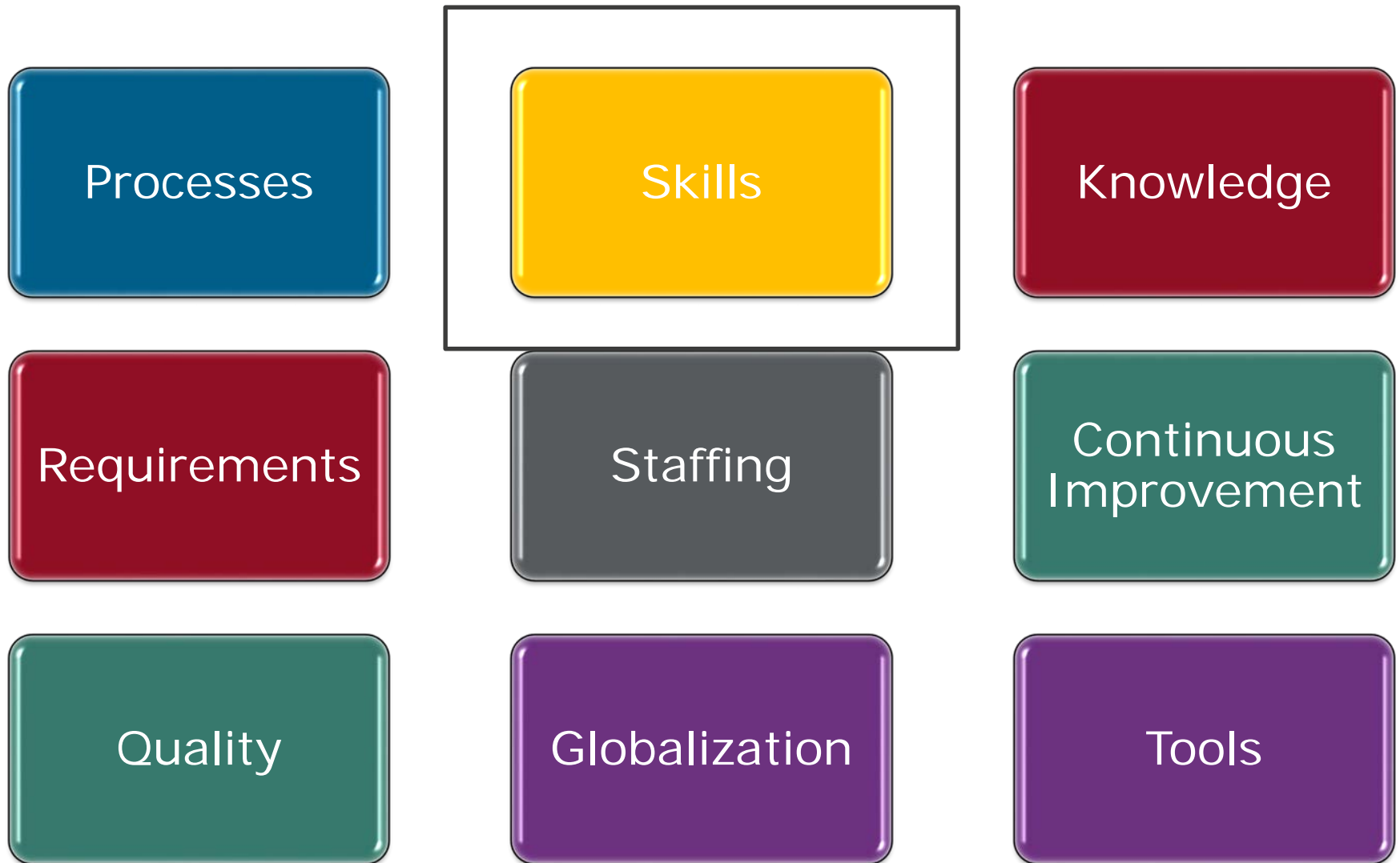
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What Is Support Academy?

- Anytime, Anywhere, Mobile Learning
- Scheduled or Just-in Time
- Existing Courseware and New Purpose-Built Modular Content
- Easy to Access – Single Launch Point – By All of Teradata
- SME-Propelled Learning Community

Image courtesy of: http://remotelearningproject.com/wp-content/uploads/2011/12/Learning-with-Distance-Education.jpg

Why? The New Learning Landscape

- **More to learn** / know / access / deal with
- **More technology** to capture and share learning assets
- **Better access** leads to just-in-time
- **Learners participate** more in their own learning
- **Learn your way,** at your pace
- **People will share** what they know

Learning may be:
Formal - Informal - Social

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Support Academy and Learning

As a Learner:

- Access Support Academy on Teradata Connections
- Help new associates develop skills
- Help experienced associates acquire new skills
- Find what you need "just-in-time"

As a Creator:

- Share the great insights you have acquired!

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Expertise Goes From Locked Up to Pervasive

Insights trapped in email archives
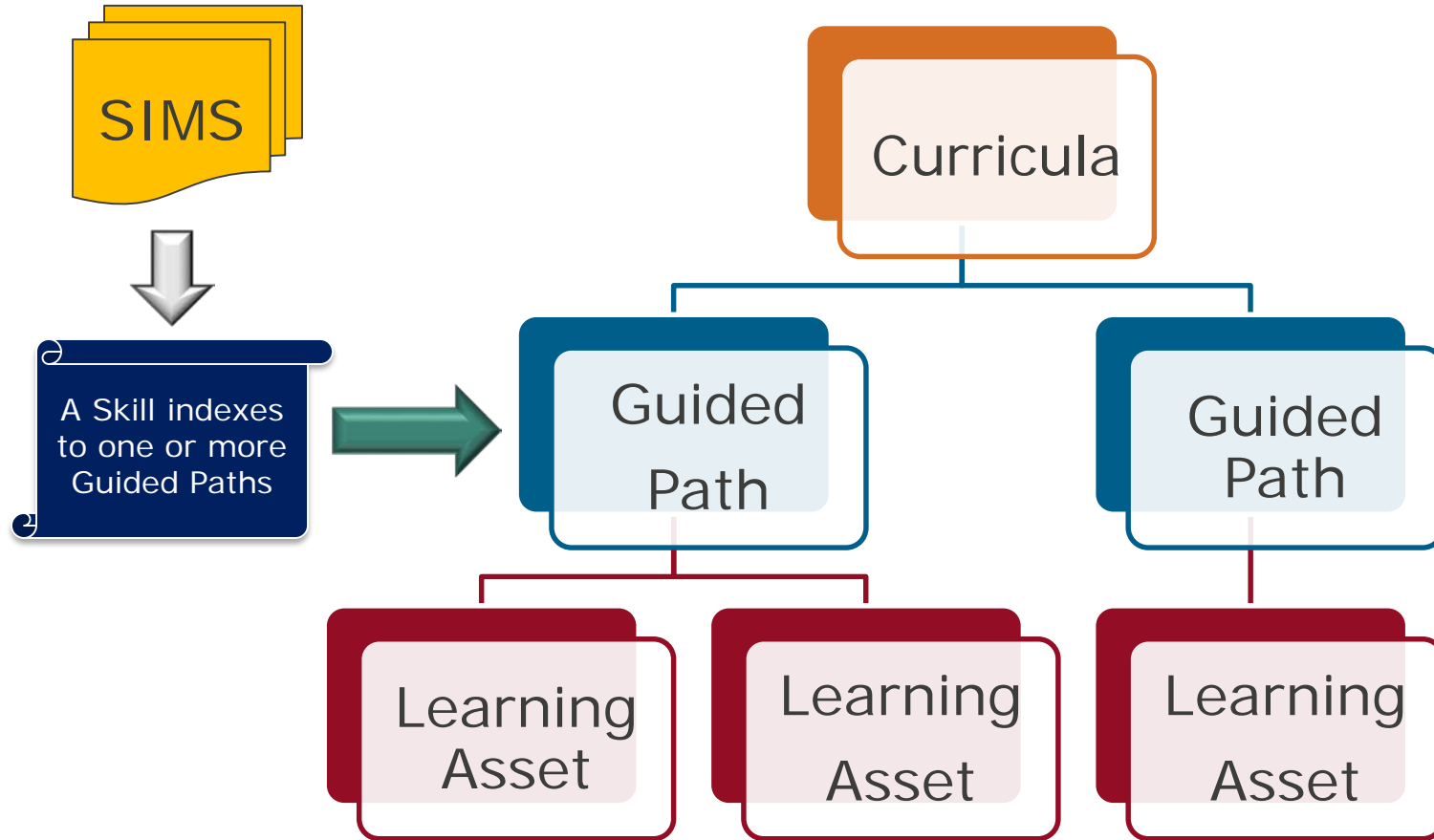

Insight provided by any expert worldwide is immediately available *everywhere.*

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Support Academy Hierarchy

SKILLS INVENTORY MANAGEMENT SYSTEM

SIMS

A Skill indexes to one or more Guided Paths

Curricula

Guided Path

Guided Path

Learning Asset

Learning Asset

Learning Asset

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Support Academy Hierarchy

- A Curricula consists of a comprehensive list of **Guided Paths**.
- Each Guided Path is
  - > Associated with a **Skill.**
  - > A set of **Learning Assets** that may have a particular order.
- A learning asset is the basic training element.
  - > Ideally consumable in 3 to 10 minutes.
    - – Longer material may be subdivided.
  - > Many are videos purpose built for Support Academy.
  - > May reside in Teradata Connections or wiki, file share, Teradata University, YouTube, etc.
  - > Each is described and accessed in a Teradata Connections document. This allows liking, comments, ratings, sharing for individual assets.

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Example of Guided Path

- Guided Path – Hadoop Distributed File System
- Description: These videos talk about Hadoop's HDFS File System, and how it stores Data Files.

Name of Course	Author
Hadoop's HDFS Component	Jeff Walz
Using "hadoop fs" commands to manage and view the HDFS	Jeff Walz
Using the NameNode WebUI interface to view the HDFS	Jeff Walz
NameNode and DataNode	David Fernandes
Job Tracker - WIP	Currently in Progress
Task Tracker - WIP	Currently in Progress
Master Node - WIP	Currently in Progress
Slave Node - WIP	Currently in Progress
Redundancy in Hadoop - WIP	Currently in Progress

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LEARNING ASSET PRODUCTIVITY - OVER 750 VIDEOS

	January	February	March	April	May	June	July	August	September	October	November	December
Monthly	4	9	18	17	49	108	86	59	47	93	129	146
Cumulative	4	13	31	48	97	205	291	350	397	490	619	765

- Every GSC associate had an objective to contribute to one Support Academy learning asset per month (starting in April, 2013).

- ~2500 learning assets needed to have >90% coverage of all identified GSC product area skills.

  > Based on the count of skills in SIMS and

  > Estimates of the number of learning assets per skill

- Monthly competition for the Crystal Trophy

- Annual Support Academy Oscars

Impact to Customers/Organization

SIMS – Self-ratings completed quarterly

- Jointly identify skills development opportunities (need file system, dump analysis, query performance, system performance)
- Become proficient in identified areas of concentration (development plan outlined by manager)

Support Academy Objectives

> - Produce 10 Support Academy Video Learning Assets
> - Reduce skills gap in Specialization area to a perfect 7 by 10%
> - Build out Guided Paths
> - Link learning with SIMS

- Customers see improved skillset knowledge to solve their most challenging technical problems

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Visual Workflows

What are the Levers for Improving Customer Experience?

Processes	Skills	Knowledge
Requirements	Staffing	Continuous Improvement
Quality	Globalization	Tools

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Global Process Consistency Objectives

- Remote efficiency
  - > Improving remote access contacts (customer) information
  - > Need help in standardizing the delivery processes and continuing to drive remote connectivity and enable remote resolution by Global Technical Support (GTS)

- Follow the Incident Management Process
  - > Consistent process execution across the globe

- Use proper escalation/inquiry procedures
  - > Know how to escalate properly. See the escalation workflows and training
  - > Avoid jumping to conclusions – they are usually incorrect and/or missing information

- Minimize non-standard support

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What are Visual Workflows

- Online workflow diagrams
- Consistent with Incident Management Process (IMP), but fill in the gray areas.
  - > Ie., what to do when things break down and don't go as planned.
- Extremely specific about every twist and turn.
  - > It's not easy to design good workflows.
  - > We find many issues with process completeness and consistency by working to get the visual workflows right.
- Visual workflows link to each other
- Always up to date, single source of the truth
  - > Goal to eliminate paper copies, post it notes, sharepoints, ad-hoc word of mouth processes, conventions, process gaps, etc.
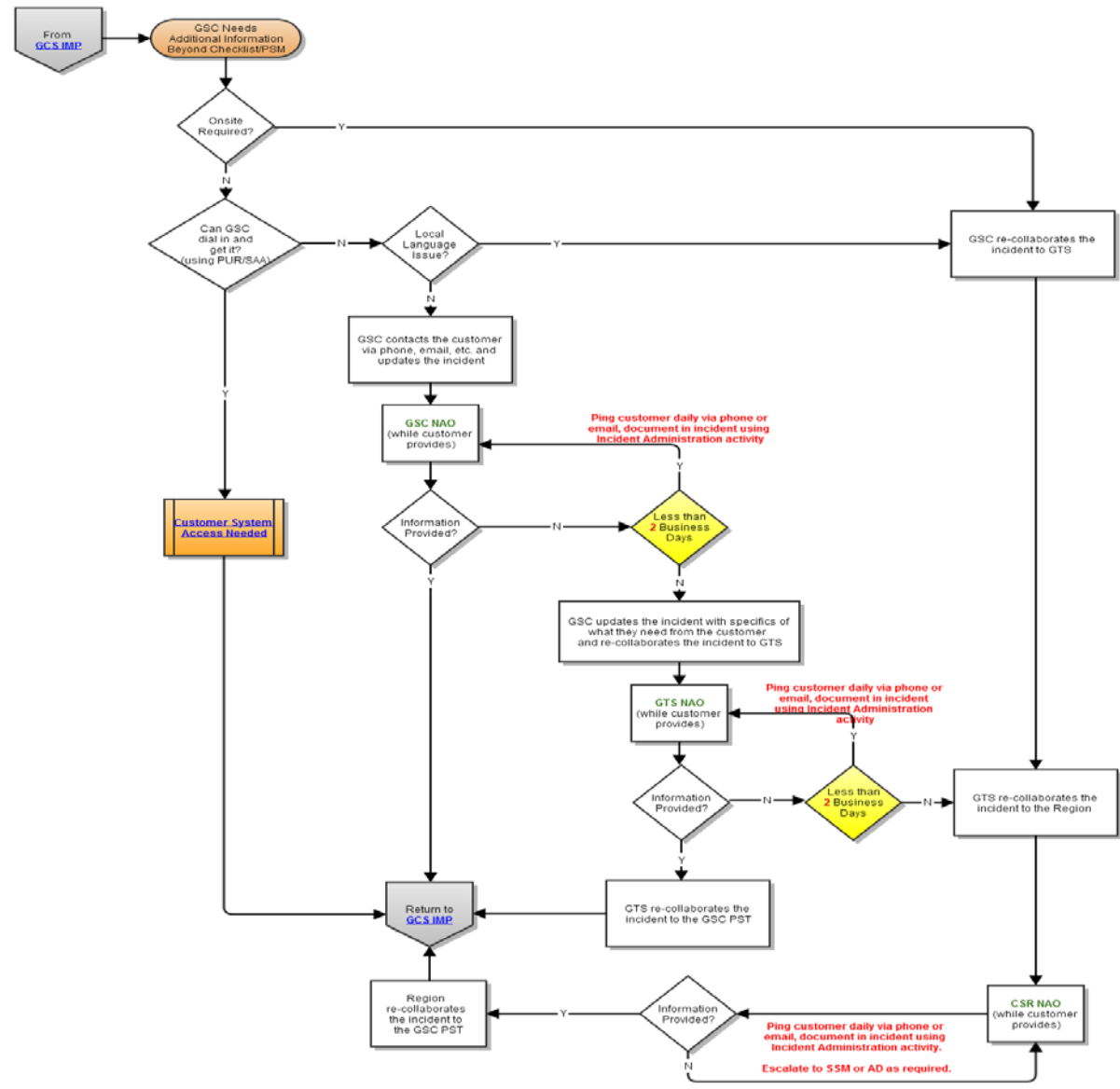 - > It will take relentless effort and time.

Don't be surprised if we answer a question with a pointer to a visual workflow and ask it to be followed.

Visual Workflow Map – Macro Processes

http://teraworks.td.teradata.com/display/GSC/Visual+Workflow+Map
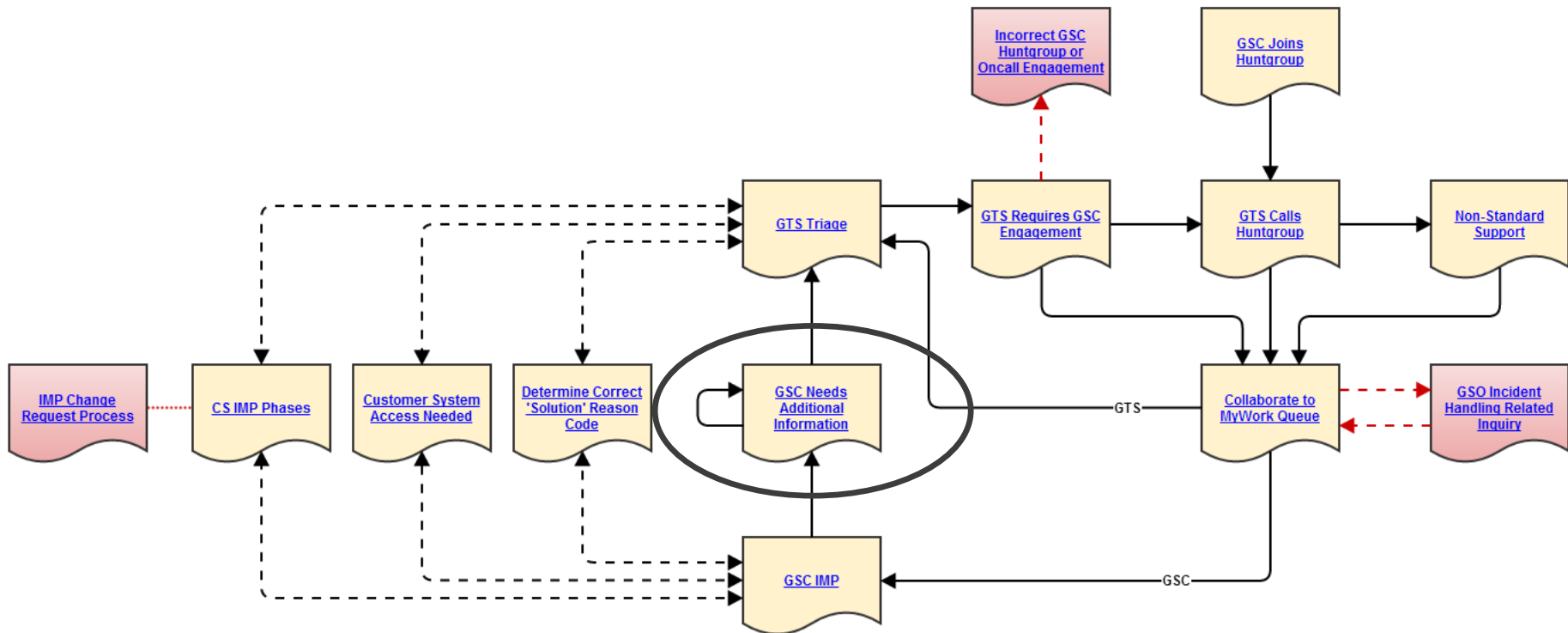
GSC Needs Additional Information (Deployed)

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Impact to Customers/Organization

- Working tool
- Now a fully interactive part of normal working routine to navigate through complex processes
- Collaborated incidents can be worked by many analysts along the path and processes can by consistently applied
- Customers see a consistently applied process for the same workflow throughout the organization

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Incident Management Quality

What are the Levers for Improving Customer Experience?

Processes	Skills	Knowledge
Requirements	Staffing	Continuous Improvement
Quality	Globalization	Tools

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Incident Management Quality

- When consistent processes are followed on incident resolution, customers' perceptions of Teradata are positively influenced, because they are receiving excellent customer service. Their experiences may impact decisions to renew or expand service agreements.

- Incident Management Quality Analysis
  - > Timely Updates
  - > Quality Updates
  - > Phone calls to customers when needed

- Consistency in execution
  - > Response and Updates
  - > Workflows
  - > After hours processes
  - > Special Handling
  - > Monitor incident trends (Response time, Backlog, Escalations)

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INCIDENT MANAGEMENT QUALITY

- Assure a smooth transition as incidents move from analyst to analyst
  - > Improve incident documentation
  - > Lower requests for escalations due to lack of update
  - > Decrease review time of incidents to begin/continue analysis when transitioned
  - > Consistency across the team
- Provide meaningful internal reports
  - > Global Support Center Metrics
    - – Workload
    - – Capacity planning
    - – Scheduling
- Increased customer satisfaction ☺

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INCIDENT QUALITY METRIC IMPLEMENTATION

- Update Incident Best Practices
  - > Managers will review random incidents for each associate and rate based on process AND content
  - > Process: Individual Self-rates, then sends to manager
  - > Reviewed during the period the individual is collaborated to the incident for a single individual
    - −Not responsible for things outside of analysts' control
- Annual Objectives
  - > Managers will review individual objective expectation with associate

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25 POINT BREAKDOWN

- Engagement – 2 points
  - > Incident collaboration
- Progress updates – 12 points
  - > Timing and content
  - > Customer viewable - "Current Incident Status"
  - > Technical summary
- Keep the incident moving – 6 points
  - > Making it clear who the next action owner is
- Incident Resolution – 5 points
  - > Wrapping-it-up

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ENGAGEMENT - 2 POINTS

- Accepting the Incident
  - > Initial collaboration – **1 point**

- Tracking
  - > Entry to communicate engagement type – **1 point**
    - – PURPOSE : Administrative, provides better reporting capabilities for management to analysis of workload, scheduling and capacity planning.
    - – Make specific entry based on engagement type
      - Initial engagement
      - Huntgroup engagement
      - On-call engagement
      - Management engagement

TIMING - 3 POINTS

- Current Incident Status - Timing
    - > Initial update – **1 point**
        - – This should be made within the same day of collaboration
    - > Remains in IMP guidelines through incident lifecycle– **2 points**
        - – P1 – Hourly updates
        - – P2 – Daily updates
        - – P3 – Updates every 5 days

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CUSTOMER UPDATE - 4 POINTS

- Current Incident Status - Content
  - > Are the status updates easily understood and outlined?
  - > Are they concise and coherent updates for the customer?
    - Each status should provide a single point of reference to understand the 'life of the incident to date"
  - > Point Breakdown
    - Status – **1 point**
    - Action – **1 point**
    - Summary – **1 point**
    - Void of restricted information – **1 point**

INTERNAL STATUS - 4 POINTS

- Technical Progress Summary "Internal"

  > PURPOSE: This makes for smooth transitions and re-assignment. It keeps the technical audience up-to-date the actions that have been taken and what the next action should be.

  > If incident is transitioned at any given point is it clear?

    – What has been investigated?

    – What are the findings?

    – What are the next steps?

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- Technical Progress Summary - Timing
  - > Internal technical summary/next action frequency – **1 point**
    - Frequency – If you've worked on an incident during the day, provide technical summary of what has been tried, the outcome and provide what the next logical action might be
      - The expectation would be there is a summary of what problems have been ruled out or tests executed on a daily basis on all incidents where you have taken current action

- Setting Next Action Owner (NAO)
  - > NAO- setting NAO appropriately throughout the life the incident – **3 points**
    - – PURPOSE: Keeps the incident from stalling by keeping the action owner set correctly.

- Direct communications with the customer
  - > Email which includes customer when we have something we want the customer to do – **3 points**
    - – PURPOSE: Promotes faster response time from the customer for required information for us to continue to work to root cause

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- Synopsis
  - > PURPOSE
    - – Synopsis provides the first impression of the incident to all concerned parties. It should represent what the problem is / where it the problem is
  - > Synopsis – **2 points**
    - – Update with more meaningful synopsis or backtrace
    - – Should be a true indication of problem
  - > DR – **2 point**
    - – If DR is identified add it to synopsis
  - > Tech Alert – **1 point**
    - – If Tech Alert is identified, add it to the synopsis

IMPACT TO CUSTOMERS/ORGANIZATION

- Finding time for evaluations has been a challenge

- Provides analyst opportunity to learn from mistakes

- Ensures manager and individual contributor are on the same page

- Ultimately provides for more timely updates with less rework

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Customer Results

CUSTOMER SURVEY RESULTS

- 3 Point improvement in Customer delight for "Effectively communicating next steps"

- 5 point improvement in Customer delight for "Solves problems Efficiently"

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