# **Enterprise Desktop Solution**



Corporate User Experience Design

### **Outline**

- Problem Statement & Vision
- Enterprise Desktop Framework
- Challenges & Next Steps



### The Team

- Information Architects
  - Wei Ding
  - Marcy Morelli
  - Michael Magoolaghan
  - Bala Kalyanasundaram
  - Nadia Moro
- Information Designers
  - Jim Bemis
  - Matt Flick
  - Thuy Nguyen

- Our Partners
  - Corporate ArchitectureOffice
  - Corporate Trident Business/Development Team
  - IRPS business leads
  - Retail business leads
  - Retail UID
  - QEG Development Team



### The Problem

# Separate solutions to a similar (or same) desktop aggregation/integration problem

- No clear direction for new desktops.
- Duplicate efforts in the past and future throughout the system development cycle.
- Overall costs offsetting benefits.

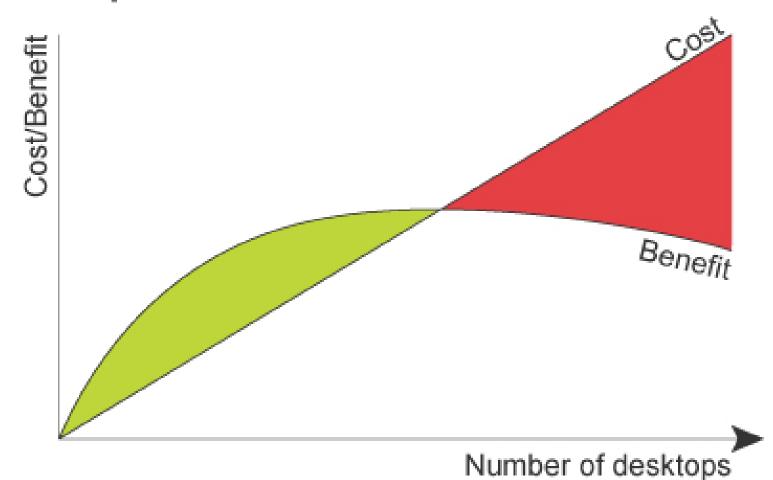
### Barrier to collaboration & reuse

- Being built on incompatible platforms limits sharing & collaboration
- Disconnection between desktops & Crewnet
- User learnability issue



### Issue with Scalability

### Separate effort



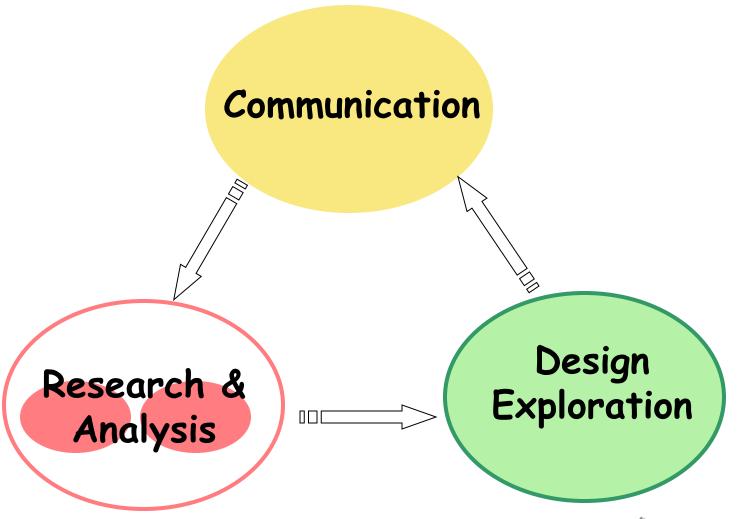
**Vanguard**<sup>®</sup>

### The Desktop Vision

- Addressing common problems holistically while meeting unique business and user needs.
- Maximizing benefits of sharable components and global utilities.
- Increasing cost-effectiveness & promoting collaboration and reuse.



### The Desktop Journey





### **Desktop Capability Matrix**

### **Universal Desktop Capabilities**

High Level Capablities/Functionality	FAS Internal Sales Rep	FAS External Sales Rep	FAS/IAM RM	FAS/IAM Operations	IAM Full Service Sales Rep	FAS External Sales Rep	FFS Associate	IRPS RM	IRPS Account Admin.	IRPS Universal Associate	Participa Services
Aggregation of applications	0	(2)	0	(2)	(3)		4				
Interactivity of applications	(8)	(8)	0	(8)	0		0				
Maintain states of applications	(1)	(8)	0	(2)	(2)		4				
Flexible layout	(5)	(8)	0	(2)	(8)		0				
Internal people search	(8)	(8)	(2)	(8)	(8)		(8)				
External people search	0	0			0						
Internal people address book	<b>(E)</b>	(8)	(0)	(8)	(3)		4				
External people address book	(1)	(8)	0		۵		(2)				
Detachable views (dupliate copies)				(8)							
Information search - policies and procedures	(0)	(8)	0	(8)	0		(3)				
Information search - data, activities, transactions	0	3	(8)	(2)	0						
Smart data/application relationships							(8)				
View based on user type							4				
Multiple user views available							(3)				
Task lists	(8)	(8)	(2)	(3)	(3)						
- pre-packaged set of tasks (ex. List of common activities)	(8)	(2)	(1)		(3)						
- application generated (ex. Outcalls)	(5)	0	0		(5)		(8)				
- self assigned (ex. To do's)	(1)	(8)	0	0	(8)						
- delegated tasks (ex. Assigned to do's)	(8)		0								
Client relationship management (CRM)	(E)	(8)	(f)	(8)	(8)				<b>X</b> \\\\		

### Desktop Capability/Feature Prioritization

FAS/IAM

WAVE

High Level Capablities/Functionali ty Aggregation of	IRPS Participant Services Associate	FAS Internal Sales Rep	FAS External Sales Rep	FAS/IAM RM	FAS/IAM Operations	IAM Full Service Sales Rep	FAS External Sales Rep	Core Phones	SBS Processing
Aggregation of applications	1	1	2	1	1	2	1	1	1
Interactivity of	1	1		1			1		1
applications	1	1	2	1	1	2	2	1	1
Maintain states of	1	1		1	1			1	1
applications??	2	1	1	1	1	1	1	1	1
Flexible layout	1	1	1	1	1	1	1	2	2
Internal people search	1	1	1	1	1	1	1	3	3
External people search	1	1	1	1	1	1	1	1	1
Internal people address									
book	2	2	2	2	2	2	2	2	2
External people address									
book	4	1	1	1	1	1	1	3	3
Detachable views		1	2		4 (Personal	5	6		
(duplicate copies)	2	(Siebel)	(Siebel)	3 (Siebel)	Investors)	(Siebel)	(Siebel)	1	1
Search/Browse - policies									
and procedures	1	1	1	11	1	1	1	1	1
Information search -									
data, activities, or	1	1	1	1	1	1	1	1	1
Search for									
content/information		2	2	2	2	2	2	1	1
relationships	2?	?	?	?	?	?	?	1	1

### Design Explorations

- Vanguard Desktops
- Related Work
  - Microsoft Research on window management and task management
  - Internet Aggregators
  - Newer Web Browsers
  - Portal solutions: IBM & Sungard
  - Google Desktop



### **Business Needs & User Needs**

- Business Lines and Groups
  - Retail, IRPS, FAS/IAM, Corporate FFS
- Personas
  - Total of 35 unique personas
- Vanguard Job Families and Job Titles
  - 26 Job Families and 156 Job Titles
- Working Styles & Job Functions identified
  - Working Style
    - Event-driven
    - Self-paced
  - Job Function, e.g., call center, processing center, client relationship management, data administration, etc.

### Working Styles & Job Functions Identified

### ❖Job Functions

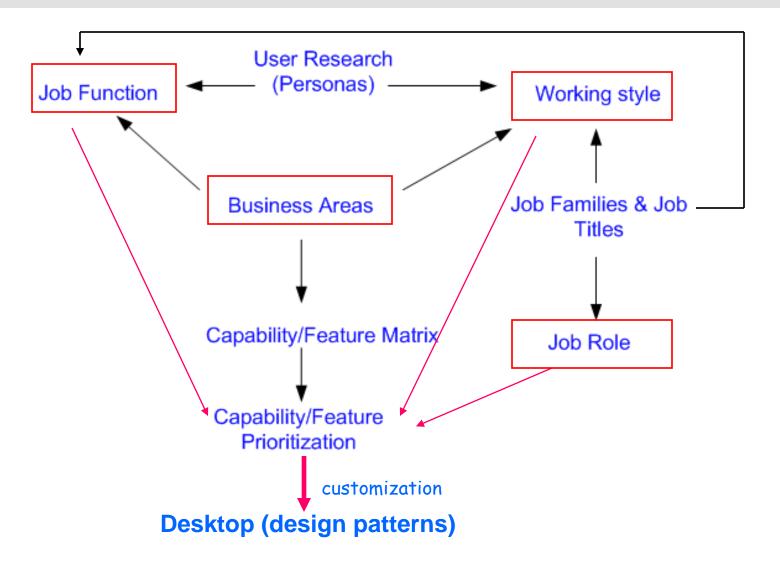
- Call Center
- Processing Center
- Customer Service
- Client Relationship Management
- Data Administration
- Reporting
- Managers/PMs/Executives
- Investment Professionals
- Other

### Working Style

- Event-driven: performing time-critical tasks and needing help to maintain agility
- Self-paced: needing support for multi-tasking, dashboard views for prioritization, quick recovery from interruptions,



### **Desktop Formulation**





# Enterprise Desktop Framework

- Each desktop derived from the same framework
  - Containing a subset of desktop components
  - Meeting unique needs via "attributes" identification and customization
- Carries on strengths of existing desktops & takes advantage of shared services
- Component-based development more costbeneficial
- Better scalability and flexibility



### Approaches Explored

### ❖Ideal Model

- Ownership of unified infrastructure and enterprise platform, on which core components are built
- Additional components contributed by each organization
- Profile-based view of the desktop with consistent user behavior & BCM compliant design elements

### **Maximum sharing**

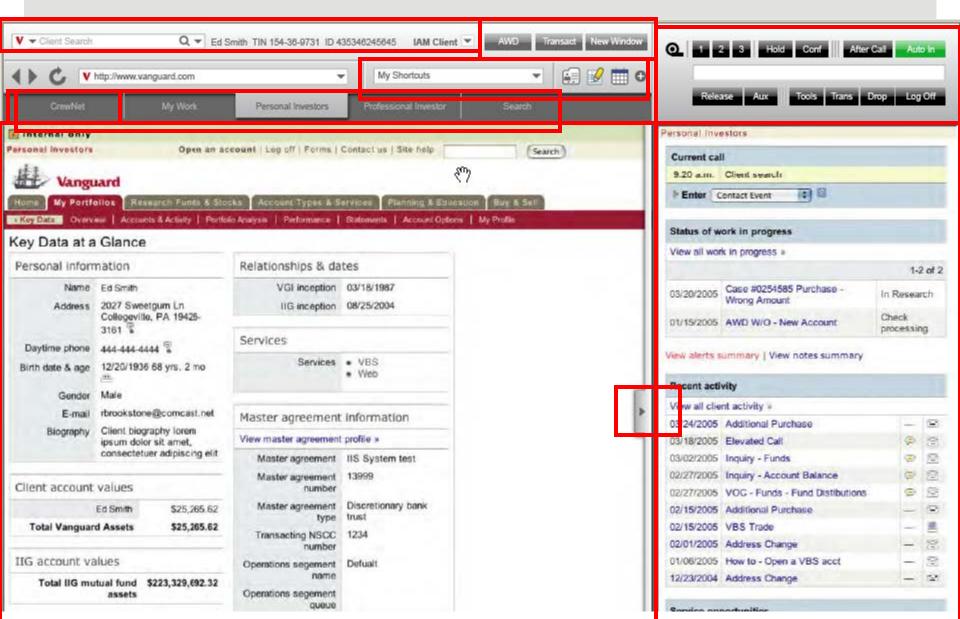
### Alternative Model

- Keeping status quo infrastructures & platforms
- Sharing enterprise components and reusable components developed by each organization
- Unified desktop framework with profile-based views

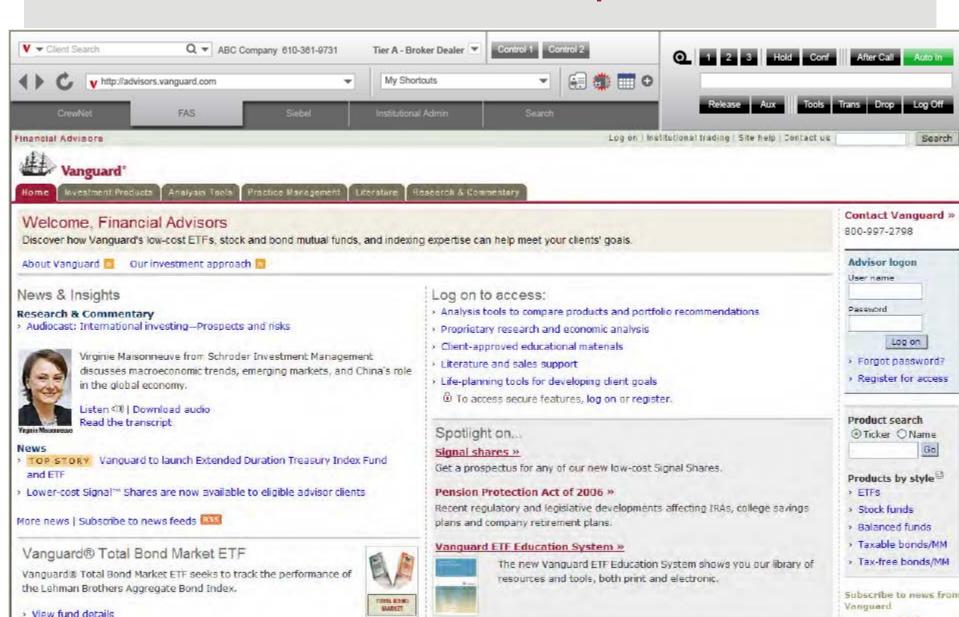
### **Optimal sharing**



# Example



# FAS Desktop



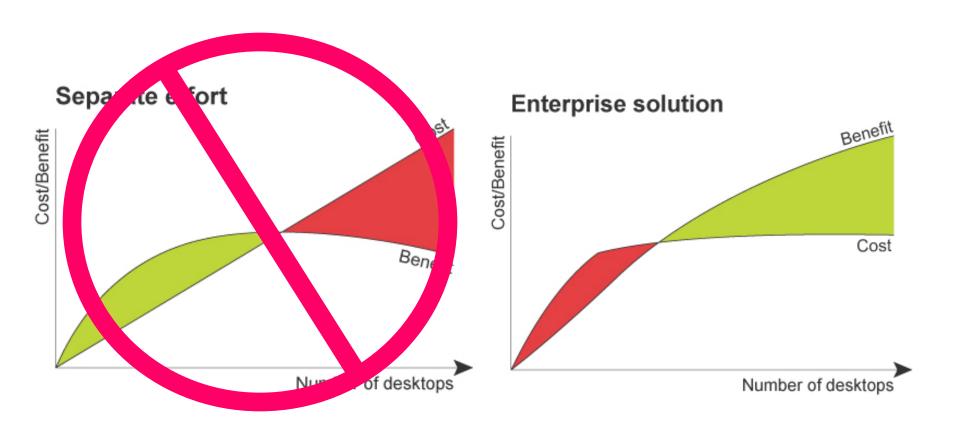
Maur Frade RSE

### Functionalities of the Desktop

- Information space aggregation & application integration for job efficiency
  - Easy access to all critical applications/sites and tools
  - Meaningful connections between applications to minimize manual steps & human errors
  - More integrated intranets
- Easy access to global utilities & shared services
  - Federated search
  - Aggregated calendars
  - Bookmarks
  - Addressbooks
  - Alerts, feeds, reminders
- Group tools based on aggregated usage to support collaboration & sharing



### The Shift



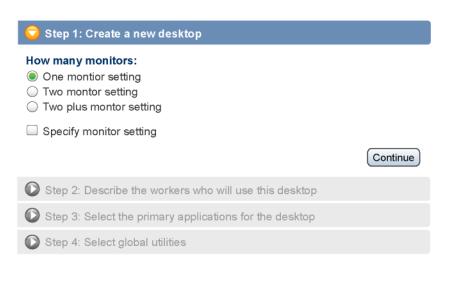


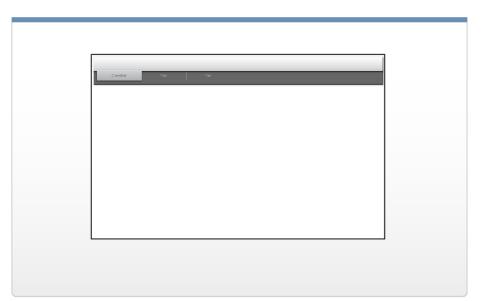
### **Desktop Assembly Tool**

- Captures desktop design knowledge and design patterns for reuse
- Simplifies and expedites the desktop visioning process
- ❖Attributes identification → customization → Desktop visioning screens
- Option for reuse of existing desktops

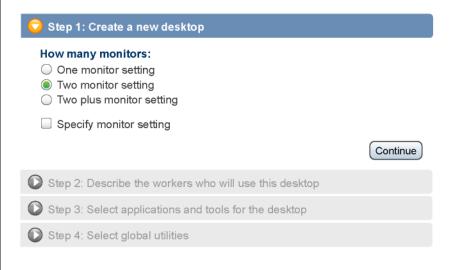


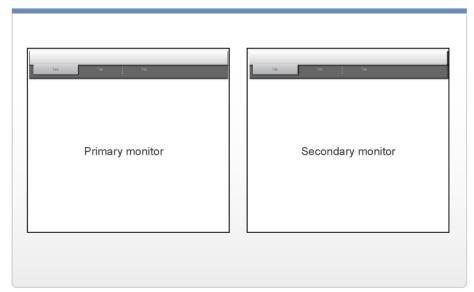






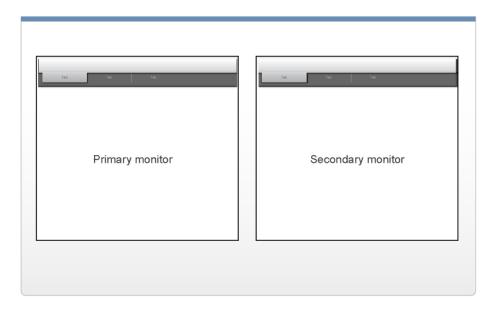






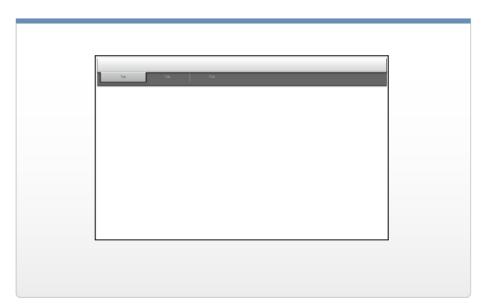






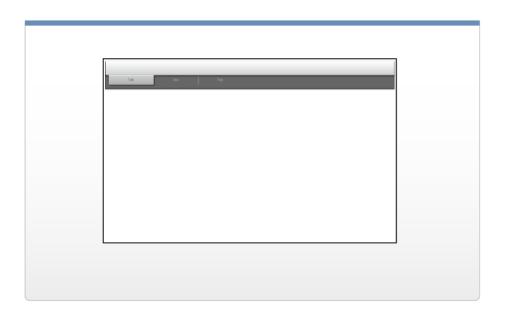






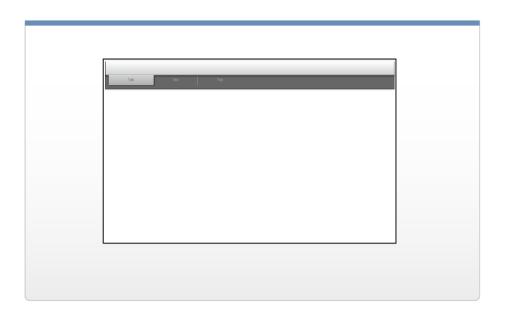


Create a new desktop	existing desktops	
Step 1: Create a new desktop		
Step 2: Describe the workers	who will use this desktop	
Job function:  Call center  Processing center  Customer service  Relationship management  Data administration	Business areas:  FAS/IAM  IRPS  Retail  Corporate  Other, specify	
Working style:  Event driven Self paced Both	Client(s) being served: Internal External	
Roles involved: Individual Supervisor/Manager Helm/Conn	Special capabilities:  Resource management Work monitoring	
Back		Continue
Step 3: Select applications and	tools for the desktop	
Step 4: Select global utilities		





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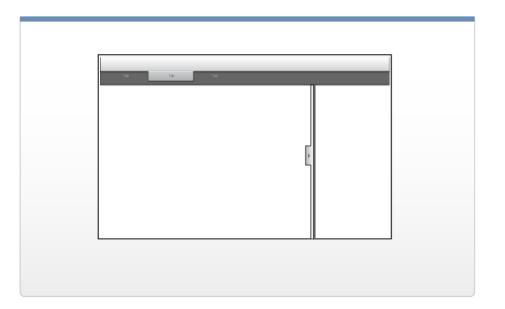


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Are simultaneous views of apps required?  Yes No	Client(s) being served:  Internal External	
Working style:  © Event driven  © Self paced  © Both	Special capabilities:  Resource management Work monitoring	
Roles involved:  Individual Supervisor/Manager Helm/Conn		
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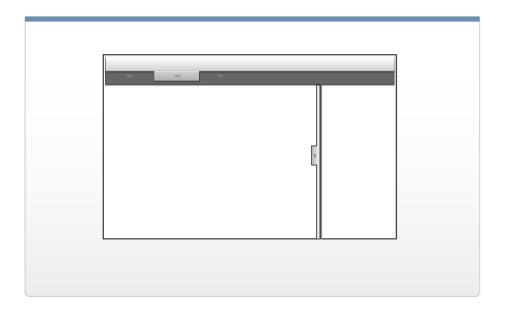


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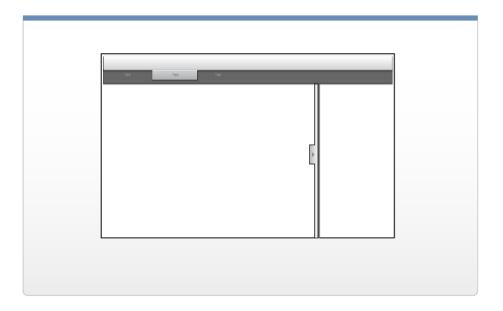


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Working style:  ○ Event driven ○ Self paced ○ Both	Client(s) being served:  ☐ Internal  ☑ External	
Roles involved: Individual Supervisor/Manager Helm/Conn	Special capabilities:  Resource management Work monitoring	
Back		Continue
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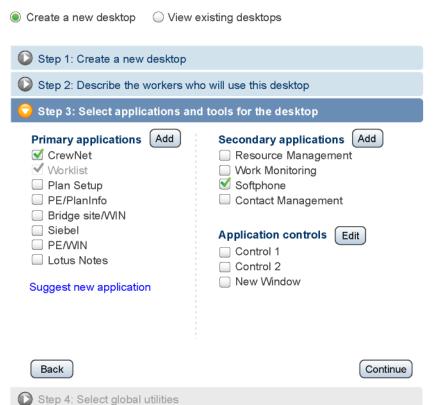


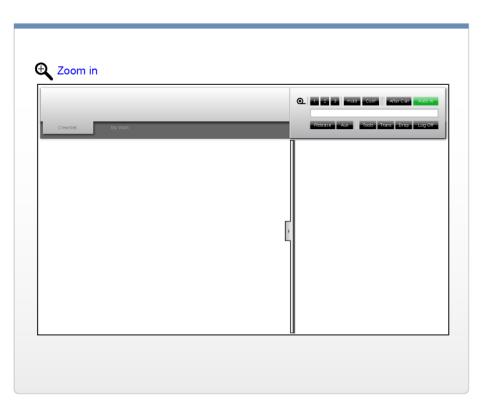


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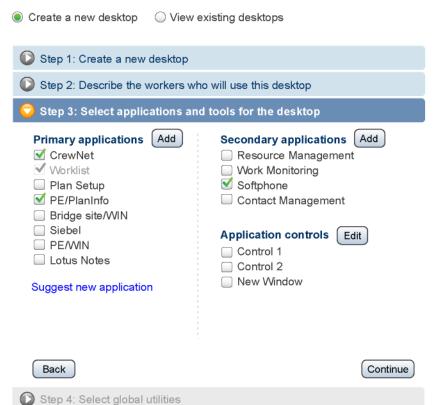


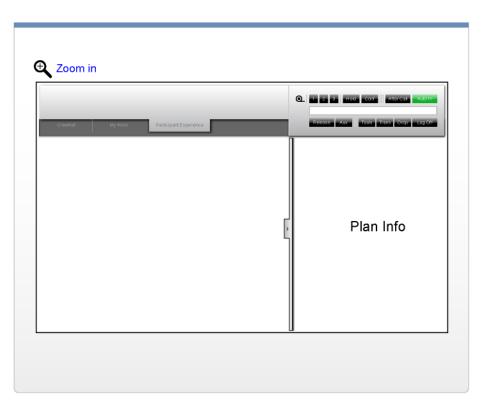










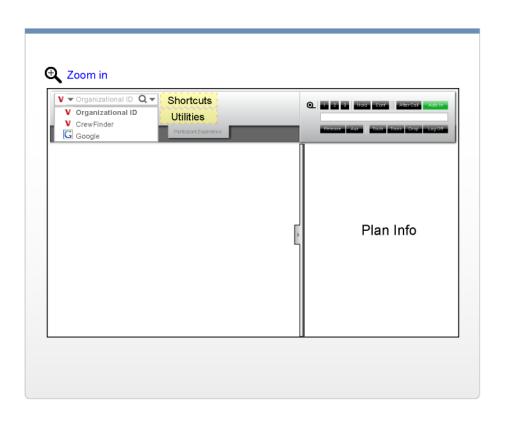




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Create a new desktop	desktops
Step 1: Create a new desktop	
Step 2: Describe the workers who will u	se this desktop
Step 3: Select applications and tools for	r the desktop
Step 4: Select global utilities	
Search engine list Add  Organization ID search (default) Client ID search CrewFinder Federated search InfoWave Documentum Google Yahoo MSN search  Global utilities Add Alerts Reminders Aggregated Calendar My Contacts Group contacts Inernal contacts External contacts Notepad Click to Chat To-Do List Vanguard Time Zone Weather	Shortcuts Add  Personal tools  My Bookmarks  My CrewNet Pages  My Apps & Tools  My Dashboard  Group tools  Bookmarks  Templates  Dashboard  Contacts  Department tools  Department site  Wikis  Blogs

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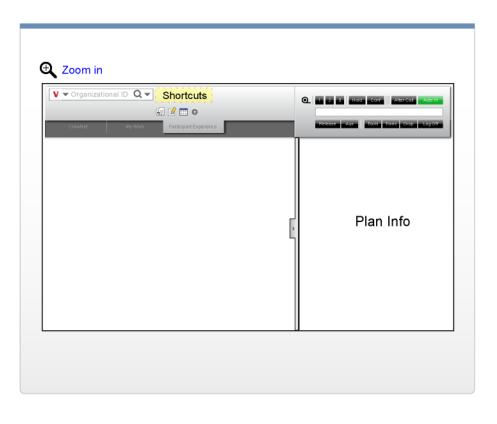




Back

 View existing desktops Create a new desktop Step 1: Create a new desktop Step 2: Describe the workers who will use this desktop Step 3: Select applications and tools for the desktop Step 4: Select global utilities Search engine list Add Shortcuts Add ✓ Organization ID search (default) Personal tools Client ID search My Bookmarks CrewFinder ■ My CrewNet Pages Federated search My Apps & Tools InfoWave My Dashboard Documentum Group tools Google Bookmarks Yahoo Templates MSN search Dashboard Contacts Global utilities Department tools Dashboard Alerts Department site Reminders ■ Wikis ✓ Aggregated Calendar Blogs ✓ My Contacts ✓ Group contacts ✓ Inernal contacts ✓ External contacts ✓ Notepad Click to Chat To-Do List Vanguard Time Zone Weather

Submit

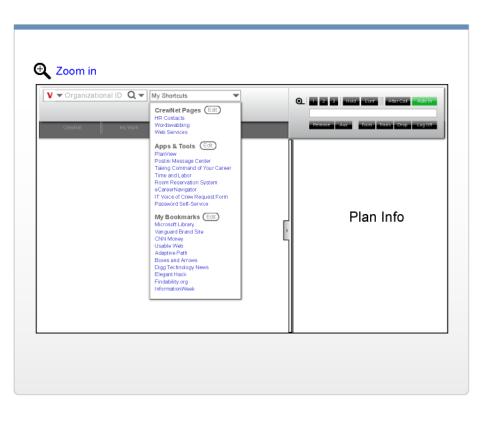




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 View existing desktops Create a new desktop Step 1: Create a new desktop Step 2: Describe the workers who will use this desktop Step 3: Select applications and tools for the desktop Step 4: Select global utilities Search engine list Add Shortcuts Add Organization ID search (default) ✓ Personal tools Client ID search My Bookmarks CrewFinder My CrewNet Pages Federated search My Apps & Tools InfoWave My Dashboard Documentum Group tools Google Bookmarks Yahoo Templates MSN search Dashboard Contacts Global utilities Department tools Dashboard Alerts Department site Reminders Wikis ✓ Aggregated Calendar Blogs ✓ My Contacts ✓ Group contacts ✓ Inernal contacts ✓ External contacts ✓ Notepad Click to Chat To-Do List Vanguard Time Zone Weather

Submit





<ul><li>Create a new desktop</li><li>View</li></ul>	iew existing desktops
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#### Choose an existing desktop to view

- FAS
- RKS
- ☐ TIDE
- WAVE

#### WAVE Desktop Overview

#### **Targeted Users:**

- 1.) Retail phone associates.
- 2.) Processing associates.

#### **Key User Tasks:**

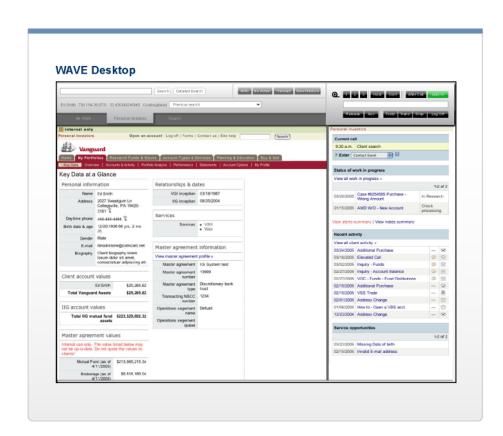
- 1.) Answering client questions on account balance, transactions, and policies.
- Processing transactions based on client instructions.

#### **Desktop Characteristics:**

- 1.) Defaults to key client data for phone associates upon receiving a call.
- 2.) Defaults to account activity for processing associates.
- 3.) Shared sites/apps are dependant on business units.
- 4.) Major components are connected based on client ID.

#### Major Components:

- 1.) Windows controller with search functionality.
- 2.) Softphone.
- 3.) Key client data.
- 4.) Contact events.
- 5.) InfoWave.
- 6.) AWD.



# Summary of Benefits

#### For all parties

- Unified desktop creation practice
- Promotion of cross-organizational collaboration & sharing
- More integrated Intranets

#### For the user

- Predictability for placement and interaction mechanism
- Learnability and cohesion of all Vanguard desktops (workflow, components, interaction, look & feel)

#### For business

- Functioning like one company
- Saving time & money from duplicating efforts

#### For development teams

- Taking advantage of enterprise services
- Reusing sharable components from other systems
- Easier maintenance and better scalability

#### ❖For UXG

- Identification and promotion of design patterns
- Harnessing the collective experience & expertise in desktop design
- Helping focus design effort on unique problems by leveraging proved solutions for known problems
- Contribution to BCM standards

### Next Steps

- Identify business and IT sponsors
- Pilot with real projects E.g., OEi, VIPs or RM
- Feed into the UXG cohesion effort
  - Usability validation
  - Refining design & applying internal standards
  - Enriching the knowledge base of desktop design



### Thank You!

# **Questions and Discussions**

