



Conceptual Models

Workflow Identification



What we did...

- **Identify pain points**
- **Identify actions**
- **Extrapolate workflows**



Understanding Our Target Users

Who?

- **...Begins with User Research**
 - Consistency Delivers Patterns
 - Our 10-minute Small Business Interview
 - Participatory Design Methodology
 - Accumulate a Storehouse of Findings



Understanding our Users' MOTs and Pain

What?

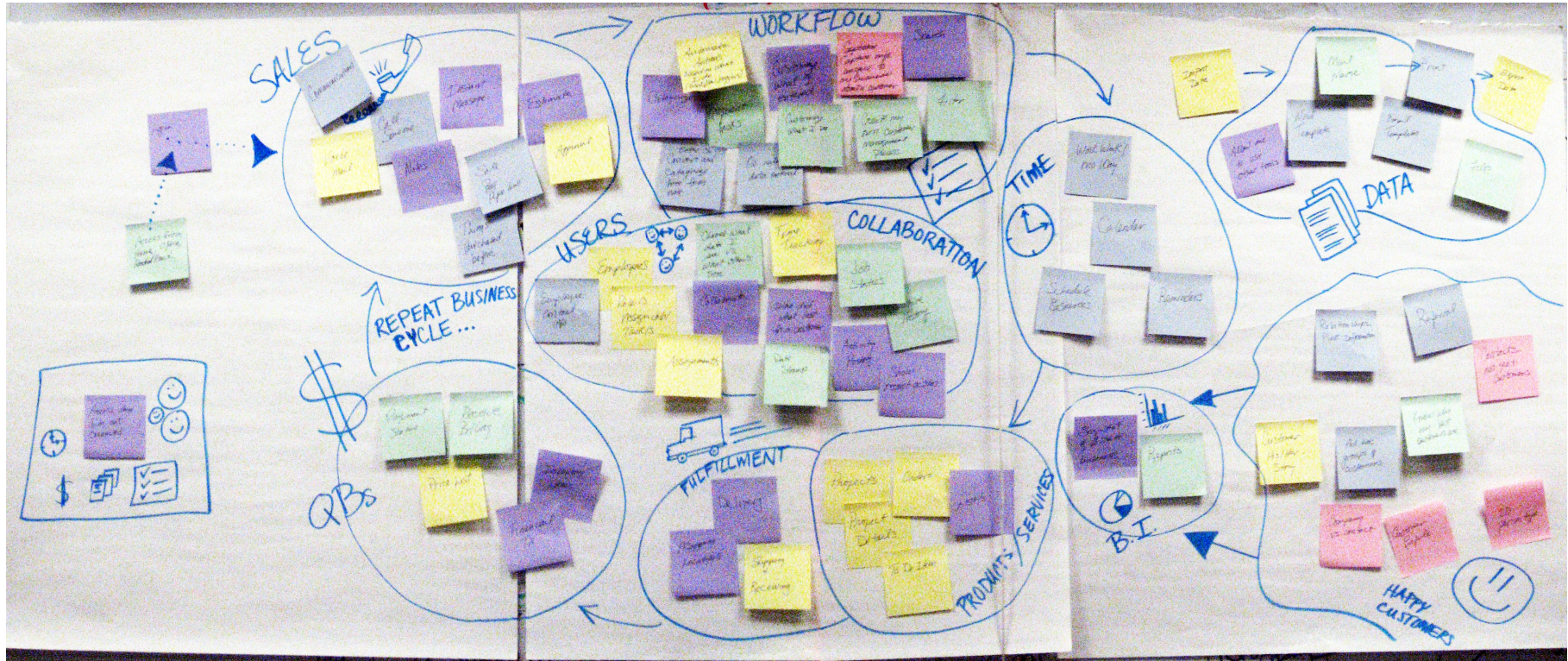
- Data mine previous research for common tasks / workflows

	G	H	I	
	Workflow Process	View their work in terms of Jobs, Projects...	Needs for Building & Maintaining Their Customer Relationships	Biggest Pain P Wishlist
	1) Sales/Dispatcher gets a call from a customer 2) Gets out a quote quickly (auto-generates Service Order #) 3) Quote signed (typically receive fax or eFax) 4) Schedule installation 5) Depending on project, send quote to field technician 6) Field technician call customer 7) Test everything and provide documentation 8) Bill for the job 9) Payment received 10) Pay the technician	<ul style="list-style-type: none"> ■ "Service Orders" make up most of the work we do. These are estimated quotes that are adjusted after the job is completed and ready to bill. These are tracked by the Service Request # that is automatically generated when quote is 	<ul style="list-style-type: none"> ■ Need to forge strong relationships with Building Managers. ■ Need to know the Building Engineers who can give them great insight on the logistics of the buildings where they install equipment. ■ Getting quotes out to customers quickly is important: "when they call us they're panicking". ■ Quality of the service we provide is everything: "We test everything and provide the test results documentation in a binder to the customers. They love that." 	<ul style="list-style-type: none"> ■ Wish his FileMaker QuickBooks -- that fill the date paid, or system. ■ Would like to keep the warehouse installed job -- "use what we have" ■ In the near future for every job where communicates with Field Technicians w
	Workflow P		Needs for Building & Maintaining Their Customer Relationships	Biggest Pain P Wishlist
			<ul style="list-style-type: none"> ■ We need to keep track of when the customer last-ordered, or dates when the 	<ul style="list-style-type: none"> ■ CM Sync -- "You the house and it's



Identify Tasks / Actions

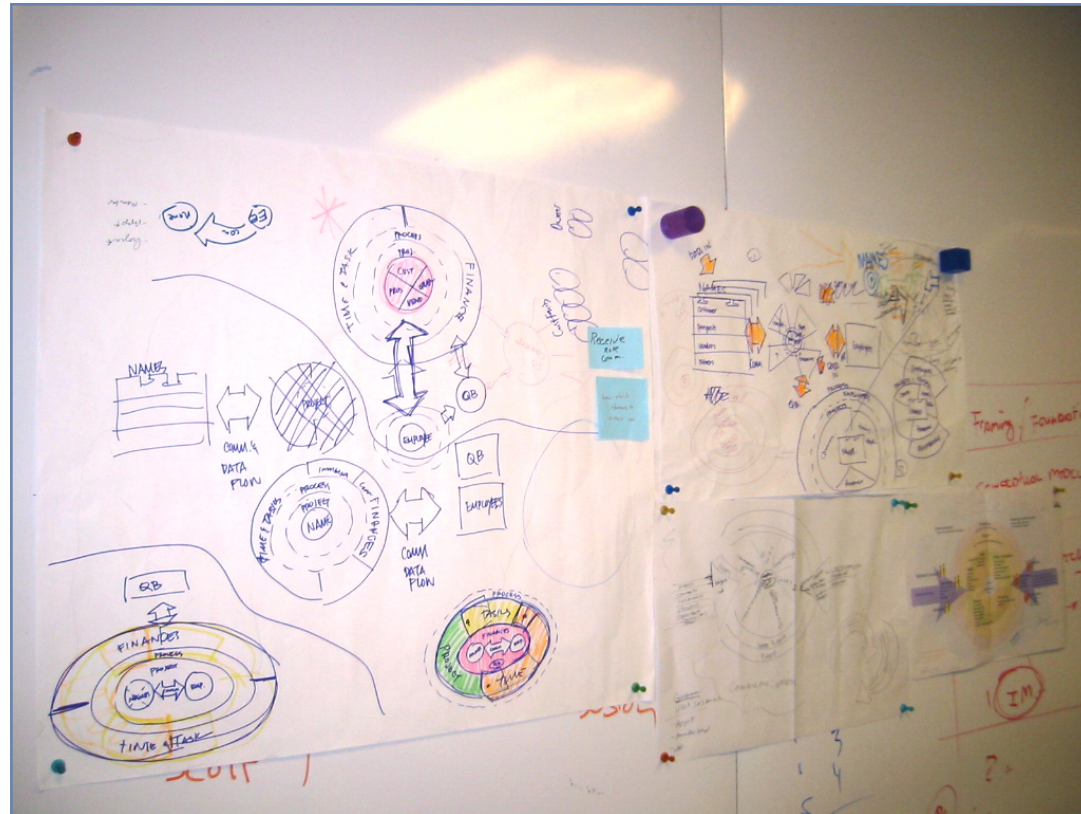
- Create multiple affinity groupings and identify categories





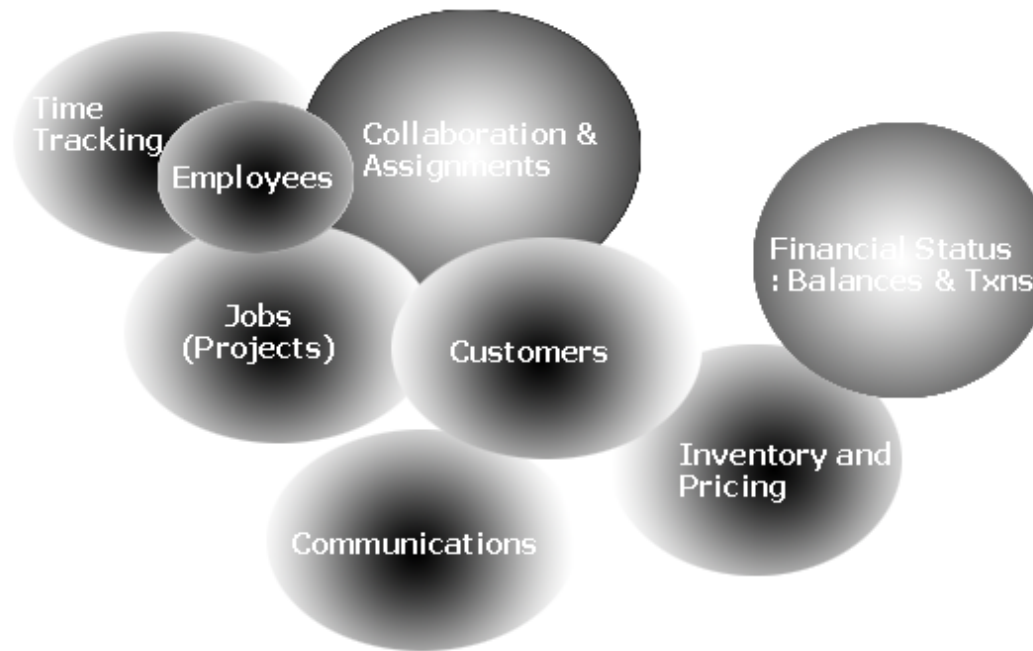
Group Brainstorming

How?



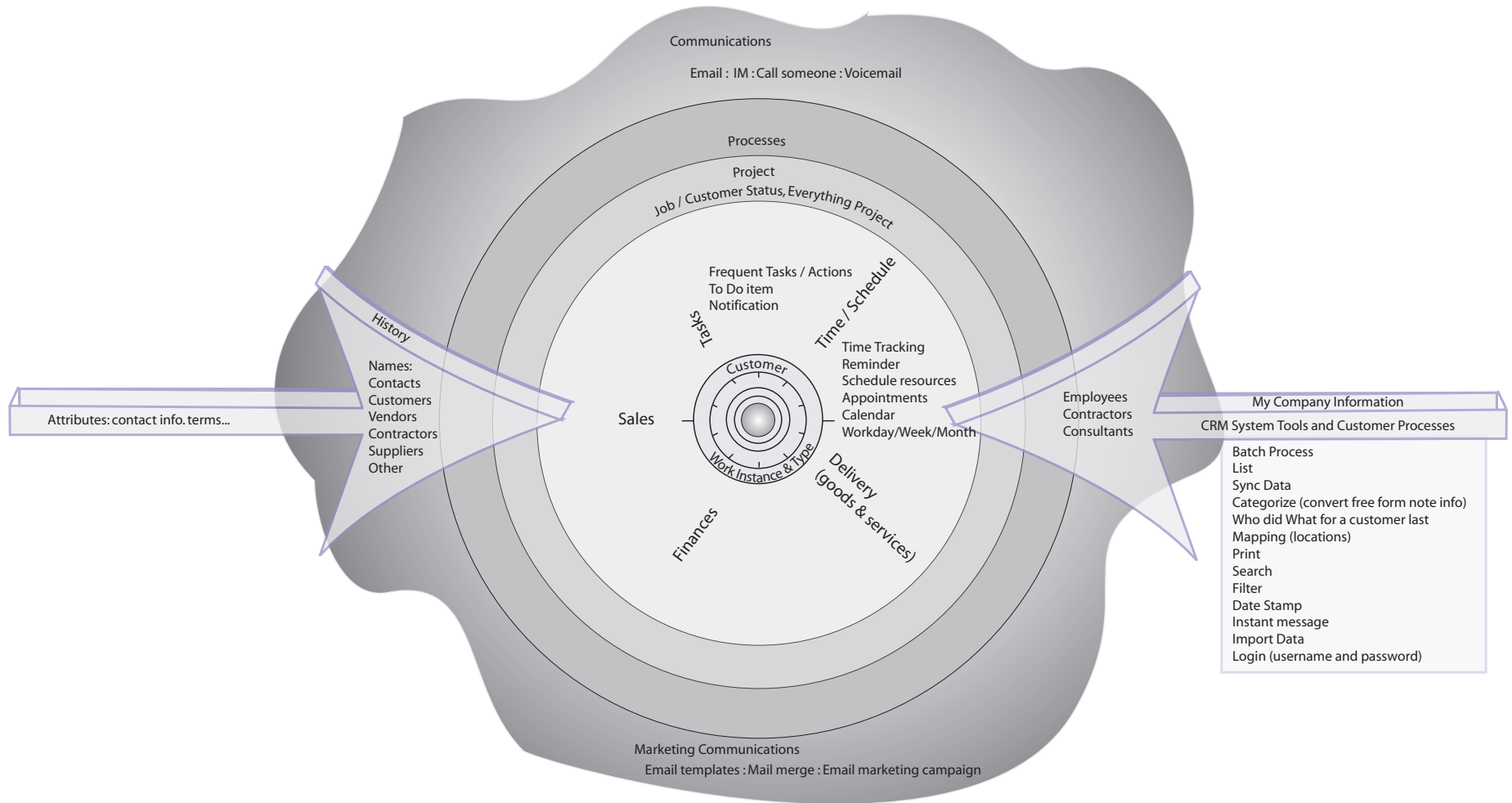


Beginning the Conceptual Model



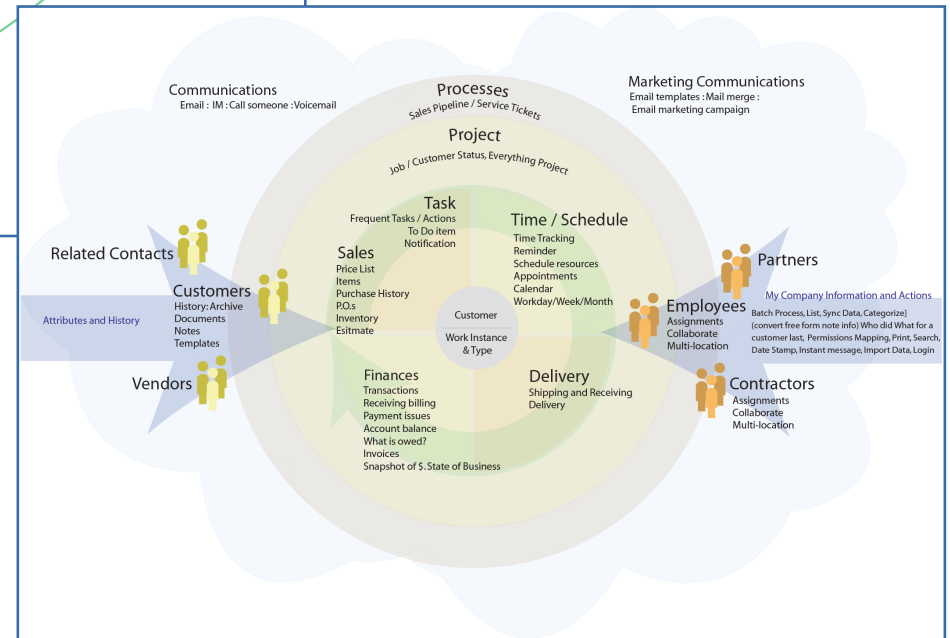
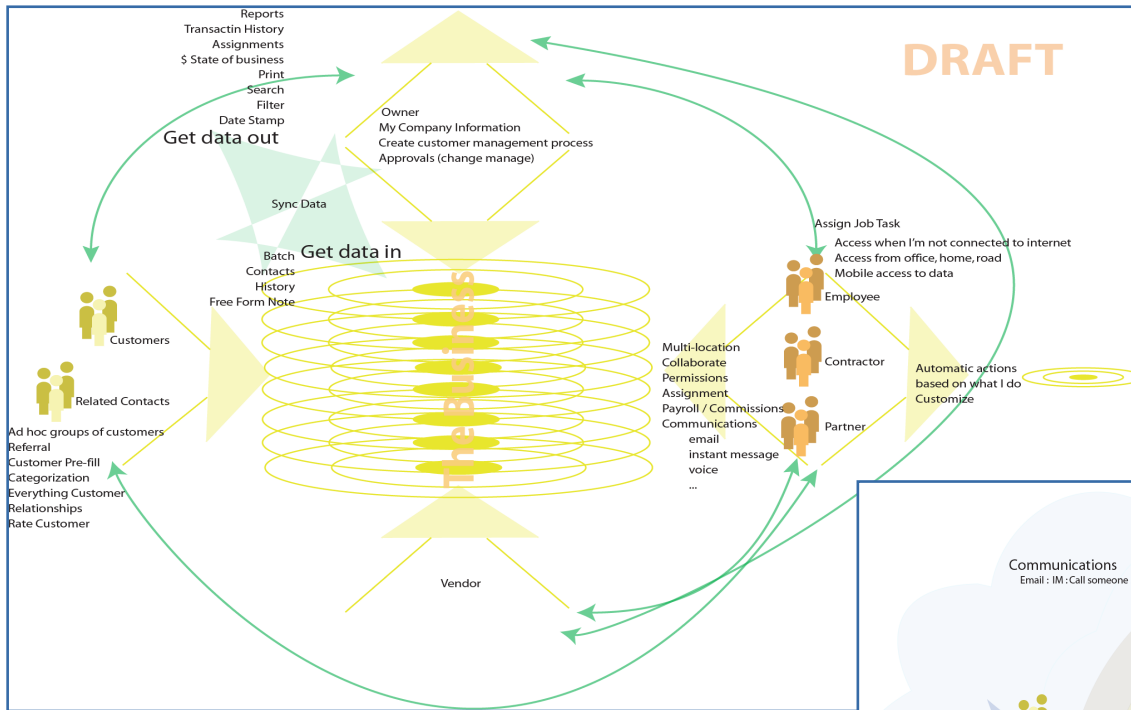


Iterate on the conceptual model



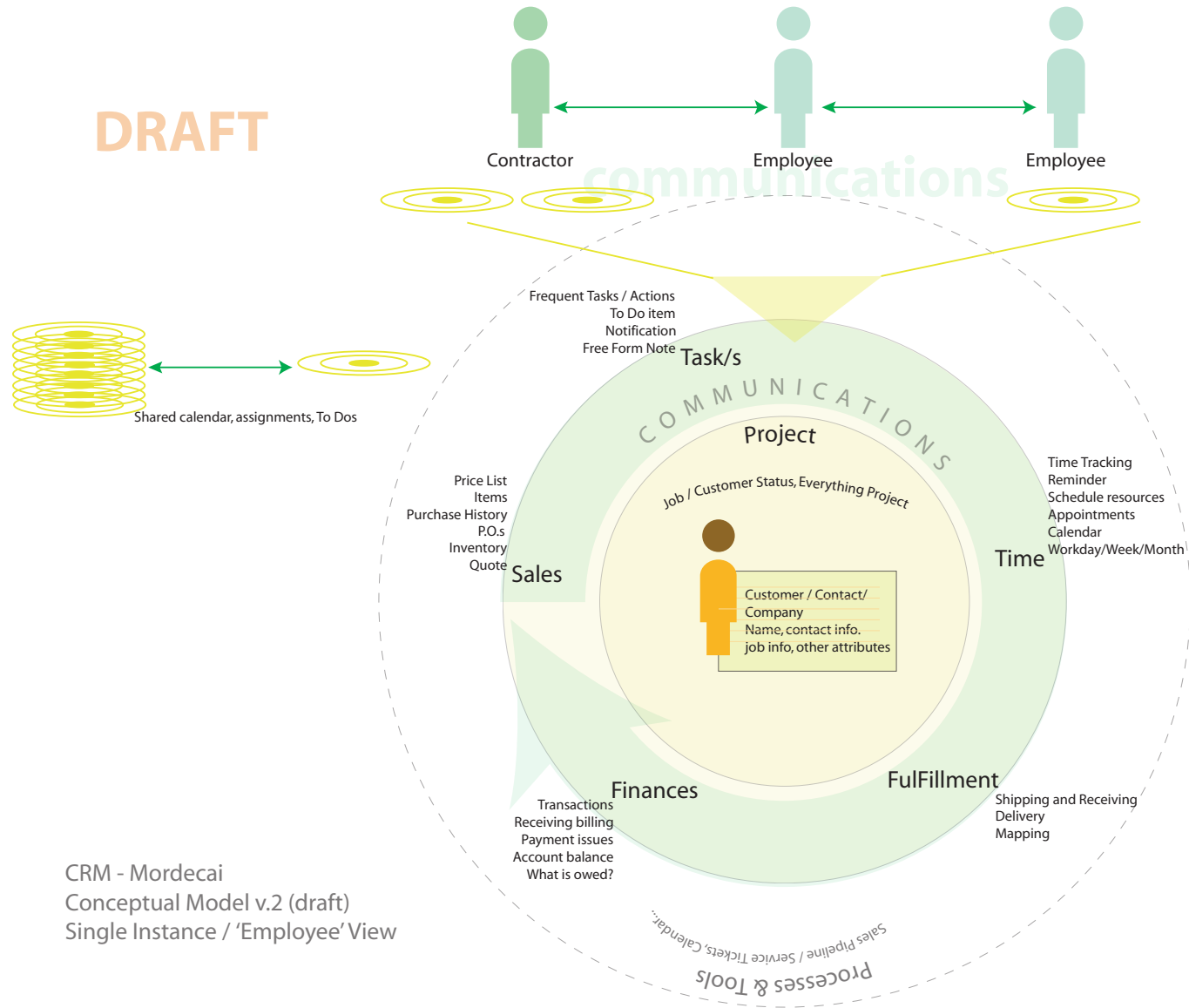


Iterations on conceptual models





Iterate on the conceptual model



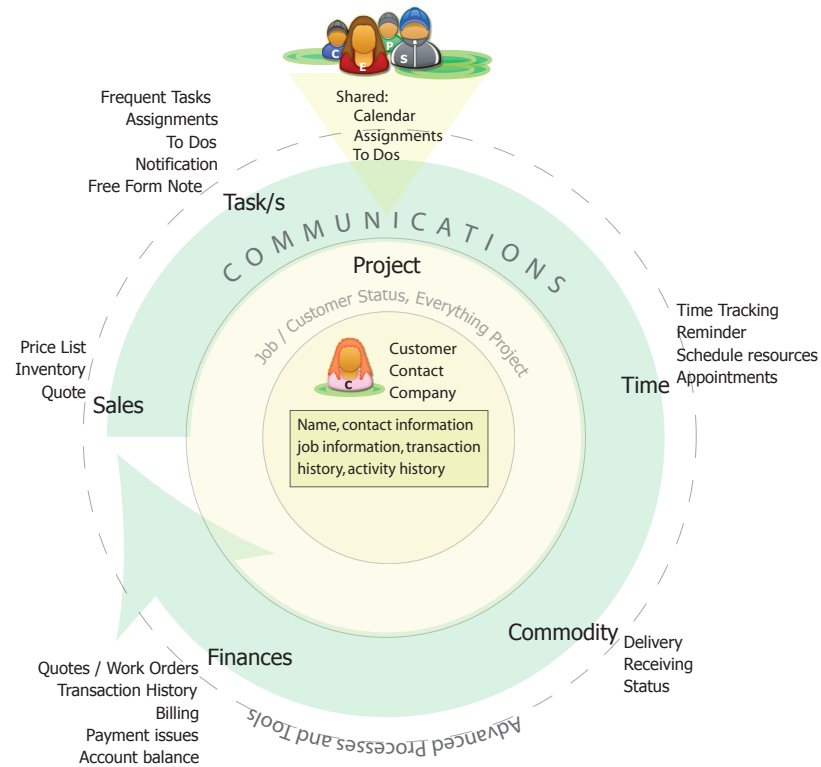


Iterate on the conceptual model

Small Business 360° Single Customer View

Conceptual Model

For a given customer each 'worker' type - in collaboration with others- acts on a series of tasks/activities that vary in duration according to business processes.



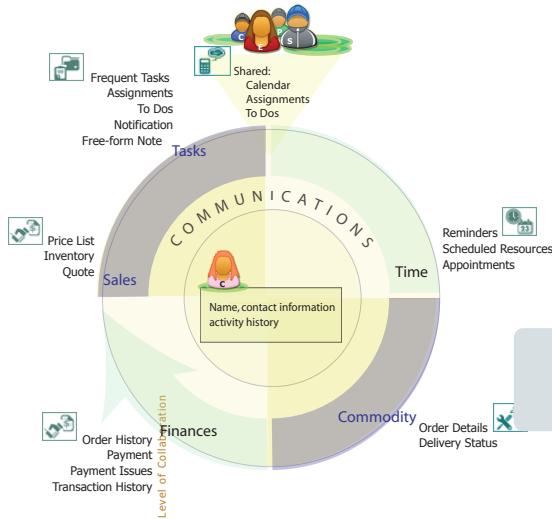
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Applying personas to the conceptual model

Customer 360° View Order Based

User Types



TYPICAL ATTRIBUTES

- o Usually little customization of product
- o Typically time to fulfillment is relatively short
- o Tracking of status is important – order fulfilled and on time

PRIMARY NEEDS

- o Detailed information about customer order history
- o Clear and accurate status information of fulfillment
- o Product inventory / vendor information

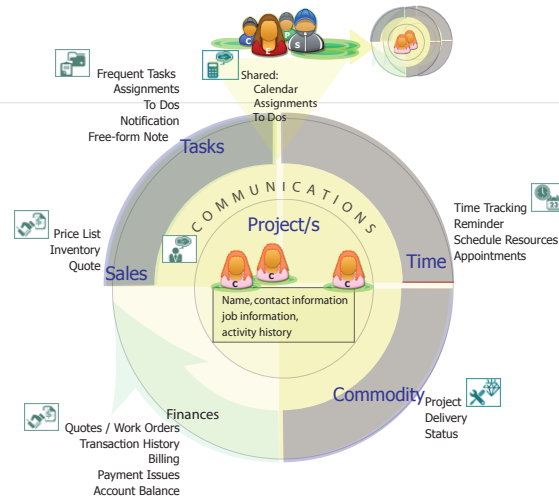
EXAMPLES

- o Home building materials (wood floors)
- o Gifts & jewelry
- o Bakery & groceries

Customer 360° View Project Based

User Types

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TYPICAL ATTRIBUTES

- o Complexity of multi-touch process with many tasks
- o High level of collaboration
- o There are often dependencies between tasks
- o Time: several days to several years
- o High level of detail
- o Need for a quote is likely
- o Possible incremental billing

PRIMARY NEEDS

- o Detailed information about project tasks and dependencies
- o Ability to assign tasks to 'workers' and view task status
- o View and add appointments to personal calendar and others' calendars

EXAMPLES

- o Builder/home remodeling
- o Commercial solar power installation
- o Interior design firm
- o Computer (CAD) design firm

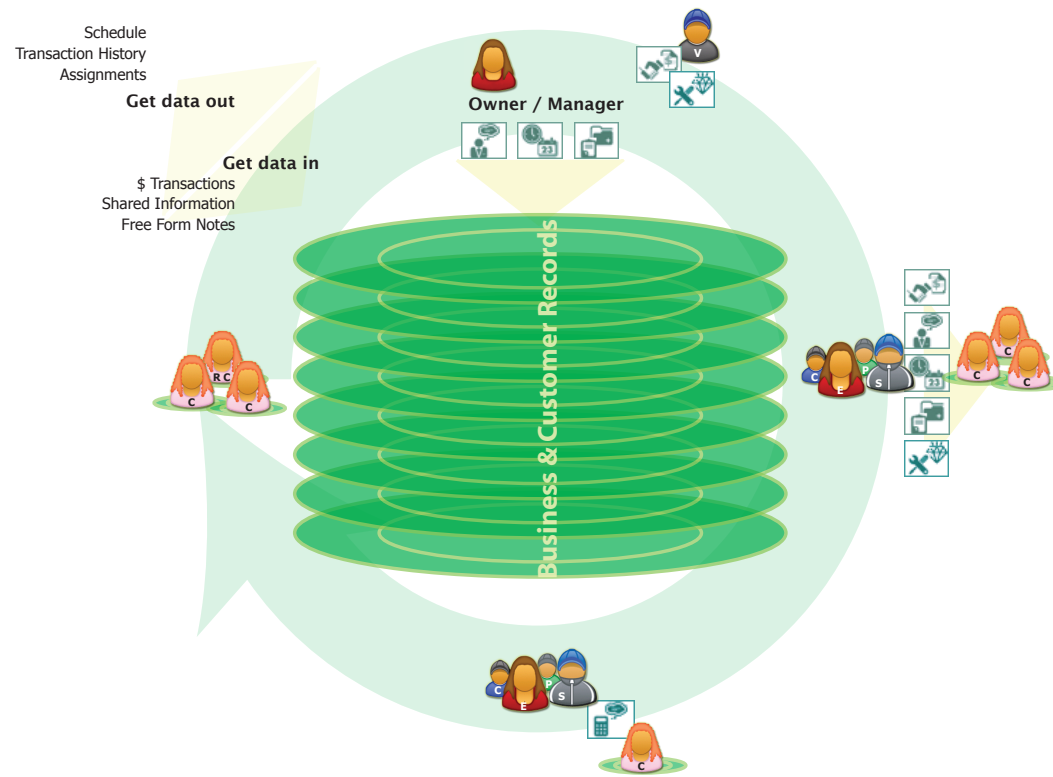


Current working aggregated view

Small Business 360° Aggregated View

Conceptual Model

A business is an aggregation of customer records that includes data tracking, business processes, access methods and contributors to the system.



- Remote access
- Sale / Finances
- Communications
- Schedule / Appointments
- Tasks / History
- Goods & Services

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Applying personas to collaboration models

Small Business Collaboration Overview

Collaboration

Over Arching Characteristics

Each worker has a role and a set of customer (records) they are responsible for. Workers are highly interdependent and need seamless access to communications from each other. Critical to have access to and be informed of customer activity history.

Collaboration Actions

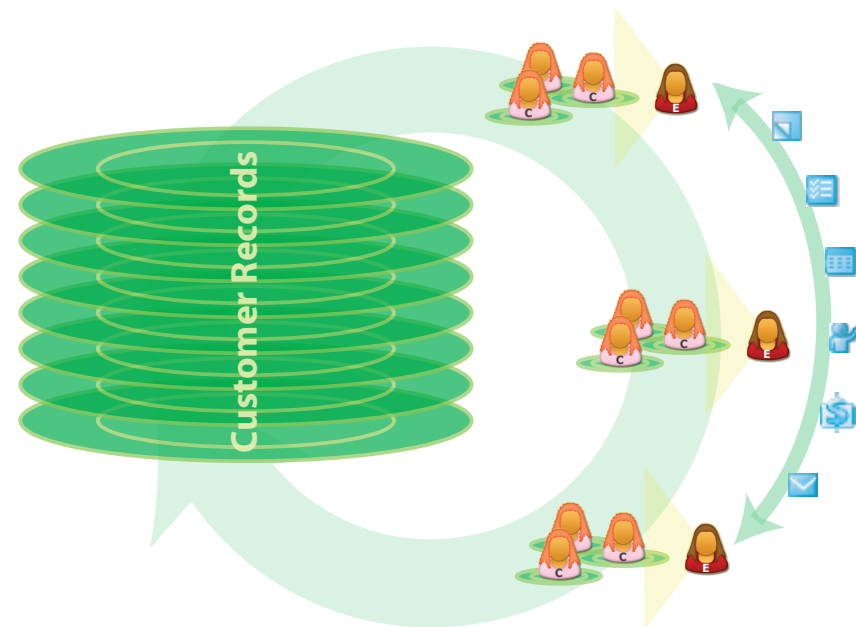
View
Assign
Notify
Respond
Modify
Delete
Initiate Workflow action
(create new object)

Collaboration Methods

e-mail
IM
Vmail
Notes
In person
Over phone
Conference

Collaborative Style

Asynchronous
Continuous
Real time



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Business Collaboration Models

Small Business Collaboration Models : Segmentation

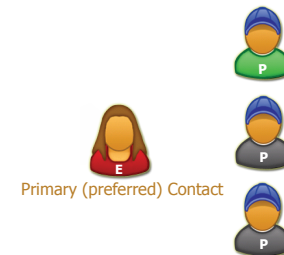
Collaboration

Everybody Does Everything

Each worker has a role though many tasks 'belong' to whomever can do them. In both models workers need full access to customer information and be able to take needed action/s.



Basic Collaboration



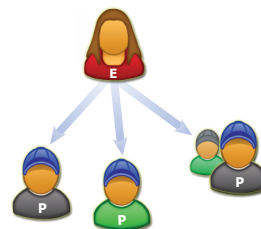
Primary (preferred) Contact

Secondary Contact

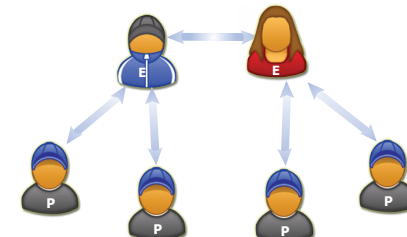
Some basic level of control for point of contact. Ability to assign each other tasks, to dos etc..

Begin to Specialize

Role specialization where at least once source provides instructions & assignments to other workers. Highly dependent on tracking and controlling 'workers schedule' as resources for deployment. All workers do not need to view, create or modify information about a given customer. Frequently performed tasks with status monitoring.



Organize Around Roles



Multiple Points of Contact

Discreet work instances sequential in nature. Touch points especially driven by what the customer needs at a given time.



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Lifecycles and the "Work Instance"



Credit to Beth Wells for this work.



Foundational Design and Conceptual Modeling

How?

- **Group brainstorming – mining the collective**
- **Sketching the concepts together**
- **Conceptual Models – simplifying**
 - Aggregated view : across the business data
 - Single view : across a single data slice (job or customer)

Outcome > Conceptual Models



What followed...

Find Emily Mick

Emily Mick is selected
a) Hover over Apprt - Details

Search Results

Print View

Tools as in

- Scenarios
- Sketches
- Thumbnail Flows
- Screens
- Prototype > Usability

Primary Scenarios

Scenario of Use: New Potential Customer Inquiry

- New potential customer needs desserts for event

Action Type	Themes
Single - Entry	Sales
Conceptual Model Phase	NA
Collaboration Styles	NA
Shop / Buy / Use Phase (AO7S)	Use
Lifecycle Phases (AO7S)	Lead / Opportunity
Web Access Required	Yes
Rename (modify) Access Required	NA
WWW (G6), FL, G64	360, Ease of Adopt
Yes - possibly cater	3rd Party Application / Integration
Subsequent Actions (appet, task...)	Create taste test ap
Assign Activity	Possibly assign work
Communication Method	Phone
View Recent Activities	NA
View History	NA
S Ranking (H, M, L)	NA
Inputs / Outputs	Intake Application
Outside Application	Auto generates an alternative list of ta
	New information or inquiry could also

Primary User Type: Order Based "know the Customer"

Franchising:

- Easy to enter data
- Easy to categorize data
- Future schedule
- Work Instance
- New customer

Alternative Approaches:

- More user New button
- News smart try menu

QuickBooks Customer Manager - Microsoft Internet Explorer

Customer Profile: Emily Parker
415-555-2385
1921 Main St., San Jose, CA 95101
emilyparker@pub.com

Appointments: Fri, 7/21/07 10 am - Discuss event

Invoices: Invoice #124 (pdf), Estimate #126

Jobs and Assignments: Open House, VIP Recognition

Related People: Ecker Design, Heidi, Bob, Markley, Chris



User Object Model – QuickBooks and CMO

