Customer-Supplier Engagement Model Quick Starter

How to quickly and effectively develop a Customer-Supplier Engagement Model for your business or industry.

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Introduction

This document is for people interested in exploring Information Sharing in a new situation. The Information Sharing Work Group (ISWG) uses a technique called Engagement Models to capture the Information Sharing experience for both individuals and data recipients. The Engagement Model is a requirements document for developing working services, including business, technical, and legal systems. In this paper, we will explain how Engagement Models work and get you up and writing your Engagement Model as quickly as possible.

Creating an engagement model will take a good deal of work. Doing it right means addressing lifecycle, depth, and consensus.

Lifecycle. The model covers the entirety of the customer / supplier lifecycle, from the earliest searches through purchase, use, exit, and re-engagement.

Depth. It does so at enough depth to tease out the specific details that get you into the participant's motivations and system requirements.

Consensus. It operates in a framework of collaborative development, combining multiple perspectives to be more universally valuable.

Information Sharing can change just about every data transaction, which means it can change the entire customer supplier relationship. That means challenging deep habits around data architecture, privacy, and market relationships. By thinking through those changes and documenting the new possibilities, we can help create a new infrastructure for handling personal data.

The good news is that we're here to help. The Information Sharing Work Group will help you develop your engagement model, from initial idea to concrete use cases.

We break the process down into four steps, each building on the preceding one. We start with a quick overview of all four steps, then introduce a few key concepts behind the approach, and finally provide detailed guidance for each step, including examples and questions to help spur your effort.

That's it. We'll keep this as simple as possible. If anything is unclear or confusing, drop a line to Joe Andrieu at joe@andrieu.net, editor of this document. Hopefully we'll be able to answer any questions and improve the document based on your input.

Let's get started.

A Few Extras

Throughout the text, we've added a few extras to catalyze, inspire, and keep things moving along.

Sector Perspectives

What does Information Sharing have to offer businesses?

1. More profits and less waste.
2. Richer relationships with more satisfied customers.
3. Less guesswork and more demand-driven development.

Look for Sector Perspectives throughout this document for a glimpse at how Information Sharing can transform your relationships with your customers.

Winning, not Whining

Quick, concise questions and answers to help keep things in perspective. Perhaps a little snarky, so be sure to laugh!

The Process at a Glance

Developing a Customer-Supplier Engagement Model consists of four separate steps.

Step 1 – Define Your Target

Name and write an abstract of your model. The name is a few words capturing the key product or service being purchased by the customer. This is worth repeating: the model is based on the core product or service being purchased. Name it and describe it to get started. The abstract introduces the primary actors involved, what they do and why. This sets the direction of the work ahead and explains the entire model in a nutshell, so readers new to your work can quickly understand what you are discussing.

Step 2 – Write Essential Scenarios for the Stages in the CSEF

The Customer-Supplier Engagement Framework outlines 12 stages of the relationship between a customer and their suppliers. Essential Scenarios for all 12 stages should be written for both the Customer experience and the Suppliers, for a total of 24 paragraphs. Each Essential Scenario should be a prose paragraph or two, describing user actions and benefits. Start with the Customer.

Step 3 – Write Detailed Scenarios for the Most Interesting Stage

Pick one of the 12 stages and flesh out the Scenarios for both Customer and Supplier so that you fully describe each Information Sharing interaction. You should identify the key mechanisms through which users invoke, authorize, and benefit from information sharing. In practice, about 1000 words for each is about right.

Step 4 – Write Use Cases For the Detailed Scenarios

Based on the Detailed Scenarios, draft Use Cases detailing the linear flow of user intention and system responsibility. This sequential outline of the interaction is a straightforward transformation of the prose narrative, into terms that can drive downstream technical design and development.

That's it. Follow these four steps in a collaborative effort and you'll end up with a robust Engagement Model that described the entire customer-supplier relationship, from start to finish, as re-envisioned in an information sharing world.

Whiner

Why can't I just write this up in an afternoon?

Winner

Because we are redefining the entire post-industrial information architecture. A hasty, brief write up will depend on the very assumptions we are working to reinvent.

Key Concepts

Before we dive into the specific steps, here are some foundational ideas that we build on throughout. If you want to get started faster, feel free to skip this and come back to it when you have time to consider the foundations of the approach.

Personal Data Stores

At the heart of Information Sharing is the personal data store, a way for individuals to aggregate control of data for use with various services, both online and off. You can think of "your" personal data store as a collection of all the places you can share data from. Some personal data services, like Singly and Personal actually aggregate data from different individual data stores to make it easy for you to re-distribute that data to services you trust. However, you can also think about all of your distinct data stores in the plural: your friends list at Facebook, your updates at Twitter, your photos at Flickr. Each of these personal data stores actually store your data *and* allow you to authorize third-party services to use it. For example, you can log in to Bing with Facebook, which allows Bing to use your Facebook friends list to personalize your search results. This is the essence of Information Sharing.

Architecturally, the personal data store allows companies to leverage information provided by individuals rather than solely rely on their own proprietary data.

Permissioned Data Sharing

Information sharing is based on data voluntary given. There's a lot of data out there about us that we don't have any control over. Information sharing isn't trying to solve that problem. Instead, it provides an alternative architecture that leverages trust and respect to improve the quality of information driving personalized online services. In return, because people have a choice to share or not, services have an incentive to respect individual wishes about how they will use that data. Businesses that play nice get access to better, more timely, more relevant information. Those that don't, don't.

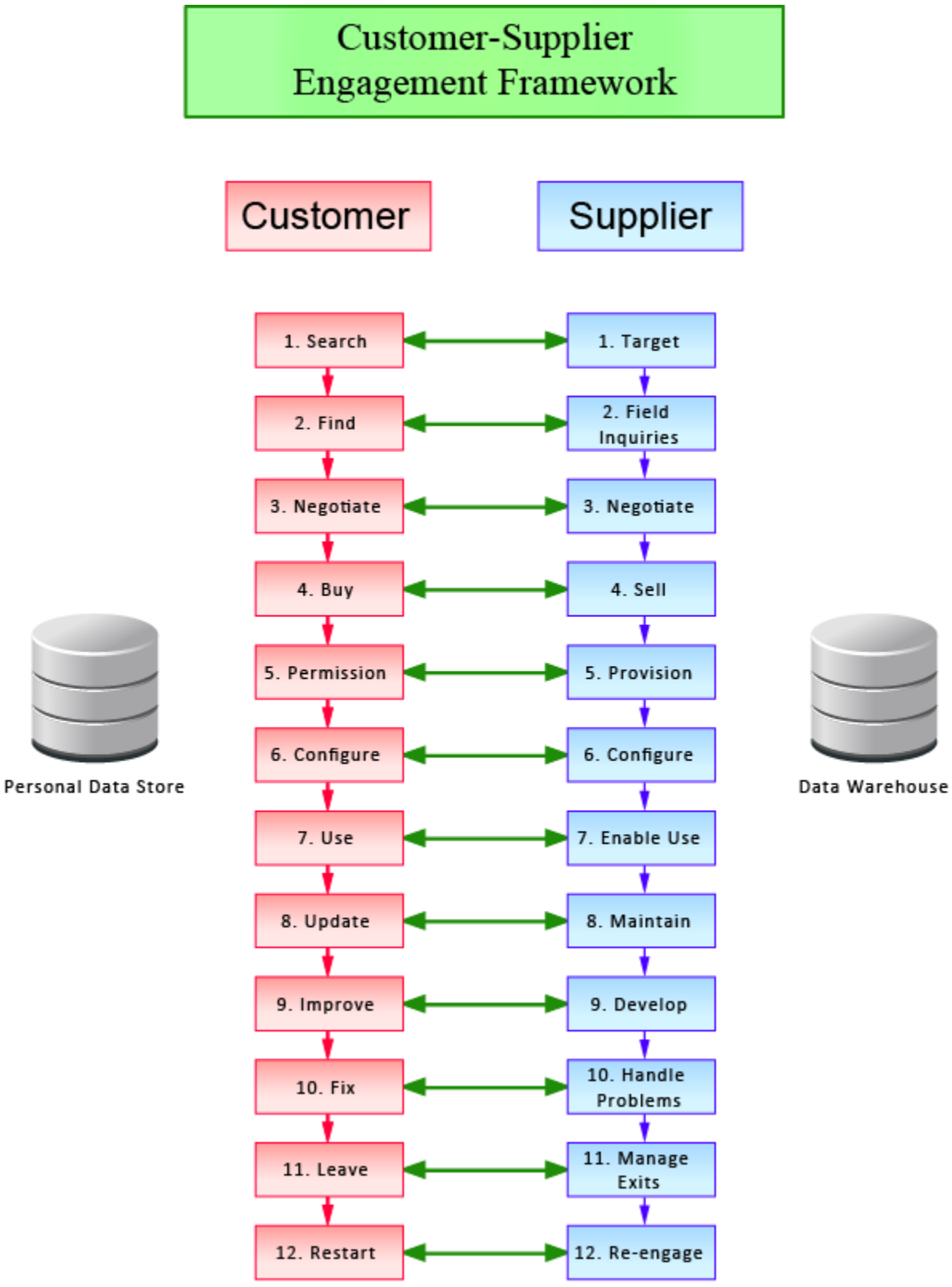
Information Sharing Agreements

Information Sharing agreements work by bootstrapping a legal contract governing terms of use *before* sharing. It doesn't redefine the entire Terms of Service agreements… each website still has its own unique requirements. Yet, with the proliferation of data sharing, it makes sense to simplify and streamline how companies handle personal data, no matter where it comes from. We use a two part approach. First, a basic agreement covers all the basics every time you share, like not redistributing data without explicit, additional permission. Then, separate transaction agreements cover the unique details for each particular instance of sharing: who gets what data for what purpose. This makes it easy for individuals and data recipients to understand what's allowed and what's not, every time data is shared.

Customer-Supplier Engagement Framework

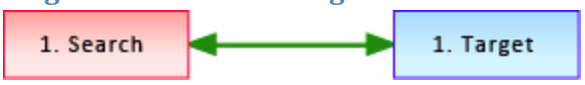
With Information Sharing agreements covering permissioned data from personal data stores, the entire relationship between individuals and data recipients changes. To make sense of the scope of this change, we step back, looking at the entire customer-supplier relationship from start to finish. We build on work done by Iain Henderson, called the Customer-Supplier Engagement Framework. The

Framework visually presents the stages of every customer-supplier relationship. The Supplier side draws on decades of systems design embedded in every major CRM system, while the Customer side mirrors it in describing what individual customers do at the same time. The Framework not only gives us a comprehensive view of the informational relationship between customers and suppliers, it aligns customer needs and expectations with existing budget items and technical systems already use by most major companies.



Let's look at each of the stages in turn.

Stage 1 – Search and Target



At the very beginning, neither party may know exactly what they are looking for. Customers Search, sometimes with an ill-defined, unspecific goal, while suppliers Target marketing efforts based on best-guesses about who might be a good fit for their offering. This stage is inherently exploratory as both parties learn through discovery and trial & error.

Stage 2 – Find and Field Inquiries

Once a customer identifies a product that looks like a good fit, they might reach out and ask for additional information from suppliers. Traditionally, this happens on the phone, in the store, or at a trade show. Sophisticated websites automate functions that used to require human interaction with configurators and online reservations, and those functions have become a part of Stage 1. Online chat, forums, and click-to-call systems are firmly in Stage 2. The difference is human contact. Fully automated sales systems, such as Amazon's online store, may never go through this stage, while automated marketplaces and auctions, like eBay, automate the communications process between customers and suppliers.

Stage 3 – Negotiate and Negotiate

During negotiations, both sides explore alternative features, pricing, and terms to arrive at a mutually satisfying purchase. At this point, the individual knows what product they want. The question is how can they get something close to that at a reasonable price and minimal hassle. Again, with automated sales systems, this stage may be skipped since it isn't negotiating unless a human participates. However, *everything* is negotiable. So, even with Amazon, there's always an opportunity to call direct and make an offer. If the offer is interesting enough, they might even respond.

Stage 4 – Buy and Sell

At this stage, an offer is accepted and an agreement entered. The corresponding legal paperwork, if any, is completed and both parties record the transaction if desired. Money may changes hands, as may title to property. However, it may simply be an exchange of obligations to pay and, reciprocally, to perform services. This stage can be fairly complicated and for large ticket transactions may require multiple steps and involve escrow accounts or due diligence. Since we are focused on individual customers working with organizational suppliers, this process is usually fairly straightforward unless covering a regulated transaction such as real property or equities.

Stage 5 – Provision and Provision

In the provisioning stage, both parties add the other party to their data stores with appropriate permissions and identities. While Stage 4 is about the legal and financial transaction, Stage 5 is about setting up all the appropriate entries in each system for managing the new Customer-Supplier relationship. Prior to this stage, both parties have had a limited set of information; now that there's been a transaction, more details are needed—and appropriate—for managing the rest of the relationship.

Stage 6 – Configure and Configure

This stage is where the product or service is delivered and configured for use. This includes traditional physical delivery plus the establishment of any product-specific data permissions and identities, such as activating your new phone and linking the Foursquare app to its online service. While Stage 5 covers information required for the relationship between customer and supplier—contact info, shipping address, etc.—Stage 6 is about setting up the product or service.

Stage 7 – Use and Enable Use

Now the product actually gets used. For services, or service-dependent products, this requires operational support by the Supplier. For many traditional products, like hammers or carpet, this stage has minimal data requirements. However, like the much maligned "Internet refrigerator", there may be significant innovations to be found by adding Information Sharing or interactive applications during use.

Stage 8 – Update and Maintain

Data inevitably gets stale. Things change and information systems need to respond to those changes. Sometimes it is as simple as updating a shipping address. Other times, you may need to update complicated legal agreements to reflect new names, dependents, or changes in regulations. Often shared information requires publish & subscribe or on-demand access to assure data recipients have the best, most current data when providing services.

Stage 9 – Improve and Develop

If things are going well, there will be opportunities for Customers to purchase additional, related services. Classically known as the upsell, smart, respectful offers can dramatically improve the overall

customer experience… and Supplier's ability to be "smart and respectful" can improve significantly with Customer-provided information like default preferences and purchase history.

Stage 10 – Fix and Handle Problems

Not everything goes smoothly. This stage is for paying attention to unanticipated problems. A car rental company should anticipate flat tires, but how does it handle lost reservations? Paying attention to this stage defines how your information architecture addresses unusual or exceptional challenges.

Stage 11 – Leave and Manage Exits

All things must come to an end. Designing for that can help assure a good end, one that competently and cleanly ties up loose ends and lays the groundwork for potential future collaboration. Nothing encourages re-engagement like a pleasant "Thanks, hope you come back soon."

Stage 12 – Restart and Re-engage

Restarting a pre-existing relationship should be easy. The parties are familiar with each other and that familiarity should greatly simplify the re-establishment of a trusted, working relationship. At the same time, just because we've done business with a company doesn't mean we want to keep getting their SPAM email and junk mail. Respectful re-engagement keeps the possibility of future transactions alive, without getting in the way of the Customer.

Payment

Payment from the Customer to the Supplier can occur at almost any time in the lifecycle, but it is most common in Stage5 Buy & Sell, Stage 7 Use & Enable Use, and Stage 8 Leave & Manage Exits. We pay for some items before we get them, while others we pay as we go, often with an outstanding bill when we terminate the service. As such, payment isn't a specific stage in the lifecycle, but it should be discussed where appropriate in your model.

Summary

The Customer Supplier Engagement Framework shapes the lens through which we explore new paradigms created by Information Sharing.

Customer-Supplier Engagement Models

Models

Models help us focus on what is important. A model is a specific, limited representation of a real or abstract thing. They can be created in any medium, but they all have the same purpose: to help us see or understand something better by looking at a *simplified*, *embodied* version. The model is specific and concrete, yet illuminates general principles and requirements that might have gone unexamined otherwise.

Engagement Models

Engagement models represent the entire lifecycle of a specific relationship, from the earliest inklings of potential, through all its twist and turns. It's in the context of the entire experience that we can best understand how to support healthier, more meaningful relationships.

Customer-Supplier Engagement Models

Customer-Supplier Engagement Models use the Customer-Supplier Engagement Framework to represent the lifecycle of a specific product (or service) relationship. Combining both Scenarios and Use Cases, it spans the gap between emotionally compelling narrative and implementable system interactions.

Most importantly, it captures a specific scope of interest, focusing on a specific individual interacting with a specific system or set of systems. Where the Framework can be applied to a broad range of situations, a Model is a specific exploration of one particular situation. Think of it as a document-based prototype, exploring in words and diagrams how an actual system might work, with a specific customer, specific supplier, and specific product.

Key to the Customer-Supplier Engagement Framework—and therefore key to the Model—is the focus on the Customer-Supplier relationship. While Engagement Models and user-driven thinking can be applied to situations beyond the traditional customer-supplier one, such as government or non-profit sector, we specifically choose a limited framing to keep our efforts focused. Reinventing the profit-based Customer-Supplier relationship *will* lead to change elsewhere, but let's first think through this part rather than try to solve everything at once.

The Customer-Supplier focus gives us two key drivers.

First, customers buy things. For Customer Supplier Engagement Models, the boundary is defined by a particular product or service offering. The model may incorporate ancillary purchases and interactions, but at its core, each model can be summed up by the primary product or service purchased. For instance, the Car Buying Engagement Model is—perhaps obviously—primarily about buying a car, even though it mentions insurance and permits and navigation software.

Second, the thread starts with the Customer, then incorporates the role of the Supplier. This is a principle of VRM, or Vendor Relationship Management, and is an intentional alternative to the corporate financed perspective that drove development of our global IT architecture. After decades of

organizationally focused analysis, design, and development, we think the way to reinvent the system is by focusing on the experience of the individual first, then add integration with trusted vendors.

Customer-Supplier Engagement Models are a tool for system design. That is, there is an implied system that the users are interacting with. This "system" is the as yet-to-be realized goal of the exercise. To talk about this system means to discuss the totality of the individual components that collaborate to realize the proposed experience. Typically, this means software, hardware, and networks run and owned by both individuals and organizations. Sometimes it is important to be extremely detailed about that hardware and software. Other times, the description can be left at a high level because the interesting parts of the model don't require further depth at that point.

In essence, the "system" is the future we are trying to build, and in our interconnected world it is unlikely that any one organization or individual will control its entirety. Since we are implicitly designing a heterogeneous system, we focus on the user experience as the totality, rather than any particular subset of the system.

Finally, although the Customer-Supplier Engagement Framework comes from work based on liberating the customer, the Model is a method of describing a system. As such, it's a platform for exploring ideas and catalyzing conversations. Whether or not the proposed system embodies any particular user-driven or customer-driven ideas is completely up to the author and his or her collaborators. Ideally, by thinking through the entire customer lifecycle and building a coherent Model, any developer will be able to contribute to a better overall user experience while supporting the constraints and goals of their employer, no matter what those might be.

Scenarios and Use Cases

In addition to the name and abstract, Engagement Models are comprised of Essential Scenarios, Detailed Scenarios and Use Cases. We'll tell you how to write each of these for each step in the process. In brief: you'll keep it simple for the Essential Scenarios, so you can see the entire lifecycle clearly. Then, tease out the Detailed Scenario. Finally, you dive deep into system interactions with Use Case development.

Sector Perspective: Automotive

First, we see the personal RFP as a cornerstone of reinventing the auto sales process. Just as Saturn once made a push to save us from the “car salesman” annoyance, personal RFPs can cut out much of what people hate about the car purchasing experience while streamlining the most valuable parts for both customers and suppliers. We also see the personal data store as a valuable means for integrating a wide number of services based on actual usage data captured during the life of the vehicle. Those services could include improvements to traffic management & planning, better shopping excursion planning, vehical maintenance, and resell certifications. Understanding how an individual is actually using their vehicle can significantly enhance many service relationships.

Step 1 – Define Your Target

Name and write an abstract of your model. The name is a few words capturing the key product or service being purchased by the customer. The abstract is a brief paragraph introducing the primary actors involved, with a bit of context about why they do and why. This sets the direction of the work ahead and explains the entire model in a nutshell, so readers new to your work can quickly understand what you are discussing.

Here's an example from our first Engagement Model.

> ***Name: Car Buying Engagement Model***
>
> ***Abstract: Sally's car lease is expiring, so she researches, processes the paperwork for, and acquires a new car. The primary vendors are all UD-VPI enabled, only the bureaucratic functions require legacy integration. As Sally progresses through this use case, she maintains her data in a personal datastore, under her control, sharing such information as needed. Sally is a salesperson and often drives her car to visit customers (and potential customers).***
>
> From of the Car Buying Engagement Model
> http://kantarainitiative.org/confluence/display/infosharing/Car+Buying+Engagement+Model

That's it, just a quick label and an introduction to your Model.

Sector Perspective: Real Estate

In Real Estate, we see numerous opportunities to reinvent the relationship between buyers and sellers. First, given tools on the buyer side, a distributed reverse-MLS could offer home sellers a way to find buyers just as easily as buyers find homes. We also see an opportunity for streamlining the communications between buyers and sellers in the home market. If individuals have open tools for tracking their search for a new home, they could integrate structured conversations with realtors, brokers, sellers, bankers, and inspectors for a smoother, more efficient home buying experience. Finally, we see the Personal Data Store offering a way to start crafting a home's digital footprint, for better maintenance, security, insurance and resell value. Individuals who keep track of home expenditures in a personal data store can seamlessly track precisely the kinds of information that could be intelligently used by various service providers to improve their lives, including utility optimization (solar, heating, etc.), vacation monitoring (enhanced security), and scheduled maintenance.

Step 2 – Write Essential Scenarios for all 12 Stages in the CSEF x2

The Customer-Supplier Engagement Framework outlines 12 stages of the relationship between a customer and their suppliers. Essential Scenarios for all 12 stages should be written for both the Customer experience and the Suppliers, for a total of 24 paragraphs.

A Scenario is a concise prose description of a specific user's experience in enough detail to understand their interactions with the system: what they do, why, and what their expected results are. We start with Essential Scenarios.

A Scenario

1. gives enough background to explain the user's motivation,
2. describes what the user actually does
3. explains the expected benefits of the user's actions

Each scenario should be as brief as possible, telling us what the user does and why. It should focus on the unique differences created by Information Sharing so as to present the most powerful illustration of how that stage in the relationship is improved by Information Sharing.

The key to good scenario writing is the balance between simplicity and detail. You want to capture just the important bits, yet you also need to explain how the user actually engages with the new system. In an Essential Scenario, the goal is to capture the essence of one stage in the Customer-Supplier Engagement Framework in about a paragraph.

Whiner

Do I really need to map out all 12 steps of the Framework? They aren't all important in my situation!

Winner

If personal data stores and permissioned data sharing aren't changing every step in the relationship, you're missing opportunities to remove waste and create value.

Example Essential Scenario:

> ***Now that she knows what she wants, Sally gets a quote from several vendors and negotiates pricing, financing, features, and delivery terms by sending a personal RFP both to vendors she already knows and two that she found online, one that specializes in online sales and one that is her local dealer. Two of the dealers are not yet "online" with the electronic personal RFP system, so they receive letters via postal mail. She reads the vendors responses online and calls one with a few questions. She confirms the deal with her husband, using his authority as a counterpoint in the negotiations.***
>
> From Stage 3 of the Car Buying Engagement Model
> http://kantarainitiative.org/confluence/display/infosharing/Car+Buying+Engagement+Model

Essential Scenarios have just enough detail at each stage in the Framework to illustrate the model without exhausting collaborator interest. For the Car Buying Scenario, a paragraph or two was enough to capture the essence of each stage while keeping the overall lifecyle to a couple of printed pages, or about 1000 words. This meant it was possible to review the 12 stages in a given meeting and get an overall sense that we had captured the essence of the model.

Do this step for both the Customer and Supplier sides of the Framework. Remember to be specific and detailed. In the example, we highlight the use of a a personal RFP, postal mail for outreach to offline suppliers, two methods of follow up (online and by phone), and the role her husband plays in negotiating. There's still a lot of detail still unstated, but it shapes the basics of the stage, painting a picture of Sally's experience and a new way for her to relate to her Suppliers.

Questions to Ask

To help you write each Scenario, it may help to ask yourself a few questions about the user experience at that stage.

1. What is the Customer doing that's different from business as usual?
2. How is this stage in the relationship changed by information sharing?
3. How does the Supplier engage with the individual? Is the benefit of that worth it to the Supplier?
4. How do we handle outliers?
5. How do we handle transitions from business as usual to the new approach?

The goal is a coherent flow from the earliest part of the relationship through all 12 stages of the Customer Supplier Engagement Framework. Don't worry about answering all five questions. (Consider them suggestions for inspiration.) Keep it simple. Keep it relevant. Focus on telling a compelling story that makes sense for both Customers and Suppliers.

Sector Perspective: Car Rental

The automotive rental experience is fraught with considerable options, uncertainty, upsells, and legal fine print. Streamlining this through a pRFP and a personal data store can significantly improve efficiencies and customer satisfaction. Default preferences and even standing legal agreements could address the inevitable mass of paperwork every time you rent. In addition, search and reservation options based on user-driven needs rather than corporate data modeling could offer individuals a more responsive way to find what they really need. Instead of focusing on the schema of data in a rental agency's inventory, an information sharing approach would allow users to specify desires in their own terms and language. Agencies could combine that language with information in their personal data store to offer focused suggestions more aligned with their needs.

Step 3 – Write Detailed Scenarios for the Most Interesting Stage

Pick one of the 12 stages and flesh out the Scenarios for both Customer and Supplier so that you fully describe each Information Sharing interaction. This is a deep dive on one key Essential Scenario written in Step 2. Identify the key mechanisms through which users invoke, authorize, and benefit from information sharing. One thousand words is about right for each of the Customer and Supplier sides of the stage.

We broke out our first Detailed Scenario as a separate project, giving it its own name and abstract. This had emerged from Stage 3 of the Car Buying Engagement Model and was specifically focused on the use of a pRFP to manage Negotiation. In this case, the abstract acted as an update on the Essential Scenario.

> ***Name: Personal Request For Proposal (pRFP) Engagement Model***
>
> ***Abstract: Sally uses a Personal Request for Proposal (pRFP) to solicit offers for, negotiate, and purchase a new car through the MyPal pRFP Broker. She has previously researched her options and made up her mind about the kind of car she wants to buy. She has also secured financing and credentials asserting that fact. Sally's information is maintained in a personal data store, which provides it on demand for use by service providers and vendors. On the Vendor side, Frank at Chryota of London responds to Sally's Personal RFP (pRFP), using a hands-on approach that integrates CoL's CRM system, MyPal, and Chryota Manufacturing's CRM program HEARING AID, which is managed by Jimmy.***

Then, we fleshed that out in enough detail to understand how, when, and why information sharing occurs. While Essential Scenarios focus on the flow of user motivation and key aspects of the relationship with one or more suppliers, Detailed Scenarios illustrate the concrete interactions that Sally had throughout her realization of the first.

How did she interact with different suppliers? When did she share different information? How did she authorize the sharing and for what purposes?

Here's the Detailed Scenario for Sally's pRFP (part of the Car Buying Engagement Model):

> ***Now that she knows what she wants, Sally fills out a PRFP template using MyPal's mobile phone app. She pulls in details from her prior research, specifying what she is interested in and how she wants the conversation to unfold.***
>
> ***Sally sets up MyPal as an Authorized Recipient with Mr. Doorman, provisioning MyPal as a pRFP Broker. She specifies the standard pRFP information use policy, which allows use only for responding to this pRFP, with long term storage only for quality control and future product and service development. It also allows authorized recipients not selected in the process to follow up once within the following year using Sally's protected inbox.***
>
> ***Second, Sally specifies what she is interested in and how she wants the conversation to unfold. To describe what she is looking for, Sally lists:***
>
> ***1. new 2010 Chryota Prius***
> ***2. enhanced Bose surround sound system (standard factory option)***

3. *standard Chryota kids package (car seat, etc.).*
4. *no convertible*
5. *custom color: Nemo (Clownfish) Orange w/ stripes (semi-structured)*
6. *purchase within 1 week*
7. *delivery in 2 weeks after purchase*
8. *drop off at her home*
9. *target price £22,000 (£10,000 cash deposit, balance on delivery)*
10. *buyer's financing (credit union loan for balance)*
11. *DVLA & Congestion permit paperwork (unstructured)*
12. *no Insurance (she already has it)*

This list includes

- *Details about the product she wants*
- *Details about financing, price, and delivery*
- *Unstructured requests for customization or custom services*

To specify how she wants the conversation to unfold, Sally details who is to receive the pRFP, the terms of use for reviewing the pRFP, and how and when she wants them to communicate with her.

Sally starts building a white list of recipients by searching at MyPal through a list of Authorized Chryota Dealers within 25 miles of her home, and adds a few from a search of within 50 miles of her sister's. As she adds the vendors, MyPal presents notice of further distribution, letting Sally know with whom each Chyota dealer may share the pRFP information, allowing Sally to opt-out if possible. Each of the dealers lists Chryota Manufacturing, which Sally is ok with. MyPal's interface indicates one or more dealers have been excluded due to Sally's personal blacklist (as stored in her personal data store). Sally double checks that list and totally agrees: Bob's Chryota is never getting her business again! Based on Sally's searches, MyPal suggests two additional vendors, one an online car dealer and another a car broker near Sally's home. Sally decides not to include those two in her recipient list. As she reviews possible recipients, MyPal displays the reputation information available for each Vendor. Sally drills down on the reputation details for two of the vendors, using MyPal's tracking data. At this point, she decides not to pay for the details provided by any of the third party reputation services.

When submitting this information, Sally authorizes MyPal, eBay, and Equifax as reputation providers for this transaction, linking this particular pRFP to Sally's reputation and tells Vendors that this transaction will be recorded for reputation tracking (of both Sally and the Vendor) at those three services. In exchange for this tracking information, the reputation providers agree to incorporate this transaction in future reputation scores and to provide a current reputation score to approved Vendors on a freemium business model: a simple score for free, details for a fee, while depersonalizing all information presented to help protect Sally's privacy. Sally also specifies that all questions asked during the pRFP process will be confidential, as will be their answers.

After a final review of the details, Sally tells MyPal to publish the pRFP, selecting the £25 option that will process offline paperwork, contact legacy vendors who haven't yet registered with MyPal, and host a protected inbox for communications with vendors. MyPal sends a notice to all of the Vendors on Sally's recipient list, giving them a way to review the pRFP once they agree to Sally's terms of use. For legacy vendors, MyPal makes a phone call, letting them know about the pRFP and recommending they sign up through

their relationship with Chryota Manufacturing. Sally receives inquiries from two of the Vendors through MyPal, to which she replies. In her replies, she specifies that she wants the dealer to login to view her reply, rather than sending the message in clear text directly to the recipient. She ultimately receives offers meeting her criteria from three Vendors; those offers are hosted at MyPal.

After reviewing the offers, Sally calls Chryota of London and asks some additional questions. She takes notes on the conversation, which are stored along with the Vendor's offer at MyPal. Sally sends her husband a link to the offer (provisioning access via MyPal, and specifying her husband's contact service LinkedFace) and asks what he thinks. He likes it, but doesn't want the proposed audio system, suggesting a different model, just out from Bose. Sally sends a quick message to the Vendor, through MyPal, asking for the alternate sound system. The Vendor replies with an updated offer. Sally likes it and decides to pay £25 for Equifax's detailed reputation history for Chryota of London. She finds a history of recent transactions as well as reviews from actual customers in her area. Some of the reviews aren't so glowing, but they seem rare and from the comments, the customer may have been the unreasonable party.

After one last surf around the net to check out her alternatives, Sally makes her decision and commits to the sale, taking her to Step 4 of the Car Buying Engagement Model.

From the pRFP Engagement Model
http://kantarainitiative.org/confluence/download/attachments/44564832/Personal+Request+For+Proposal+Engagement+Model.work+group+report.v2.pdf?version=1&modificationDate=1291627987000

We developed this in an iterative, collaborative process and we encourage you to do the same. It's slower, but you'll get a much more thorough vetting of the possibilities and a better overall picture of how information sharing might work.

It's worth making sure all the details are consistent, as this will help you uncover subtleties that might otherwise be overlooked. In the example, placing Sally in London impacted pricing, currency, regulatory aspects, and more. The details let us think through whether or not Sally would actually do that, by imagining what we would do in her shoes. The idea of checking her sister's neighborhood for vendors came from exactly that sort of discussion, as we tried to get inside her head and truly understand how she might go about buying this particular vehicle.

Questions to ask along the way

Here are some general questions for every stage plus specific questions for each of the 12 stages. The goal is a clear and concise picture of the entire lifecycle—especially how the customer experience *changes* with information sharing.

Whiner

There's just too much detail! There are so many things I could include, writing it all up would take forever!

Winner

Keep the detail and cut the fluff. The specifics of user interactions and expectations are what's important, not how many gee-whiz ideas you can cram in. In each stage, focus on one or two key differences enabled by Information Sharing. Focus on a minimal number of key innovations.

General Questions for Every Stage

1. How does permissioned sharing from a personal data store change the experience?
2. What data is shared?
3. How is shared?
4. Why? (motivation of the individual)
5. For what purpose?
    a. What is the recipient doing with it?
    b. What services are being provided in response?

Stage 1 – Search and Target

1. How does the individual seek out the Supplier?
2. How does the individual keep track of their exploration?
3. How does the supplier reach out to Customers? (Preferably those who are seeking them out, rather than mass-marketing segmentation strategies.)
4. How do individuals vet the quality of potential suppliers?
5. How do suppliers qualify potential customers?

Stage 2 – Find and Field Inquiries

1. How does the individual reach out to a human at the Supplier?
2. How does the supplier respond to incoming contacts?
3. How does the current context (from Stage 1 and existing preferences & history) contribute to the conversation, i.e.,
    a. how does the individual get it into the conversation
    b. how does the supplier access & utilize it?
    c. how do both add the current stage to the ongoing context?
4. How do the parties validate the identity of the other?

Stage 3 – Negotiate and Negotiate

1. What terms matter to both sides? What are the key pivots that the negotiation will really turn on?
2. How is the conversation facilitated?
3. How open/engaging is the process to other parties? Is it one-on-one? Is it an open bidding? Who can see what parts of this discussion?

Stage 4 – Buy and Sell

1. How do the parties indicate binding agreement to the terms? E.g., click the "confirm purchase" button
2. How is the legal agreement memorialized?
3. How does the money get transferred (Credit Card, loan, ACH?)
4. How does the deal close and title get transferred?

Stage 5 – Provision and Provision

1. What information needs to be exchanged to maintain account information (i.e., identity) for both parties? E.g., name, contact info, passwords
2. How does each party provide that information to the other? (OAuth, loyalty card, email)
3. Where is this information kept? In other words, what applications or service providers are keeping track of the identities and authorizations?
4. What permitted uses are authorized for that data? (The information should be purpose-bound and the receiving party should be able to honor that.)

Stage 6 – Configure and Configure

This stage is where the product or service is delivered and configured for use. This includes traditional physical delivery plus the establishment of any product-specific data permissions and identities, such as activating your new phone and linking the Foursquare app to its online service. While Stage 5 covers information required for the relationship between customer and supplier—contact info, shipping address, etc.—Stage 6 is about setting up the product or service.

1. What information does the product or service need to operate?
2. How does it get it? (On demand, subscribe, one-time transfer, manual input)
3. How does the user authorize the access? How do they manage/ revoke that authorization?
4. What are the bounds on use, especially for data streams authorized for long term or continuous access to the personal data store?

Stage 7 – Use and Enable Use

1. What information is generated or tracked during use?
2. Where does it go? For what purpose?
3. How does the user manage the permissions and data flow over the lifetime of using the product?

Stage 8 – Update and Maintain

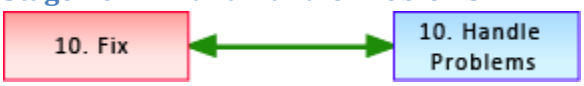
1. What otherwise static data changes over the life of the product?
2. What life or situational changes cause those data changes?
3. How do those life changes get into information systems? Where is it stored and how is it communicated?
4. How do configuration options and preferences evolve over time?

Stage 9 – Improve and Develop

If things are going well, there will be opportunities for Customers to purchase additional, related services. Classically known as the upsell, smart, respectful offers can dramatically improve the overall customer experience… and Supplier's ability to be "smart and respectful" can significantly improved with Customer-provided information like default preferences and purchase history.

1. How does the user control incoming marketing messages? What permissions are requested or given for offers, promotions, announcements, etc.?
2. How can individual proactively express a desire to upgrade?
3. What points in the user experience make a natural contact for potential upsells?
4. Is there a way for users to opt-out of these intrusions?

Stage 10 – Fix and Handle Problems



Not everything goes smoothly. This stage is for paying attention to unanticipated problems. A car rental company should anticipate flat tires, but how does it handle lost reservations? Paying attention to this stage defines how your information architecture addresses unusual or exceptional challenges.

1. How do users communicate problems with the system, back to the system?

2. How can individuals track and then contribute their own records for problem resolution?
3. Are there ways that users can innovate to fix their own problems?
4. How can customers and suppliers access information for pursuing a legal grievance?

Stage 11 – Leave and Manage Exits

All things must come to an end. Designing for that can help assure a good end, one that competently and cleanly ties up loose ends and lays the groundwork for potential future collaboration. Nothing encourages re-engagement like a pleasant "Thanks, hope you come back soon."

1. How do customers terminate the relationship?
2. What permissions are requested by the Supplier for future contact and/or analysis?
3. What happens with data that is already at the Supplier's system?
4. Are there any continuing data subscriptions, for example for class action lawsuit notifications?
5. How can users maintain services while transitioning to a new provider?
6. Does the termination include transfer to a new buyer? How does product specific data

Stage 12 – Restart and Re-engage

1. What communications channels are appropriate for Suppliers reaching out to Customers?
2. How can Customers re-activate a prior relationship?
3. Can customers re-engage with a clean persona/identity? In particular, can you support Customers who engage in a work persona that is different from their parental persona?
4. How do permissions granted in Stage 11 inform Stage 12 activities?
5. Where are details of the prior relationship stored and how do they get accessed during re-engagement?

Sector Perspective: Online Retail

Joyce Searls once asked “Why can’t I take my shopping cart with me from website to website?” Well, with information sharing, you could. Given a standard framework for controlling access to a virtual shopping cart, companies would be able to access and store items on request. Instead of each store being an isolated, proprietary destination, trusted stores can participate in a collaborative marketplace, not only helping Customers find what they want, but also helping Suppliers better understand customer needs.

Step 4 – Write Use Cases For the Detailed Scenarios

Based on the Detailed Scenarios, draft Use Cases detailing the linear flow of user intention and system responsibility. This sequential outline of the interaction is a straightforward transformation of the prose narrative, into terms that can drive downstream technical design and development.

Use Cases

A Use Case defines the user expectations and system responsibilities for a given interaction with the system.

Essential & Abstract

There are many different definitions and ways to develop Use Cases in the software development literature. We base our approach on Essential Use Cases as presented by Constantine and Lockwood in *Software for Use.*

The Use Case presents a linear sequence of User Intention and System Responsibility, defining in abstract terms what the user does and what the system does in response. It's detailed enough that each step in the interaction is described enough for implementers to start specifying interface, data, and communications requirements. However, it is abstract in that care should be made to avoid as many implementation details as possible. Unless vital to the experience, don't specify the actual hardware or interfaces to be used. Doing so significantly limits the opportunity to come up with a better design. This is in stark contrast with the Scenarios, where we want concrete specifics so we can get into the mind of the users by keeping it as real as possible. By abstracting away the implementation limiting details of the scenario, abstract Use Cases allow for innovation during design and implementation.

Constantine & Lockwood put it this way:

> ***An essential use case is a structured narrative, expressed in the language of the application domain and of users, comprising a simplified generalized, abstract, technology-free and implementation-independent description of one task or interaction that is complete, meaningful, and well-defined from the point of view of users in some role or roles in relation to a system that embodies the purpose or intentions underlying the interaction.***

From *Software for Use*, Constantine & Lockwood. 1999. ACM Press/Addison Wesley

A key distinction for Use Cases—as we mean them—is that they describe intention and responsibility rather than actions and reactions. Other, similar timeline or sequence modeling approaches will describe users interacting with a system in concrete steps based on what the individual and the system do, often in technology- and implantation-dependent language. We peel back the implementation details to expose *why* the user and the system are doing what they do in that step. By specifying user intention and system responsibility, we get a clear picture of the intended system without limiting the future development to our initial ideas about technology and design.

For example, a scenario for someone using a mobile ATM (automated teller machine) might mention debit cards and entering a pin on the keypad and specific prompts on the screen with the ATM responding by making particular queries and updates to a database over a dial-up connection on a cellular phone. However, what's essential to the use case *isn't* the card or the keypad. It isn't the queries or the database or the cellular phone. It's that the user needs to identify themselves and direct the machine to give them money. The system needs to authenticate the user and verify that its ok to give them the money by checking a bank account balance over some wireless mechanism. This can be described without limiting it to specific hardware, allowing downstream design & development to consider options like biometrics and voice/audio interfaces as well as WiFi or 4G data connections without the mental overhead of technology-dependent assumptions made in the modeling stage.

Whiner

This would be a lot easier if I just sat down with my team and knocked it out.

Winner

The consensus process forces you to rethink your assumptions and to build a more universal solution. We all bring our own mental models, assumptions, and agendas to the work we do; the best way to get beyond the limitations of our own mind is to bring in other perspectives.

Built on Scenarios

Use Cases are built on, and incorporate, Detailed Scenarios, which are themselves based on Essential Scenarios of the 12 Stage Model. You'll likely find yourself updating your Detailed Scenarios as you flesh out the Use Case. Inevitably, you'll realize you were missing something vital or perhaps had a mistaken assumption. That's ok. The Detailed Scenarios are a starting place and, as the author, you should feel free to update the Scenarios if discoveries further downstream improve the model.

Use Cases build on Detailed Scenarios directly. For each interaction described in the scenario, first copy the verbage directly into the table, then define the linear User Intentions and System Responsibilities that realize that scenario.

For example:

User Intent	System Responsibility
Now that she knows what she wants, Sally fills out a PRFP template using MyPal's mobile phone app. She selectively pulls in details from her prior research. Sally sets up MyPal as an Authorized Recipient with Mr. Doorman, provisioning MyPal as a pRFP Broker. She specifies the standard pRFP information use policy, which allows use only for responding to this pRFP, with long term storage only for quality control and future product and service development. It also allows authorized recipients not selected in the process to follow up once within the following year using Sally's protected inbox.	
1. Start MyPal pRFP App on her mobile	

phone a. Install mobile phone App b. Run app 3. Tell MyPal about MyStuff 5. Login to Mr. Doorman and provision MyPal for access to specific information for the purposes of managing a pRFP process. Select information from the personal data store to be shared, including: **a. a specific Search** history b. a specific digital scrapbook with notes and information on the car she wants c. vendor blacklist d. financial credentials from Credit Union e. Sally's address f. preferred contact channel (protected inbox address) g. the terms under which the information is to be shared (in this case, using standard pRFP terms)	2. Setup App a. Introduce app to MyPal servers b. Ask for personal data store 4. MyPal Attempts to get pRFP info from MyStuff a. MyPal asks MyStuff for PRFP information b. MyStuff tells MyPal to see Mr. Doorman c. Mr. Doorman tells MyPal it needs proof of signature on standard information sharing agreement, specific authorization by Sally to provision MyPal for access, and proof of acceptance of Sally's terms of use. d. MyPal asks Sally to provision access using the URL from Mr. Doorman. 6. Mr. Doorman records the new policy for MyPal and redirects Sally back to MyPal. 7. MyPal gets pRFP info from MyStuff a. MyPal shows proof to Mr. Doorman i. signed token from a valid InfoSharing Trust Framework provider ii. signed token demonstrating acceptance of Sally's specific terms e. Mr. Doorman gives MyPal key to MyStuff's data store f. MyPal requests & gets pRFP information from MyStuff 8. MyPal Maps incoming pRFP information to pRFP template 9. MyPal presents pre-filled template to Sally for confirmation

From the pRFP Engagement Model
http://kantarainitiative.org/confluence/download/attachments/44564832/Personal+Request+For+Proposal+Engagement+Model.work+group+report.v2.pdf?version=1&modificationDate=1291627987000

You can see that the Use Case directly incorporates the first interaction from the Detailed Scenario we included above. Then, in two columns, it specifies the linear narrative of that interaction.

In hindsight, this example only does a moderate job at being general rather than specific. In particular, the use of specific vendors could perhaps have been avoided. However, it does a good job of avoiding how the permission is granted. Does it use OAuth? Email? Cell phone? The mention of a token implies but doesn't require a PKI approach. In fact, the "token" could be a confirmation code sent to her cell phone. The specifics of MyPal, MyStuff, and Mr. Doorman, gave us role-specific labels that made it easier to understand which party is doing what.

The key point about abstracting away from technology isn't to force vague and ambiguous descriptions, it's to get the collaborating team to tease out what is truly essential to the use case. In this case, OAuth

isn't vital, but some sort of token indicating permission is. In other words, push for abstraction, but don't worry about being pedantic about it. The point is to capture the power of information sharing and provide guidance for specification and software developers. Momentum and clarity is far more important than arguing over specific technical options.

Glossary

Customer
An individual who buys something. For our focus, we do not consider corporations or organizations as customers.

Customer Supplier Engagement Framework (CSEF)
A multistage view of the relationship between Customers and Suppliers.

Customer Supplier Engagement Model
An representative instance of the Customer-Supplier Engagement Framework, comprised of prose Scenarios and linear Use Cases.

Detailed Scenario
A comprehensive prose description of a user's interactions with a system: what they do, why, and what they expect. Approximately 1000 words. In our case, used to expand essential scenarios to capture the details of information sharing: what data gets shared when for what purposes.

Essential Scenario
A concise description of a user's interaction with a system. About 1 paragraph of what the user does and why. In our case, used to describe a single stage in the Customer Supplier Engagement Framework. Used to capture the innovative aspects of that stage in an information sharing relationship.

Information Sharing
The voluntary disclosure of information under specific terms of use.

Information Sharing Agreements
A contractual agreement covering the terms of use for shared information, agreed prior to sharing.

Information Sharing Work Group
A non-profit collaborative group working to establish a user-driven legal, technical, and business framework for sharing information online.

Personal Data Store
A repository of data that individuals can share with online service providers for enhanced services. Also the collection of all such repositories under one's control, e.g., "your personal data store" can be used to refer to the distributed totality of data stores under one's control.

Scenario
A prose description of an individuals' interaction with a system, comprising one or more complete, value-creating transactions.

Supplier
An organization or individual who sells things.

System Responsibility
A brief statement of the system's obligations in response to expressed user intention. A technology- and implementation-free description of the systems reaction in fulfillment of user direction.

Use Case

A linear sequence of statements of User Intent and System Responsibility describing a single, complete value-creating transaction.

User Intent

A brief technology- and implementation-free statement of an individual's intention, as indicated through interaction with a system for a specific purpose.