Case Study: Aligning Customer Experience with Business Architecture

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Date: 2018-03-21

Abstract

This paper describes how Autodesk used a Customer Experience framework with business architecture to create a holistic and complete blueprint for a set of capabilities that it calls inquiry management.

This Customer Experience vision was driven mainly by various business model transformations that Autodesk is undertaking, in particular the Digital Transformation model, which requires direct interaction with its customers. To facilitate this, Autodesk needs to improve the customer's experience and intelligently automate customer interactions so that it can meet the predicted demand.

This article will cover:

- the customer experience vision Autodesk is striving for

- a framework for eliciting collaboration and alternate business perspectives as input to the design, and

- a couple of artifacts that Autodesk created, including a wireframe which overlays the defined capabilities on to the experience and a "Tenets and Principles" document used to keep the company on track

Aligning Customer Experience with Business Architecture

Context

This paper is based on a presentation that was delivered March 2018 to the Business Architecture Guild Summit in Reston, Virginia. The talk focused on the benefits of aligning Customer Experience and business architecture.

Introduction

Autodesk is in the early stages of its business architecture journey, with the usual highs and lows associated with such an endeavor. One such high point is how the company was able to link its Customer Experience framework with business architecture to create a comprehensive blueprint for something called Inquiry Management.

Inquiry Management

Inquiry Management refers to an experience and set of company capabilities that surround how a customer submits an inquiry (or posts a comment) and gets a response or resolution to that input. Autodesk tracks, measures, and reports on inquiries, including page views and hits, deliberate questions that customers submit, like support tickets, sales questions, and billing inquiries. In addition, the company is interested in social media comments or mentions associated with Autodesk, and it wants to identify these, ingest them, and provide an appropriate response.

When the company was trying to identify and describe its main business objects and these capabilities, it had difficulty with the inquiry items as they didn't really fit within Work Management or Submission Management. These seemed specifically focused on a standard, deliberate inbound question or piece of work and didn't cover proactively looking for and responding to comments and mentions.

The company decided that it needed a new business object — an inquiry —and a set of capabilities to manage it. It defined this as a level 1, customer-facing capability, and it associates or matches it with work items which track through its lifecycle.

The Customer Experience Vision

The customer experiences Autodesk is trying to emulate are those its customers are already familiar with in their personal and consumer lives. These are the mostly positive experiences already delivered by B2C companies like Amazon, Apple, and Netflix. Autodesk is a B2B organization, and it is discovering that its customers' expectations — when they are at work — are increasingly influenced by the experiences they have as consumers.

Autodesk's goal is to be able to deliver better experiences when its customers interact with it. To that end, the company has focused on the following areas:

Customers expect Autodesk to be open 24/7 — not just during business hours. The only way the company can meet this expectation is to provide intelligent self-service tools, so that customers

can take care of their business themselves without waiting for Autodesk representatives to be available.

Customers expect personalization, which means they expect Autodesk to know and remember them. When they contact the company about an issue for a second time, they expect Autodesk to know what that issue is. Companies like Amazon and Netflix do a really good job of knowing their customers and of using the data that they capture to add value to their customers' interactions in the personalized content or products and services that they recommend. Autodesk needs to be able to provide value every time its customers engage with the company and help increase their likelihood of success using its products.

In addition, Autodesk needs initiatives to eliminate the non-value transactions that drive contact volume. A non-value interaction is one where a customer has to contact the company because of a deficiency in systems, processes, or policies.

Service Blueprint

One of the first things Autodesk did was to identify the area that it wished to focus the experience improvement on — for example, eCommerce — and then, through analysis, define typical customer contact use cases. The company then set up a number of working sessions and invited a cross-functional team made up of business architects, customer experience architects, technical architects, data architects, and product managers with the express purpose of using their expertise to brainstorm an ideal experience and architecture. As a starting point Autodesk used a service blueprint framework (figure 1) to map the customer journey for a given use case and then asked participants to brainstorm on how the company achieved its ideal experience. The real magic occurred when participants started commenting from other people's perspectives and shared their own great experiences from other companies that they had dealt with in their personal lives. Finally, Autodesk defined the capabilities required to support this new experience.

Approaching the problem using a combination of design thinking and business architecture, helped Autodesk produce a very complete customer and agent experience and identified affected and new capabilities that may well have otherwise been missed.
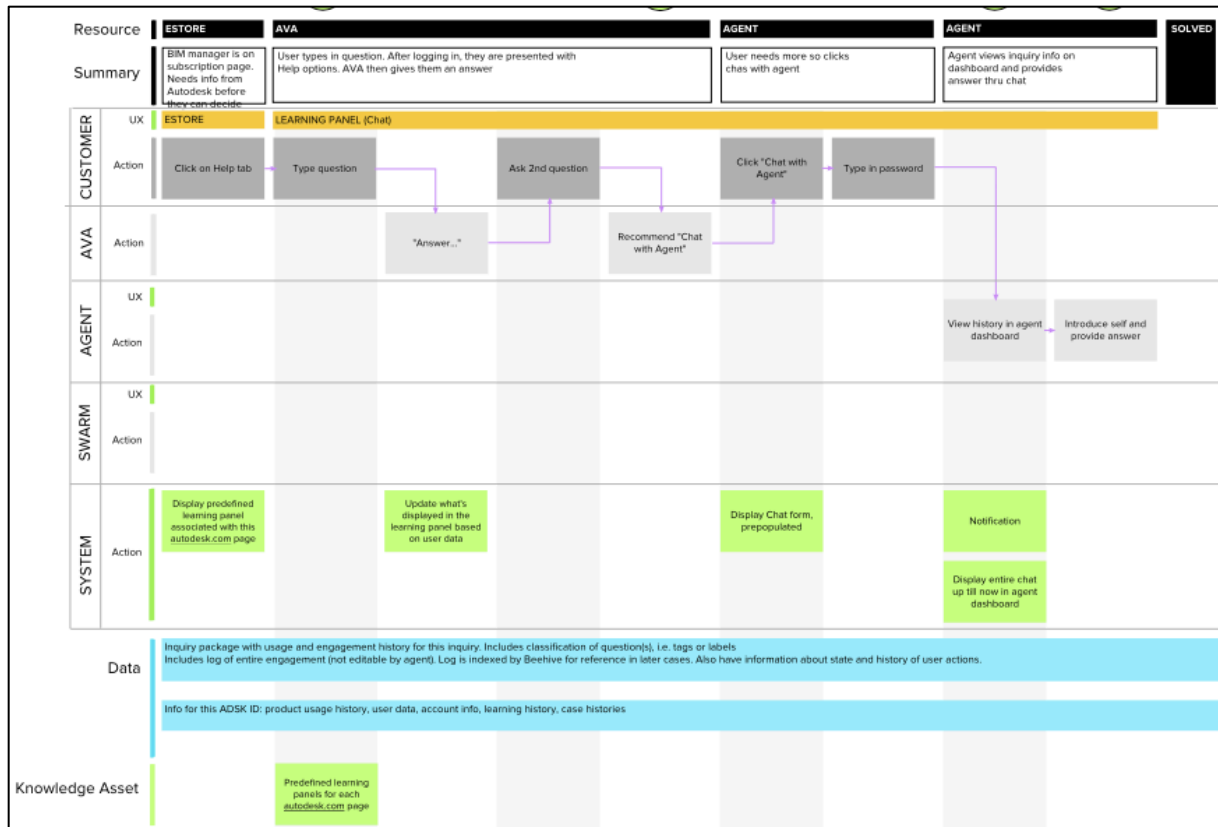
Figure 1. Service Blueprint

With the benefit of hindsight, a more efficient way to proceed initially would be to cross-map the impacted area of customer experience to the value streams that supported it. From there Autodesk could have decomposed to the value stages and then to the capabilities. This information could have been used as a starting point for the ideation working sessions.

Wireframes

Once confident that there was a complete experience worthy of a B2C company, Autodesk decided to create a set of wireframes that could help it visualize and communicate to other stakeholders the specific experiences it was trying to create. It's much easier to walk through a wireframe than to walk through a service blueprint or a document full of capability descriptions.

This wireframe (figure 2) is an artifact that was created as a socialization and communication tool. It overlays the capabilities onto the experience — in this instance, a specific customer-use case — and helps to describe which capabilities support which experience. The image below is a single screen capture from a part of the wireframe.
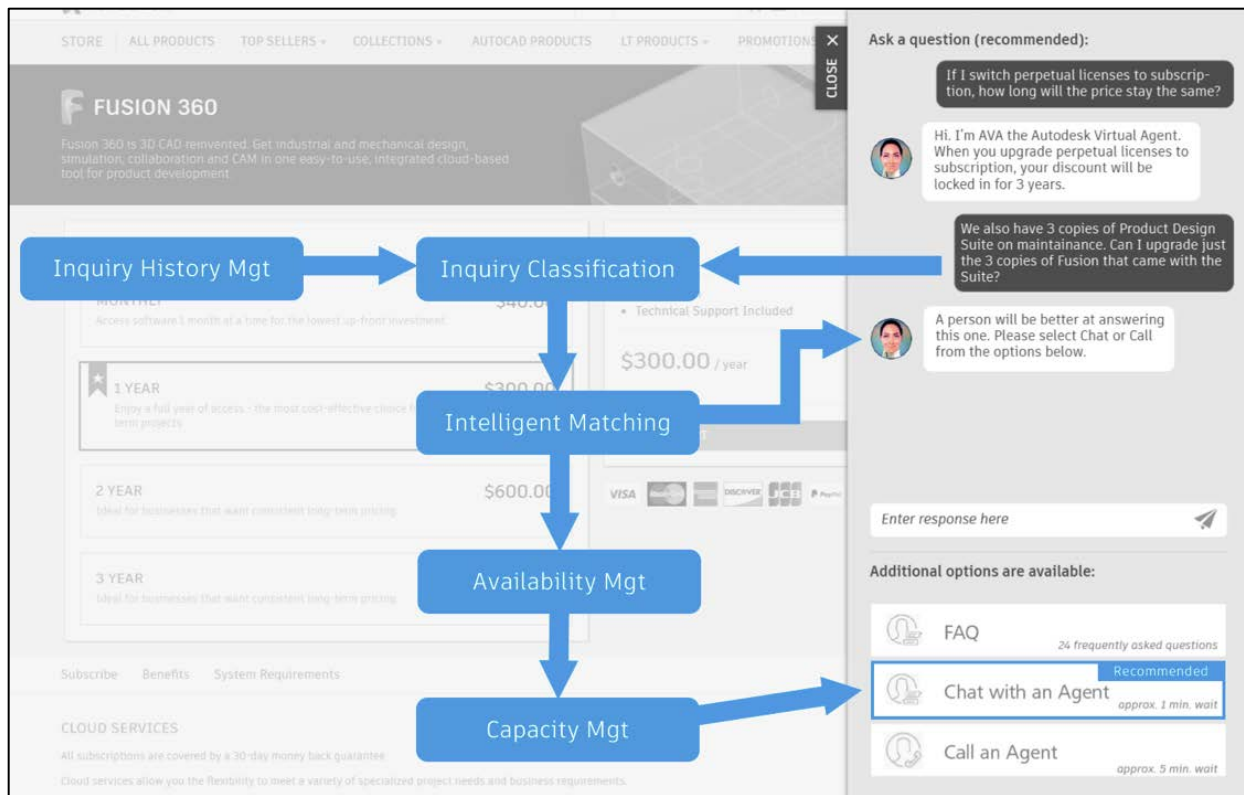
Figure 2. Wireframe

The wireframes are purely conceptual — they're not supposed to show final design. These wireframes simply visually describe the concepts Autodesk is attempting to articulate.

The use case in this wireframe is that a customer has landed on Autodesk's e-commerce page, selected a product, and has had a question before completing the purchase.

The scenario begins after the customer has had the in-context help "container" appear and has asked their question. As Autodesk builds the wireframe out, it describes the capabilities that are leveraged and how they interact with each other and the experience; Autodesk speaks to the roles they play in resolving the scenario and ties them back to the experience characteristics described earlier.

This particular wireframe provoked a healthy tension and discussion between experience design and business architecture. The experience design team argued that the best customer experience was provided by exposing and allowing customers to select their contact modality before asking them to describe their issue.

As a company, Autodesk has about 140 products and provides support in at least 10 different languages across an inconsistent set of contact modalities. The business architects argued that the best experience might be that Autodesk ask the customer for a description of their inquiry and, based upon the best available resource, provide the contact modality options.

Ultimately, it doesn't matter who is right or wrong in these discussions; rather it's more important that these types of conversations are occurring. This will ensure that the company is exploring all solutions so that it ends up with the most complete architecture, and the customers

and agents end up with the best experience. Provoking these discussions is one of the major values of business architecture.

Inquiry Management Schema

Figure 3 demonstrates a schematic way of looking at the inquiry management experience.
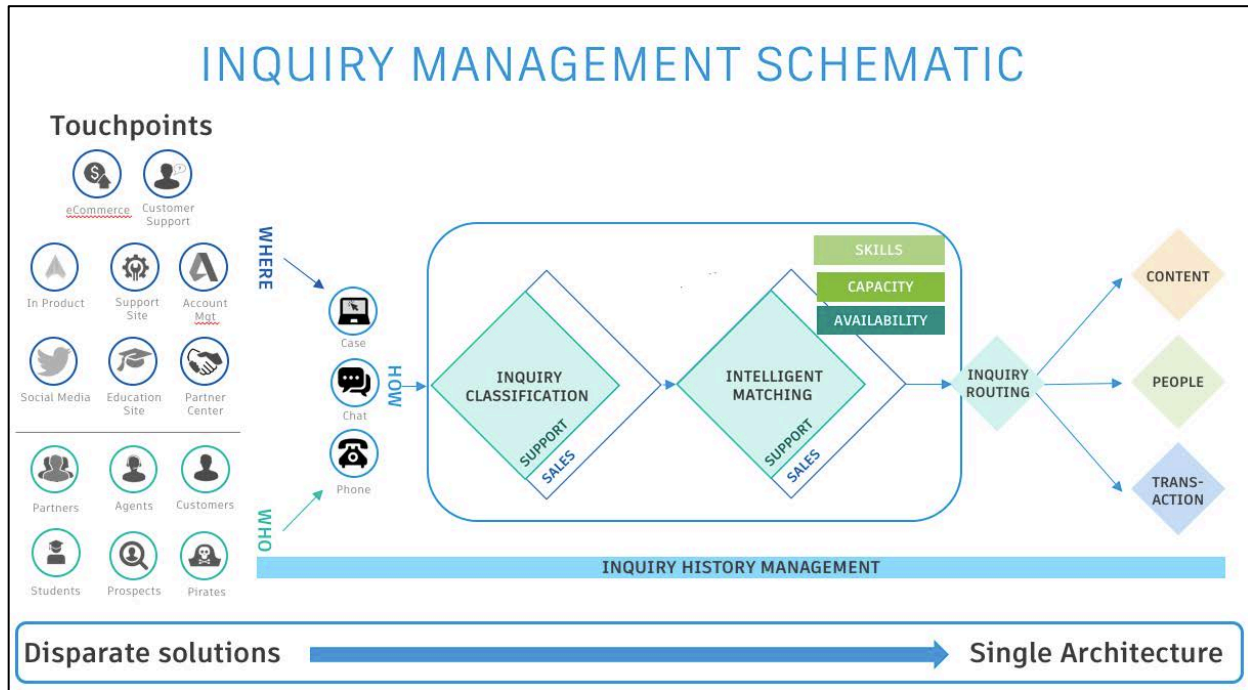

Figure 3. Inquiry Management Schematic

Autodesk is moving from having different solutions at each of the touchpoints above. It effectively has its own experiences, platforms, and systems — all independent from each other. What Autodesk is trying to do by creating this inquiry management architecture is bring them all together and have a common, consistent, reliable way to provide the customer with a way to get the best answer possible.

The types of things that Autodesk is trying to address are:

- inconsistent customer experiences at each of the touchpoints

- duplicated capabilities and systems; case, chat, and phone solutions, and

- unintegrated systems, which mean bad experiences (for example, inability to warm transfer phone calls).

When Autodesk started to analyze each of these different touchpoints, it realized very quickly that they leverage the same set of capabilities and that there was a lot of redundancy and duplication. Whether someone is taking sales calls, support questions, or billing inquiries, they are all leveraging the same capabilities.

Therefore, Autodesk started architecting for a common, consistent solution — inquiry management. The ramifications, however, of a common business architecture mean that the company needs to consider:

- a common data architecture — for example, currently there may well be eight different skills taxonomies, and Autodesk now needs a consistent way of gathering and representing people's skills across the organization and how it relates those skills to the kinds of questions the customer asks, so the company can identify who can best answer the question

- a common technical architecture — common (or at least compatible) voice, chat, and case platforms so that it can achieve that high-quality, seamless experience that Autodesk has designed for, and

- a common set of interface guidelines, a common customer experience across all the touchpoints, so whether someone is in product, on the e-commerce site, or on the support site they will encounter a familiar consistent experience in which to get and receive help.

Architectural Tenets and Principles

During the design of this experience, Autodesk created and used a set of tenets and principles that it effectively 'distilled' from its vision as a guide to keep people on track and to ensure that everyone was thinking along the same lines (see figure 4.). This became something that people involved in the project could reference to ensure that what they had designed or built adhered to the original intent of the vision. They describe the high-level characteristics that the experience should present when implemented.

CUSTOMER EXPERIENCE-BASED TENETS & PRINCIPLES

INQUIRY MANAGEMENT BLUEPRINT

Tenets
- Never ask a customer for anything that we know or should know
- Never ask a customer to repeat their reason for contact

Principles
- People help will always be available
- The customer will always choose the method to contact us

Figure 4. Tenets and Principles

Summary

Aligning business architecture and customer experience leads to a more complete business blueprint and to a well thought out customer experience.

Encouraging lively discussions between the business architects and design professionals helps to highlight other, perhaps unimagined, avenues to explore and will ultimately lead to optimal solutions and experiences.

The service blueprint collaborative working sessions were a great way to pull together alternate business perspectives, and more importantly the customer perspective, which, helped Autodesk identify gaps in experience, new technology, and capabilities.

Finally, visualizations help — they are great way to explain the way Autodesk's new or improved capabilities will act to improve or change a customer experience. Like the tenets and principles document, they also provide a guiding north star, something that people can reference in order to understand the intent of the vision.

Autodesk is still a long way from completing this experience, but the techniques employed thus far have enabled the company to architect an experience that an Amazon or an Apple customer would be proud of. All Autodesk needs to do now is build it!