An Exploration of Customer Involvement

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Presenter Guide

"Offing the Off-site Customer" is a simulation for a group of 5 or more people. It can be finished in an under an hour, including time for discussion. This simulation demonstrates the difference between having a customer onsite and working directly with a programming team and having the same customer offsite, working through intermediaries or written documents.

In addition to providing a pointed demonstration of the value of an on-site customer, this simulation is a lot of fun. It works well as a brown-bag lunch and makes a great icebreaker for a larger workshop.

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Required Materials

- one "Product Vision" handout for each team (included)
- one "Participant Guide" handout for each participant (included)
- lots of blank paper, minimum three pieces per team
- at least two pencils per team
- toys or other distractions for participant down-time
- an enclosed room with a door (things could get noisy)
- chairs and tables to write at
- whiteboard or flipchart for group discussion (optional)
- at least four participants
- one presenter
- at least one uninterrupted hour

Overview

"Offing the Off-site Customer" is a simulation in two parts. Participants form two- or three-person teams. Each team represents a start-up company striving to get a foothold in a market.

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For the first part of the simulation, each company team simulates creating a software product using a "traditional" approach to customer communication, such as written requirements. In the second part, each team simulates creating another software product, this time using an agile "on-site customer" approach. Afterwards, the presenter acts as the "marketplace" and compares each product, using objective guidelines, and chooses a winning team.

The game is not rigged in any way. The nature of the two approaches to communication is such that the "on-site customer" approach almost always beats the traditional approach.

Metaphors

The simulation revolves around simulated companies bringing products to market. We use the following metaphors.

<u>Reality</u>	<u>Metaphor</u>
Team with	A start-up company trying to bring a
"programmer,"	new product to market
"customer," and	
possibly "business	
analyst"	
Abstract diagram that	The customer's product vision of
only the customer is	what the market needs, based on his
allowed to look at	or her experience and market research
Hand-drawn copy of	The programmer's implementation of
the product vision	the product.

Straight-line figures in	The basic demands of the market.
the product vision	Without these, the product will be
diagram	rejected and the company will fail.
	One figure is very complicated:
	satisfying market needs isn't easy.
Curved-line figures in	A new, unique twist on the product
the product vision	requirements. With these, the
diagram	product will be a "killer app" and the
	company will dominate its market.
Presenter comparing	Releasing the products to market and
"products" to "product	seeing what happens.
vision"	

Scenarios

We have provided two scenarios: one for two-person teams and one for three-person teams. Each scenario consists of an "A" simulation, demonstrating a traditional requirements approach, and a "B" simulation, demonstrating an agile requirements approach.

Every company gets a product vision handout, several blank pieces of paper, and pencils before beginning each simulation. One of the blank pages is the "product implementation" and only the programmer is allowed to draw on it. Some simulations allow the customer and/or business analyst to write; in these cases, they are only allowed to write words, not draw pictures. In all cases, the team's goal is to "implement the product" by creating an exact copy of the product vision.

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After each simulation is complete, the team may reveal their secrets and compare notes, but no further modifications to the product are allowed.

Scenario 1: Classic requirements hand-off

Time required: 35-45 minutes plus intro, judging, and debrief

Company size: 1 customer, 1 programmer

Simulation A: Off-site customer

In this simulation, the requirements are generated ahead of time by the customer, handed off to the programmer, and then implemented. Each person will spend ten minutes waiting for the other person, so have something on hand for people to play with.

The customer has ten minutes to write down an exact description of his or her product vision on a blank piece of paper. This is the "requirements document." Only words are allowed; no pictures. The programmer is not allowed to participate or watch in any way.

After the customer's ten minutes are up, he or she hands the "requirements document" to the programmer, who has ten minutes to "implement the product" on a blank sheet of paper by following the instructions in the requirements document. The customer is not allowed to participate or watch in any way.

Simulation B: On-site customer

In this simulation, the customer and programmer collaborate closely to produce the product.

Start by having the programmer and customer sit together. The team has ten minutes to "implement the product" by producing an exact duplicate of the customer's product vision on a blank sheet of paper. Only the customer may look at the product vision and only the programmer may use a pencil. Any amount of verbal communication is allowed. The team may also point and use ad-hoc measuring tools such as paperclips or pipe cleaners, but don't suggest it.

Scenario 2: Business analyst as intermediary

Time required: 25-35 minutes plus intro, judging, and debrief Company size: 1 customer, 1 programmer, 1 business analyst

This scenario is more active than scenario 1 and doesn't involve any waiting. It's slightly more complicated and may not make its point as clearly as scenario 1.

Simulation A: Off-site customer

In this scenario, a business analyst acts as an intermediary between the customer and programmer.

Rules: Start by locating the programmer on one side of the room and the customer on the other. The further apart, the better. The business analyst will walk (or run) back and forth between the programmer and customer relaying information. The programmer and customer are required to remain on their side of the room and may not talk directly to each other.

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The whole team has ten minutes to "implement the product" by producing an exact duplicate of the customer's product vision on a blank sheet of paper. Only the customer may look at the product vision and only the programmer may draw on the "product." The business analyst may make personal notes but may not draw any pictures nor may those notes be shown to anyone else.

Simulation B: On-site customer

In this scenario, the customer, business analyst, and programmer collaborate closely to produce the product.

Rules: The rules for this simulation are the same as the rules for simulation 1B. The business analyst's role is to assist the customer in clearly explaining his or her vision.

Judging

After both simulations are complete, the presenter acts as the "marketplace" and judges the success or failure of each company. The presenter compares each product to its product vision using the rules below and announces how the company fared.

Each product vision consists of five elements: Three straightline elements and two curved-line elements. Each simulated company's success in the market depends on their ability to exactly copy these five elements. "Exactly copying" means that the element is in the same position, is the same size, and has the same orientation—as if it had been copied on a photocopier. When judging, be strict: the simulation doesn't make its point if success is easy.

Only the elements inside the box are required. There's no need to hand-copy the copyright notice or the vision number in the corner. It's okay to leave the box out, too. The lines aren't required to be the same thickness as in the product vision.

Failure

If a team doesn't exactly copy all three straight-line elements, their product was a failure and their company folds. (It doesn't matter if they got the curved-line elements right; the straight-line elements are a precondition for success.)

Survival

If a team exactly copies all three straight-line elements, their company has survived. They've successfully given the market what it wants, but they haven't innovated. One of the straight-line elements is very difficult to copy: giving the market what it wants isn't easy.

Dominance

If a team exactly copies the entire product vision (except the product number and copyright statement), their company dominates the market for several years. The curved-line elements represent new innovations. By copying all five elements exactly, the team gave the market exactly what it wanted and went on to produce several innovations that the market wanted but didn't know it wanted. One of the curved-

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line elements is easy and one is very difficult: both have to be perfect in order to achieve market dominance.

Sample Script (Scenario 1, ten participants)

Introduction

Welcome! Today we're going to simulate the difference between having a customer on-site, working directly with programmers, and having a customer off-site and communicating through a requirements document. This simulation is a lot of fun and I hope you enjoy it. It's been provided courtesy of James Shore of Titanium I.T. LLC. I found it on his website, http://www.jamesshore.com. There's a lot of other good material on his website and I encourage you to check it out afterwards.

Let's start by forming two-person teams. Pick one person to be the "programmer" and one to be the "customer." (*Presenter* waits while the ten participants form into five teams.)

Each of you represents a start-up company. Like any start-up company, you have big dreams. Fortunately, your customer is a marketing guru and your programmer is a technical genius. Your customer has come up with a product vision that is sure to dominate the market. All you have to do is implement it perfectly, and fame and fortune is yours.

Did I say "all you have to do?" It's never that simple. Here's what the product vision looks like. (*Presenter passes out participant handouts and then holds up sample product vision.*) It's crazy what the market wants, isn't it? And your customer

is the only person who really understands them. This handout represents your customer's vision for the market. It's all in his head, so in this simulation, you won't be allowed to look at your customer's vision. (Smiles.) Unless you know how to read minds.

In order to achieve market dominance, your company has to create an exact copy of your product vision on a fresh piece of paper—without the programmer ever seeing it. When I say "exact copy," I do mean exact, like a photocopier. The lines don't have to be exactly the same thickness, but everything else inside the box needs to be the same in terms of position, orientation, and size. You can leave out the number and you don't need to copy the copyright notice.

(Audience grumbles.) Hey, market dominance is hard! Fortunately, you don't have to be perfect. Take a closer look at the sample vision. It's made up of five elements: three straight-line elements and two curved-line elements. Every product vision has those five kinds of elements, although the shapes are all different.

If you successfully copy all five elements, perfectly, your product will be an enormous success. Your company will dominate the market and you'll retire millionaires. Congratulations!

If you don't make a perfect copy of everything but you do reproduce all three straight-line elements, your company will survive. Ramen and peanut butter are in your future, but at least you don't go out of business!

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If you don't perfectly reproduce all three straight-line elements, your product is a failure and your company folds. Sorry. 90% of all start-ups fail, you know.

Simulation A: Off-site customer

Okay, let's get started. We're going to do this twice. The first time, your company decides to create a formal requirements document. Customers, take a blank piece of paper and pencil. When I start the timer, you'll have ten minutes to describe how to reproduce your vision. You can only write words: no pictures, please.

Programmers, this is a classic requirements hand-off situation, so you won't be involved at all until your customer has finished his or her requirements. I've set up a table over here with some stuff to play with—please gather over here and talk quietly amongst yourselves until the customers' time is up.

(Programmers get up and move over to the table. Meanwhile, the presenter gives one vision handout to each customer.) Go ahead and take a moment to look at the vision but don't start writing yet. Okay, you have ten minutes. Ready... go!

(Ten minutes go by. The presenter announces a five minute warning, then two minutes, then 30 seconds, then 10 seconds.) Okay, that's time. Put your pencils down and cover your requirements documents.

Programmers, now you're going to take your customer's requirements document and implement the product.

Remember, it has to be an exact duplicate of his or her vision. Take a piece of paper and a pencil and trade places with your customer. Don't uncover the requirements yet. Customers, hold onto your product visions. We don't want any peeking!

(Customers go over to activity table while programmers sit in the customers' chairs.) When I say "go," you'll have ten minutes to review the requirements and implement the product. Ready... go!

(Another ten minutes go by, with the presenter giving the same countdown warnings.) That's time. Put your pencils down.

Okay, now is the moment of truth. The programmers have finished implementing the product. You've spent all of your seed money and all you can do now is hope the market blesses your product. But at least you can see how you did. Programmers and customers, you can compare your diagrams. No changes! When you're done, write your names and your product number in the corner along with an 'A' and hand everything in to me.

(The room fills with the buzz of conversation, punctuated by laughter and groans. As people hand in their papers, the presenter puts the vision handouts in one pile and creates five piles, one for each product number.)

Simulation B: On-site customer

We'll see how your products did in a little while. But first, a miracle occurs: you get more funding! You decide to

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implement a new product. This time, being wiser and more experienced, you're going to use a different approach to communicating requirements. Customers and programmers will sit together and work on the product together.

The rules are the same: customers are the only ones who can see the product vision and programmers are the only ones who can draw on the product. Customers, this time around you're not allowed to touch a pencil at all. But you can talk as much as you want and you can see what the programmers are doing. Programmers, you can ask as many questions as you want. There are no restrictions on how you communicate at all so long as programmers don't peek at the product vision and customers don't pick up a pencil.

Programmers, take a blank piece of paper and pencil. Customers, I'm going to hand out a new product vision. Let me know if I accidentally give you the same one you had last time. You can look at the vision but please don't let your programmer see it.

(Presenter passes out product vision handouts.) Okay, you have ten minutes to make an exact copy of the customer's vision. Ready... go!

(The room fills with animated conversation. It's clearly more involving and fun this time around. The presenter counts down as before.) That's time. Put your pencils down.

Well, you've created another product! Congratulations. It's time to release it to the market. Please write your names, the product number, and a 'B' in the corner and hand everything in.

(As people hand in their papers, the presenter puts the new product in the same piles as before and adds the product vision to the top. The presenter ends of with five product piles. Each pile has a product vision on top and an 'A' and 'B' implementation from two different companies.)

Judging and Discussion

It's time to see how your products did in the marketplace. We ended up with two implementations for each product. For each product, one implementation was done with an off-site customer and the other was done with an on-site customer. Let's see how they did.

(Presenter holds up product vision from first pile.) Here's what the market wanted for our first product. And (holds up implementation) here's an implementation from Bob and Karen. Okay, let's see. (Points at various picture elements.) The straight line is good, and so is this shape, but this complicated straight-line figure is missing a few lines. Sorry, Bob, Karen, your company folded. (Audience chuckles.) What approach did you use? (Karen answers: "off-site customer.") What went wrong? (Group engages in a discussion.)

Here's an implementation from Joe and Alex. This one was done with an on-site customer. (*Points at various picture elements.*) The straight line is good, so is this shape here, and

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this complicated straight-line figure looks perfect, too. Nice job! Your company survives! (Audience claps.) Now let's see if you dominate the market. This circle is good and this... shape... hmm. No, not quite right. It's a little too large and bulbous on the right side. Sorry, you don't become millionaires, but you do survive and next year you might just make it. Joe, Alex, how come you survived when Bob and Karen didn't? (Group engages in a discussion.)

Okay, here's our second product. (Presenter demonstrates results for remaining four products, stopping occasionally for discussion. Afterwards, the presenter leads the group in a discussion of how requirements are done "here" and leads the group in comparing that to the activities performed in the simulation. A lively discussion ensues about how customers could be more involved in the process. Finally, the presenter brings the meeting to a close.)

That's our time. Thanks for attending today; I hope you had fun. There have been some good points made today about how we can involve customers more. Let's follow up on that. Bob, you seemed particularly passionate about this. Do you want to follow up on the ideas that came up today? (Bob agrees.) Thanks again, everybody! Good afternoon. (Applause; exit.)