# The Psychology of Waiting:
## The Business Impact of Diminishing Consumer Patience

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# EXECUTIVE SUMMARY

**People don't just buy products or services, they buy experiences. Everything bought and sold in today's digital world of instant access and same-day delivery requires an increasing amount of speed, relevancy and timeliness to cut through the noise of options and gain consumer loyalty. In essence, real-time is now critical for successful customer experiences.**

Real-time requires data — lots of it — to assess and deliver the optimal experience that will encourage an individual to make a purchase or come back to a brand. We know that delivering real-time services and experiences is complicated on the business side, but how significant is it in the eyes of consumers?

This independent study, conducted by research firm Vanson Bourne and sponsored by VoltDB, assesses the business impact of real-time experiences. The data dives into the amount of time consumers are willing to wait for certain actions that are dependent on accurate and consistent real-time analysis. The survey also looked at our psychological need for immediacy across generations and specific services like gaming, financial services, digital advertising and telecommunications, as well as how we react when tasks take longer than we anticipate.
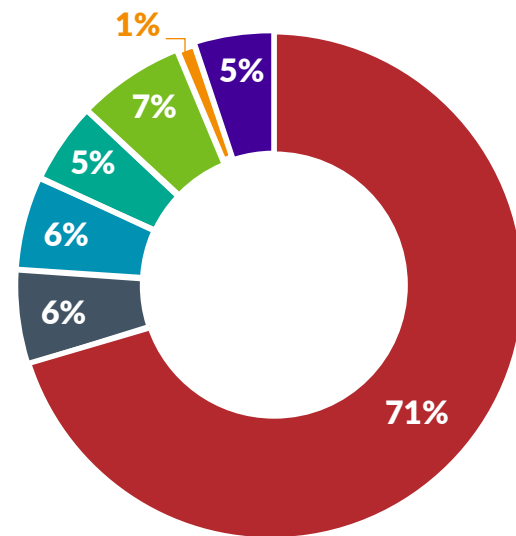
The findings were clear. Immediacy, accuracy and relevancy are crucial and already expected in the eyes of consumers, and the results of not delivering on that expectation will cost brands their customer base.

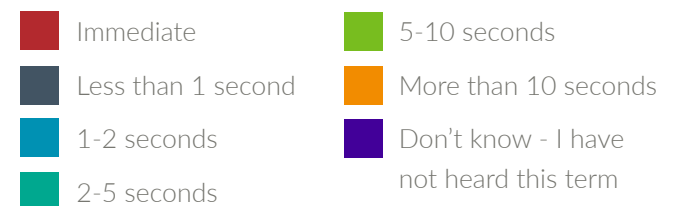**VOLT**DB

# DEFINING "REAL-TIME"

**Real-time: "The actual time during which an event or process occurs;" "relating to a system in which input data is processed within milliseconds so that it is available virtually immediately as feedback"**

The goal of any real-time related function is to provide end users with the most current and accurate information possible. CFOs need current financial transaction data to plan an accurate forecast. A mom searching on Amazon must be presented with a real-time offer for her infant's hypoallergenic cream while she is completing her diapers order in order to secure the cross sale. A gamer moving through levels of Candy Crush doesn't care about a cheat code offer if it's delivered after he passes that level. The examples where real-time matters are limitless. And for brands seeking to gain customers and inspire loyalty, experiences based on real-time data are crucial.

Different companies have varying views of what 'real-time' actually means when it comes to processing information and user experience. The window of 'real-time acceptable' is often dependent on several different technologies and systems, all collectively working to execute various actions and analyze data. Consumers, however, are pretty clear on the idea that 'real-time' means immediately.



**What Does Real-Time Mean?**

- Immediate
- Less than 1 second
- 1-2 seconds
- 2-5 seconds
- 5-10 seconds
- More than 10 seconds
- Don't know - I have not heard this term

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# Real-Time and Relevancy: AdTech's Greatest Threat

Real-time is of particular importance to the advertising technology (AdTech) industry, as many of the publishers, advertisers and technology services involved rely on immediate processing of information to deliver relevant digital ads or offers within milliseconds of a user hitting a website. Digital advertising is a more than $7 billion industry and effective real-time execution of relevant ads is crucial to its consumer success and billing model.

70 percent of survey respondents note that they receive at least one real-time offer per day, with five offers being the average received per day. Shockingly, however, is that only one in four (28 percent) consumers viewed real-time offers as relevant to their current needs — and only 2 percent report that all the offers they receive are relevant. Making matters worse is that 63 percent of those interviewed said that non-personalized offers are annoying, potentially harming a company's brand reputation and wasting their money.
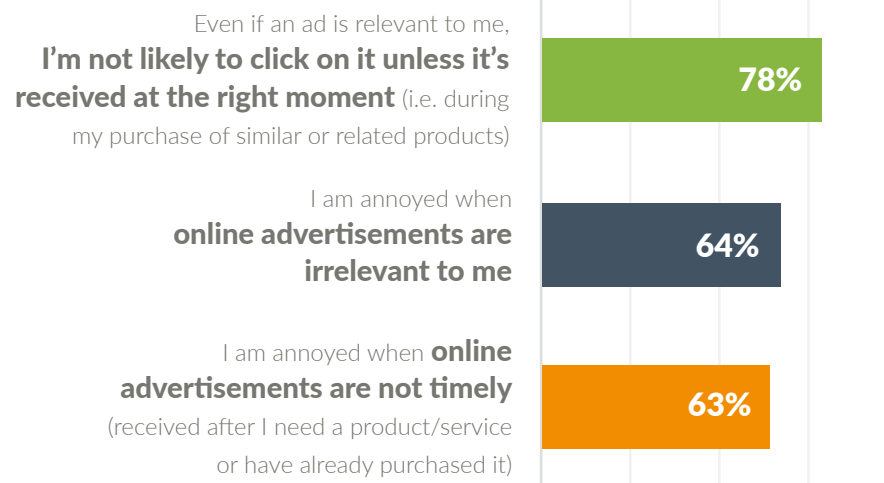
With all of the current customer information available, this disconnect on delivering relevant, useful digital offers indicates a potentially massive waste of ad dollars and alienation of consumers who become frustrated with irrelevant ads. Companies need to invest in technologies that can effectively deliver personalized, relevant content and offers to consumers — or risk losing revenue. There is good news though — when done right, relevant real-time offers work. More than half (56 percent) have taken advantage of real-time offers, and 75 percent have selected in-game offers.

**70% receive at least one real-time offer per day**

However, only 28% of those offers were relevant

## Relevancy and Consumer Annoyance

Even if an ad is relevant to me, **I'm not likely to click on it unless it's received at the right moment** (i.e. during my purchase of similar or related products) — **78%**

I am annoyed when **online advertisements are irrelevant to me** — **64%**

I am annoyed when **online advertisements are not timely** (received after I need a product/service or have already purchased it) — **63%**

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# THE NEED FOR SPEED

**Saying 'speed is everything' wouldn't be far from the truth when it comes to consumer expectations and behavior.**

More than half of study respondents (52 percent) agreed that waiting — even for a few seconds — for something that they expected instantaneously annoys them and 83 percent said that speed is one of the most important aspects of a positive customer/user experience.

Real-time issues can often be caused by technical challenges. Most database platforms perform either transactions (such as when you purchase a product) or analytics (analysis of existing customer data that dictates what "personalized" offers you receive). The problem lies in the latency that occurs when data moves from a transactional database to an analytics database, killing real-time opportunities on the spot. An emerging technology known as translytical data platforms combines transactions and analytics under one system, accelerating the analytics and action on data the moment it matters.

The annoyance many experience if made to wait can turn into lost revenue for brands. **Around two thirds (63 percent) of respondents noted that waiting would negatively impact their relationship with a brand, including moving to a different brand or service.**

# 83%

**said that speed is one of the most important aspects of a positive customer/user experience**
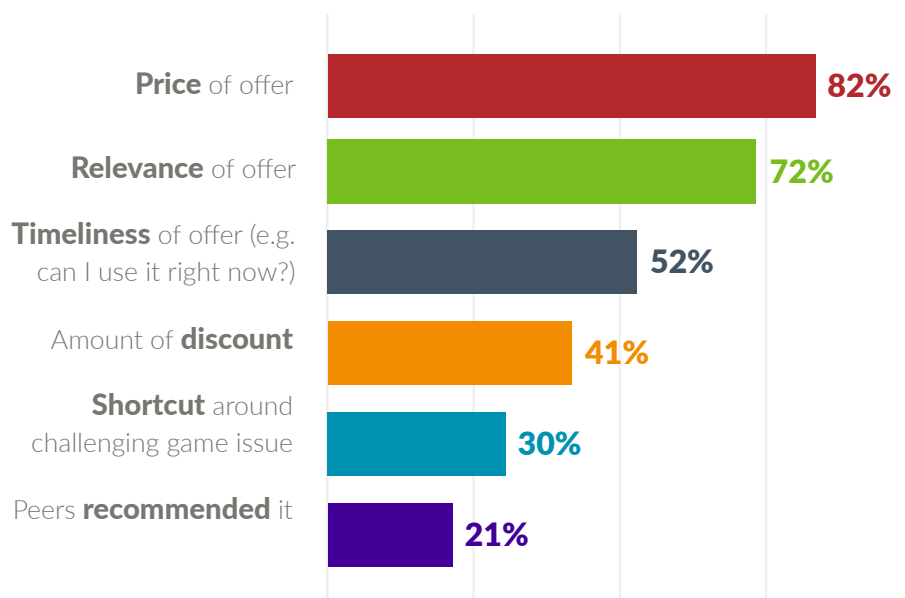
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## Gaming

Online gaming is a multi-billion dollar industry and growing. More than 60 percent of survey respondents said they have played an online game or mobile game within the past month. The success of gaming depends heavily on user engagement and satisfaction, and the study showed that speed is a significantly important element in retaining players. On average, players using a mobile gaming app or online game would tolerate a new game lagging only three times before abandoning it.

# 3x

**respondents will allow a new game to lag before abandoning it**

### In-game Offer Motivators

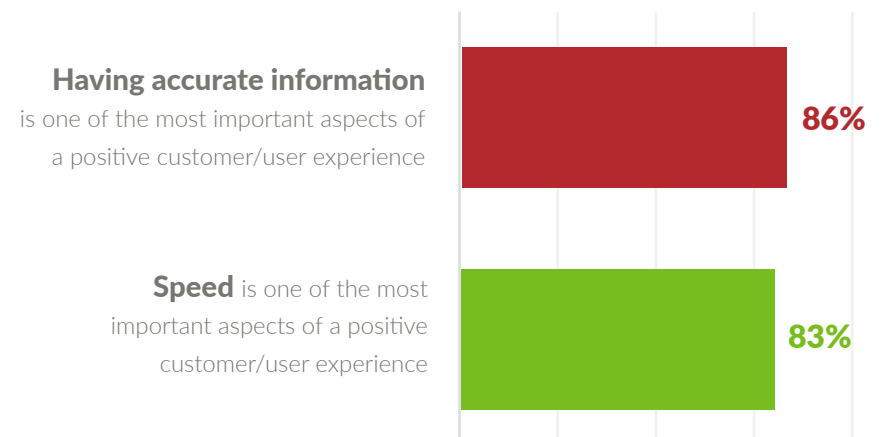| Motivator | Percentage |
|---|---|
| **Price** of offer | 82% |
| **Relevance** of offer | 72% |
| **Timeliness** of offer (e.g. can I use it right now?) | 52% |
| Amount of **discount** | 41% |
| **Shortcut** around challenging game issue | 30% |
| Peers **recommended** it | 21% |

Gaming revenues are also hugely dependent on in-game offers. 84 percent of gaming respondents said they have received in-game offers, but only 29 percent reported that those offers were timely and relevant to their current experience. When digging into the motivators of choosing an offer, the top factors are price, relevance and timeliness. Game developers and advertisers need to ensure that the offers presented reflect accurate and timely moments in the user's gaming experience — or risk leaving money on the table or worse, annoying their gamers.

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# SPEED + ACCURACY

**While the data shows that speed is critical in the eyes of consumers, accuracy is equally important.** Nearly 9 in 10 respondents agreed that information accuracy is one of the most important elements of a good customer experience. Ultimately, consumers want both speed and accuracy, presenting a challenge to businesses. While speed of information processing can be achieved through a number of different ways, most of today's systems have to sacrifice accuracy levels to achieve real-time delivery, unable to scale both together.

The ability to capture, process and act on data in real-time is critical to providing both speed and accuracy as part of a successful customer experience. If organizations fail this challenge, the risk of alienating customers by failing to deliver on both is high.
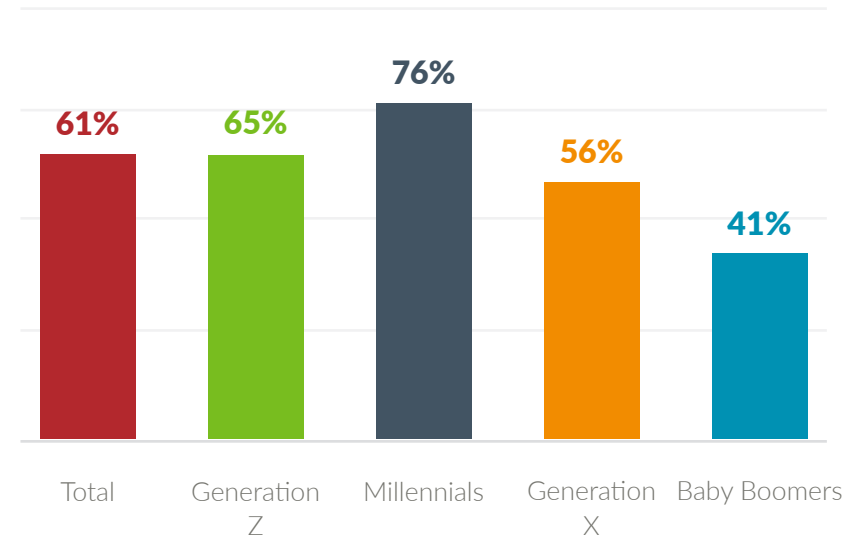
### Consumer's Take on Speed & Accuracy

**Having accurate information** is one of the most important aspects of a positive customer/user experience **86%**

**Speed** is one of the most important aspects of a positive customer/user experience **83%**

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## Financial Services: Urgency is Key

84 percent of respondents expected to see financial transactions appear in their mobile banking app within two hours or less. What matters most, however, is how financial institutions treat fraud detection. Just over six in ten (64 percent) respondents who have used an online banking/financial service app or website feel that their financial institution should notify them immediately if there is a suspicious transaction on their account. This reveals that fraud should be considered as a matter of urgency. If organizations do not act immediately, it could seriously impact the loyalty of their customers **— 61 percent of consumers said they would leave an institution for not catching a fraudulent charge on their account before they reported it.**

**Generational Breakdown of Those Who Would Leave a Financial Institution for Not Catching a Fraudulent Charge**

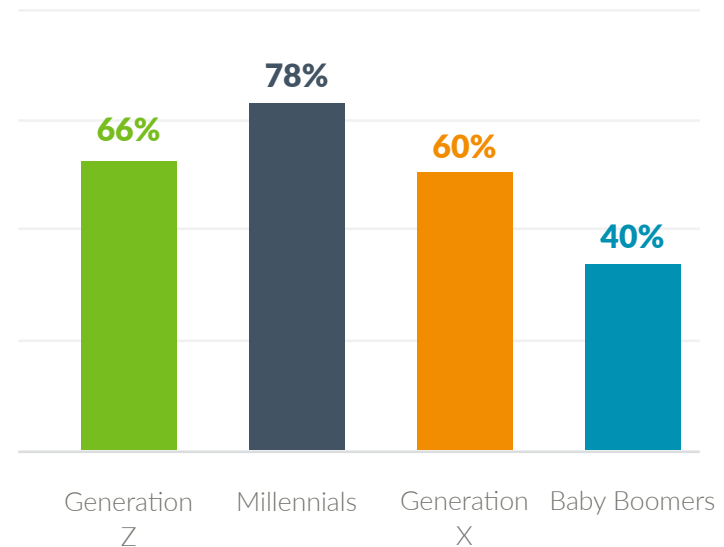| Total | Generation Z | Millennials | Generation X | Baby Boomers |
|-------|--------------|-------------|--------------|--------------|
| 61% | 65% | 76% | 56% | 41% |

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# A GENERATIONAL DIVIDE

**While a general feeling of annoyance exists around waiting for digital experiences/services, the study uncovered some interesting divides among the generations — specifically millennials vs. baby boomers — when it came to their levels of patience and response to waiting.**

Millennials may have more patience than older generations when it comes to waiting for real-time data, but are quicker to abandon brands that don't meet their expectations. 78 percent of millennials said that waiting for something that they expect to happen instantaneously impacts their relationship with the brand responsible, compared to only 40 percent of baby boomers who felt the same. However, when it came to certain service areas, baby boomers became much less patient and unforgiving regarding real-time experiences.

- When it comes to finances and banking, 67 percent of millennials believe banks should catch fraud as soon as it occurs and immediately notify the consumer, compared to 88 percent of baby boomers who felt the same. 100 percent of baby boomers expect to see transactions in their account within two hours, compared to 82 percent of millennials.

- Regarding their phone usage, 68 percent of millennials say inaccuracies in real-time usage or network delays could lead them to change their network provider, compared to 21 percent of baby boomers.
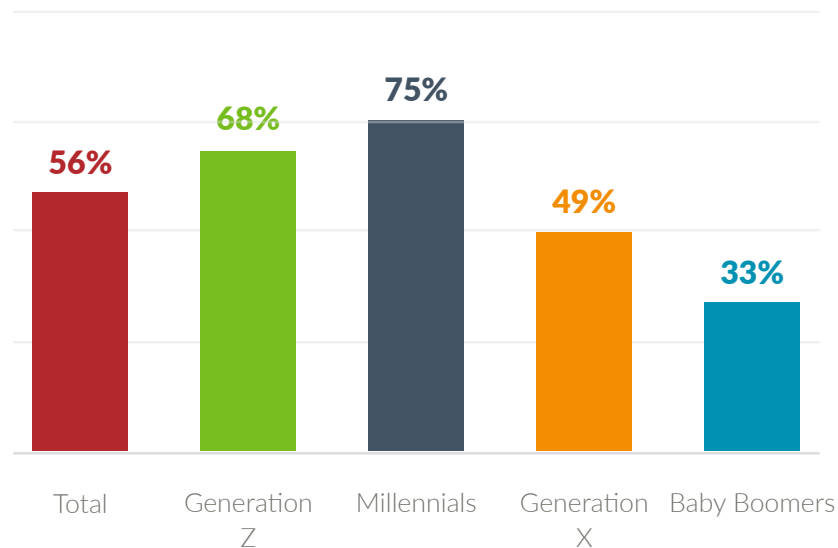
## Negative Impact of Waiting by Generation

| Generation Z | Millennials | Generation X | Baby Boomers |
|:---:|:---:|:---:|:---:|
| 66% | 78% | 60% | 40% |

*Analysis of respondents who say waiting negatively impacts their relationship with a brand or service, split by generation

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## Real-time offers

When it comes to effective real-time digital offers, brands have the greatest chance of success targeting millennials. **75 percent of millennial respondents have taken advantage of a real-time offer from a retailer, service provider or online game provider,** where only 49 percent and 33 percent of Gen X and Baby Boomers have, respectively.

**Which Generations Take Advantage of Real-Time Offers The Most?**

| Total | Generation Z | Millennials | Generation X | Baby Boomers |
|-------|--------------|-------------|--------------|--------------|
| 56% | 68% | 75% | 49% | 33% |

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# RAGE: THE EMOTION OF WAITING

One of the most significant findings of the study focused on consumers' emotional responses to waiting — and it's eye opening. While one would assume a generalized displeasure around waiting for services or experiences, the reaction is actually much greater — consumers are quicker to annoyance and rage — and much more willing to abandon a service or think poorly of a brand that can't deliver speed, accuracy and relevancy.

'Lag Rage' is the leading cause of consumer dissatisfaction, particularly with cell phone use. Ever had that moment when you make a call, raise the phone to your ear and ... nothing? You check your phone to make sure it's dialing, waiting those extra seconds for the connection. **On average, respondents said it takes about two seconds for calls to go through/start ringing, but those seconds of waiting result in 'delayed dial rage' — an experience felt by 78 percent of respondents who make at least five calls per week.** Interestingly, 90 percent of millennials surveyed noted experiencing this rage. As the largest generation with the most spending power, this lag could be costing telecommunications companies their consumer base — not to mention the potential brand harm that it can cause to both providers and smartphone manufacturers.

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**Two seconds of waiting is all it takes to illicit a rage response in someone trying to make a call.**

Gamers will abandon a game after only three lags, and consumers are quickly annoyed with any digital ad that isn't personalized and timely. The real reputational damage and lost revenue to brands that do not deliver real-time and/or relevant experiences is significant, but there is also ample opportunity to get it right. 82 percent of respondents notice personalized ads, 75 percent of millennial consumers take advantage of real-time offers and 73 percent of gamers want in-game offers. The stage is set for businesses to succeed with real-time experiences, but they need to embrace technologies to deliver with timeliness and relevancy, and they need to align themselves with the consumer expectation of urgency: 'real-time' = immediately.

00:02

**On average it takes 2 seconds for a call to go through**

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# CONCLUSION

Companies cannot underestimate the importance of the digital experience. Consumers today are constantly engaging with brands online and via mobile, placing a high value on data speed and accuracy. And whether it's fair or not, they expect companies to provide them with the most up-to-date information immediately upon request and with complete accuracy. As the survey indicates, failing to meet these expectations can have a serious and tangible impact on brand loyalty.

Consumers are impatient and — as we know — are not likely to offer many second chances before giving up and turning to a competitor. The ability to offer immediate, accurate and relevant data to customers on a consistent basis will make or break a positive user experience. It is therefore critical that companies work quickly to implement real-time capabilities to survive in today's digital world.

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# METHODOLOGY

2,000 adult consumers in the United States were interviewed in July and August, 2017. Respondents were 50 percent male and 50 percent female and split into the following demographics:



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