



# Contingency Design

## Maximizing Online Profitability By Helping Customers When Things Go Wrong

### What you'll learn by reading this document

**What** contingency design is and how to evaluate your site's contingency design.

**Why** contingency design is important to any online business.

**How** your online business can use contingency design to increase customer conversion rates and loyalty.

Contingency design must be a top priority for any site interested in providing successful customer experiences. Web sites that invest in contingency design will increase customer loyalty and significantly improve the rate at which site visitors purchase, subscribe and register.

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# Defining Contingency Design

## Why you should care about contingency design

### Failed purchases...

Poor contingency design results in failed purchase attempts (a recent study revealed that more than one in four online purchase attempts fails, see the text at right for more).

### result in frustrated non-customers...

41 percent of customers who experienced failed purchase attempts stopped shopping at the sites where the problems occurred.<sup>3</sup>

### who don't come back...

While over 90 percent of satisfied online consumers report that they are likely to visit a site again, only 9 percent of unsatisfied shoppers will do so.<sup>5</sup>

### which means lost revenues and increased costs.

In addition to lost revenues, customers lost to poor contingency design will increase a company's overall customer acquisition costs. Lost revenues and increased costs are a surefire formula for failure.

## What is Contingency Design?

Contingency design is design for when things go wrong. It's the error messaging, graphic design, instructive text, information architecture, backend system, and customer service that helps visitors get back on track after a problem occurs.

It's impossible to be perfect, so make mistakes well. That is the essence of contingency design. No matter how much testing and quality assurance has gone into a web site, customers will encounter problems.

"This isn't what I searched for." "Did my order go through?" "How do I get out of here?" "Where is the page I clicked on?"

These are problems that anyone who has spent time online has experienced, but web sites consistently fail their customers at these crisis points.

In fact, a study conducted by The Boston Consulting Group in 2000 revealed that 28 percent of all online purchase attempts failed,<sup>1</sup> and four out of five consumers who made purchases online experienced at least one failed purchase attempt.<sup>2</sup>

The same study found that a whopping 41 percent of consumers who suffered a failed purchase attempt online stopped purchasing at the site in question.<sup>3</sup>

What caused these failures? Five of the top 10 problems cited by customers were common contingency design problems.<sup>4</sup>

These numbers illuminate the fact that contingency design is serious business. Lost customers means lost revenues and higher customer acquisition costs. This, in turn, leads to lower margins and a longer road to profitability — something that few online businesses can afford in the current economic climate.



# Defining Contingency Design

## The benefits of contingency design

Effective contingency design can benefit an online business in all of the following areas:

- Improved Usability
- Improved Conversion Rates (see examples at right)
- Increased Revenues\*
- Increased Brand Loyalty

Best of all, sites can realize these benefits from their existing traffic without having to spend more to acquire new visitors.

Given this information, can you afford not to examine your site's contingency design?

\*Satisfied online customers spend 57 percent more than those who are dissatisfied.<sup>11</sup>

## How Can Contingency Design Help Your Business?

Quick fixes to a site's contingency design require minimal investment yet can yield significant real-world results.

Following are two real-world examples that illustrate just how effective good contingency design can be. Note that neither of these contingency design upgrades required a major site overhaul.

### LandsEnd.com

LandsEnd.com leveraged smart contingency design to reduce abandoned shopping carts and increase sales. A site review revealed that planning for the contingency of out of stock items would increase sales and reduce bail outs. Now the site presents an inventory alert feature that tells shoppers when the item will be available, offers to send e-mail notification when the item arrives, and shows shoppers similar items that are available immediately.<sup>6</sup> **The conversion rate at LandsEnd.com is 11%, one of the highest among online apparel retailers.**<sup>7</sup> The site creators say that this sort of dedication to the customer is a major reason why.<sup>8</sup>

### Macys.com

**Macys.com more than doubled the rate at which it converts site visitors into buyers by effectively planning for the contingency of inaccurate search queries.**<sup>9</sup> The site implemented a new search engine technology that finds the correct product even when a shopper types in a keyword that is not an exact match. Even if you mistakenly enter "Calbin Klein" the site successfully returns results for "Calvin Klein." Macys.com executives said that planning for this contingency gets "most of the credit" for the big boost in the site's conversion rate.<sup>10</sup>



# Contingency Design in the Wild

## Two Examples of the Bad

Here are two examples of bad contingency design from Design Not Found, the web's leading resource for contingency design. For more contingency design examples go to <http://www.DesignNotFound.com>.

**Search results found for "mop"**

FIND YOUR ITEM IN THESE CATEGORIES...

1. Target Home : Toys : Toys that Teach : [VTech](#)
2. Target Home : Electronics : Audio : [Personal Audio](#)
3. Target Home : Electronics : Audio : [Boomboxes](#)
4. Target Home : Sports + Luggage : Camping : [Camping Accessor](#)

**VIEW ALL CATEGORIES**

PRODUCT RESULTS

Here's a look at the actual search results for "mop" from Target.com

**ADD A NEW ADDRESS**

Please complete all fields on the form before continuing.

- Address Exceeds Maximum Allowable Length

First Name:	JASON
Last Name:	FRIED
Address Line 1:	37SIGNALS
Address Line 2:	314 WEST INSTITUTE F
City:	CHICAGO

Okay, but could you tell me what the maximum length is?

### Target.com

A search for "mop" at Target.com returns results for toys and MP3 players, among other things, but nothing bearing any resemblance to a mop. Could it be that Target, that bastion of all things retail, no longer sells the dull, but still utterly necessary, mop?

**Why is this bad? It's as if I go to Target and ask customer service where the mops are and they send me to the electronics section. This problem is particularly bad for Target because it creates the impression that no Target stores, neither online nor offline, carry mops.**

### CDNOW.com

CDNOW asks shoppers for a shipping address at checkout, but neglects to mention how long it can be. After submitting the form the site returns an error stating that "Address Exceeds Maximum Allowable Length." Not only is this very unfriendly, it doesn't disclose the maximum field length so the customer is almost certain to make the same mistake again.

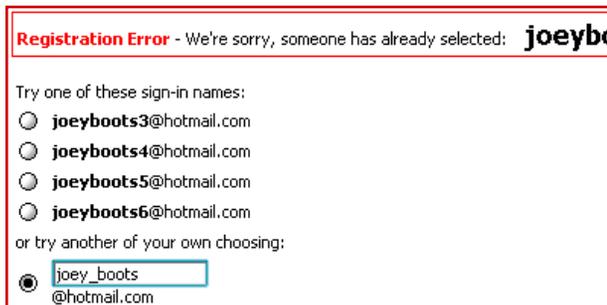
**Why is this bad? It's as if I'm driving along and get pulled over for speeding even though no speed limit sign is posted. Each time I ask the officer what the speed limit is, he just repeats – like a broken record – "Sir, you were speeding, I'm going to have to give you a ticket." Then, after I pull away, he stops me again and I get another ticket.**



# Contingency Design in the Wild

## Two Examples of the Good

Here are two examples of good contingency design from Design Not Found, the web's leading resource for contingency design. For more contingency design examples go to <http://www.DesignNotFound.com>.



In this example from Hotmail.com, the requested sign-in name of "joeyboots" was already taken so the site suggested several alternatives.



Note that even though the URL typed into the address bar contains only two Ws, the visitor is still properly directed to Amazon.com.

### Hotmail.com

Hotmail.com prevents fruitless attempts to pick a sign-in name by presenting available alternatives that closely match the registrant's original choice.

**Why is this good? It's as if I'm at a fast food restaurant's drive-through window and order a fried chicken sandwich. The salesperson informs me that they're all out of fried chicken, but, instead of making me guess, quickly notes that grilled and barbecue chicken sandwiches are still available.**

### Amazon.com

Amazon.com realizes that it's very easy to type too few or too many Ws in a web address and so the company accounts for this very common mistake. Doing so makes it far less likely that potential visitors will see the dreaded "Page Not Found" error.

**Why is this good? It's as if I send a letter to a friend, but forget to include the zip code. Despite this mistake, the post office recognizes the address and delivers the letter to the proper recipient.**



# What You Can Do Today

## Rate your site's contingency design

To get a sense of how your site rates in terms of contingency design you can use the 20 rules listed in this section. Here's how to rate your site:

- Walk through your site and give it a score of one for each rule that is followed and zero for each that is not. Skip any rules that don't apply to your site (for example, your site may not have a search feature)
- Next, divide your score by the total number of rules that did apply to your site – this is your rating.

**A rating above 80%:** You're treating your customers well, but should still consider making a few refinements around your specific problem areas (see page 3 for examples).

**Between 40% and 80%:** You need to take a serious look at your site's contingency design. It's likely that you are spending too much to acquire customers and leaving most of them less than fully satisfied.

**Below 40%:** Your site may be doing more harm to your brand than good. You should reassess your online strategy and redesign your web site around the needs of your customers.

## Contingency Design Rules You Can Use

Here are the 20 most important rules for providing successful contingency design. Applying these rules can dramatically improve a site's performance.

### 1. Use language your customers understand

You must speak in terms that visitors can comprehend. Stay away from obscure codes, abbreviations, technical jargon, or internal marketing terms unfamiliar to your customers. Use plain English that's easy to understand.

### 2. Be polite

Remember that people are upset when things are going wrong. Be courteous with your customers and admit your mistakes. Treating them with respect at this critical juncture can make or break your future relationship with them.

### 3. Offer an escape route

Give customers a clear way to continue using your site. Can they fix the error right from this page? Will the back button let them correct their error? Are links offered so they can

backtrack? If a page isn't found do you offer a search box to help customers find what they are looking for? Concisely and directly instruct customers on how to get back on track.

### 4. Offer customized "Page Not Found" error pages

Explain that the requested URL could not be found and offer tips to help customers find the right page. If possible, also offer a search box to help customers locate the desired information.

### 5. Make sure the browser's "Back" button works

Many sites employ code that causes the web browser's back button to cease functioning properly. This disarming tactic traps visitors and practically begs them to give up.

*continued...*



# What You Can Do Today

## Contingency Design Rules You Can Use

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### 6. Reduce the need for constant back-and-forth between different pages to fix errors

Whenever possible, collect form errors and display them on a page that allows your customers to fix them **without backtracking**. If a form error occurs, redisplay the same form with the errors clearly highlighted. Alternatively, accept the valid information entered and show customers a page where only the problem field is displayed.

### 7. Use highly visible color, icons, and directions to highlight the problem

Web pages are a confusing jumble to most customers. If there's a problem spot (e.g. the phone number has too many digits), clearly identify it so it's easy for the customer to find. Red text, an error icon, and explanatory text should all be used.

### 8. Don't make customers guess

Explicitly tell them how to prevent repeating an error. If a message is rejected because it is

too long, make sure you tell visitors what the maximum number of characters is. If the username "janewilson" is taken, inform customers that "janewilson5" is available. The less your customers have to guess, the happier they'll be.

### 9. Briefly and clearly explain what's happening

Customers want to quickly know what went wrong and how to fix it. Don't make them read an essay when they're at a crisis point. Be brief.

### 10. Don't block content with ads

Sites shouldn't block critical content with ads or promotional offerings. This is even more true for error messages and other crisis points. Ad revenues may be important but sites will lose money if they come at the expense of driving customers away for good.

### 11. Use smart search technology that understands common mistakes

Search engines should be able to understand common errors and provide customers with relevant results. Accept common typos, spelling errors, or similar search terms. For example, Macy's search engine understands that "Calbin Klein" is a typo and returns results for "Calvin Klein."

### 12. Don't offer too many or inaccurate search results

Customers won't search through thousands of results so only offer the most relevant results or offer tips on how customers can narrow their search. Also, make sure you don't return an avalanche of irrelevant search results (e.g. a search for "mops" shouldn't return a list of electronic appliances).

*continued...*



## What You Can Do Today

### Contingency Design Rules You Can Use

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**13. Help log-in with tips or by emailing information**

Customers usually have dozens of passwords and user names to remember. Help them by offering a hint or email service that will remind them how they registered at your site.

**14. Offer contextual FAQs**

Save customers time by offering answers to common questions on the same pages that generate those questions.

**15. Answer e-mails quickly and effectively**

Your customers took the time to write. Let them know you received their email and make sure you get an answer back to them ASAP (preferably within 24 hours). 57 percent of customers say the speed of a retailer's response to an e-mail enquiry would affect their decision to make future purchases from them.<sup>12</sup>

**16. Don't force registration in order to assist customers**

When customers encounter a crisis point they need help. This is not the time to give them a form to fill out.

**17. Solicit feedback on contingency design**

Give customers a way to get in touch and report erroneous errors or other contingency design problems. Allowing an alternate path of resolution (e.g. email support) can help convert a visitor who would otherwise abandon the site. Plus, it provides you with valuable information on how to improve your site.

**18. Provide a fallback plan**

Provide links to either email, telephone or other support options. It's important to make this information easy to find. When a potential customer is attempting to get help is not

the time that you want him hunting around your site for contact information.

**19. Learn From Mistakes**

Examine failure scenarios to understand what went wrong and why.

...and the golden rule of contingency design:

**20. Plan for failure**

Things will go wrong. Make sure your site handles failure scenarios properly.



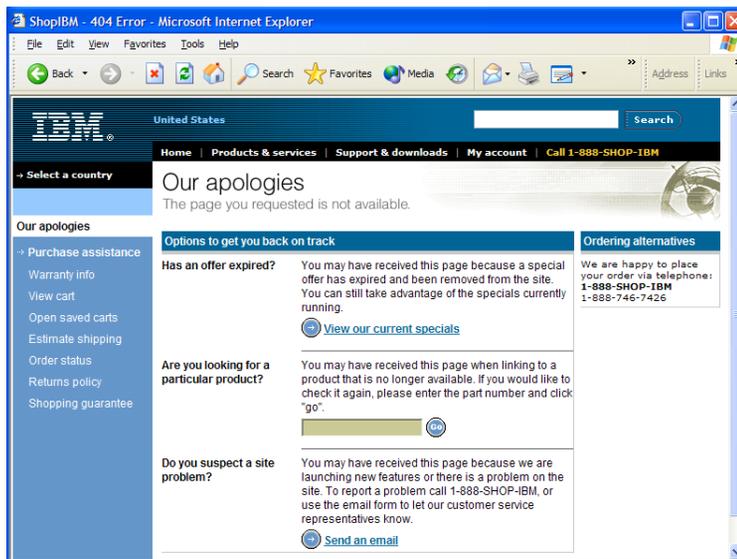
## What You Can Do Today

### See the Contingency Design Rules in Action

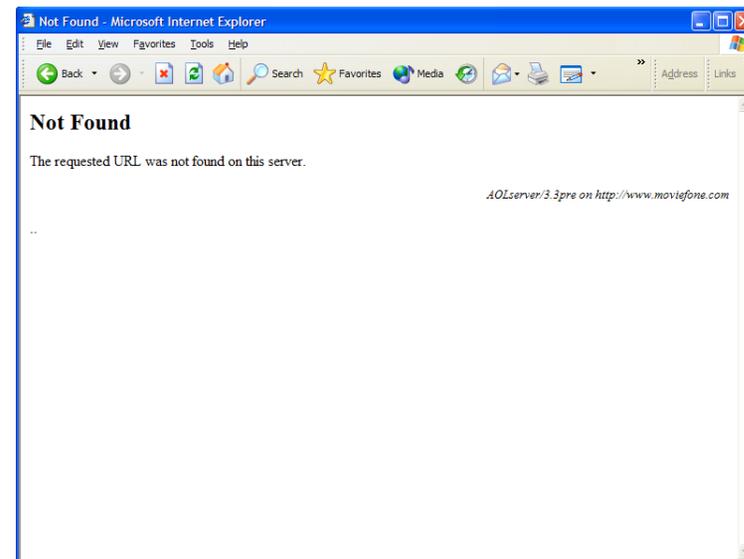
Let's follow John Doe as he goes about his business on the web and makes three common mistakes. Which of the two example sites addresses the contingency design issue most effectively?

#### Common Mistake 1: Mistyped URL

John enters a URL for a page that no longer exists on the site.



**A** **IBM.com:** John is presented with an apology and is provided two options for finding the page that he's looking for. He's also provided with a phone number and an email link to notify IBM.com of the problem.



**B** **Moviefone.com (a service of AOL):** John is presented with a generic "Not Found" screen.

*continued...*



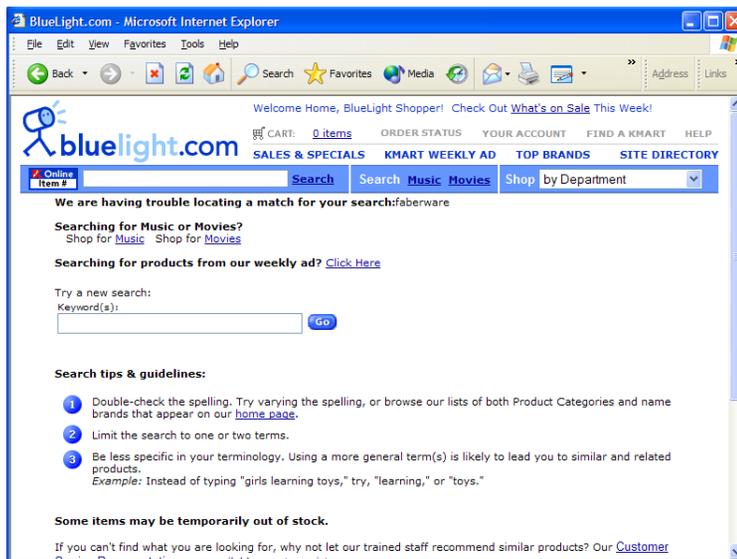
# What You Can Do Today

## See the Contingency Design Rules in Action

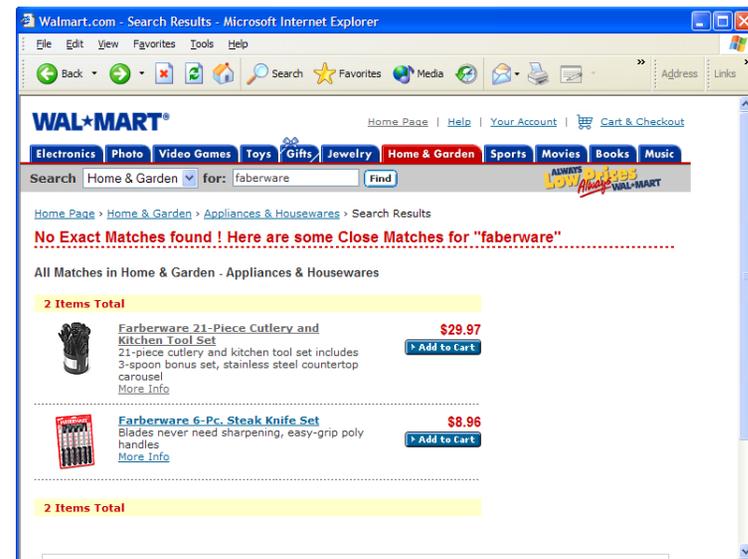
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### Common Mistake 2: Mistyped Search Term

John is in search of a Farberware brand kitchen organizer that he saw at a friends house, but he mistakenly types “Faberware” (without the first ‘r’) into the search field at two different web sites.



**A** **bluelight.com:** John is notified that the site is “having trouble locating a match” for his search term – even though bluelight.com **does** carry Farberware products.



**B** **WalMart.com:** John is presented with a list of items produced by Farberware. Included in the list is the kitchen organizer that John was looking for!

*continued...*



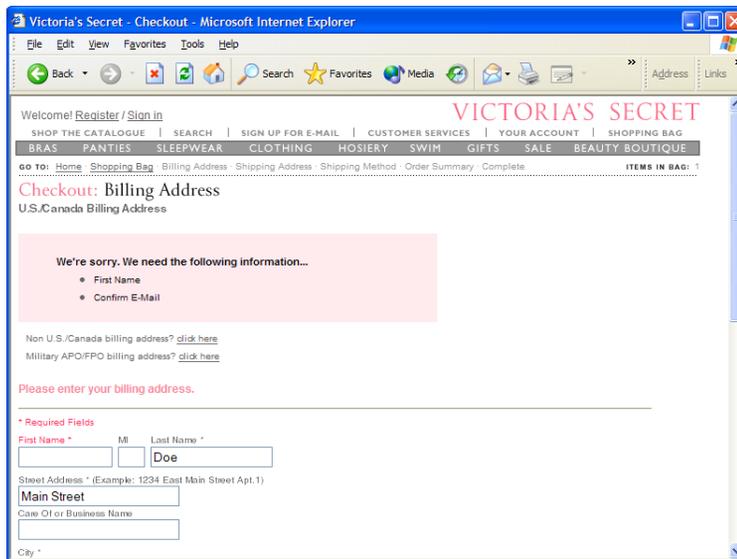
# What You Can Do Today

## See the Contingency Design Rules in Action

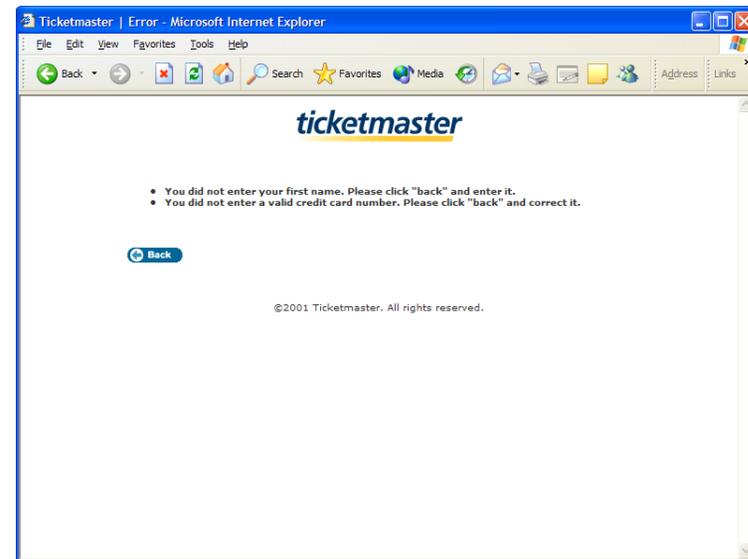
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### Common Mistake 3: Forgotten Form Field

John is making a purchase at a web site for the first time. In the course of registering he misses a couple of form fields.



**A** **VictoriasSecret.com:** John is notified of his omissions both at the top of the page and at the fields he left empty.



**B** **Ticketmaster.com:** John is notified of his error on a new page that is generated after he submits his registration information. To fix his mistakes he has to go back to the registration page, but without any indication of the fields he has to fix.

*continued...*



## What You Can Do Today

### See the Contingency Design Rules in Action

As the previous examples illustrate, even the biggest sites frequently make serious contingency design mistakes. Use these examples as a quick reference when checking your own site's contingency design.

#### Common Mistake 1: Mistyped URL

The contingency design winner is choice A, IBM.com. By providing site navigation as well as two methods to help customers get back on the right track, IBM.com is doing all that it can to convert site visitors into customers. And the addition of a feedback link to notify IBM.com of the problem sends a clear message to John that IBM is a customer-focused company that cares about getting things right.

#### On the other hand...

Moviefone.com, does nothing to help John get back on track and, instead, leaves him dazed and confused.

**Related rules:** 1, 2, 3, 4, 8, 9, 17, 18

#### Common Mistake 2: Mistyped Search Term

The contingency design winner is choice B, WalMart.com. Would an offline WalMart store turn John away because he mispronounces a product's name when asking a sales clerk for assistance? Of course not. WalMart.com understands this and makes sure to account for common misspellings, the online equivalent of this situation.

#### On the other hand...

bluelight.com (the online division of Kmart) leaves John oblivious to the fact that they carry Farberware products. To their credit, though, the site does provide some contextual help that might help wayward searchers along with a link to contact customer service (though the link is displayed far down the page).

**Related rules:** 11, 14, 18

#### Common Mistake 3: Forgotten Form Field

The contingency design winner is choice A, VictoriasSecret.com. The company understands that purchasing online can be an intimidating experience and does all it can to help customers through the process. The site presents the error message on a page where John can correct the error and informs him of the errant fields both at the top of the page and at the errant fields.

#### On the other hand...

Ticketmaster.com displays the error message on a separate page and forces John to go back to a different page to resolve the problem. Since that page does not display the error, John will also have to remember what the error message said before he can resolve his problem. This increases the workload on its customers and makes a bad situation even worse.

**Related rules:** 1, 2, 3, 6, 7, 8, 14



## Related Material

### What people are saying about Design Not Found

“Reacquaint yourself with one of the smartest interface critique sites out there – 37signals’ Design Not Found – and appreciate too its intelligent organisation and functionality, and the elegant, uncomplicated layout that belies the great attention to detail. Snappy title, too. I think the secret to its success is short critiques of individual kernels of interface design, rather than a waffly shotgun approach.”

- **Francois Jordan, Web-Graphics.com**

“From the good people who brought you eNormicom.com (the best still-working critique of dot-comania): Design Not Found. Very funny and good. Dig it.”

- **Doc Searls, Doc Searls Weblog**

“Another good collection of bad designs is ‘Design Not Found’. This one focuses on websites and their lack of support for edge cases in the interaction (e.g., how to handle error states).”

- **Jakob Nielsen, Useit.com**

## Customers Speak Out on the Importance of Contingency Design

Visitor comments at Design Not Found

(<http://www.DesignNotFound.com>) reveal just how significant the impact of contingency design can be on your customers.

### Customers Hate Sites With Bad Contingency Design

#### On being rejected by Ticketmaster.com:

“[Ticketmaster] continually rejected my credit card (though it’s paid up and my credit is fine), sending me back to a previous page where all my info was still correctly entered -- except for the expiration date...I’d change it, get rejected again, return to the previous page and again, all things the same except the expiration date. I think the rejections were Ticketmaster’s fault -- the wrong date kept appearing where I’d entered the correct expiration. I ended up calling their ticketline, which was somewhat less annoying. Ticketmaster in general irks me to no end. Next time, I’m planning ahead and going to the local record shop to get my tix.”

#### On wasting time at Amtrak.com:

“I just recently experienced the same issues with the Amtrak site and shared my rant with several friends. Your observations are exactly right: The site offers no benefit to its users and no assistance to its intended audience...I found the mechanism completely useless and, after wasting 15 minutes time mostly because I couldn’t believe it could possibly be that bad, I moved on and decided train travel was not as convenient as I require.”

#### On being disappointed by Sony.com:

“Sony’s site is so sad. If they built consumer devices the same way they built their web site, we’d all have Zenith Walkmans. It’s amazing that a company that so gets it offline just can’t get it online.”

*continued...*



## Related Material

### Contingency design resources on the web

Design Not Found

- <http://www.DesignNotFound.com>

Jakob Nielsen's error message guidelines

- <http://www.useit.com/alertbox/20010624.html>

Error messages at Usable Web

- <http://usableweb.com/topics/008870-0-0.html>

## Customers Speak Out on the Importance of Contingency Design

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### Customers Love Sites With Good Contingency Design

#### **On being amazed by Orbitz.com:**

“The other night I was looking for a flight into NYC, and I didn’t know the airport abbreviations or which airport I wanted to land at, so I just entered “NYC” as my destination airport. Orbitz didn’t even make me pick from one of the three area airports, it simply searched from my departure city to all three airports and gave me results to compare. It was simply amazing.”

#### **On why Google rocks:**

“Google rocks. I swear it can read my mind, despite my spelling errors, lack of articulation, etc. I love google.”

#### **On loving allrecipes.com:**

“I love allrecipes.com. Not only do they allow you to search by ingredients, or by multiple ingredients, they also allow you to search excluding cer-

tain ingredients if you want. Now that’s cooking with what’s in the kitchen!”

#### **On smiling at NBA.com:**

“I always smile when a site handles an error like this [with a javascript alert dialog that appears instantly instead of loading an additional page]. I wish more would go this route.”

Customers clearly respond strongly to contingency design. This is a crucial area for web site developers who want to keep their customers happy. Sites that ignore it will face the wrath of disgruntled visitors.



## Related Material

### Endnotes

1. "Winning the Online Consumer: The Challenge of Raised Expectations," Boston Consulting Group (June 2001)
2. *ibid.*
3. *ibid.*
4. The Boston Consulting Group conducted a survey in 1999 and 2000 to determine the most critical purchase problems for online consumers. Of the top 10 problems encountered by consumers, five fall under the rubric of contingency design. They are as follows: out of stock items, a system crash prior to the completion of an order, the necessity to contact customer service to complete a transaction, an inability to contact customer service, and an inability to get the site in question to accept the consumer's credit card number.
5. "Driving Sales With Service," Forrester (November 1999)
6. "E-Tailers beef up online support to corral carts and shoppers," InternetRetailer (June 2001)
7. "Top 20 Web Retailers," PC Data (October 2000)
8. "E-Tailers beef up online support to corral carts and shoppers," InternetRetailer (June 2001)
9. "Macy's Doubles Conversion Rate," InternetWeek (November 2001)
10. *ibid.*
11. "Winning the Online Consumer: The Challenge of Raised Expectations," Boston Consulting Group (June 2001)
12. "Consumer Survery," Jupiter Media Metrix (November 2001)



## About 37signals

### For the Rolodex

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web: <http://www.37signals.com>

#### Statline

- Founded in 1999
- 4 employees
- 25+ cumulative years experience
- 100% of our clients are references

#### Our work has been featured in

- The New York Times
- USA Today
- Chicago Tribune
- Sports Illustrated
- FOX News
- Washington Post
- Times of London
- Fresh Styles in Web Design

## 37signals

We design web sites, conduct usability reviews, and educate people about the real-world advantages of simplicity and clarity online.

### Services

- Interface design for web sites and web-based applications
- Usability reviews (including the Contingency Plan, a review of your site's contingency design)
- Training and education seminars

### Clients Include

- GettyOne
- FastWeb
- Monster.com
- Qwest Dex
- Transportation.com
- Performance Bikes
- Tenzing
- Missile Lock
- Kicksology.net
- GSX
- Telstreet
- R.Bird

### Average Duration/Cost of Our Projects

- Interface design: 2 - 6 months / \$25,000 - \$250,000
- Usability review: 3 - 5 weeks / \$7,500 - \$25,000
- Training and seminar duration and costs vary widely based on client and venue.  
Please contact us for more information.



# Contingency Design

## Maximizing Online Profitability By Helping Customers When Things Go Wrong

### Pass this on to a colleague

Please feel free to share this summary tear-out page with a colleague.

If you've received this page and would like to see the complete 37signals white paper on contingency design, it is available for free download at <http://www.37signals.com/whitepaper>

Contingency design must be a top priority for any site interested in providing successful customer experiences. Web sites that invest in contingency design will increase customer loyalty and significantly improve the rate at which site visitors purchase, subscribe and register.

### Defining Contingency Design

Contingency design is design for when things go wrong. It's the error messaging, graphic design, instructive text, information architecture, backend system, and customer service that helps visitors get back on track after a problem occurs.

### The Costs of Poor Contingency Design

Poor contingency design leads to confusion, failed transactions, and frustrated non-customers. This results in lost revenues and higher customer acquisition costs, which, in turn, leads to lower margins and a longer road to profitability.

### The Benefits of Effective Contingency Design

Effective contingency design can benefit an online business in all of the following areas: improved usability, improved conversion rates, increased revenues, increased brand loyalty.

### What You Can Do

Check your site's contingency design using the 20 contingency design rules provided on page six of the 37signals white paper "*Contingency Design, Maximizing Online Profitability By Helping Customers When Things Go Wrong.*"