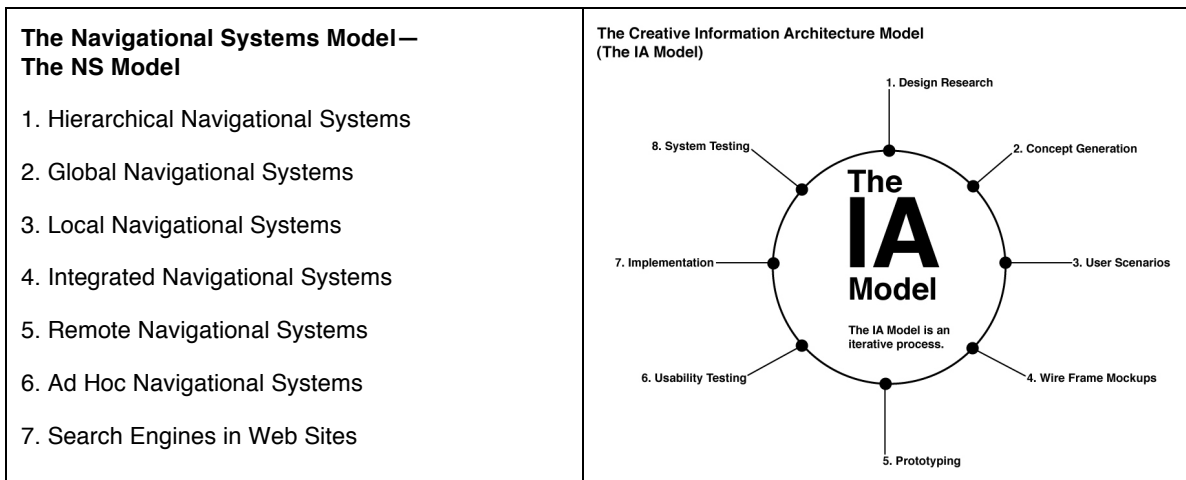


# INFORMATION ARCHITECTURE & NAVIGATIONAL SYSTEMS— The Navigational Systems Model

## AN ONLINE TUTORIAL FOR DIGITAL-MEDIA DESIGNERS TO LEARN WEB NAVIGATIONAL SYSTEMS



By  
**STEVEN HEITMAN**

**INFORMATION ARCHITECTURE & NAVIGATIONAL SYSTEMS—  
The Navigational Systems Model**

**AN ONLINE TUTORIAL FOR DIGITAL-MEDIA DESIGNERS  
TO LEARN WEB NAVIGATIONAL SYSTEMS**

A Creative Work Thesis Report

Submitted as a Partial Fulfillment of the Requirements for:

**MASTER OF ARTS DEGREE IN INDUSTRIAL ARTS**

**With a Concentration in Industrial Arts—  
Specializations in Information Architecture,  
Navigational Systems, Graphic Design**

By

**STEVEN HEITMAN**

San Francisco, California

May 2000

**INFORMATION ARCHITECTURE & NAVIGATIONAL SYSTEMS—  
The Navigational Systems Model**

**CERTIFICATION OF APPROVAL**

I certify that I have read *An Online Tutorial for Digital-Media Designers to Learn Web Navigational Systems* by Steven Heitman, and that in my opinion this work meets the criteria for approving a creative work project submitted in partial fulfillment of the requirements for the degree: Master of Arts in Industrial Arts at San Francisco State University, 1600 Holloway Avenue, San Francisco, California, United States of America 94132—May 27, 2000.

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The Navigational Systems Model**

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**SR INFORMATION ARCHITECT SPECIALIST**

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**INFORMATION ARCHITECTURE & NAVIGATIONAL SYSTEMS—  
The Navigational Systems Model**

**AN ONLINE TUTORIAL FOR DIGITAL-MEDIA DESIGNERS  
TO LEARN WEB NAVIGATIONAL SYSTEMS**

**Steven Heitman  
San Francisco State University  
May 2000**

**ABSTRACT**

Navigational Systems are used within a Web site, a Web page, and/or a subsite to provide a clear path of navigation in which the end user may move about in cyberspace without getting lost. The end user oftentimes finds himself lost or experiences extreme bouts of puzzlement while online.

The reason effective Navigational Systems need to be designed for any Web site, from *only* five-to-fifteen up to thousands of Web pages, is because the end user should be able to navigate through any Web site without experiencing severe problems of *puzzlement* or *getting lost* while surfing.

The methodology that was used to research this study and creative work project included a review of related literature, field activities, and exploration and review of fifteen online Web sites.

The study addressed the problems of navigation in cyberspace that the end user may experience without Web sites, Web pages, and subsites, and the issue of how Web designers should design Navigational Systems that work both effectively and quickly—utilizing the *seven commonly used Navigational Systems*—thus helping the end user in obtaining the information online.

After completion of the literature review, field activities, and online investigation of fifteen Web sites, it was determined that an outline of a model of the seven commonly used Navigational Systems be created, as well as a document entitled *Presentation on CD-ROM* (attached to the document).

**INFORMATION ARCHITECTURE & NAVIGATIONAL SYSTEMS—  
The Navigational Systems Model**

The Model contains nine sections. The Model of Seven Commonly Used Navigational Systems is divided into the following nine sections:

- 1) Section 1: What are Navigational Systems?
- 2) Section 2: What is the Internet?
- 3) Section 3: What is the World Wide Web?
- 4) Section 4: Why do we need Navigational Systems?
- 5) Section 5: What is an Information Designer?
- 6) Section 6: What is an Information Architect?
- 7) Section 7: What are seven commonly used Navigational Systems within Web sites?
- 8) Section 8: What combinations of Navigational Systems work effectively within a Web site?
- 9) Section 9: Conclusion.

We certify that the Abstract is a correct representation of the content contained within the study and creative work project.

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### **TRADEMARKS**

Trademarked names appear throughout this creative work project. Rather than list the names and organizations that own the trademarked name, the researcher, Steven Heitman, states that he is using the names only for editorial purposes, and to the benefit of the trademark owners with no intention of infringing upon that trademark.

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The Navigational Systems Model**

**EPIGRAPH**

Whatever there is of God and goodness in the universe, it must work itself out and express itself through us.

**—Albert Einstein**

**HAPPINESS.** Derive happiness in oneself from a good day's work, from illuminating the good that surrounds us.

**—Henri Matisse**

The state of the world, however, cannot and does not interfere with my deep love of life.

**—Arthur Rubinstein**



**INFORMATION ARCHITECTURE & NAVIGATIONAL SYSTEMS—  
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I would like to *thank* Dr. Cheng, Dr. Gates, Dr. Dierke, *all my Professors*, my friends,  
and my family for their support.

**Steven Heitman  
San Francisco, CA USA**

**INFORMATION ARCHITECTURE & NAVIGATIONAL SYSTEMS—  
The Navigational Systems Model**

**MOTTO**

“ Information Architecture is the structure of user-centered design and usability—  
it has to be strong. ”

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**CHAPTER ONE**

**The Problem—  
Information Architecture**

**1.1 Navigational Systems Used in Web Site, Web Page, and Subsite Design**

**1.1.1 Introduction**

**Information Architecture and Navigational Systems:**

Navigational Systems are designed within a Web site, a Web page, and a subsite to provide a clear path of navigation to end users—so end users will not get lost in cyberspace. In *Designing and Writing Online Documentation* William Horton explains the *problem* and *symptoms* of getting lost in cyberspace; he quotes from Jakob Nielsen’s book *Hypertext and HyperMedia* that states: “Readers in complex online documents often lose track of where they are or where they have been. In a field study of a hypertext document [*about Information Architecture and Navigational Systems*], 56 percent [56%] of [the end] users said they were unsure about where they were and 44 percent [44%] doubted they could find a topic they visited earlier [on the World Wide Web]” (8:210; 11:188-206).

Regarding the design of Navigational Systems, Jakob Nielsen states in *Information Architecture for the World Wide Web* by Peter Morville and Louis Rosenfeld that a large Web site such as Sun Microsystems (<http://www.sun.com>) contains a base of at least 25,000 Web pages (14:xi). The reason effective Navigational Systems need to be designed for any Web site is that because the end users should be able to navigate through any Web site, without experiencing severe problems of puzzlement or getting lost.