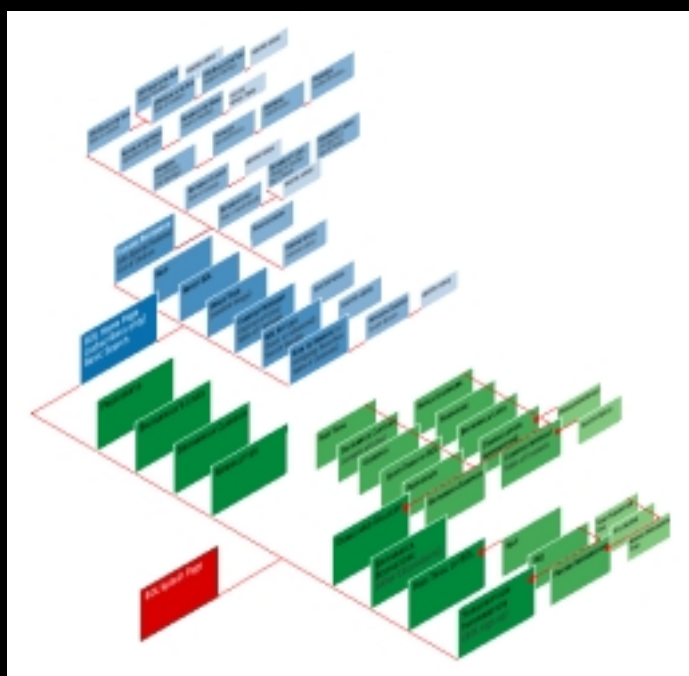


4 Web Site Planning Diagrams

ANALYSIS OF NETSCAPE SOFTWARE DOWNLOAD AREA

This diagram catalogs the software products available from Netscape through the software download area of the Netscape web site in September 1998. The sequence of selecting an operating system, language, version of the program, and encryption type are shown.

Planning diagrams are the least visible form of web site mapping. The planning diagram is an artifact of the design process. It is usually shared only by the planning group or the designer and the client, and then discarded. Still, it is a critical part of the design process.



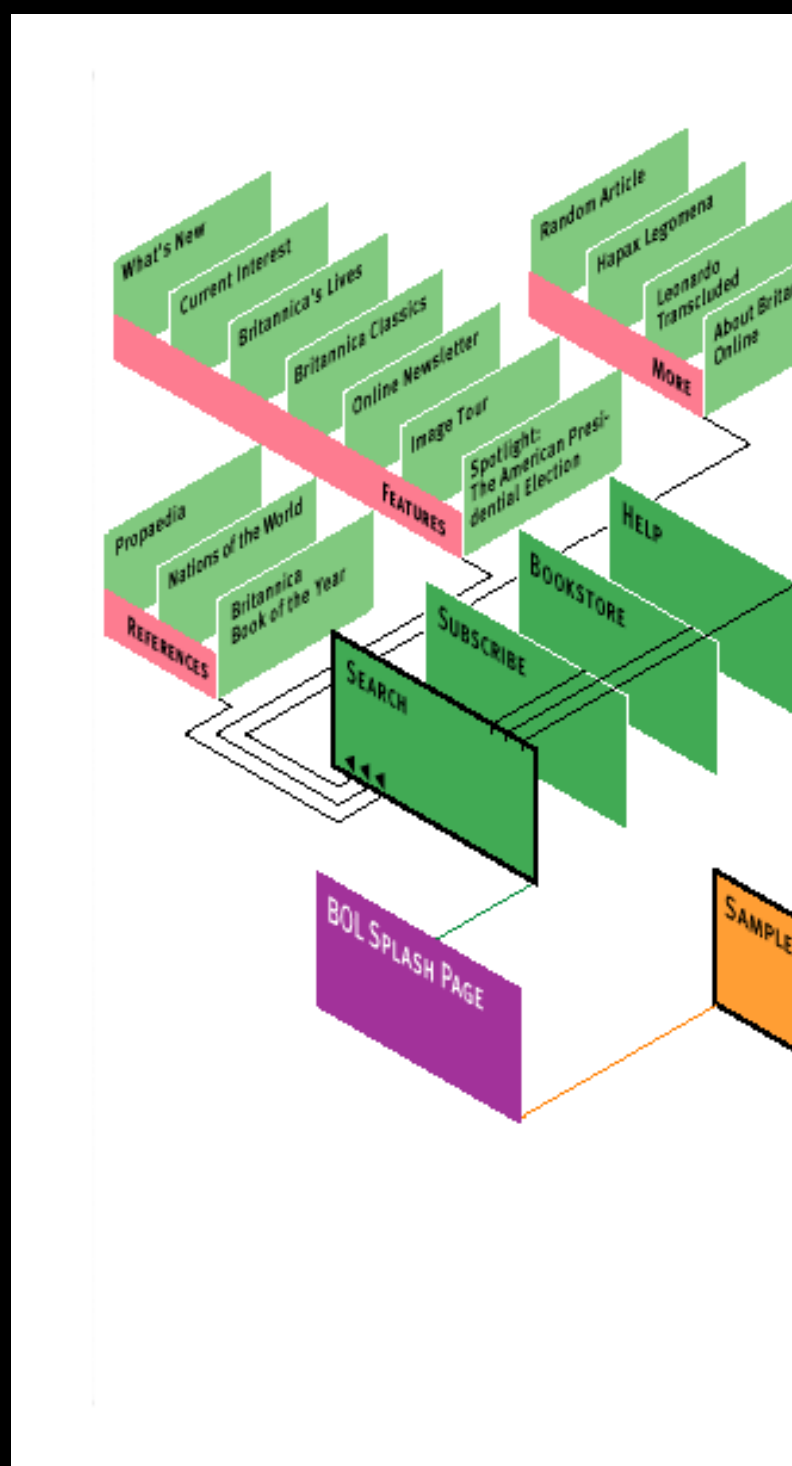
As Edward Tufte has pointed out in *Visualizing Information*, the most rewarding and challenging form of information graphics are compositions that convey multivariate data, diagrams that pack many layers of information into the “flatland” of graphic two-dimensional presentation.

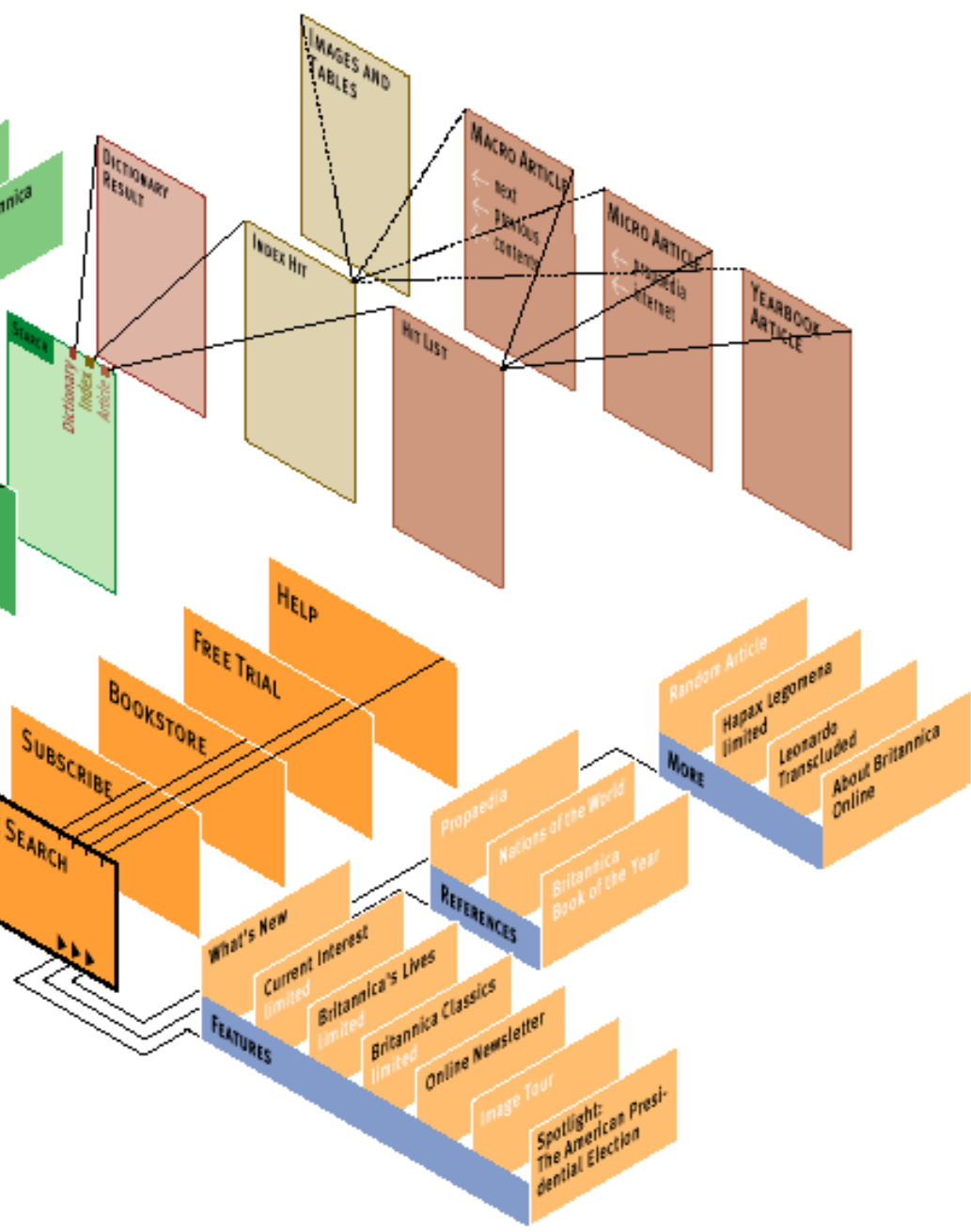
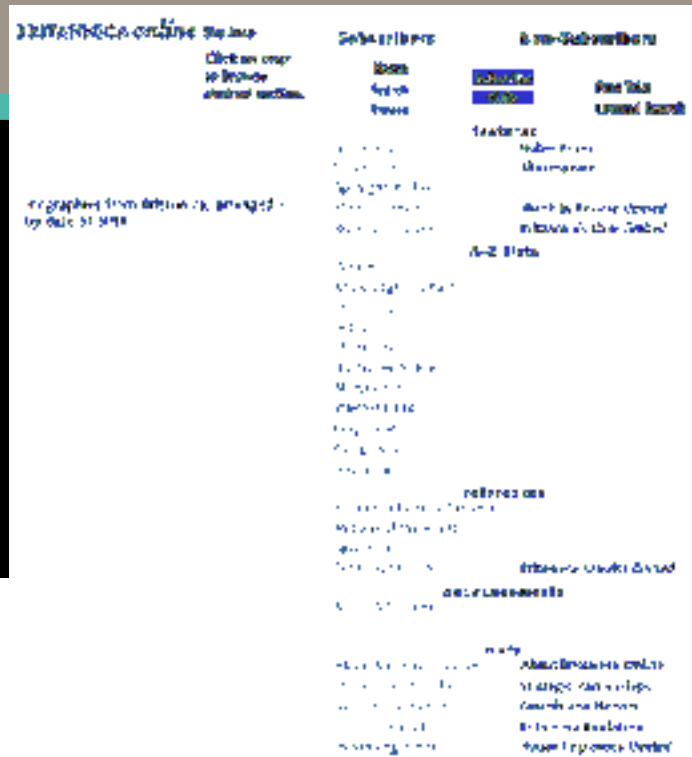
Web sites are inherently multi-dimensional, though they exist in an abstract space that does not obey the rules of Euclidean geometry. However, as we have shown in the earlier chapter about maps, visual conventions play a critical role in our ability to perceive the meaning of a diagram. If a web site is actually an invisible, multi-dimensional abstraction, we may understand it as a set of cards or boxes connected by lines, color, or symbols in part because we know, from our previous experience, what cards, boxes, and lines can represent.

Mapping a web site requires several steps. First, the kind of information to be represented must be defined. There are many possible dimensions to illustrate: click depth, page type, logical grouping, major navigation path, link relationships within the site or out to other sites, access rights, etc. Cataloging the content of the site according to these information types comes next. Third, the information must be organized into a visual pattern. Choices of

what to use to represent link relationships must be made. Some of the most dramatic variation in the maps within this chapter lines, arrows, colors, visual proximity, symbols.

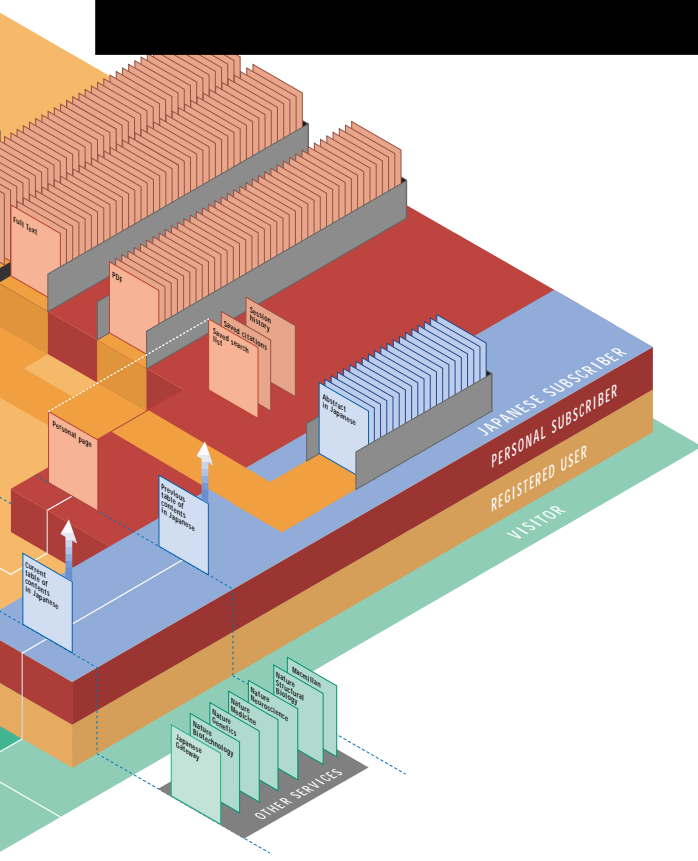
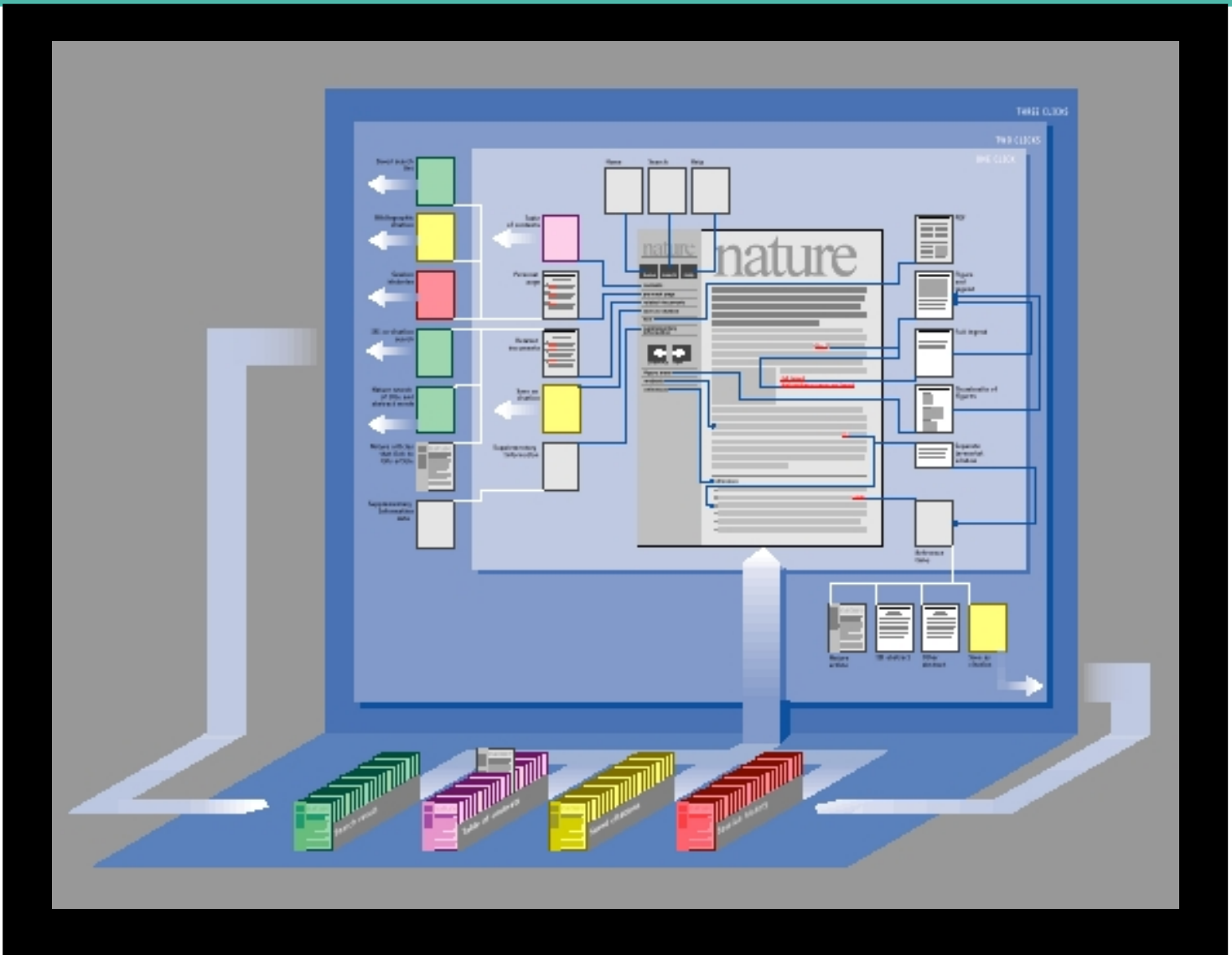
The most difficult thing is deciding what the map should reveal about the web site. What are we trying to show? This depends on several variables: the audience for the map, the nature of the web site, the media in which the map will be viewed.





BRITANNICA ONLINE PLANNING DIAGRAMS AND SITE MAP

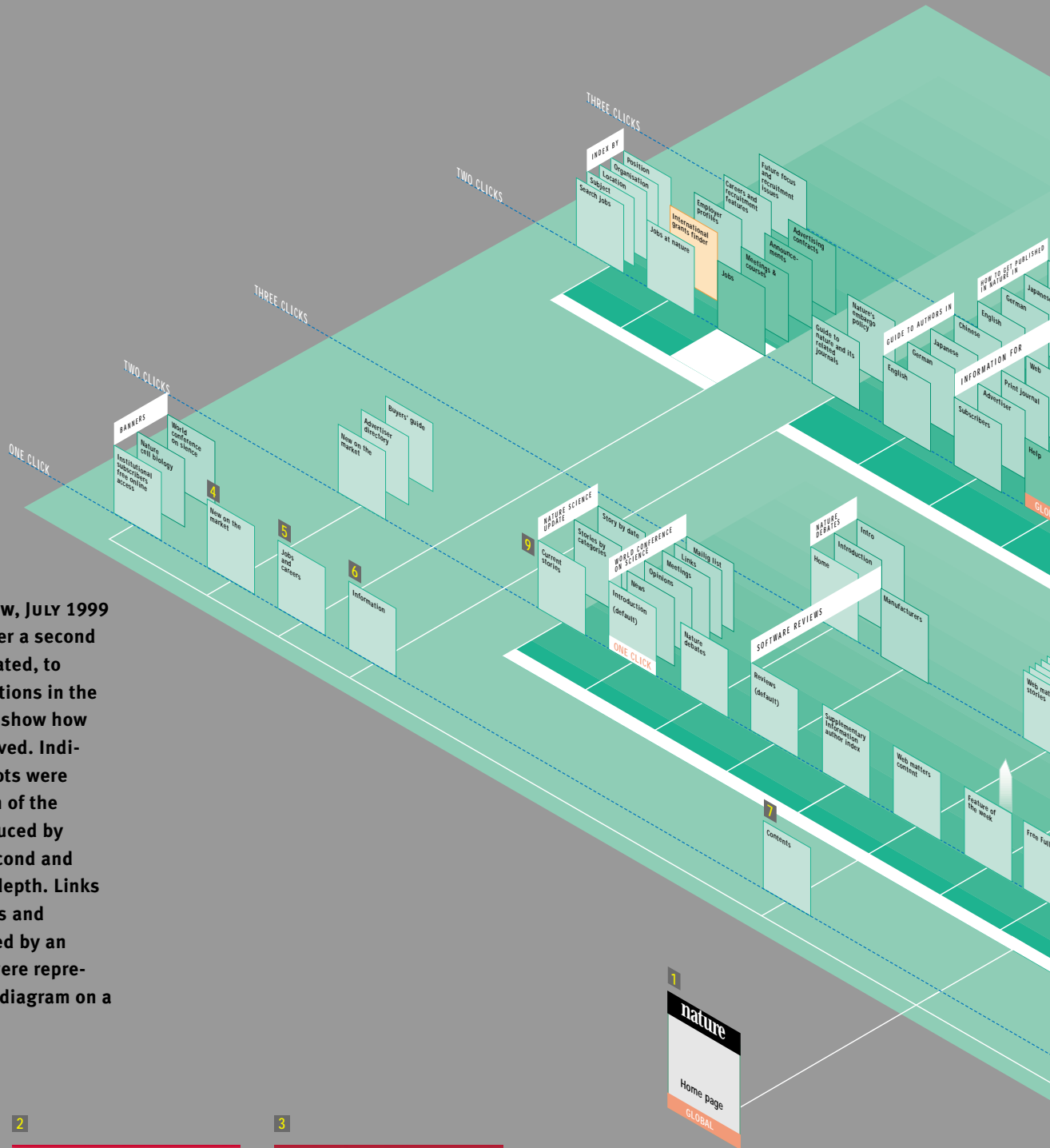
These planning diagrams for the redesign of Britannica Online illustrate different levels of detail for different purposes. The initial map (far left) was a catalog intended to illustrate the problems that existed before the redesign. The second diagrams (center) presented the new structure, an organization that emphasized the parallel structure between the material available to the subscriber (green) and non-subscriber (orange). The organization of the second diagram drove the navigation options that appeared on the redesigned pages. Both these diagrams were for the editorial and marketing groups involved in planning and building the new site. The site map (upper right) was intended for the general visitor to the web site.

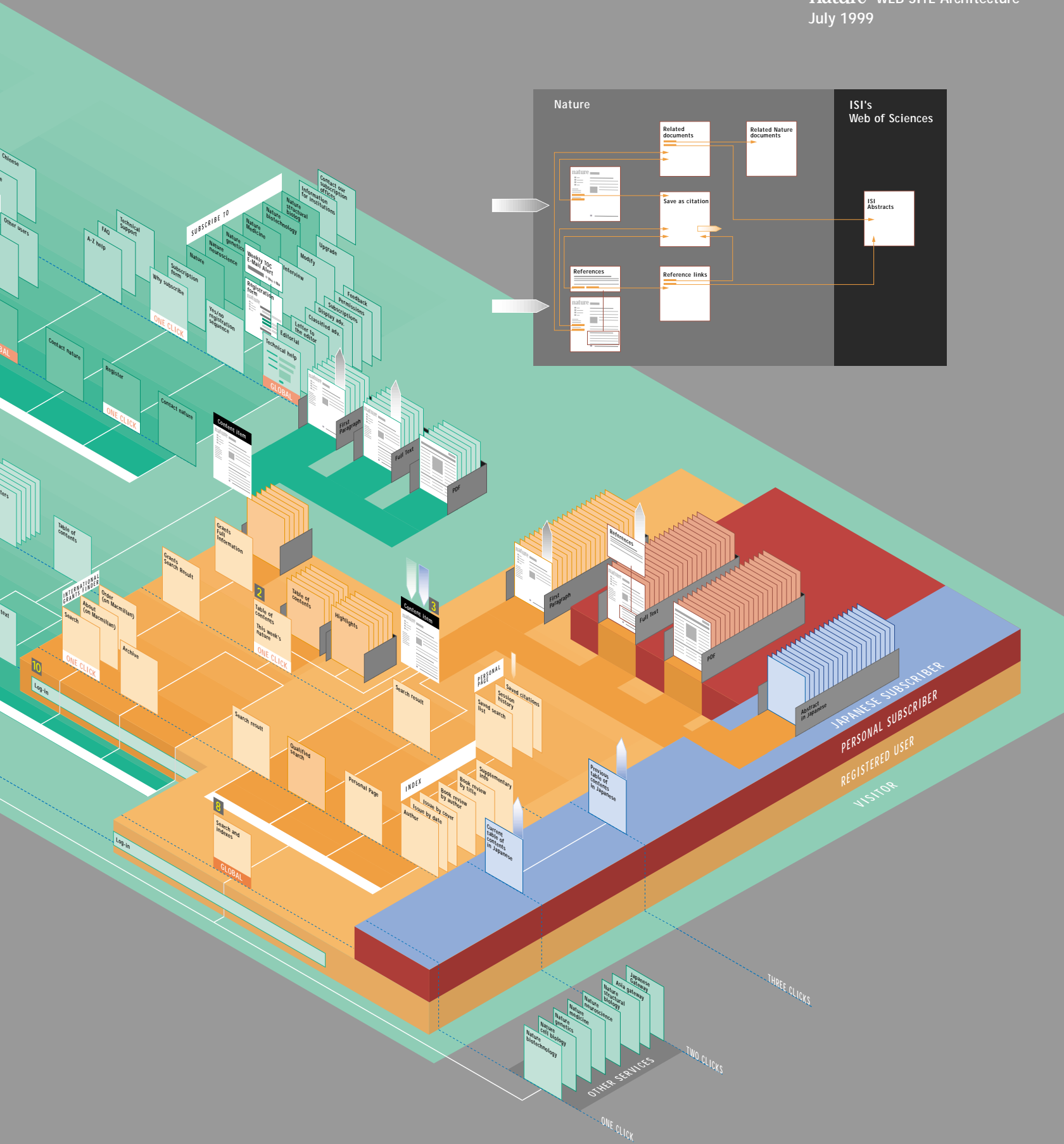


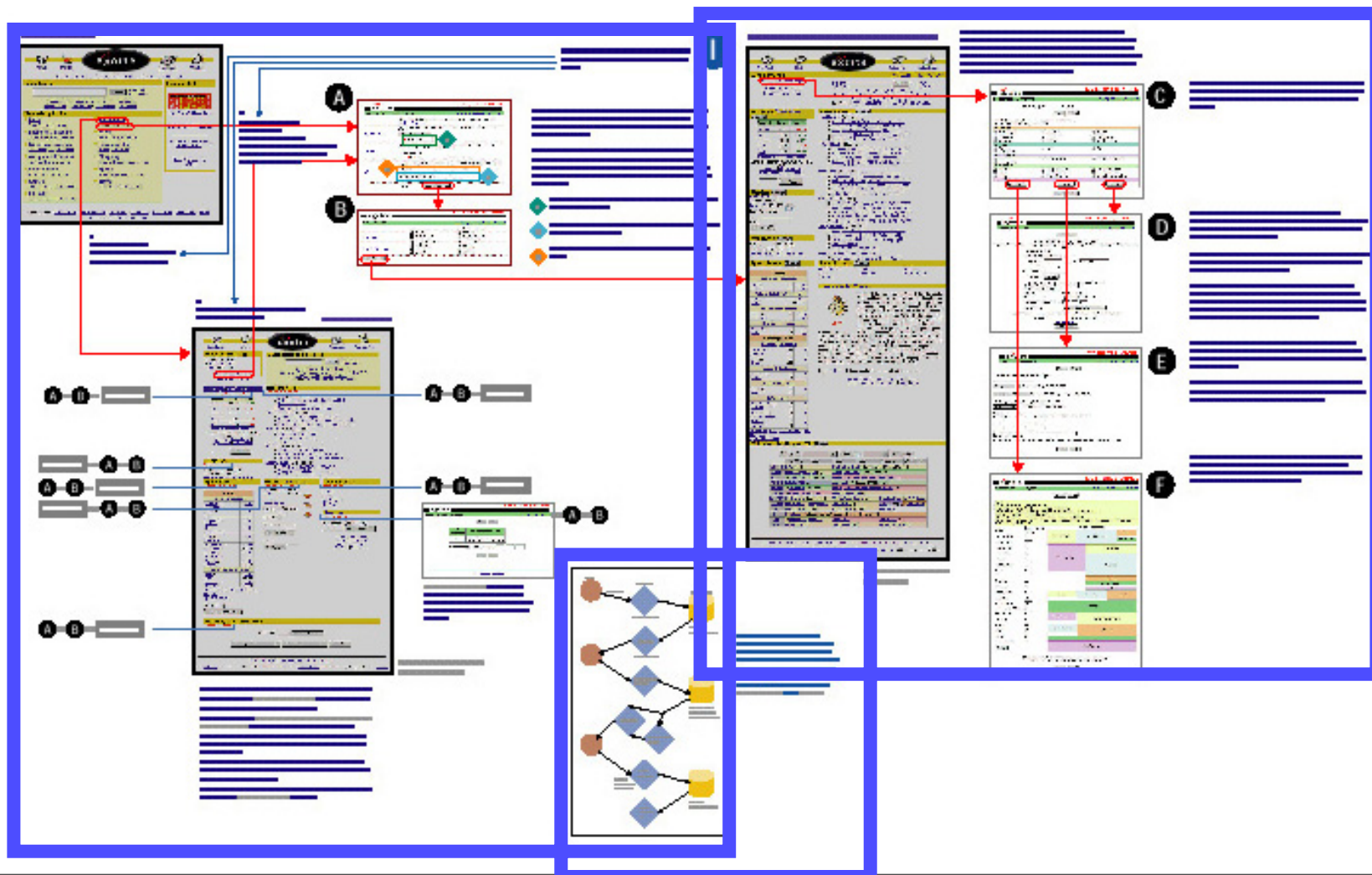
NATURE ARTICLE DIAGRAM

Since most visitors would come to this site to read individual items in the magazine, we created a diagram showing the material linked to and from each story in the magazine. This diagram uses colored layers to show click depth. Collections of items such as tables of contents and search results are shown as color-coded boxes in the foreground.

NATURE OVERVIEW, JULY 1999
 Nearly a year later a second diagram was created, to catalog the variations in the page design and show how the site had evolved. Individual screen shots were added. The width of the diagram was reduced by repeating the second and third level click depth. Links between citations and abstracts provided by an outside vendor were represented as a flow diagram on a different plane.



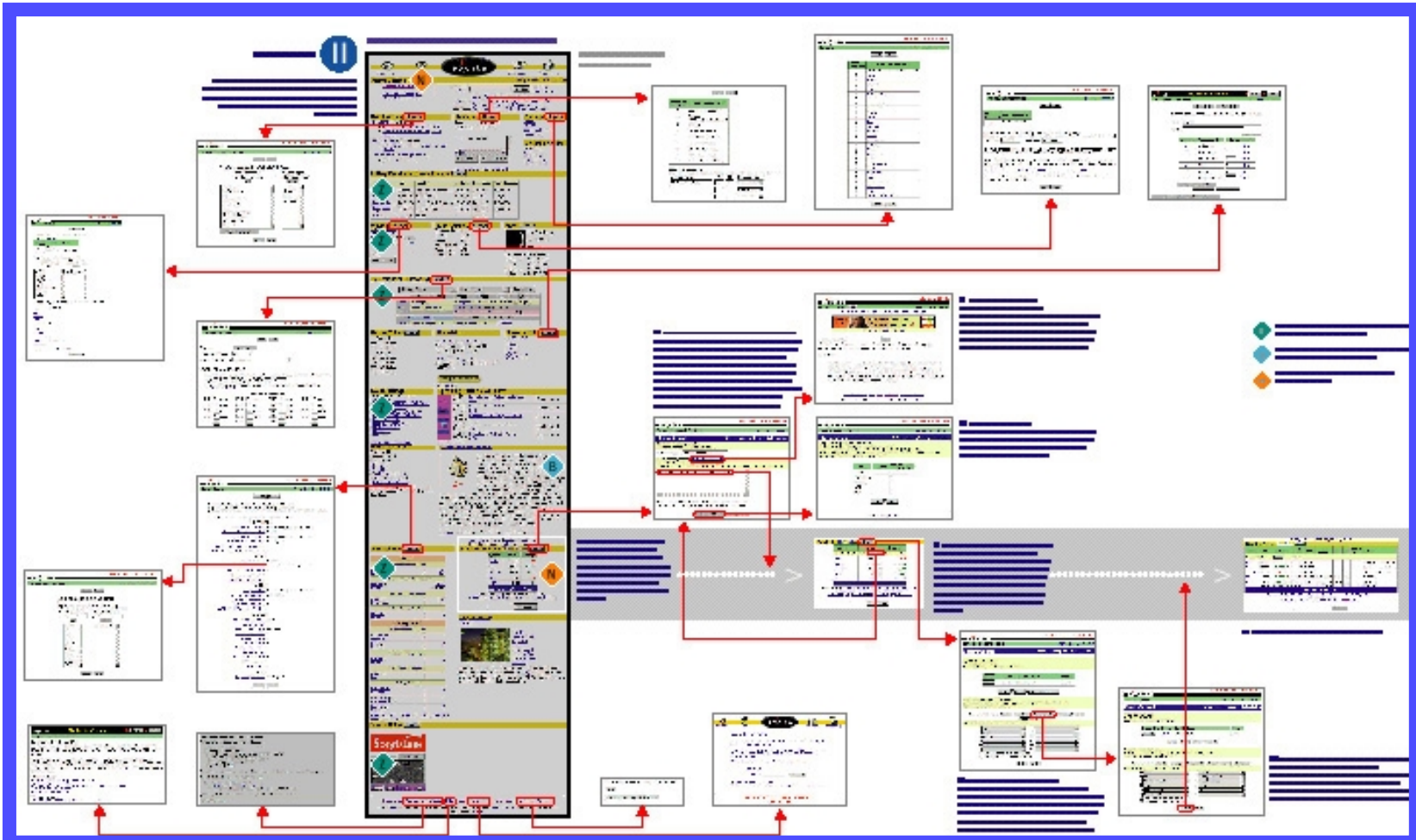




Then there is the choice of what to represent. There are many possible layers of data to choose from: screen image, page title, URL, click-depth, etc. Most web sites can be broken down into sections or information categories. Many sites have different levels of access control. How do you show these boundaries? Pages or section of the web site may be created in different ways, by different processes or different parts of the editorial organization. Showing the difference between database-driven pages versus other pages may be important. We might need to show the revision schedules for sections of the site. The number of variables is as endless as those facing a traditional cartographer. The question is how to combine the variables in a way that allows the intended audience to grasp the appropriate level of detail.

Finally there is the question of the media for presenting the map. Will it be presented on the screen or on paper? How big can it be? Interestingly, the

physical size of the print can have a major effect on the way it is designed. It is just easier for people to view a large map in a horizontal orientation than in a vertical one. If it is taller than you are, it is hard to see without a chair. If it is very wide, you can view it in a panoramic glance and then focus in on a portion of the print. If it is viewed on the screen, there is a definite limit to how much text can be represented, and how wide the map can be. Even with a wall projector 1024 pixels is as wide as your design can stretch. But on the screen there are interactive effects that can be added. Interacting with or querying a portion of the map can present or reveal additional information. We will have more to say about the interactive potential of web site maps in the Chapter 6 on data-driven maps.



MYEXCITE ANALYSIS DIAGRAMS: SHOWING HOW IT'S DONE

Sometime during 1998 Search Engines became Web Portals. Competing for user attention and loyalty, these web sites that brought information together from various sources (aggregation) at the same time they helped users locate resources on the web (search). An important step in this process was the creation of the personalized start page, pioneered by Microsoft Network and Excite. The openness of the web is one of its greatest strengths. The Internet itself is based on published standards and HTML is visible to everyone who uses the web. This is

one of the reasons for the rapid growth of the web. Each new style and technique that appears comes with its own primer, the source of the document being viewed. Millions of novices become experienced authors simply by imitating and refining the examples that flood into their web browsers. While the technical details of server farms and database management systems for any web site are hidden from view, the basic strategy for serving pages can be inferred by examining the web sites themselves. We were asked to analyze the personalization features of MyExcite.com when this new feature of Excite (now Excite@Home) when it first appeared. The task was a

competitive analysis. Our client wanted to know how it was done. The audience was the engineering group that would have to match and exceed the standard set by this pioneering application of personalization in the Web Portal market. We set about creating a series of wall-size posters. The goal was to capture the flow of the customization process, from initial contact with the MyExcite page, through creation of an account, into minimum personalization, and on to catalog all the controls offered to the user to customize the MyExcite page. On this page we reproduce two of the three diagrams. The first (left) shows the process of creating an account and the initial

personalization that results from gathering demographic information. The second chart (right) shows each of the control widgets for the personal page, with all information options displayed. The third diagram (not shown) showed the destination pages for each type of information, along with the URL that often passed information about some aspect of the user's identity (an ID number, a zip code) to the destination web site. Large blue boxes highlight the four details of diagrams that are shown and explained in more detail on the following pages.

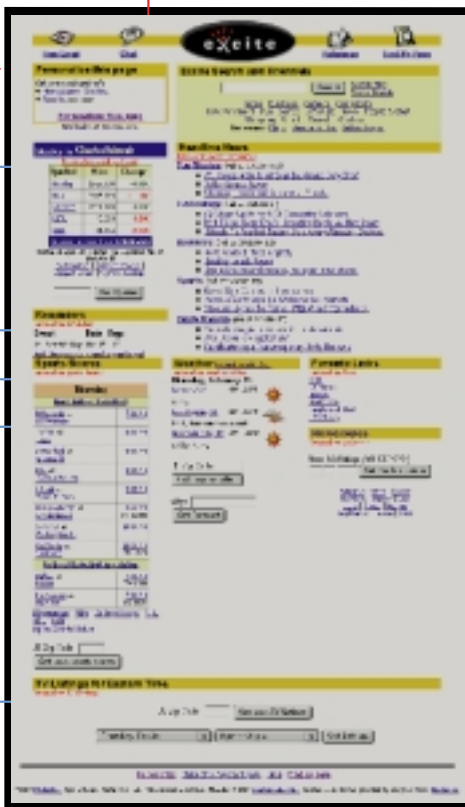
www.excite.com



1. From www.excite.com follow the link My Channel to my.excite.com default page

2. Enter directly the URL my.excite.com to reach a default page

my.excite.com



A B Change Page

Change Page A B

A B Change Page

Change Page A B

A B Change Page

A B Change Page

A B Change Page

A B Change Page

My Excite Default Page
No Customization

The My Excite Default Page offers nine Personalize options. Following the link **Personalize this page** leads to the A and B customization pages, described above.

Following the links **Personalize stock portfolio**, **Personalize news categories**, etc., leads to one of two sequences.

In four of the eight cases, the user is presented with the A and B customization pages, followed by the Change page for this option.

In the other four of the eight cases, the user is presented with the the Change page for this option, followed by the A and B customization pages.

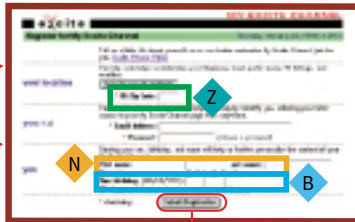
The numbers here refer to the corresponding Change pages shown in the II Change Options diagram.

INITIAL PERSONALIZATION PROCESS

The user enters My Excite from one of three paths:

A

3. From www.excite.com follow the link Personalize your page (http://my.excite.com/?change0) This path leads to the A and B customization pages.



B



Completing the A page requires the user to enter a ZIP CODE (Z), USER NAME and PASSWORD. Other information is requested, including FIRST NAME (F), LAST NAME, GENDER, and BIRTHDATE (B).

Once the A registration page is complete, the UID for of the subsequent page is associated with the USER NAME and PASSWORD. The USER NAME must take the form of an email address. However, this address is accepted without any check for accuracy.

Z The ZIP CODE (Z) is applied to select data for a number of the default features.

B The BIRTHDATE (B) determines the information displayed in the Horoscope option.

N The FIRST NAME (N) is used to name the personalized

Personalize your sign leads to the Personalize Horoscope page. This change page does not occur once the user has completed the registration process.

INITIALIZATION SEQUENCE

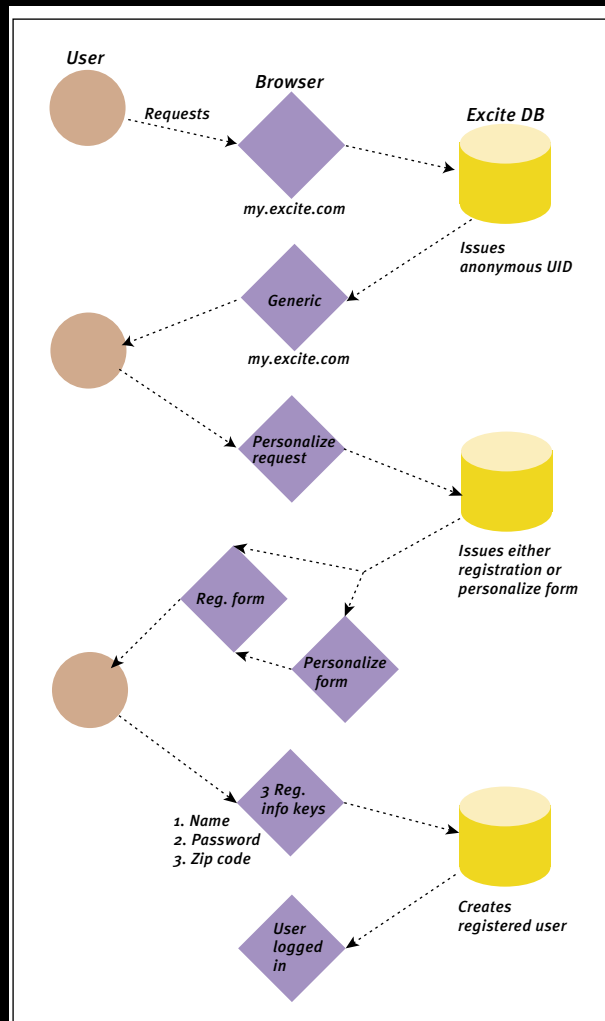
The first part of the MyExcite diagram focuses on the initialization sequence (left). The user at this time would come to MyExcite by following the My Channel link on the Excite home page, or by choosing the customization option from the Excite page., or by typing in the URL my.excite.com directly. Any of these options leads the user to the two personalization screens, marked A and B in the diagram. The A screen requires the user to provide certain information, as described in the diagram. It was important to highlight the information that would later influence the personalization process. In this case, the user's zip code, birthday and first name appear later, so they are assigned color symbols. This will make the sequence of diagrams easier to read.

USER/BROWSER/DBMS DIALOG

The point in the sequence at which the user's account information is associated with a unique identification number (UID) is something that is largely invisible, but of some significance to the software developers reading the diagram. A separate block diagram (right) shows the interaction between the user, the web browser, and the database behind the Excite web site.

MY EXCITE HOME PAGE

This screen shot of an instance of the My Excite home page (right) was made several years after these analysis diagrams were created (March 2000). The principals behind the web site product remain the same, and its success has been widely imitated.



This flow diagram shows the sequence of interactions between the User and the Excite Database during the registration process. The My Excite page can be customized once the UID has been associated with the three registration keys: name, password, and zip code.



MYNETSCAPE, MARCH 2000

CUSTOMIZED HOME PAGES

The three screen shot on the left are current examples of customized Web Portal home pages. The content and customization options do vary, but the concept is much the same.



MYYAHOO, MARCH 2000

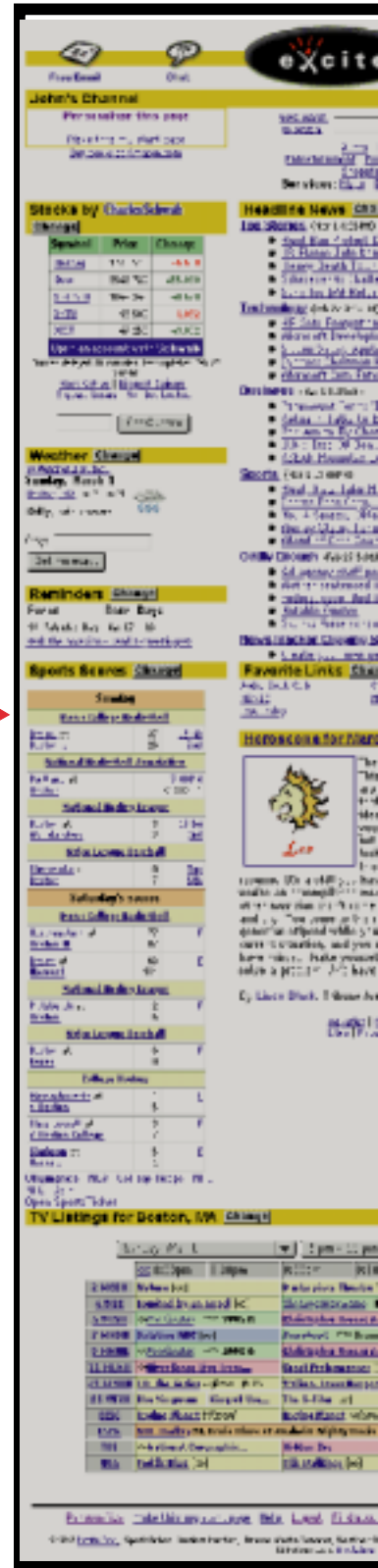
FURTHER CUSTOMIZATION

The second section of the first diagram (right) shows the customization options available to a user once an account has been created. The process moves from the simple, eight options in B on the previous detail, to the complex, twenty-one options on the screen marked C, with links to three more options.

Since the most common user behavior is to change nothing, the default options are shown in each case.

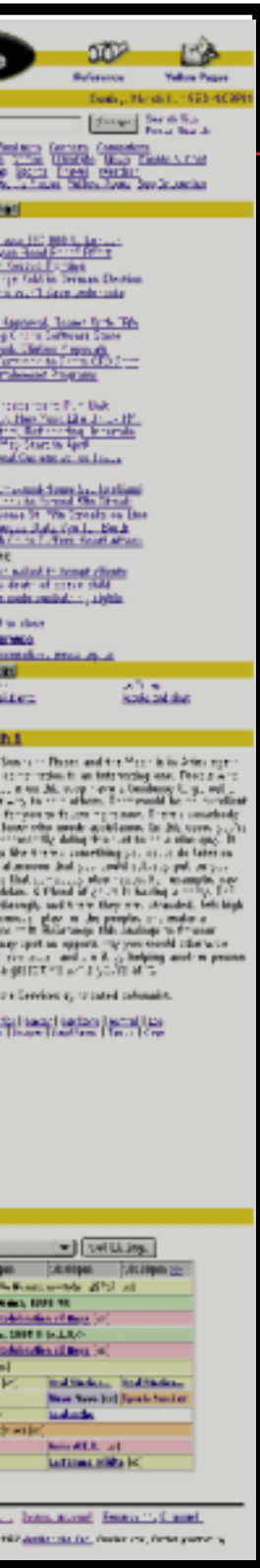


MYLYCOS, MARCH 2000



DD196B34F5945B

Once the user provides the information required in the A registration page and accepts the options suggested in the B registration page, the My Excite Customized Default Page is created. Personalize links are changed to Change buttons. The Personalize this page link (<http://my.excite.com/?changeo>) now leads to the C customization page.



My Excite Default Page Customized



C

The C customization page offers twenty-nine customization options, twenty-one more options than the B customization page. It also offers access to the D, E, and F customization screens.



D

The D User Profile customization page includes the demographic information in the A customization screen, plus six additional items: city, state/province, time zone, clock, marital status, and education.

The time zone, city and state/province are pre-selected by the ZIP CODE. These options can be changed without affecting the ZIP CODE and related options.

Changing the ZIP CODE will reset the time zone, city and state/province. A message on this screen informs the user that "Changing a US Zip code will automatically update your city, state, timezone, latitude and longitude." It will also pick nearby cities for weather and sports teams."



E

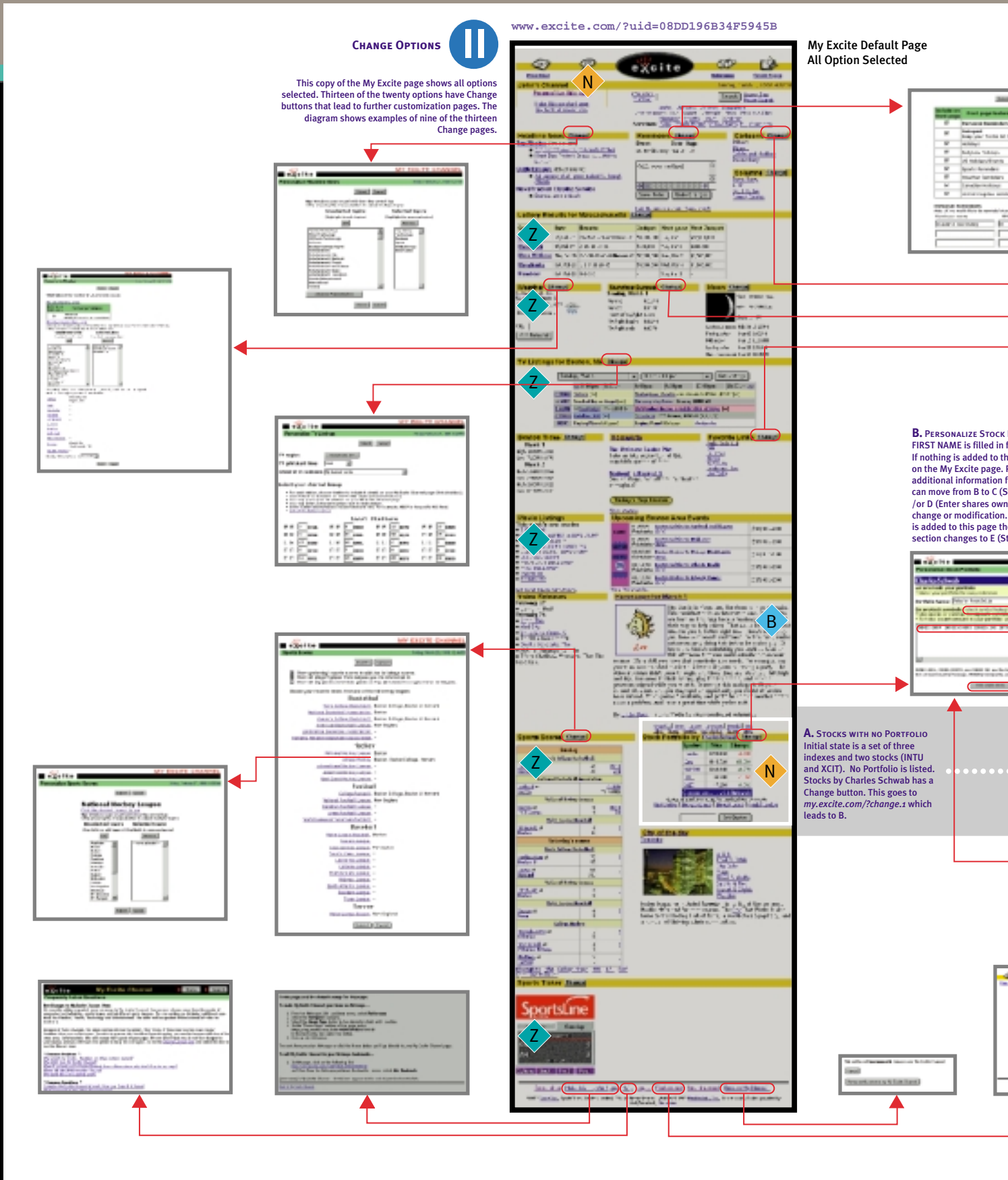
The E Page Look customization page offers control of the PAGE NAME, the frequency of update, level of graphics, an email alert service, choice of page color, and modification of the PASSWORD.

The PAGE NAME appear in the upper right and replaces the use of the FIRST NAME. It does not affect the contents of the FIRST NAME field in the C customization page.



F

The F Page Layout customization page offers control of the position of selected options. Most layout is controlled indirectly by assigning numerical ranks to the options. Two options are controlled by check boxes.



CHANGE WIDGETS
The second diagram focused entirely on the options for changing the settings for a section of the home page once it had been placed on the page. Each section had

some options the user could modify. In most cases the options were fit onto a single screen. The major exception is the Stock Portfolio widget, which requires as many as six screens to set up and modify

a stock portfolio. The effect of providing zip code, first name, and birthday are shown by overlaying the symbols developed on the first diagram.



PORTFOLIO CONTENT PAGE for the Portfolio Name field. On this page, there is no effect of pages C and D provide for the portfolio. The user can click on the Stock Symbol Lookup and Add buttons (pages C and D) without making any changes to the portfolio. However, if a stock symbol is added to the state of the Stocks with Portfolio, the user can click on the Stocks with Portfolio button.



C. STOCK SYMBOL LOOKUP
(my.excite.com/?symlookup)
This page is launched in a new browser window. It provides a search feature for finding stock symbols. There is no direct integration with the Personalize Stock Portfolio Content page. This page is part of the My Excite Stocks Channel.

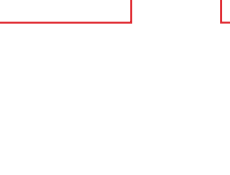


D. ENTER SHARES OWNED
This page provides a form to enter number and purchase price for stocks in the portfolio. This information is used in some of the portfolio views that can be selected in F.

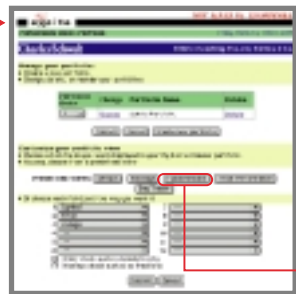


E. STOCKS WITH PORTFOLIO DEFAULT VIEW
When the stock list is customized a Portfolio Change button is added. In this state the Charles Schwab has a Change button (my.excite.com/?change.1) now goes to F. The NAME Portfolio Change button (<http://my.excite.com/?change.1.11.uid=08DD196B34F5945B.port:0>) goes to B.

- Z** The ZIP CODE (Z) is applied to select data for a number of the default features.
- B** The BIRTHDATE (B) determines the information displayed in the Horoscope option.
- N** The FIRST NAME (N) is used to name the personalized page.



H. STOCKS WITH PORTFOLIO FUNDAMENTALS VIEW



F. PERSONALIZE STOCK PORTFOLIO MANAGE YOUR PORTFOLIO PAGE DEFAULT VIEW
The first part of this page leads to the version of B for the named portfolio(s). The second part of this page defines the "view" of the portfolios, which can be very large and complex. The result of selecting the Fundamentals view is shown in G.



G. PERSONALIZE STOCK PORTFOLIO MANAGE YOUR PORTFOLIO PAGE FUNDAMENTALS VIEW
Selecting one of the "Predefined views" buttons adds some number of columns to the Stocks display. Selecting the ten-row Fundamentals view expands the Stocks Portfolio display, shown in H.





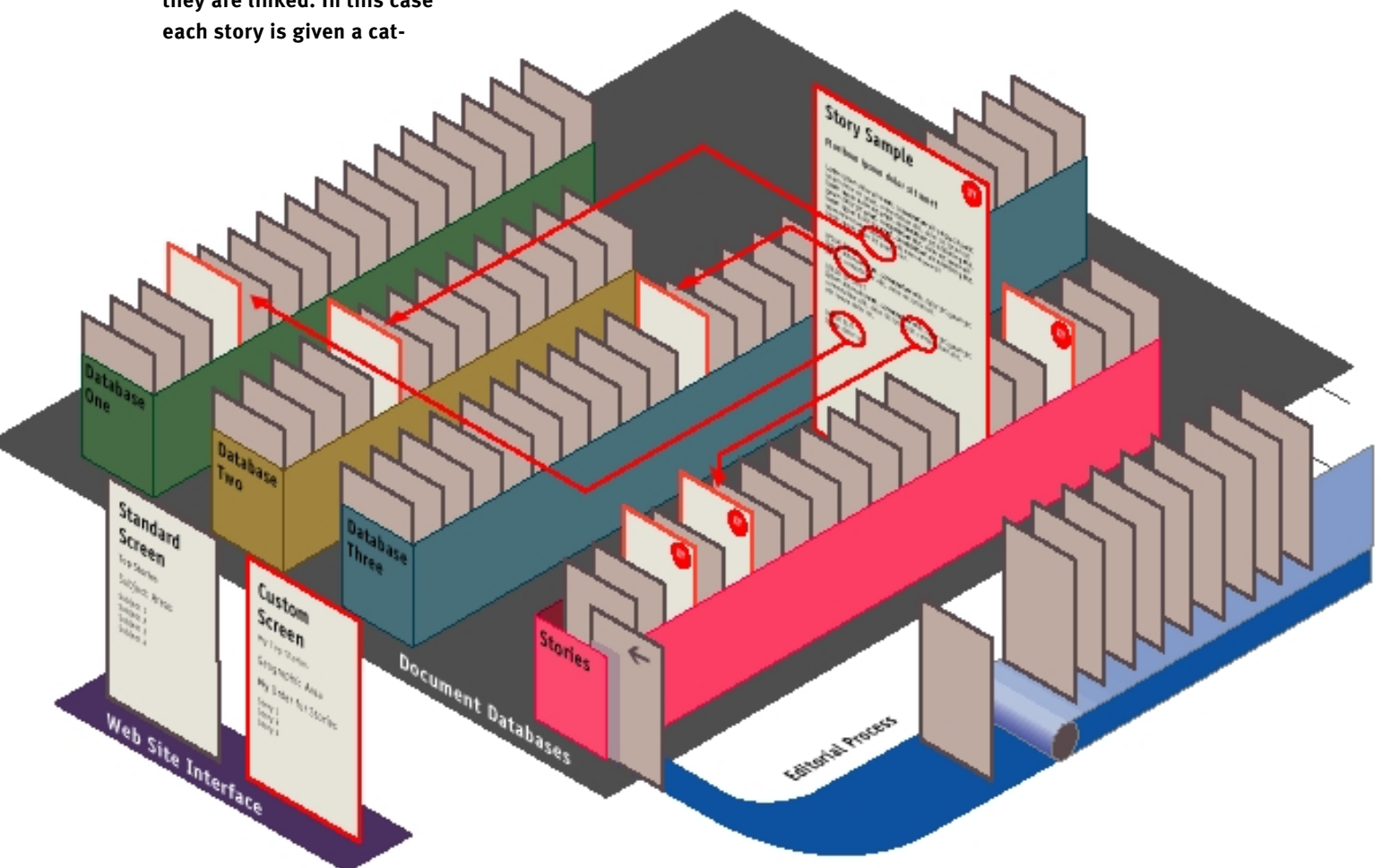
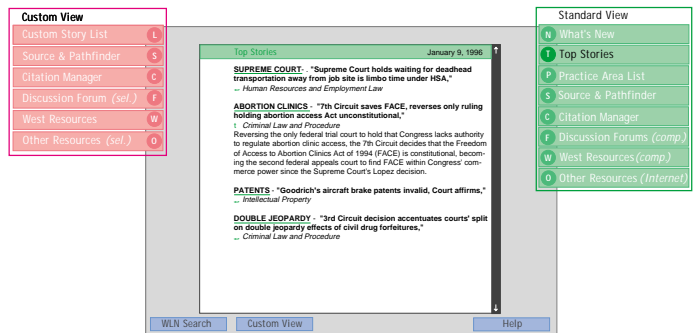
A separation of standard and customized features around the story or story list is shown in the page abstract diagram below.

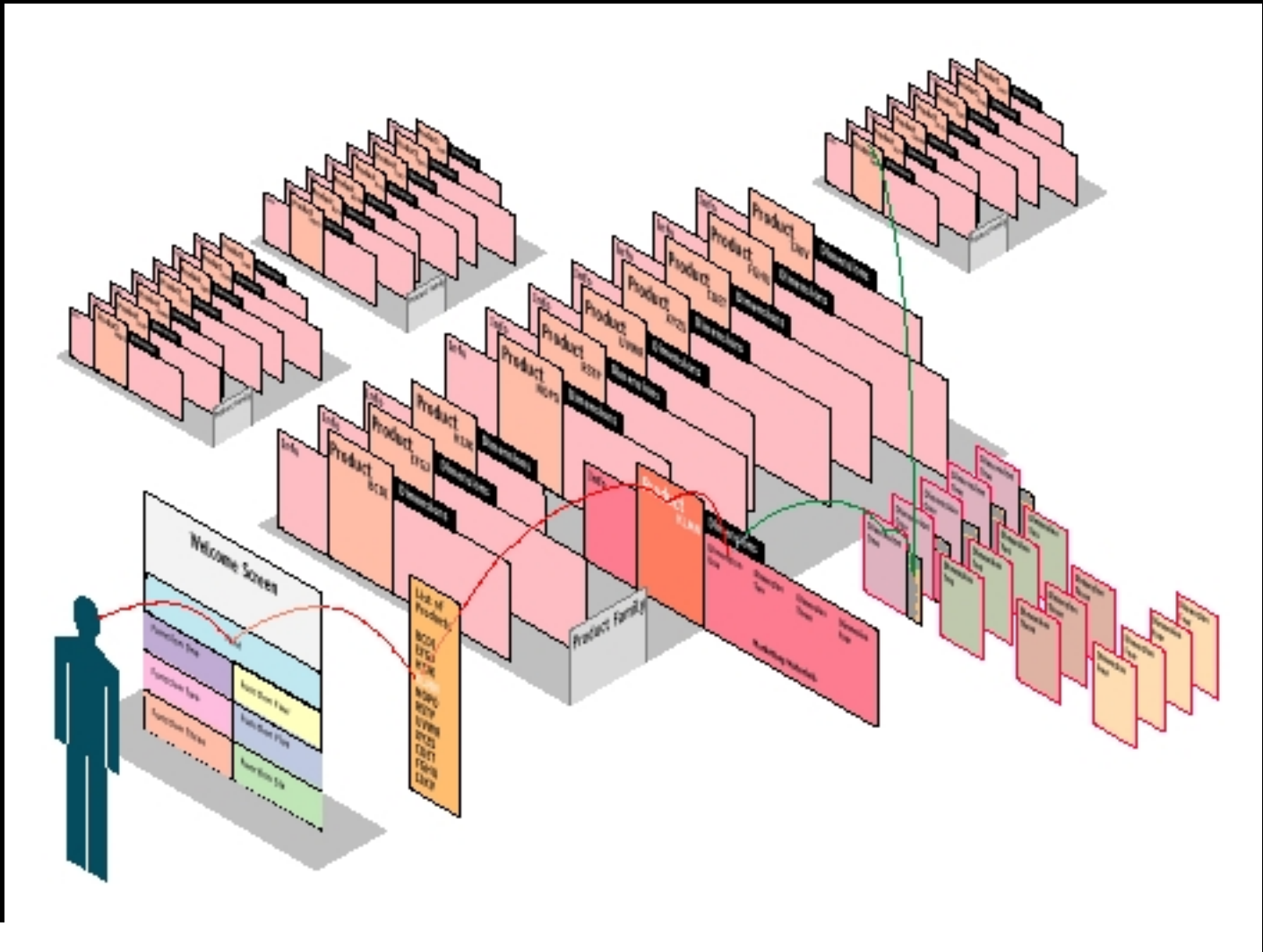
The final Top Stories page on the left, shown here in a screen shot captured in January 1997, was built on the concepts presented in these planning diagrams.

WEST'S LEGAL NEWS EDITORIAL PROCESS AND PAGE ABSTRACT

The diagram below captures the relationship between individual stories in a news service, the editorial system used to create them, and the other databases to which they are linked. In this case each story is given a cat-

egory, represented by the red circle in the upper right of the card. The story text contains pointers (links) to stories in other databases. The user's view of the story is controlled by either the Standard or Custom home page presented by the web site.





MERRILL LYNCH PRODUCT MARKETING INTRANET ORGANIZATION SCHEME

Here a planning diagram can be used to solve conceptual problems, proposing an organization scheme to deliver product marketing information over an intranet. Each product was accessible by typing in a code, if the user was already familiar with the product. Products were also grouped in product families, though products in different families often shared important relationships, such as ratings and managers. To come up with a flexible organization for the marketing material that could

also generate useful navigational links between products, the concept of dimensions was introduced. The diagram tells the story of a financial consultant quickly selecting a familiar product by code, examining the dimensions of the product, looking at other products that share this dimension, and following a link to a product in another product family. The concept was later embodied in an operational prototype for mutual fund product descriptions. The sample screen shot on the left shows the dimension links in the left frame of the screen.