

products and provided some electronic publication of technical details and specifications. UTC Carrier decided to leapfrog their competitors with the intention of providing more value to customers.

UTC Carrier's approach to CDSS used two primary facilities. First, they set about creating a comprehensive guide to the HVAC world called the Carrier Resource Center. The center contains links to industry organizations, universities where HVAC research is conducted, trade shows that maintain an online presence, and so forth. They also present items that are unique to Carrier and their customers: white papers, press releases, industry speeches, and so forth. This provides a focus for information search and, in particular, something that people in the industry can be pointed to by search engines, directories, and word of mouth.

Second, and more importantly, Carrier analyzed

the decision-making processes of its existing and potential customers. They identified a broad category of critical customers called "specifiers." These are people who are responsible for planning a HVAC system and defining the system requirements, but may not know much about HVAC per se, and be unaware of specific brands and products. UTC Carrier thought there was a significant opportunity to start the sales cycle earlier with these people: a visual navigation system was designed that walks specifiers through the design and selection process. By choosing a generic building type, like school, college, or auditorium, the user is presented with a variety of systems that can be used to heat and cool that type of structure. A quick click on one of the building types brings up a description of the system and the chance to gather more information

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# Content of Corporate Web Pages as ADVERTISING MEDIA

THE key TO turning consumers into customers IS TO  
offer Web sites with THE precise information they need.

The Internet allows marketers to target and communicate with highly involved and interested consumers worldwide. If consumers do not find information helpful for making a purchase decision at a company Web site, they are likely to visit and eventually buy products from competitors who happen to provide the necessary information. Here, we focus on the information content of corporate Web pages as advertising media and we examine how well corporations are using the Internet to effectively inform consumers.

A well-established classification system in the marketing and advertising literature, developed by Resnik and Stern [2], is utilized to understand the type of useful information provided by corporations through their Web sites [1]. It classifies advertising information based on 14 criteria or cues that represent categories of information potentially useful to the consumer:

1. Price or value
2. Quality
3. Performance
4. Components or contents
5. Availability
6. Special offer
7. Taste
8. Package or shape
9. Guarantee or warranties
10. Safety
11. Nutrition
12. Independent research
13. Company-sponsored research
14. New ideas

Content analysis (examining the message itself, not the communicator or the audience) was used in our study. The sample was drawn from the product cate-

about the actual system components.

Some very simple models can accept customer input and calculate basic requirements. There are numerous components for each system, but many of the components overlap. If a user chooses to progress, they can gain detailed product specifications and tables that give the highest available level of product information. This information is contained in an Oracle database that receives updates as the information changes.

The UTC Carrier site is firmly focused on providing information, an interface, and models that help a specifier. Carrier knows its services and products are being compared against its competitors, and that specifiers will probably compare products from all four major HVAC companies. It exhibits a key attribute of any good DSS: focus on the decisions to be made and the decision maker.

## Characteristics and Problems of CDSS

Labeling systems under arbitrary headings such as DSS, EIS, KBS, is fraught with difficulty, and often a function of the kudos associated with any particular label at any point in time. What is important here is not whether the systems developed by GEP and UTC Carrier can be labeled as CDSS, but the lessons that can be learned.

Both developments focused on providing support for customer decision making. Over time GEP learned what information their customers wanted, and extended it appropriately. UTC Carrier started from an analysis of their customer.

Both systems draw on sizable amounts of data: 15,000 pages of GEP's HTML, and full access to UTC Carrier's product database. Both sites provide some level of models, but, as with early DSS, this is less prevalent

gories of Furniture and Home Furnishings, General Merchandise, Soap, Cosmetics, Automotive, and Beverage and Alcohol, following [3]. Web pages from 125 Fortune 1000 corporate Web sites were randomly extracted.

The table shows the appearance of the cues across the Web sites studied. It shows the number of Web

containing four cues dropped to 32.8.

Price or value is the most frequently appearing cue (in terms of the number of company Web sites containing the cue in question) closely followed by performance and quality. This is not surprising, since consumers would be most interested in how much a product costs and how well it performs or its quality. But what is surprising is the comparatively low percentage (52 to 46) of Web sites containing these important cues.

Another interesting finding is the small percentage of Web pages containing multiple cues. This is an important issue as consumers are likely to look for or use multiple cues in making a purchase decision. The focus of corporate advertising should be to use the Web as a means for disseminating useful purchase-related information that effectively informs and educates potential customers about their product offerings. **C**

Frequency of appearance of the 14 cues in corporate Web pages

Cue Type	Number of Web Sites Containing Cue	Percent of Web Sites that Cue Appeared
Price or value	65	52.00
Performance	61	48.8
Quality	58	46.4
Safety	54	43.2
Taste	39	31.2
Packaging or shape	32	25.6
Availability	31	24.8
Components or contents	30	23.5
Independent research	15	12.2
Special offers	12	9.6
Guarantees or warranties	10	8.0
Company research	3	2.4
New ideas	0	0
Nutrition	0	0

sites in which the cue appeared in and the percentage of Web sites that contained the cue. The analysis indicates that 83.5% of the Web sites were informative, based on the definition that a Web site is informative if at least one cue is present [2]. Only 54.3% of the Web sites contained at least two cues and 51.5% contained at least three cues. The percent of Web sites

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An earlier version of this article appeared in the *Proceedings of the International Conference on Information Systems*, Dec. 1996, Cleveland, Ohio.

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ACM 0002-0782/98/0300 \$3.50