

Individualized Communications

Innovative ways that a company can reach large audiences on a one-on-one, personalized basis becomes practical using IntelliWeb™ and IntelliPrint™. These products are available from MicroMass Communications™, Inc. of Raleigh, North Carolina.

Established in 1994, MicroMass is a communications software company devoted to helping their clients communicate individually with each member of a company's customer base.

The first commercially-released product from MicroMass is IntelliWeb, a full-featured website personalization tool. MicroMass also provides IntelliPrint, a product designed to create tailored, individualized messages via printed media.

an elite group," says Mark Rinehart, MicroMass' director of systems engineering.

IntelliWeb delivers personalized messages by dynamically creating single web pages or entire web sites based on information provided by each website visitor. A key feature of the product is that a user need not wade through volumes to get to sentences. IntelliWeb developers tie content databases to expert system-based rules/facts databases. These are activated when a visitor's information is either entered via a standard HTML form or provided from a customer database. Also, the databases are triggered when the user's own personal IntelliWeb profile is supplied.

IntelliPrint uses proprietary technology to generate printed messages that are personally relevant and tailored to meet each individual's needs. Over time, IntelliPrint establishes a dialogue with each customer using individual customer feedback. This information is then utilized to create timely, relevant and enduring personalized messages.

"IntelliPrint dramatically changes the way people have traditionally communicated," says David Bulger, MicroMass chairman and CEO. Historically, people have only been able to communicate on either a micro (one-to-one) or mass (one-to-many) level, he explains.

Examples of IntelliPrint in operation are numerous. For instance, Bristol-Myers Squibb, in conjunction with MicroMass, developed a personalized newsletter, *Living at Your Best*. The newsletter content was geared to each recipient based on a health and

lifestyle survey taken earlier.

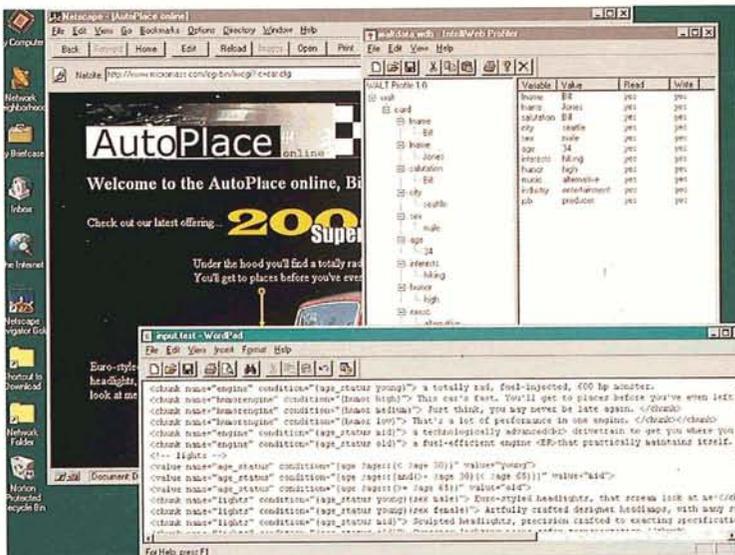
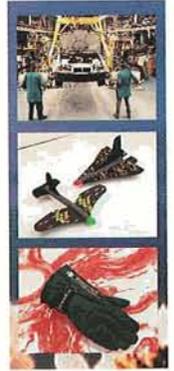
IntelliPrint also is the core technology behind SmithKline Beecham's Nicorette Committed QuittersSM Program. This 12-week program was built by MicroMass using IntelliPrint software, coupled to the latest in demand printing technology. Participants are provided individually customized motivational materials to support their attempt to stop smoking.

"Our system combines the intimacy of very personal, micro communication with the reach of mass communication, enabling our clients to develop and sustain interactive conversations with millions of people," Bulger says.

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SM Nicorette Committed Quitters is a salesmark of SmithKline Beecham.



Based on a NASA software system, IntelliWeb allows users to personalize their websites.

At the heart of these MicroMass personalization technologies is CLIPS. Computer technicians at Johnson Space Center produced CLIPS, a development and delivery expert system tool. CLIPS stands for C Language Integrated Production System. It provides a cohesive software tool for handling a wide variety of knowledge with support for three different programming paradigms: rule-based, object-oriented, and procedural. CLIPS was made available to MicroMass Communications through the Computer Software Management and Information Center (COSMIC[®]) in Athens, Georgia.

"By embracing CLIPS and its expert system technology, our personalization products can make 'expert' content selections. This has put our products in