

BRINGING NATURAL LANGUAGE PROCESSING TO THE MICROCOMPUTER MARKET

THE STORY OF Q&A

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OVERVIEW

This is the story of how one of the new natural language processing products reached the marketplace. On the surface, it is the story of one NL researcher-turned-entrepreneur (yours truly) and of one product, Q&A. But this is not just my story: It is in microcosm the story of NL emerging from the confines of the academic world, which in turn is an instance of the old theme "science goes commercial."

BACKGROUND

In September of 1985, Symantec introduced its first commercial product, Q&A. Q&A is a \$299 integrated business-productivity tool for the IBM PC/XT/AT and compatibles. It includes

- a file management system,
- a report generator,
- a word processor,
- a spelling checker and
- an "intelligent assistant" or "IA."

The IA lets users manipulate databases and produce reports by issuing commands or asking questions in English.

WHY Q&A IS IMPORTANT

Q&A is important to everyone with an interest in natural language processing because it is bringing NL technology to the attention of the world at large. Already Q&A is the most widely used NL system ever developed, with hundreds of people now using it on a daily basis and thousands using it occasionally. Here is a small sampling of the reaction:

- * SoftSel, the largest US distributor of microcomputer software, publishes a biweekly "hot list" ranking its best-selling products. At the time of this writing, Q&A is number 3 on the list, below only dBASE III and Lotus 123, with monthly sales in the thousands. Some weeks Q&A has actually been above Lotus on the charts.
- * Every major publication addressing the IBM PC market in the U.S., Europe and Australia has written about Q&A, and their reviews have consistently been favorable. *Infoworld* gave Q&A a 5 disk rating--its highest. *PC Week* has

called Q&A the "quintessential management tool." In the *New York Times*, Q&A received an unprecedented 2-part review, and it took honors as the "software product of the year" in Australia.

- * In a comprehensive survey of file management systems for IBM PCs, *Software Digest*, which is widely considered to provide the microcomputer industry's most objective testing, gave Q&A the highest overall evaluation ever given to any product in any category.

WHAT'S THE STORY BEHIND Q&A

Compressing all detail, Q&A is a direct outgrowth of NL research conducted at SRI International in the 1970's.

About the time SRI's LADDER project was winding down, the Apple Computer appeared on the scene and I got the crazy idea that it would be neat to build a LADDER for the Apple. The known problems were that there wasn't an INTERLISP for the Apple, LADDER's code was over 100 times larger than the Apple's 48K memory, the Apple was too slow, and LADDER couldn't be ported to new databases relevant to personal use. These turned out to be the easy problems.

Getting Q&A off the ground eventually entailed starting two companies, coming close to going broke on multiple occasions, putting a number of personal friends through months or years of stress, building a new culture for AI/micro/marketing cross fertilization, and learning about lawyers, finance, product marketing, PC DOS, C, advertising, PR, promotions, sales, and end users. But in the end, the product happened.

CONCLUSION

Thousands of people now own or use NL systems, and hundreds of thousands have read about them. The world of NL has changed, and new opportunities for research and commercialization abound.

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