Artificial Intelligence Markets: State of the Industry for Expert Systems

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Concurrent Roundtable Session
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Artificial Intelligence Markets: State of the Industry for Expert Systems

Researcher and Moderator:

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Industry Participants:

Harry Reinstein
Chairman and CEO
AION Corporation

Patrick Perez
CEO
Neuron Data, Inc.

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Artificial Intelligence Markets Roundtable Agenda

2:00	Introduction
2:15	Relevant 1989 INPUT Research Findings
2:30	AION Presentation
2:45	Neuron Data Presentation
3:00	Open Discussion/Q & A
3:30	Planned End of Roundtable, or continued discussion...

Relevant INPUT Research Efforts

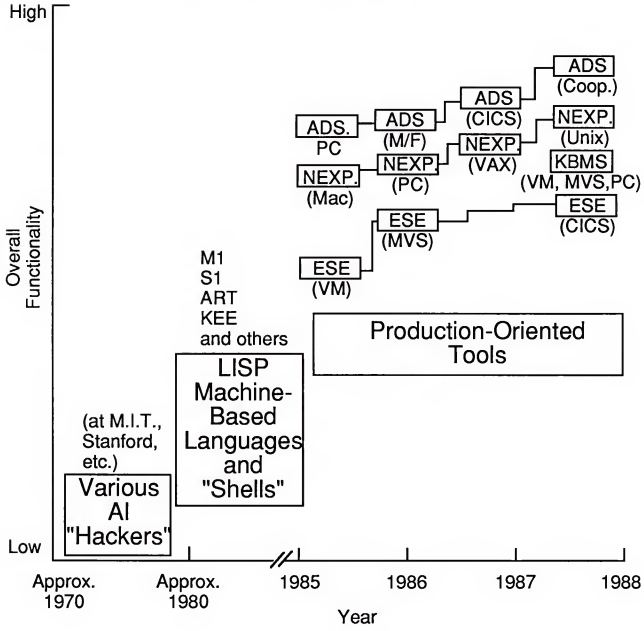
1. **Indepth expert system user interviews**
   - First half 1989
   - 40 users (hands on level)
   - By telephone
   - Sample concentrated in finance vertical

2. **Research objectives**
   - What are users really doing?
   - What tools are they using?
   - What's working/not working?
   - What direction is the market headed in?

Expert System Development Tools

Vendor - Product	Hardware	Operating Systems	Transaction Processing
AI Corp - KBMS	Mainframe PC	MVS/XA, VM OS/2	CICS, TSO, IMS/DC, IDMS/DC, CMS
Aion - ADS	Mainframe, PC	MVS, VM DOS, OS/2	CICS, TSO, IMS
IBM - ESE	Mainframe PC	VM, MVS OS/2	CICS, TSO, IMS, CMS
Neuron Data - NEXPERT	Mainframe Mac, VAX, Unix work-stations PC	VM, MVS	SQL/DS CICS, TSO, IMS OS/2

Expert System Industry Overview and Product Histories



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Which Types of Applications Are Being Built, by Whom

- **Mostly "diagnosing/classifying" applications**
  - Over 50%: Data analysis, interpretation (Examples: Insurance underwriting, bank lending)
  - About 20%: Use advising, procedures (Example: Help desk)
  - Others: Controlling, planning, configuration, simulating
- **95% of sample: No end-users build or modify expert system applications**
  - Almost always: "Knowledge engineers" were programmers
  - Mostly: Same person builds knowledge base, programs interfaces, and solves DP environment problems
- **Conclusion: Despite relative simplicity of applications, end-user development of expert systems is a "fiction"**

Marketplace Application Distinctions: Standalone vs. Integrated

	Survey Response (Percent)	INPUT Trend Forecast
Standalone	43	Decrease
Integrated	57	Increase

Applications in Production vs. in Development

In production	43%
In development	57%

Production "Environment" Defined

1. PC "production" dominates (over half)

2. More production "testing" than full production

3. Mainframe production activity
   - Little found
   - Mostly batch
   - Few transaction applications

User Satisfaction Measures

Generally satisfied with:

1. Range of capabilities
2. Ease of development
3. Integration with other applications
4. Documentation
5. Customer support and hotline

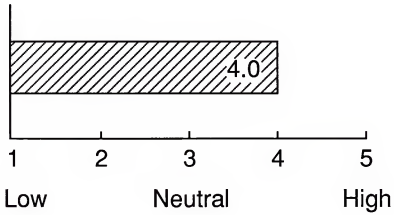
Varying responses pro and con on:

1. Processor resource consumption
2. Response time
3. Maintenance updates

Key Decision Criteria at Time of Product Purchase

	Decision Criteria (rank)
1	Mainframe platform
2	Technical superiority
3	Vendor reputation
4	Easy development
6	PC platform
6	DB access
7	Other platforms
10	Portability
10	Easy production use
10	Low cost

Overall Satisfaction with Product



Future plans: uncertain

Future Directions in Expert Systems

- Search for a home . . .
- Increased AI functionality?
- Increased production capabilities?

Dennis G. White
Director, Custom Research

PROFILE

CAPABILITIES

- Mr. White has 19 years experience in developing and implementing business strategies and marketing plans in the computer services, data communications, artificial intelligence, and software industries.
- Both staff and executive level responsibility for business opportunity evaluation, company acquisitions, corporate and product marketing in over twelve vertical markets.
- Experience working for venture capital start-ups, turn-around situations, medium-size public companies, and a Fortune 100 company.

BACKGROUND

- Director of Marketing for Boole & Babbage, Inc. Responsible for IBM system software product introduction and marketing programs to the top 5000 data centers in the U.S.
- Director of Marketing for Syntelligence, a venture capital start-up providing expert system applications to banks and insurance companies. Responsible for defining product requirements, sales support, and creating critical third party relationships.
- Vice President, Marketing for Tymshare's Information Services Division. Directed fundamental change in business strategy from timesharing to integrated applications and EDI.
- Vice President, Marketing for Tymnet. Responsible for the marketing of public data network services, electronic mail, and financial transaction services. Largest VAN worldwide in the early 1980's.
- Manager, Strategic Planning for Tymshare. Responsible for designing and implementing strategic planning for company's corporate management, individual lines of business, and foreign affiliates. Managed two company acquisitions.
- Manager, Business Planning for McDonnell Douglas Automation Company. Responsible for market research, competitor evaluation, business plans and acquisitions.

EDUCATION

- B.S., Engineering, Northwestern University.
- M.B.A., Washington University, St. Louis.