



TECHNOLOGY LEADERSHIP



Presentation By

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TECHNOLOGY LEADERSHIP

THE REPUBLIC'S TECHNOLOGY STRATEGY

Become the information leader

- **Effective collection, storage, retrieval and distribution of all types of information**
- **Not just news and advertising**

Meet the information needs of internal and external customers

- **Advertisers, readers, employees**



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INFORMATION PILLARS

Two types of information technology support our organization

Business and financial applications

- Advertising, finance, circulation support systems

News and information applications

- Editorial and other content, regardless of delivery method



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ALWAYS A TECHNOLOGY LEADER

Pioneer pagination project to cut costs

- **Provided early experience [circa 1988]**
- **Foundation for future production technology**



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MIGRATION FROM MAINFRAME

**The Republic's changing
information requirements**

We needed new methods

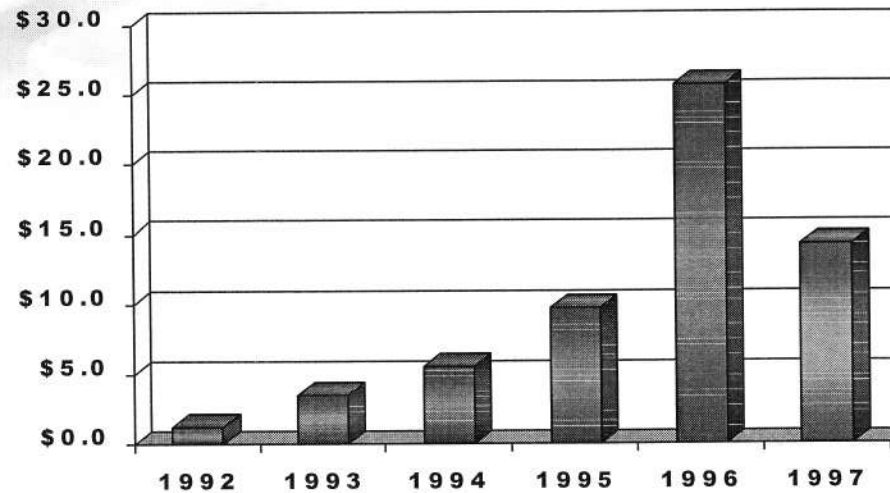
- **Reduce costs**
- **Respond to customers quicker**
- **Create and distribute new products / services**

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CAPITAL SPENDING

We have invested for the future

Capital spending for technology



In millions for hardware, software and services;
1997 reflects budget and carryover



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INFRASTRUCTURE FOR TOMORROW

**Migration from mainframe to
client/server technology**

**Information Technology is part of
strategic focus**

Reorganized IT to be customer-driven

*“There are no system projects, only company
projects enabled by information technology”*



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OUR CURRENT INITIATIVES

Advertising Sales

Editorial Production

Circulation Sales

Electronic Delivery

Database Marketing

Employee Support



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ADVERTISING SALES SYSTEM

Focus: efficiency and accuracy

- **Re-engineer sales process to better serve customers**
- **Reduce hand-off and provide sales representatives with access to information**
- **Increased revenue**
 - **Reduce mistakes and make-good requests by 98%**



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EDITORIAL PRODUCTION SYSTEM

Focus: improve design/production of print

- **Replace aging pagination equipment with database publishing system**

Support new products, delivery methods

- **Use same staff to do more**
- **Zoning and specialty publications**
- **Use same equipment to support print and online**



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EDITORIAL PRODUCTION SYSTEM

Another advantage: INI will use same system

- **Allows for faster, easier conversion**
- **Reduces risks, costs**



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CIRCULATION SALES SYSTEM

Focus: customer service, subscriber acquisition and retention

- **Customer database to more effectively target prospective subscribers**
- **Route lists, in delivery sequence order**
- **Ability to isolate subscriber stop reasons by subscriber type**



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CIRCULATION SALES SYSTEM

Reduce turnover costs, more effective marketing

- **Easier to track carrier problems**
- **More effective marketing**
- **Foundation to support Database Marketing initiative**



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ELECTRONIC DELIVERY TECHNOLOGIES

Focus: delivery of online information

- **Two online services**
 - **http: www.azcentral.com**
 - **keyword: arizona [on America Online]**
- **Content deeper than newspaper**
 - **Targeted information for travel, sports, house seekers, job hunters, small businesses**
- **Support advertisers with traffic, transactions**



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ELECTRONIC DELIVERY TECHNOLOGIES

Developing systems for learning and earning

- **New skills developed throughout organization**
- **Understand emerging technologies**



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DATABASE MARKETING

Focus: link customer information to marketplace needs

Developing system[s] to link databases to support direct mail, circulation and advertising initiatives

- **Database Marketing information aligns with Circulation information**



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EMPLOYEE SUPPORT

Focus: sharing information

- **Better knowledge throughout the organization**

Ability to organize, direct workforce more effectively

- **Provide self-service benefits program via Intranet**
- **To respond to changing market conditions quickly**



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TECHNOLOGY INVESTMENTS

Working with others via PAFET

- **A.H. Belo, Central, Cowles, Freedom, McClatchy, Pulitzer**



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TECHNOLOGY INVESTMENTS

CNI has strategic investments in three companies

- **InfoSeek**
 - Search technology for the Web
- **Pointcast**
 - Broadcast technology to the PC
- **Firefly Network**
 - Intelligent agents for consumers

The Republic will leverage investments into strategic relationships



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FUTURE PROJECTS

Explore electronic route delivery system for carriers

- **Further reduction of costs**
- **Increased revenue with targeted information delivery, which is tied to Database Marketing**



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FUTURE PROJECTS

Create new financial reporting system

- **True product cost accounting**

Streamline production tracking process

- **Reduce costs, support new products**

IN CONCLUSION

We are moving quickly to leverage current technology

- **For increased or new revenues streams**
- **For reduced costs**

Building strong technology foundations for the future