preparing for economic growth: the rebound of the technology market

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Agenda
- Where we are today
- Predictions for 2002
- Effect of “events” (9/11, Enron)
- Hot sectors and application areas for 2002+
- Looking beyond 2002
February 2002 Economic Forecasting Conference
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Total worldwide IT spend

For 2002: US$ 1.7 Trillion

Building, Construction and Trade (2%)
Education (2%)
Energy and Utilities (4%)
Healthcare (4%)
Transportation (4%)
Services (7%)
Retail and Wholesale (2%)
Government (11%)
Communications (14%)
Mining, Oil and Gas Extraction (1%)
Agriculture (0%)
Financial Services (20%)
Manufacturing (19%)

On average, US IT budgets represent 5.7% of the company's annual revenue

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Good news (sort of)

GDP PURCHASES OF HIGH-TECH EQUIPMENT & SOFTWARE (billion of 1996 dollars, real)

Business Purchases:
- Computers & Peripheral Equipment
- Software
- Communication Equipment

Consumer Purchases:
- Consumer Computers
- Consumer Software

Source: US Department of Commerce, Bureau of Economic Analysis

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Bad news

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2002 IT spending predictions

Late 90’s into 2000: Approximately 10-15% CAGR in IT budgets

U.S. IT Spending set to rebound with 4.0% growth in 2002, following a
5% contraction in 2001. Comparable “before 9/11” figures were a 3%
contraction in 2001 followed by a 7% increase in 2002.

Gartner

Negative growth (-0.7%) predicted for North American IT industry
October 18, 2001

The worldwide IT industry (save telecommunications, smart handhelds and
consumer devices) will see 2.4% revenue growth in 2001, down from
earlier predictions of 7% growth and down from 10% growth in 2000.

North American IT spending will see its first-ever negative growth rate
(-0.7%) in 2001 before rebounding to 4.3% growth in 2002 and
10.8% growth in 2003.

Meanwhile, IT spending in Western Europe will see 5.7% growth and the
Asia/Pacific region will see growth of 5.5%.

CIO Magazine/IDC

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YAV (yet another view) on tech growth

CIO TECH POLL: FUTURE & CURRENT GROWTH RATES

Source: CIO Magazine Tech Poll in partnership with yardeni.com

and ... 2002 IT spending

CIO TECH POLL: FUTURE IT SPENDING PLANS ON SEVEN BASIC IT CATEGORIES

Source: CIO Magazine Tech Poll in partnership with yardeni.com
911 impact on IT budgets

13% (24%) increased
1% (2%) sharply increased
26% (34%) decreased
57% (37%) no change

NB: %’s in brackets are Jan-01 responses

Source: Gartner & Soundview IT budget confidence survey (November, 2001)

Enron fallout

- Cable & Wireless announces it booked as revenue the total value of all lease arrangements (some as long as 20 years)
- Qwest communications discloses off-balance sheet partnership with KMC Telecom holdings
- KPNQwest said 15% of revenue from capacity-swapping arrangements
- Qualcomm’s share price drops amid concerns about its accounting practices
- Optus restates its 2001 earnings after investigation of its accounting practices
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Spending up in some sectors

- Financial services (Banking)
  - 4Q 1999 to 4Q 2001 I/T spending dropped from 27% of total budget to 15%
  - FY 2002 -- back to 25%
  - Drivers: differentiation, competition from insurance and brokerage, cross-selling and CRM

- Retailing
  - Best performers spending the most
  - Drivers: warehouse management, SCM, financial controls
  - Example:
    - Kmart turns: 3.6   Wal-Mart turns: 7.3

2002 Spending priorities

- IBM & compatible mainframes
- Contract labor services
- PDA's
- Internet projects
- Web integration
- Network H/W
- CRM
- System integration
- Intra/NT servers
- Unix servers
- Supply chain & B2B
- Systems H/W
- Portable systems
- ERP
- Database software
- Datacenter outsourcing
- Inhouse app development
- Desktop systems
- Security
- Storage
- Other Web-based apps

Source: Gartner & Soundview IT budget confidence survey (Nov-2001)

Index based upon:
The number indicating increased spending less those indicating decreased spending divided by total respondents

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IT Staffing

From staff to skill shortages
(January 2002 CIO survey):
- <1% reported IT staff shortage problem
- >63% reported skills shortage
- Skill shortages reported (frequency)
- 53% Application development
- 53% Project management
- 46% Networking
- 43% Database management
- 39% Website development
- 36% Security
- Greatest skills shortages (all categories) reported in the Southeast

Beyond 2002

The drivers of new technology spending
- First wave (2002)
  - Security
  - Data warehousing & rationalization (SAN)
  - Customer relationship management
  - Supply chain management
- Second wave (2003)
  - Revised business models
  - Application integration
  - Collaboration (intra and inter enterprise)
  - Mobile commerce (workforce)
- Third wave (2004)
  - Web services (.NET vs. J2EE)
  - Broadband to the home

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## US spend on external IT services

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<td>Manufacturing</td>
<td>62,971</td>
<td>96,127</td>
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<td>Financial Services</td>
<td>59,908</td>
<td>94,404</td>
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<td>Government</td>
<td>24,114</td>
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<td>Retail and Wholesale</td>
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<td>Healthcare</td>
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<tr>
<td>Transportation</td>
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<td>Energy and Utilities</td>
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<tr>
<td>Building, Construction and Trade</td>
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<td>Education</td>
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<td>Mining, Oil and Gas Extraction</td>
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<td>Agriculture</td>
<td>1,798</td>
<td>3,173</td>
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<td><strong>Total</strong></td>
<td>241,787</td>
<td>395,287</td>
<td><strong>10.3</strong></td>
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</table>

Source: Gartner Dataquest (December 2001)

## Wrapping up

- 2002 won’t be a great year for technology
  - But, better than 2001
  - In most sectors, short-term focus on ROI
  - Fermenting behind the scenes are new or revised business models
- 2003 focus will swing back to revenue enhancement and strategic focus
  - Much larger up tick in services and applications
  - Followed with H/W and comm purchases
  - Best in sector will be doing this in 2002
- 2004 will see a number of must-do technology initiatives emerge
  - Driven by advances in H/W and S/W