Information Technology Intelligence Consulting



# ITIC 2017 Hourly Cost of Downtime and Minimum Reliability Requirements Survey

**June 2017** 

Laura DiDio *Principal* 

### **Overview: Methodology**

- ITIC's annual Hourly Cost of Downtime and Minimum Reliability survey polled >709 global businesses in August/September 2016 and updated during April through May 2017.
- The Web-based survey included multiple choice questions and one Essay question
- The survey was independent; No Vendor Sponsorship
- No participants received any remuneration
- ITIC analysts conducted two dozen first person customer interviews to validate the Web survey responses
- Approximately 80% or 567 survey respondents hailed from North America; 20% or 142 respondents were international customers including (Australia, China, Denmark, Great Britain, France, Germany, India, Ireland, Israel, Italy, Japan, New Zealand, Norway, Poland, Spain, South Africa and Switzerland)
- All market sectors were represented: SMBs = 32%; SMEs = 31% and Enterprises = 37% of respondents
- Survey respondents hailed from 47 vertical markets
- ITIC deployed security and authentication mechanisms to prevent tampering

### **Survey Highlights: Reliability Trends**

#### Reliability Trends:

- 79% of corporations now require a minimum of 99.99% uptime for mission critical hardware, operating systems & main line of business (LOB) applications; this is a seven percent increase from the 72% of survey respondents who required "four nines" of uptime in ITIC's 2016 Minimum Reliability Survey. Additionally the percentage of corporate enterprises that need 99.99% minimum uptime and availability is up 25% from the 49% of companies who required it in the 2012 survey. These minimum reliability requirements will continue to rise.
- Security, BYOD and mobility pose the biggest technology threats to reliability
- Technical service & support and fast, efficient vendor responsiveness are crucial

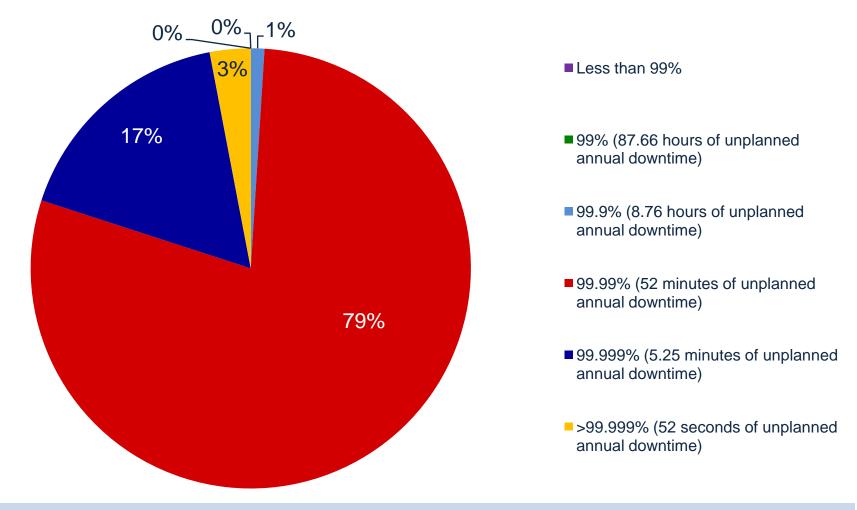
#### <u>Average Hourly Cost of Downtime Soars For All Businesses</u>

- An 81% majority of businesses across 47 vertical markets estimate the average hourly cost of downtime (exclusive of catastrophic outages) exceeds \$300K
- One-third or 33% of corporate survey respondents indicated a single hour of downtime can cost their organizations upward of \$1Million to over \$5M on average. This is exclusive of damages due to lost/stolen/changed data or any civil, criminal penalties or litigation fees.
- The average hourly downtime costs are even greater for companies in top tier and highly regulated verticals including: Banking/Finance; Government; Food; Healthcare; Hotel/Hospitality; Manufacturing; Media & Communications; Retail; Transportation and Utilities where average hourly downtime costs exceeded \$5 Million for over 68% of respondent firms with over 1,000 employees.

### Reliability Results

Corporate enterprise minimum Server Hardware, Server OS Requirements Increase Year Over Year (Y0Y): 79% of Organizations Now Require 99.99% - "Four Nines." This is an increase of 40% since 2013!

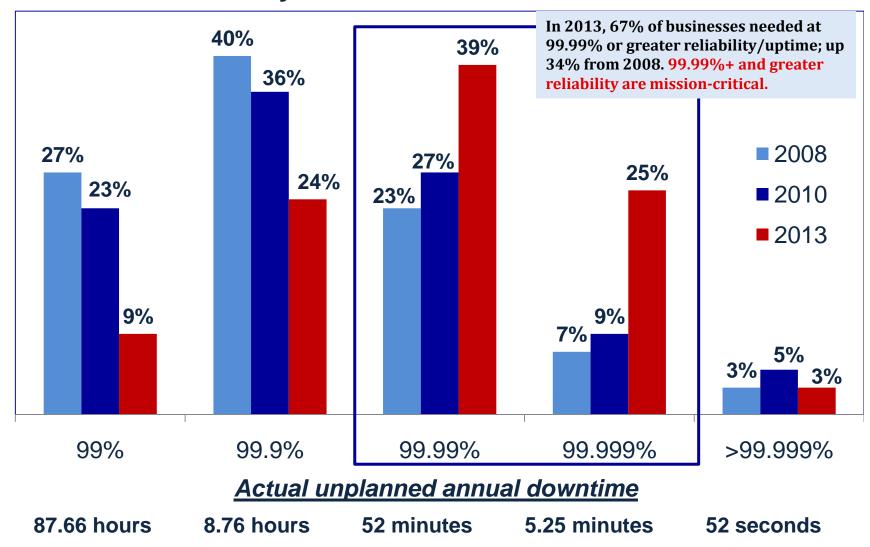
### In 2017, what is the minimum acceptable level of uptime required for the *most* mission critical applications and server hardware?



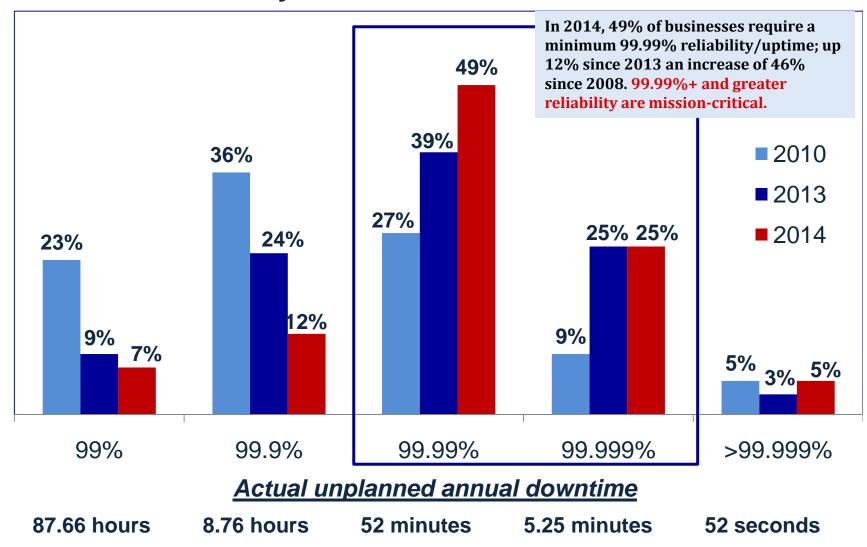
The percentage of firms requiring high availability continues to rise. Nearly one-quarter of businesses need 99.999% uptime while 3% of firms now need the highest availability >five nines = fault tolerance.

### **User Reliability Demands Increase**

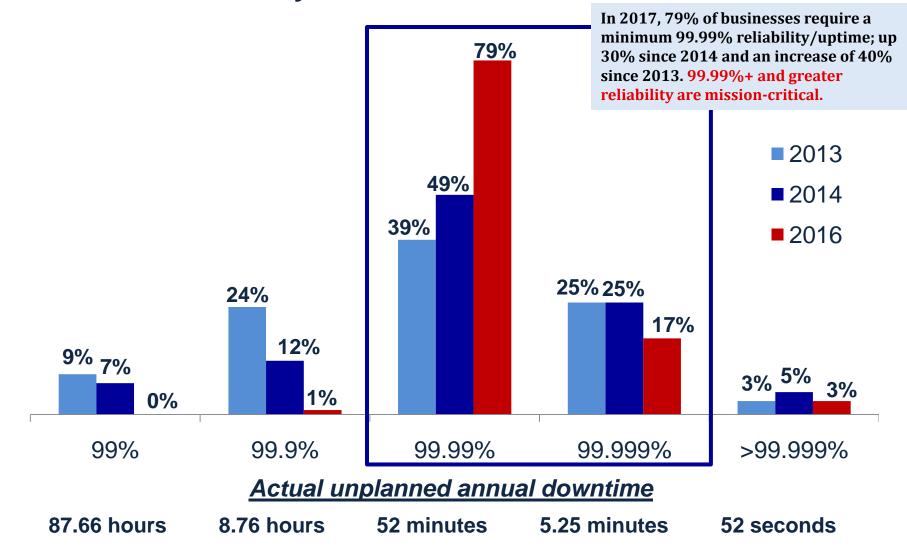
## Enterprise Minimum Required Levels of Reliability/Uptime Increase Dramatically from 2008 to 2013



## Enterprise Minimum Required Levels of Reliability/Uptime Increase Dramatically from 2010 to 2014

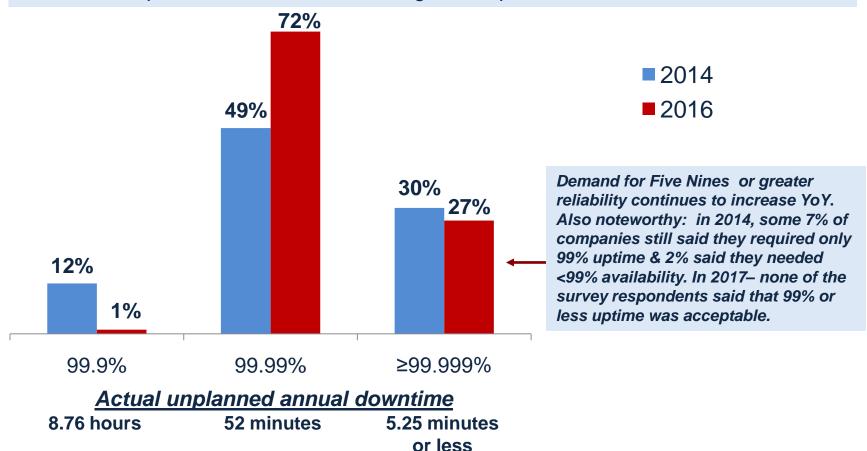


## Enterprise Minimum Required Levels of Reliability/Uptime Increase Dramatically from 2013 to 2017



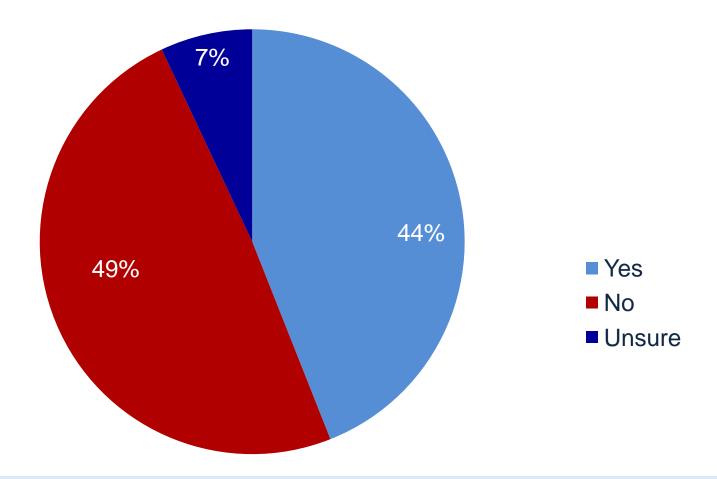
# In 2017: Seventy-nine percent of Enterprises Require a Minimum of 99.99% Reliability/Availability

Between 2014 and 2017, the number of firms requiring a minimum of 99.99% availability increased 30% from 49% in 2014 to 79% in 2017; eight out of 10 firms now need at least 99.99% Reliability & Availability for their mission critical systems. Three out of 10 companies demand 99.999% or greater uptime.



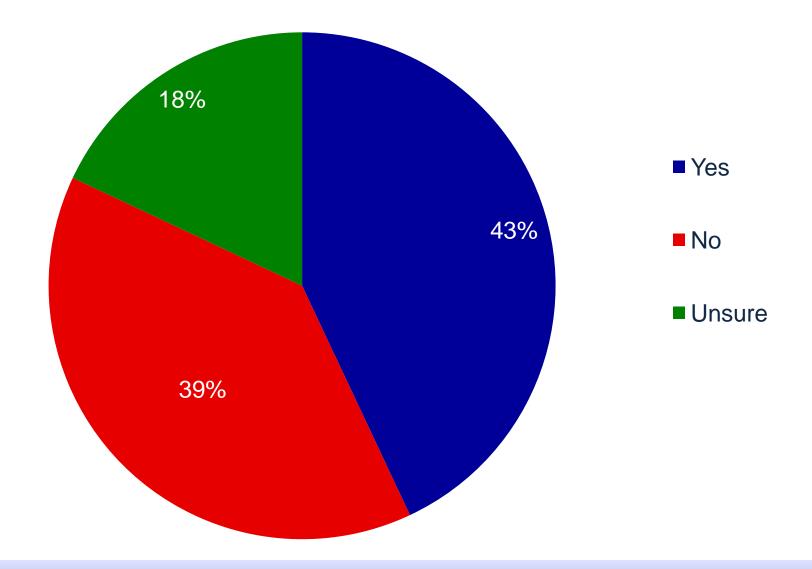


## Has your firm calculated the hourly cost of downtime for its mission critical systems and Line of Business applications?

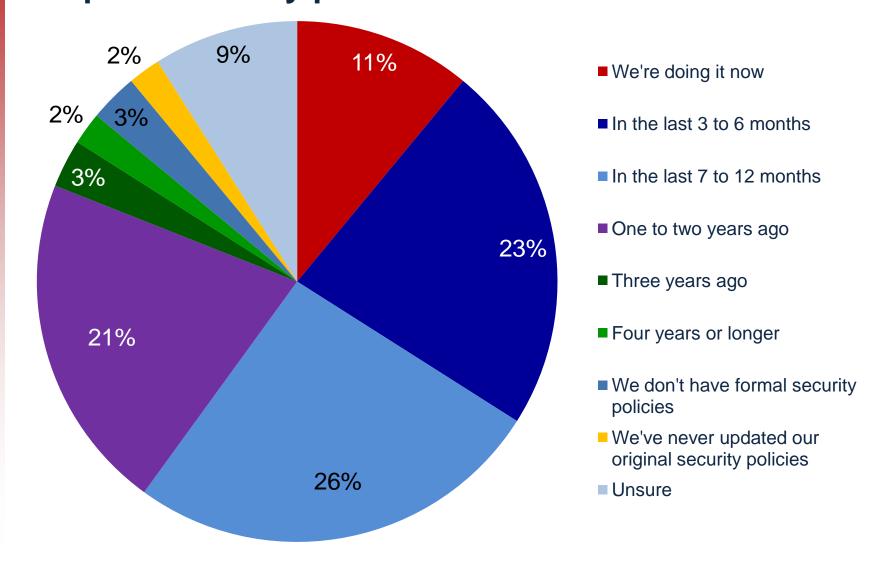


The percentage of enterprises unable to calculate the hourly cost of downtime consistently outpaces those that can over the last 10 years. Of the 44% that responded "Yes" only half --50% - can make detailed downtime estimates. In actuality, only 22% of organizations, approximately 1 in 5 can accurately assess the hourly cost of downtime & its impact on productivity and the business' bottom line.

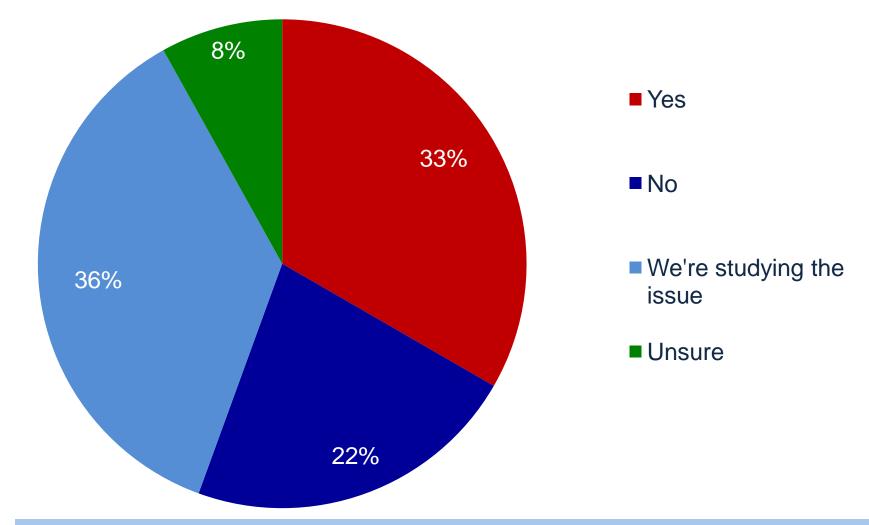
Have there been any security breaches to your firm's servers, mission critical applications, firewalls, datacenter, WAN or carrier network in the last year?



# When was the last time your firm updated its computer security policies?

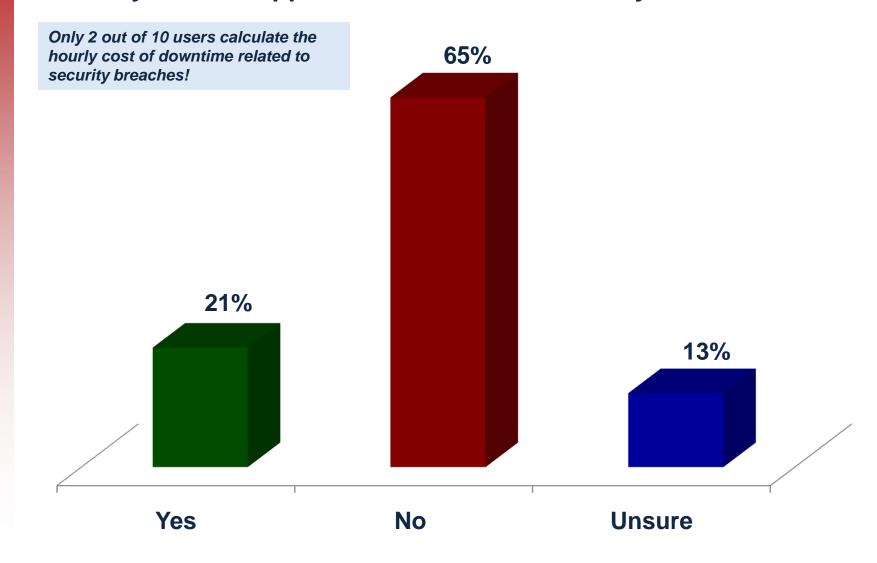


Is your firm increasing its security mechanisms & security training due to the recent spate of targeted attacks by organized hackers?



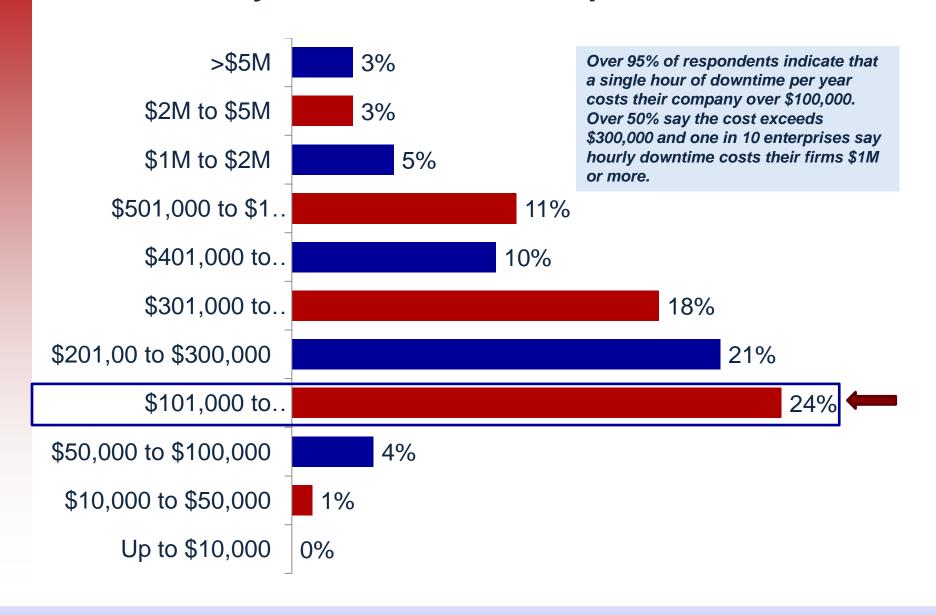
NOTE: A 54% majority of respondents are not implementing proactive security measures or training despite the increase in organized cyber attacks

### Does your firm calculate the hourly cost of downtime for mission critical systems & applications related to security breaches?

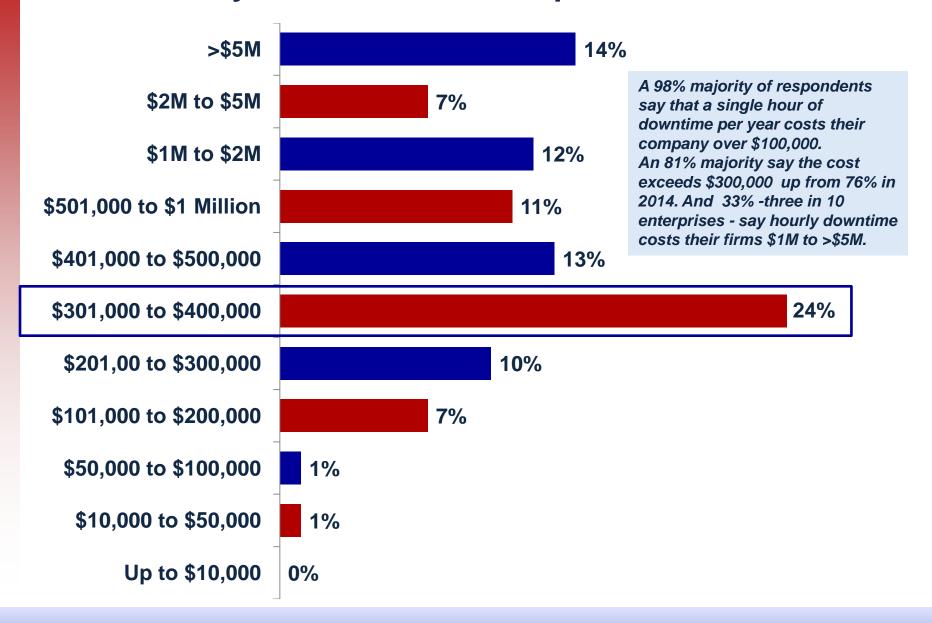




#### **Cost of Hourly Downtime for Enterprises in 2013**



#### **Cost of Hourly Downtime for Enterprises in 2017**



#### **Average Hourly Downtime Costs for Nine Top Verticals**

Vertical Market Segment	Average Hourly Downtime Cost
Banking/Finance	\$9.3 Million (US Dollars)
Government	\$7.8M
Food/Hotel/Hospitality	\$7.7M
Healthcare	\$6.9M
Manufacturing	\$8.5M
Media & Communications	\$9.0 M
Retail	\$6.6M
Transportation	\$7.1 M
Utilities	\$6.7M

#### Minimum Reliability Requirements by Vertical Industry

Minimum Reliability	Banking/ Finance	Govt/Educ ation	Food/Hotel	Healthcare	Manufactu ring	Media	Retail	Transporta tion	Utilities
99%	0%	0%	0%	0%	0%	0%	0%	0%	0%
99.9%	0%	0%	0%	0%	0%	0%	0%	0%	0%
99.99%	14%	79%	68%	72%	56%	31%	67%	47%	52%
99.999%	59%	19%	25%	21%	40%	56%	30%	51%	43%
99.999% +	27%	2%	8%	7%	4%	13%	3%	2%	5%

A 79% majority of businesses of all sizes – from SMBs to the largest enterprises – now require a minimum of 99.99% reliability/uptime. This is the equivalent of 52 minutes of *unplanned per server/per annum downtime*, or just 4.33 minutes per server every month. The requirements are even more stringent for corporations in the top vertical market segments which are highly regulated and bound by strict compliance laws.

#### **Questions?**

#### Laura DiDio

Principal, ITIC www.itic-corp.com

E-mail: Ididio@itic-corp.com

(508) 887-9814 Office

(508) 740-1513 Mobile

(508) 887-9815 Fax

Twitter: @lauradidio

Skype: laura.didio

#### **Information Technology Intelligence Consulting**

