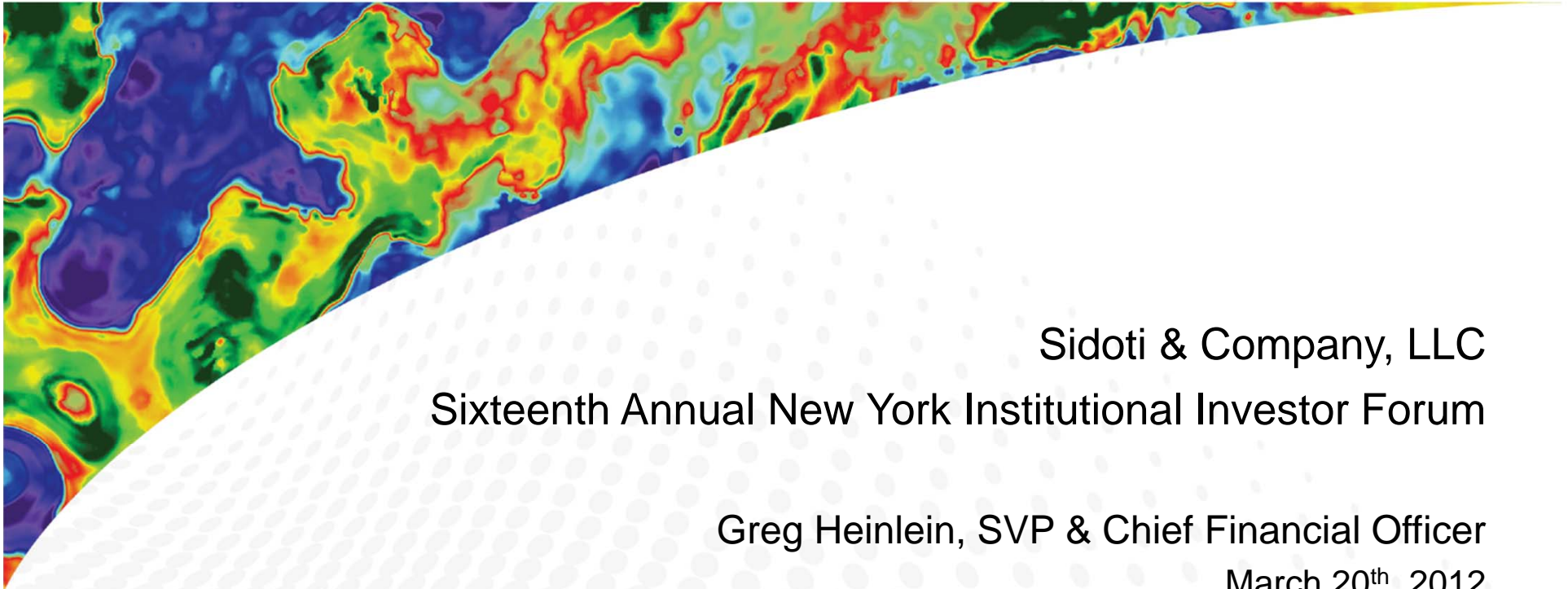




→ Charged to innovate. Driven to solve.™

ION Geophysical Corporation



Sidoti & Company, LLC

Sixteenth Annual New York Institutional Investor Forum

Greg Heinlein, SVP & Chief Financial Officer

March 20th, 2012

Forward-looking Statements

This presentation may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements include statements as to expectations, beliefs and future financial performance, such as statements relating to the Company's business prospects, future sales and market growth and other statements that are not of historical fact.

Investors are cautioned that all forward-looking statements are based on management's current expectations and include known and unknown risks, uncertainties and other factors, many of which the Company is unable to predict or control, that may cause the Company's actual results or performance to differ materially from any future results or performance expressed or implied. These risks and uncertainties include risks of audit adjustments and other modifications to the Company's financial statements not currently foreseen; risks associated with the timing and development of the Company's products and services and market acceptance of the Company's new and revised product offerings; risks associated with economic downturns and volatile credit environments; risks regarding international political and economic events and turmoil; risks associated with the performance of the Company's INOVA joint venture; risks associated with the Company's level of indebtedness, including compliance with debt covenants; risks associated with competitors' product offerings and pricing pressures resulting therefrom; risks that sources of capital may not prove adequate; risks related to collection of receivables; risks associated with pending and future litigation; and risks related to technological and marketplace changes affecting the Company's product line. Additional risk factors, which could affect actual results, are disclosed by the Company from time to time in its filings with the Securities and Exchange Commission, including its Annual Reports on Form 10-K and its Quarterly Reports on Form 10-Q.



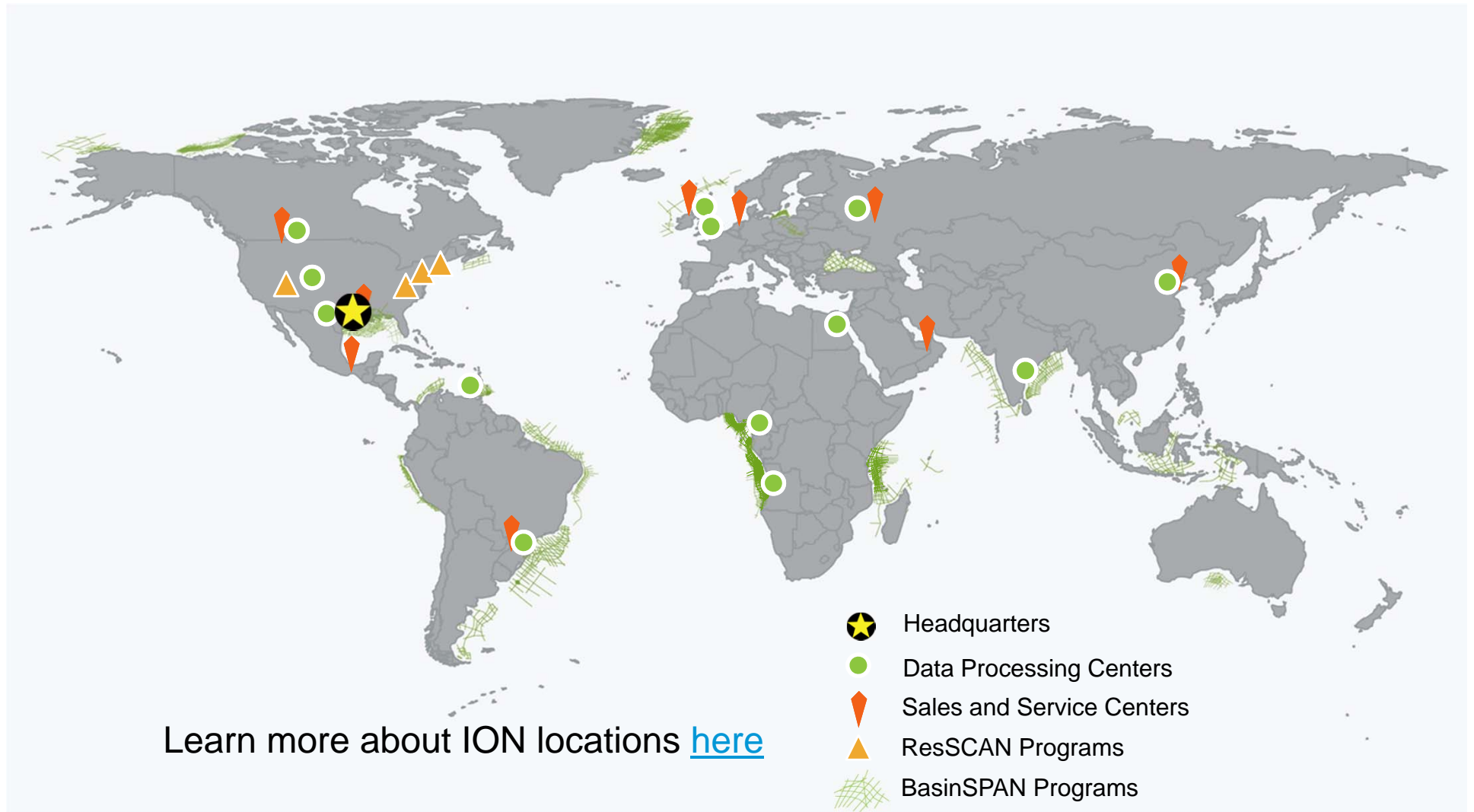
Today's Discussion

- Company Overview
- Areas of Expertise
- Current Business Issues
- Summary
- Appendix: Financial Information

ION at a Glance

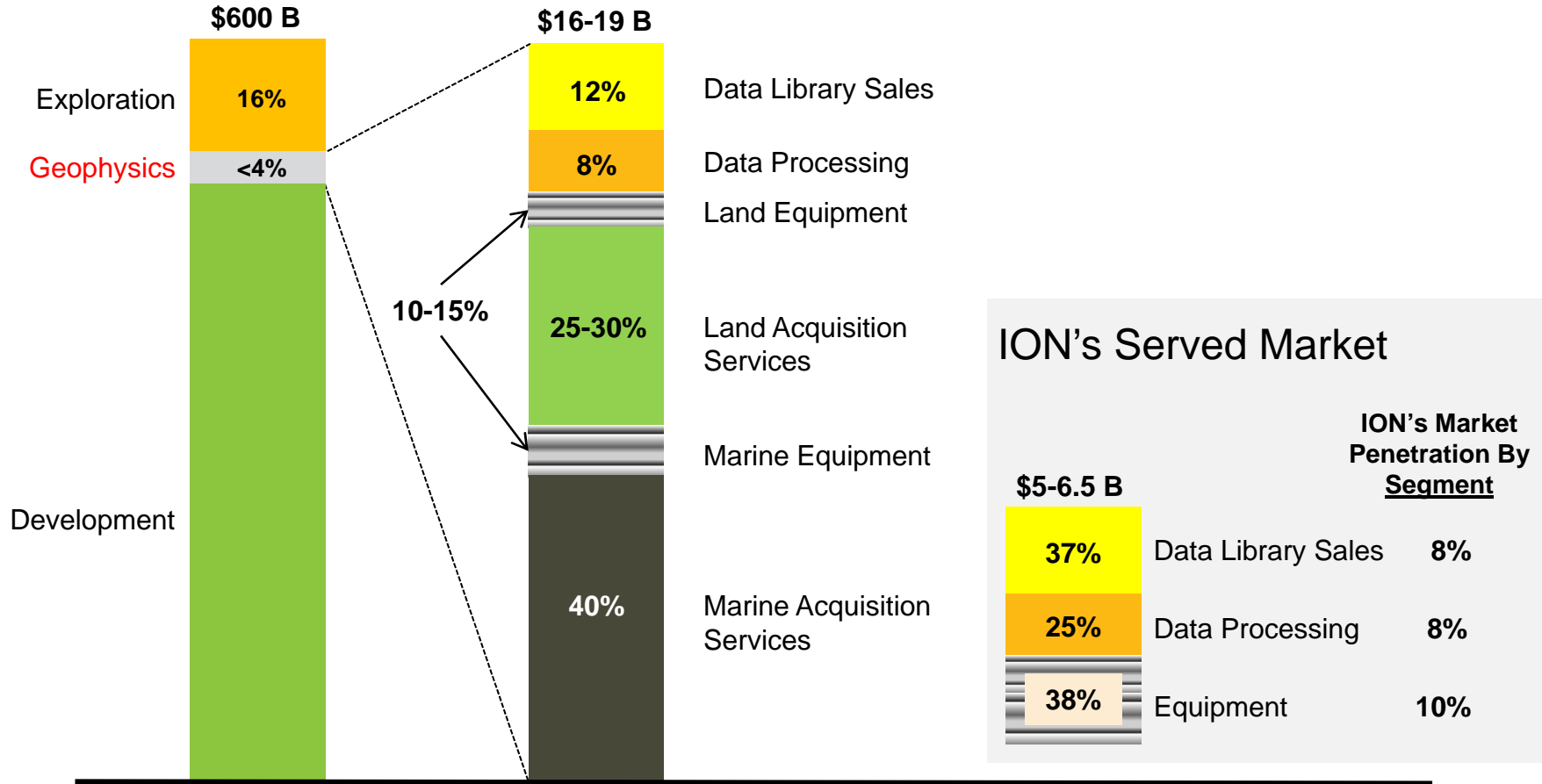
- **Technology company**, driven to develop and apply proven, innovative technologies and services to help our clients find and produce hydrocarbons as safely and efficiently as possible
- Founded in **1968** as Input/Output – renamed ION in 2007
- Headquartered in **Houston, Texas**
- Listed on the NYSE (Ticker: **IO**) since 1994
- **~1,100 employees** operating from over **20 locations** worldwide
- FY 2011 revenues - \$455 million
- R. Brian Hanson - President & Chief Executive Officer
- Robert P. Peebler - Executive Chairman (ION's CEO 2003 – 2011)
- Greg Heinlein - Senior Vice President, Chief Financial Officer

Global Footprint



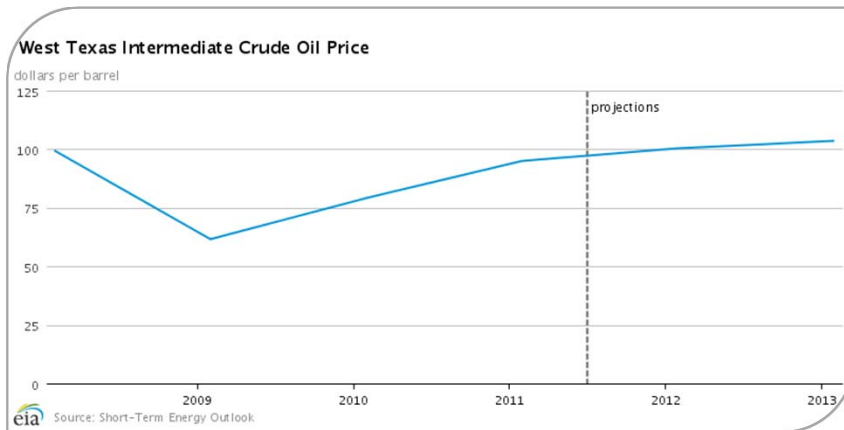
Seismic vs. E&P vs. ION's Served Market

A \$16-19 Billion Annual (Revenue) Industry, A \$5-6.5 Billion Annual Market

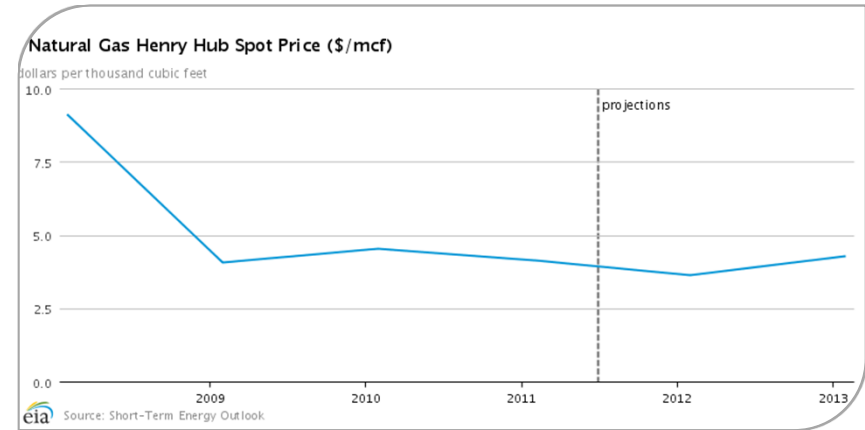


Global Market Outlook

Oil and Natural Gas Prices



- Expect oil prices to remain in the \$80 - \$100 range, supporting continued frontier exploration in challenging environments, including deepwater and Arctic.
- Expect natural decline of large global oil reserves.



- Expect depressed natural gas prices to cause shift to liquids in North America.
- Creating increased pressure on shale operators to locate, complete and produce shale gas more efficiently.

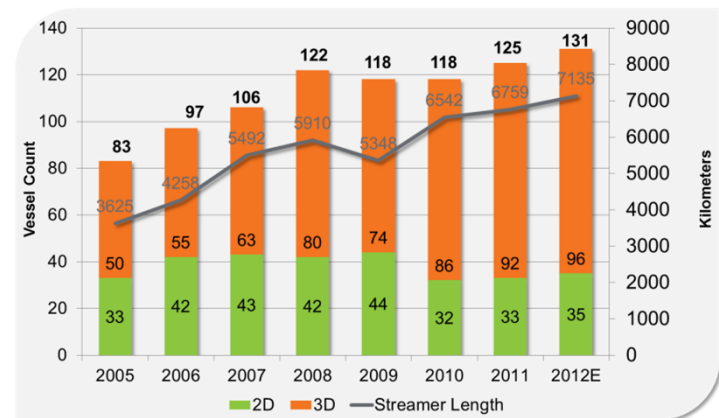
Global Market Outlook

Geophysical Sector

- Predicted increased E&P spending realized
- Marine
 - Towed Streamer: Seismic fleet expected to grow, with majority of new vessels 3D; expect streamer count and length to continue to increase with market move to higher-end 12- to 14-streamer vessels.
 - Ocean Bottom Cable: Seabed spending has increased 150%, driven by need for higher resolution imaging; seeing increased OBC activity for 3D/4D surveys.
- Land
 - Slow recovery of land seismic
 - North American shale-based seismic equipment spending may be negatively impacted in 2012
 - Trend toward larger land surveys and increased channel count, requiring higher resolution images in the Middle East

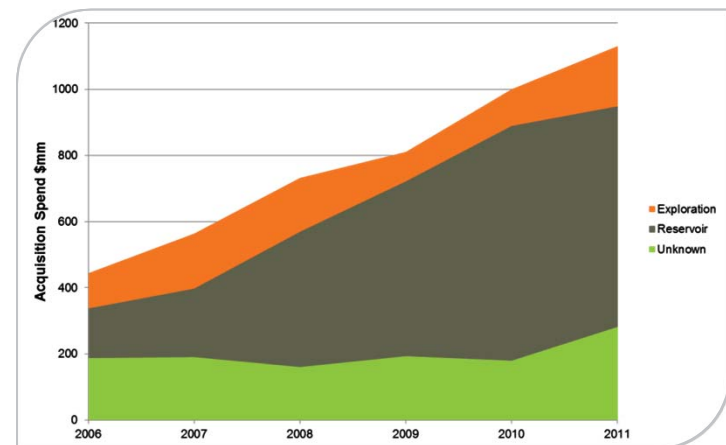
Systems Segment

Vessel Count & Streamer Length Segmented by Survey Type



2D – One streamer 3D – Two or more streamers
 Streamer length – Aggregate kilometers measured from vessel connection to end of streamer

Ocean Bottom Cable



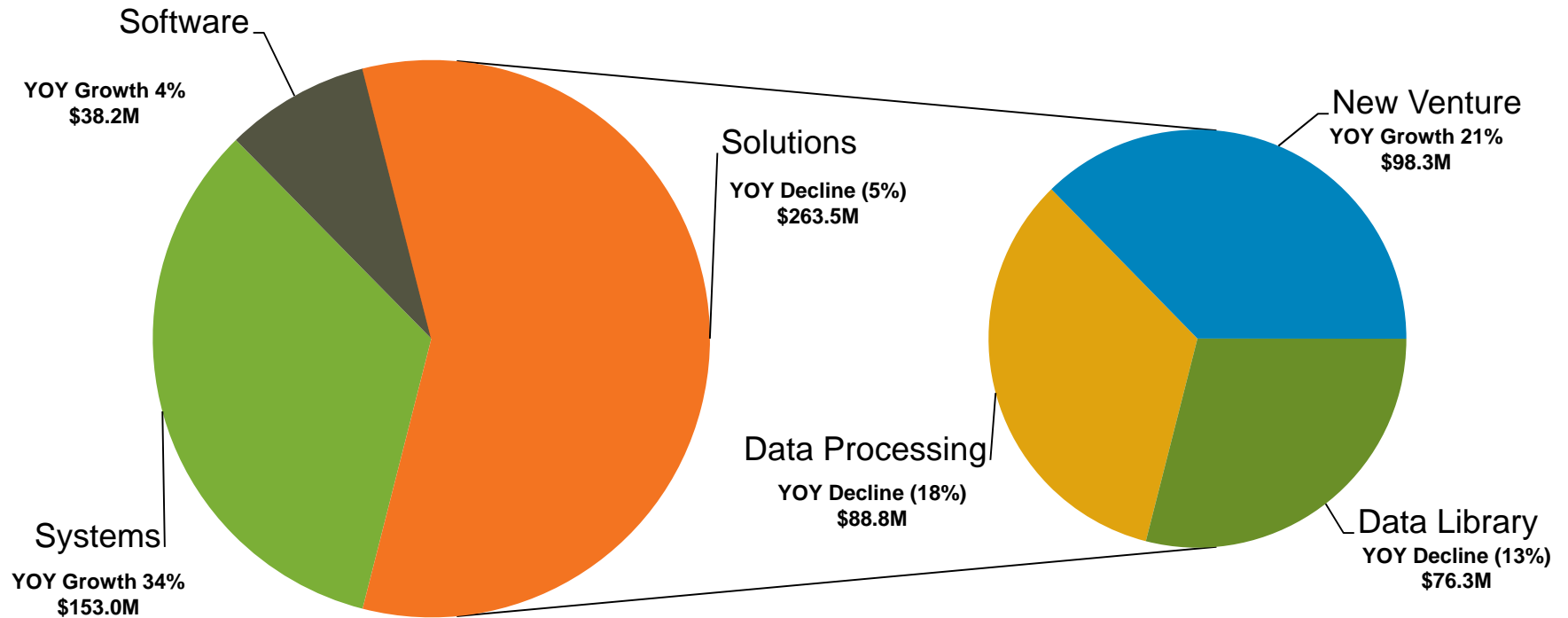
Source: ODS Petrodata, Company Analysis



Revenue Distribution by Product/Service Line

TTM Ending 31-December 2011

100% = \$454.6 Million



■ Systems ■ Software ■ Data Processing ■ New Venture ■ Data Library

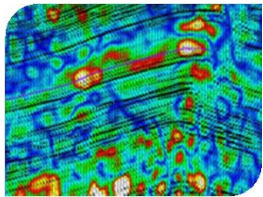
Note: Systems includes Sensor B.V., Marine Imaging Systems, Concept Systems

Data Processing includes GXT Imaging Solutions (and Reservoir Solutions)

New Ventures represent new Integrated Seismic Solution programs that are being acquired (analogous to "Acquisition Services" at ION)

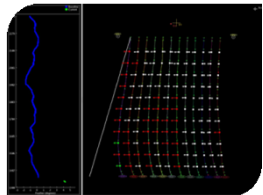
Data Libraries represent the ongoing sale of licenses to previously acquired seismic data programs

ION Strategy



Technology company

Bring the whole of ION to bear to solve the toughest E&P challenges



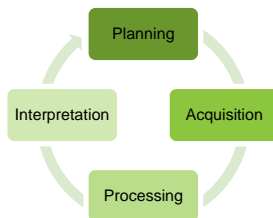
History of Innovation

Cableless acquisition technology, digital sensors, streamer steering, command and control systems, reverse time migration, full-wave imaging



'Asset light'

Focus our capital on our people and technology development

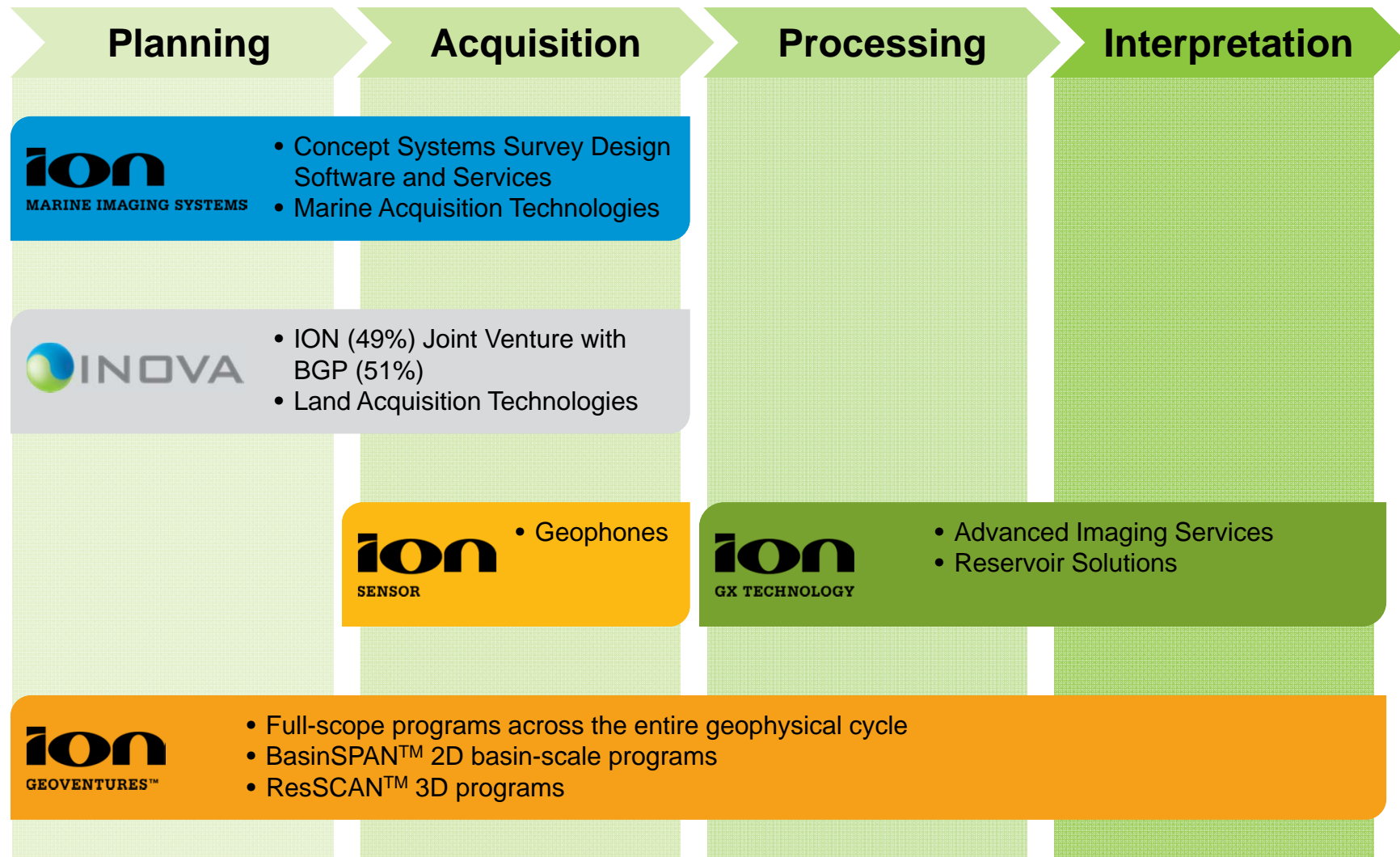


Participate in each stage of the geophysical cycle

Adding the greatest value through our services and technologies

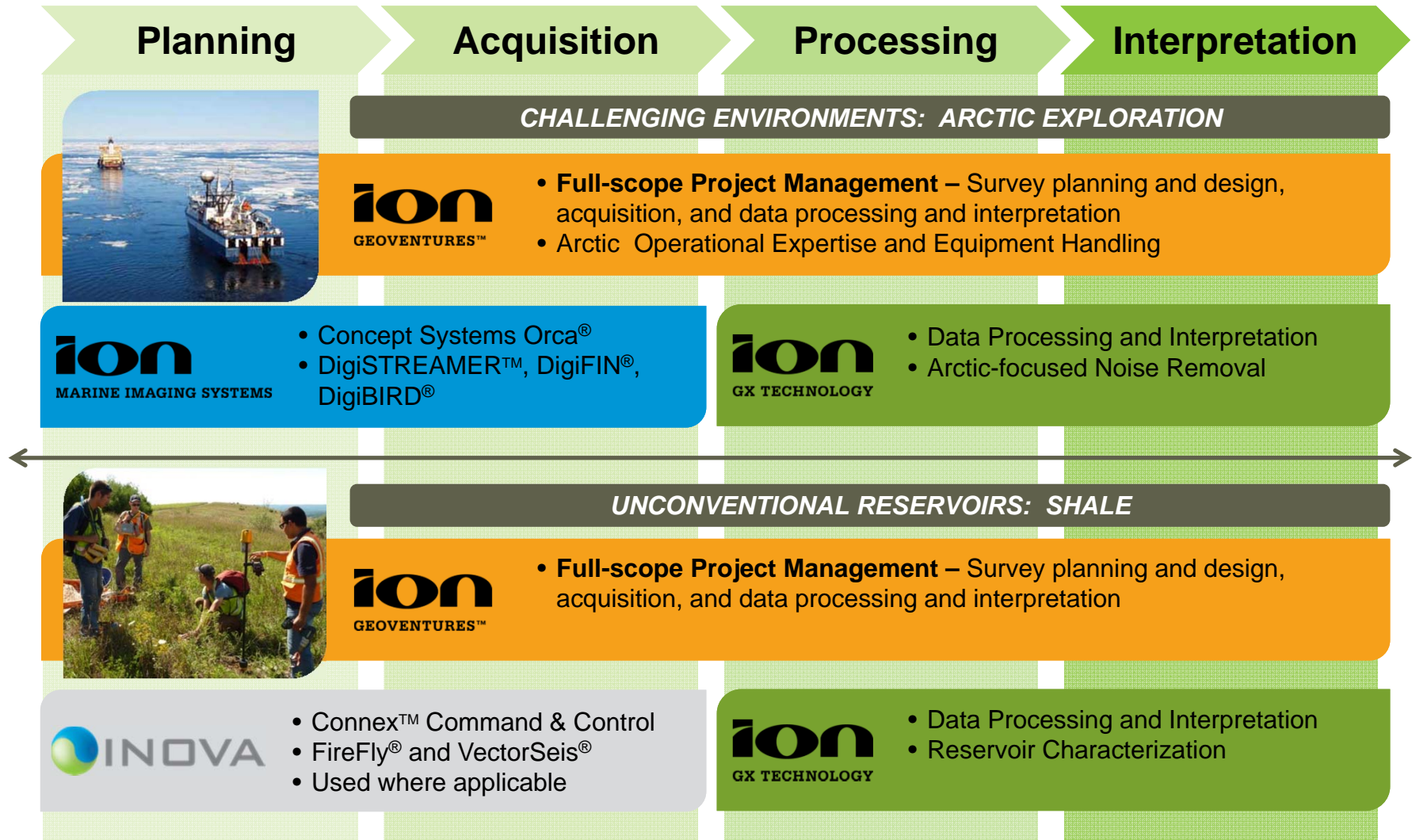
ION Strategy

Participation by Business Unit



ION Strategy

Bringing the Whole of ION to Solve Industry Problems





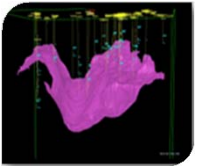
Areas of Expertise

Areas of Expertise



Challenging Environments

Arctic, Shallow/Obstructed Water, Transition Zone and Desert



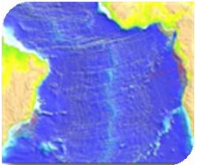
Complex Geologies

Subsalt, Sub Basalt, Thrust Belt and Carbonates



Unconventional Reservoirs

Shales, Tight Gas, and Oil Sands



Basin Exploration

BasinSPAN Data Library

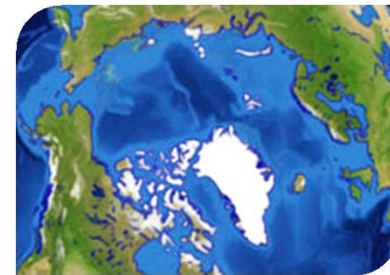


Current Business Issues

Current Business Issues

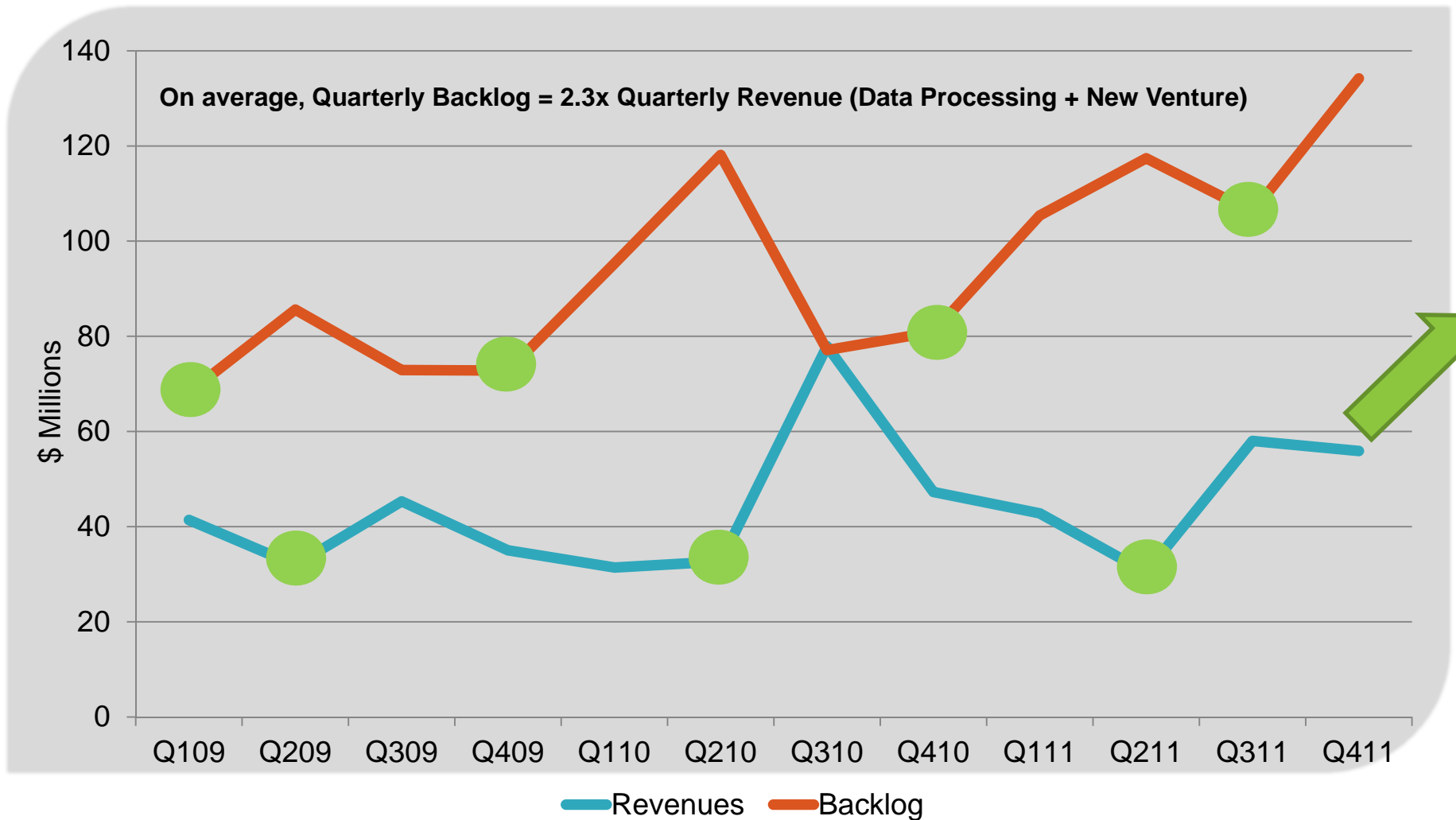
GeoVentures™

- Good performance due to portfolio of new venture activity in marine and recent shale plays
 - Funded fully on a portfolio basis
 - Leverage our high-quality GX Technology data processing services
 - Additional revenues generated through library sales after the SPAN is completed
- Considered a leader in Arctic seismic; ArcticSPAN™ contains over 50,000 km of data in the Canadian Beaufort and U.S. Chukchi Seas and offshore Greenland
- 2011 Year-to-date multi-client investment of \$144 million
- Expect \$130 to \$150 million in multi-client library investments in 2012



Solutions – Revenue vs Backlog

Quarterly Trends

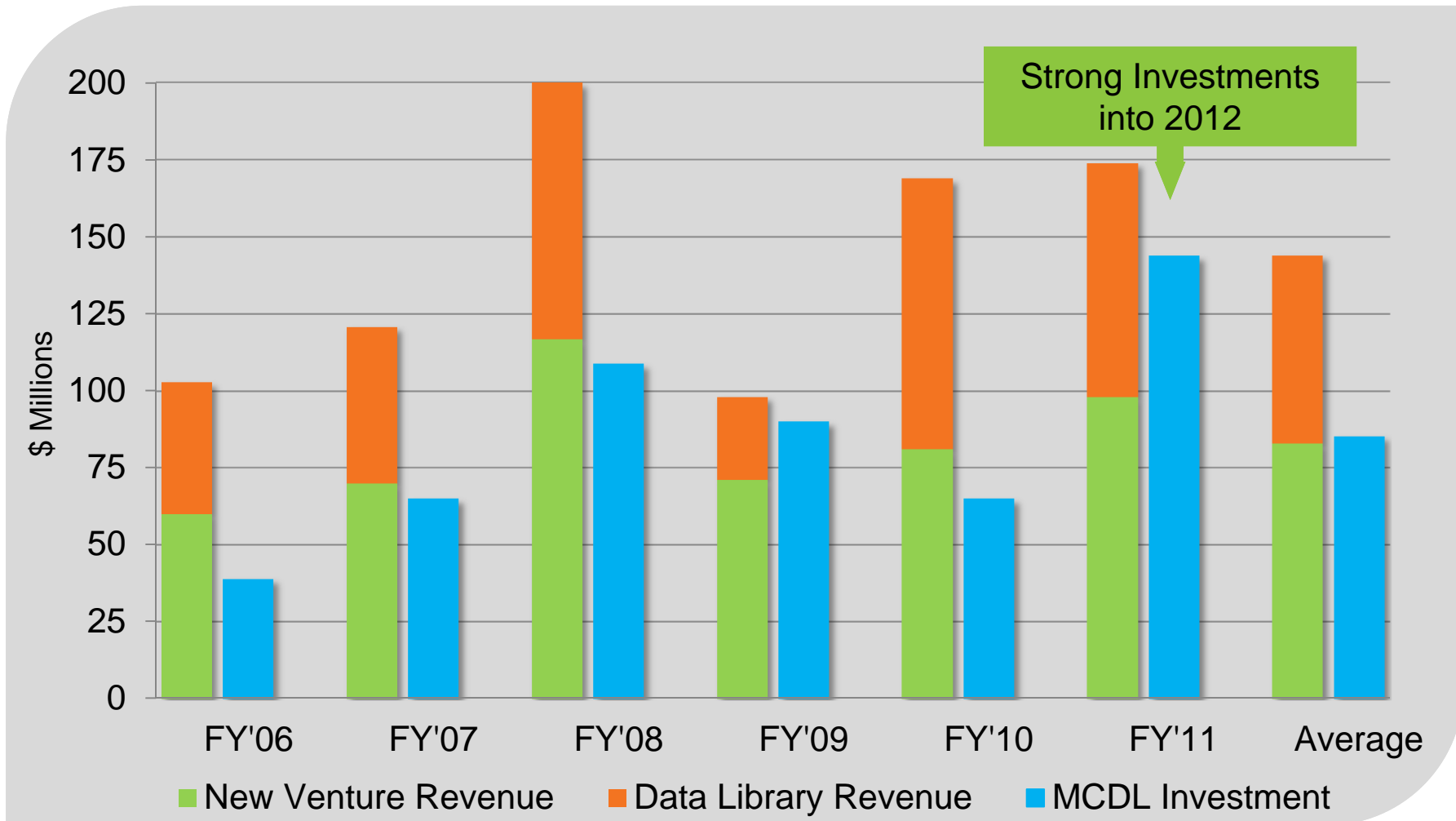


Solutions historically has a 1 – 2 quarter delay from backlog to revenue.

ION Data Library Investment Relative to Revenue

Average Per Year

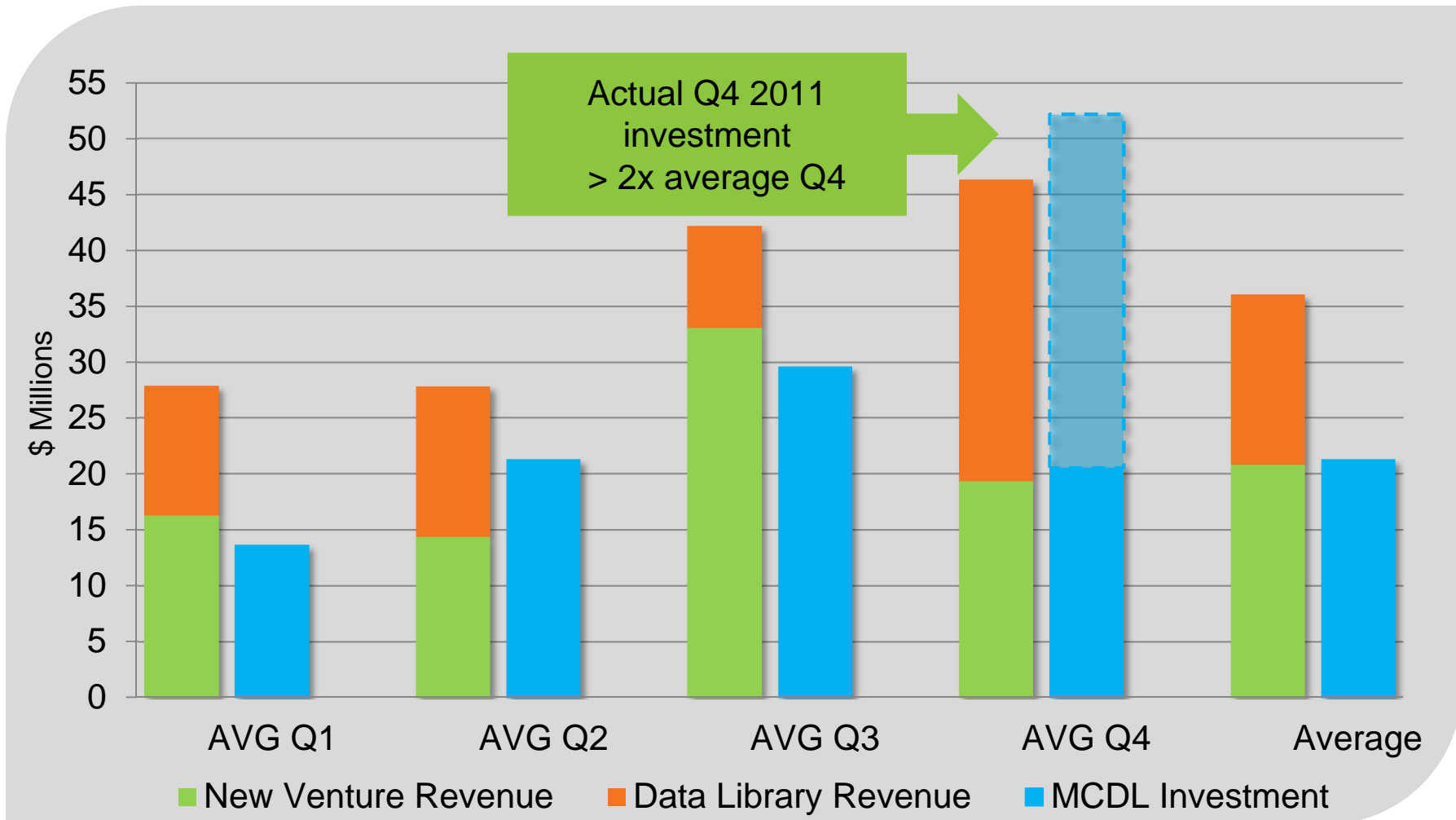
FY'06 - FY'11 MCDL Revenue vs MCDL Investment



ION Data Library Investment Relative to Revenue

Average Per Quarter ('06 – '11)

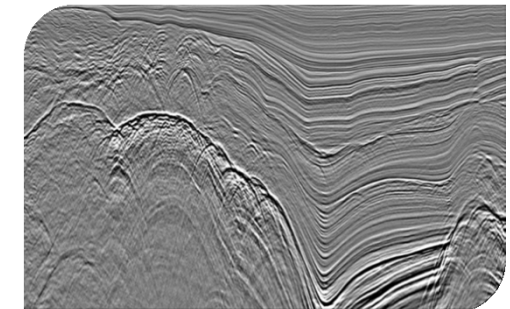
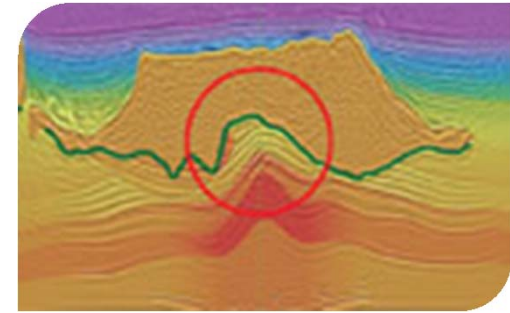
Multi-Client Data Library Revenue vs. Average Investment



Current Business Issues

Data Processing (GX Technology)

- Q4 '10 had strong GOM sales due to Macondo spill, E&P shifted to data library that was not repeated as much in 2011.
- Pioneered industry breakthroughs such as complex-azimuth, RTM and full-wave processing
- Services offered:
 - Pre-processing
 - Advanced imaging
 - Full-wave services
 - Land processing
 - Marine processing
 - Reservoir Solutions
- Headquartered in Houston, Texas with expansions in Brazil, India, China and Middle East



INOVA Geophysical

Q4 2011 Financial Overview*



FY10 vs FY11 Forecasted Revenues



- Estimated Q4 revenues of \$58 to \$62 million with operating income of \$5 to \$8 million.
- Revenue 39% ahead of the same period last year.
- Inventory further reduced in Q4 to lowest level in a year.
- Credit line capacity of \$27 million in place to support 2012 growth.
- Continued strong vibrator and string sales
- Expect to see Hawk and Firefly take off in 2012
- Breakeven in 2012

* ION to share in 49% of these estimated results. These estimates are unaudited.

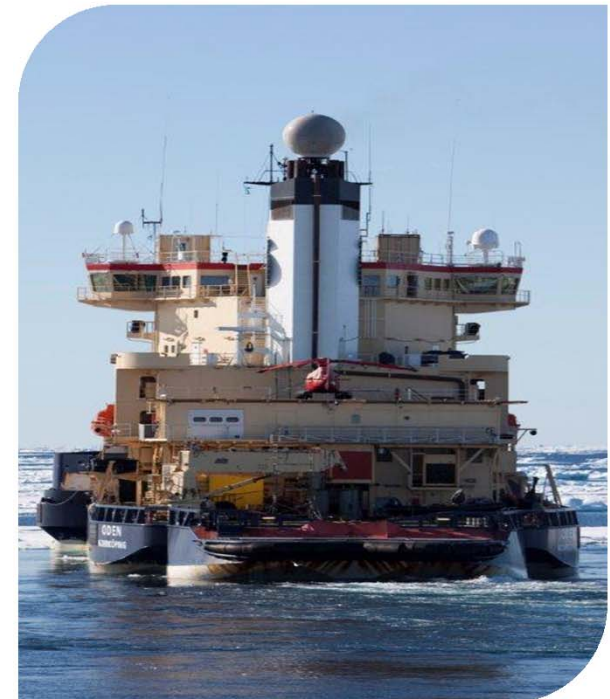
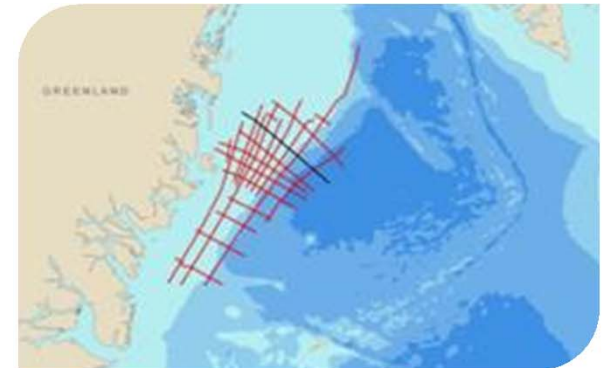


Summary

Solid Momentum Heading into 2012

Expect the following assumptions for 2012:

- All business units to see year-over-year growth in 2012.
- ¼ or more of annual earnings in the front half of the year.
- Data processing business to benefit by largest backlog and grow at normal historical rates.
- Annual data library investment to remain in the range of \$130 to \$150 million.
- Marine to sell at least two large ticket systems (either towed streamer or OBC).
- Continued progress at INOVA, resulting in break even full-year results for 2012.
- Operating expenses to remain flat as a percentage of revenue.
- Interest expense to be in the range of \$4 to \$7 million.
- Effective tax rate to range from 22% to 25%.





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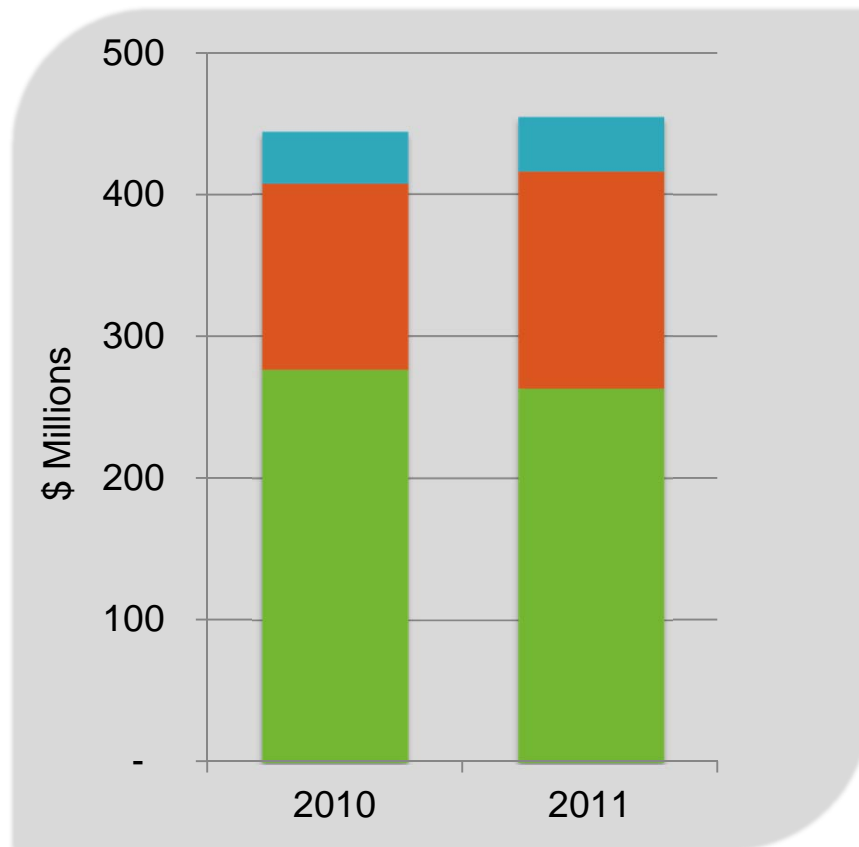
Appendix: Financial Information

- Selected Financial Highlights

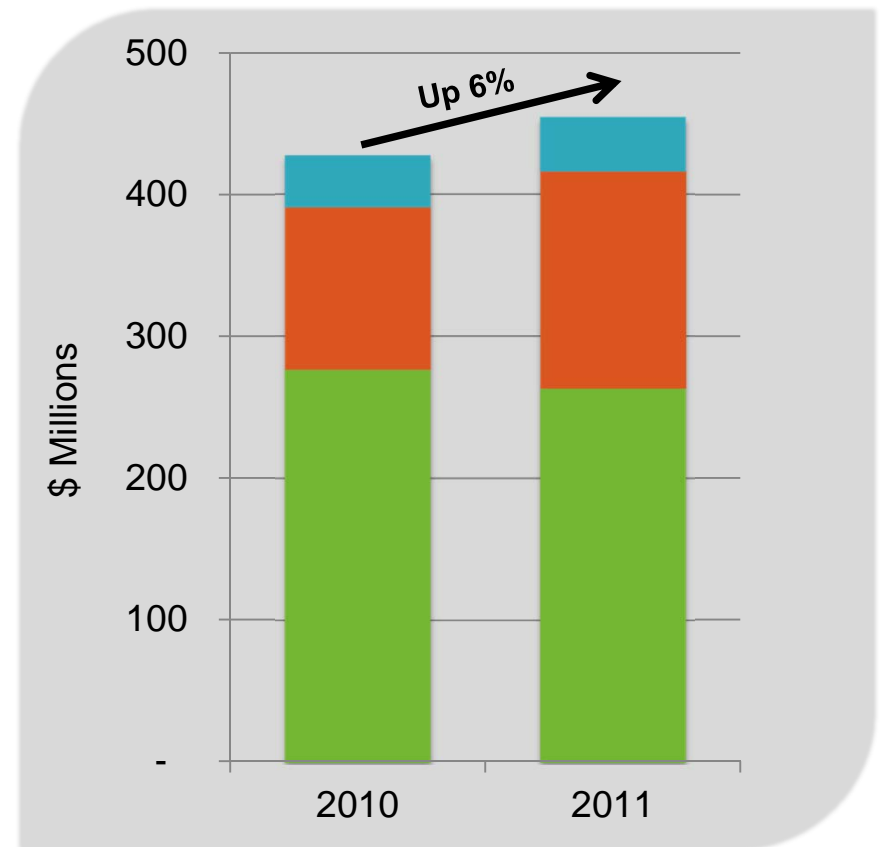
Financial Overview

Year-over-Year Revenue Comparison

Including Legacy Land Systems



Excluding Legacy Land Systems

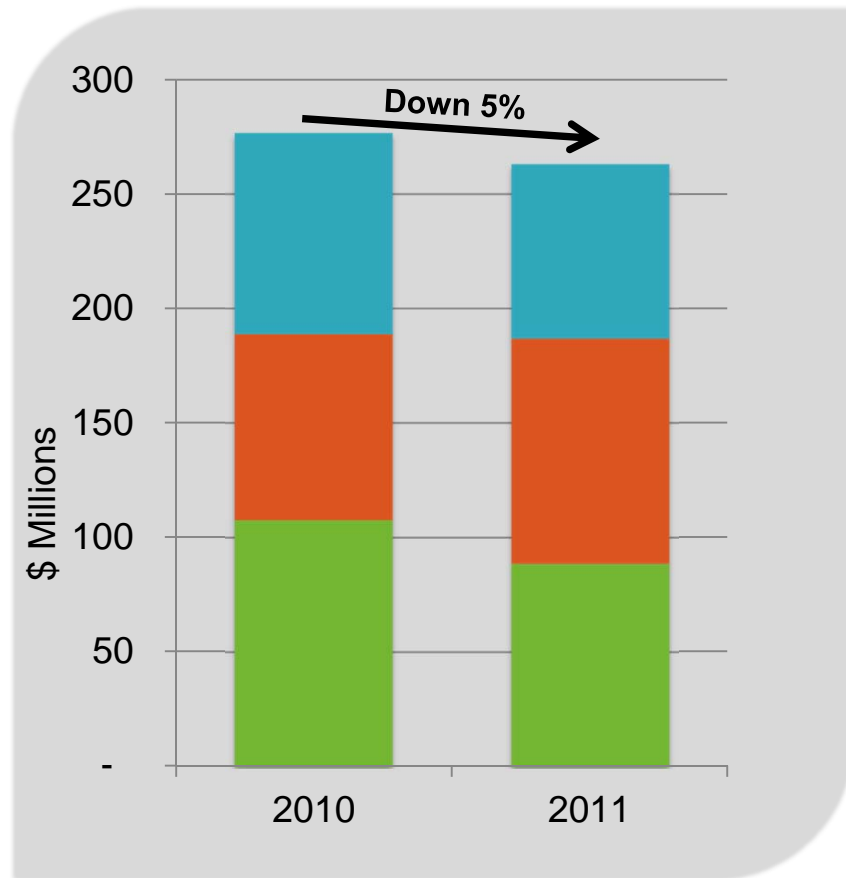


■ Solutions ■ Systems ■ Software

Solutions Segment

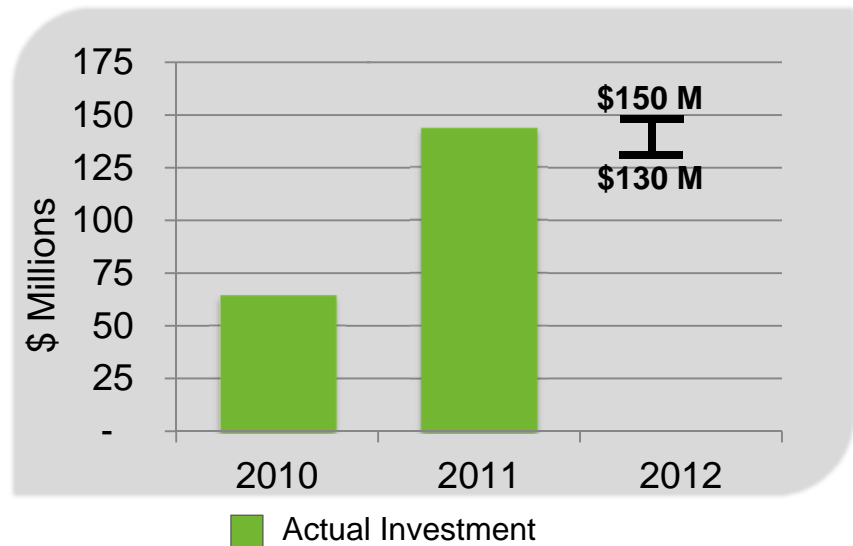
Financial Overview

Revenue by Type

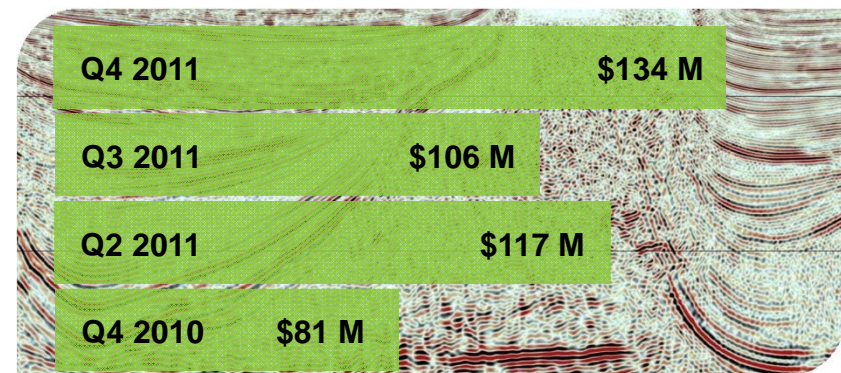


■ Data Processing
 ■ New Ventures
 ■ Data Libraries

Multi-client Investments



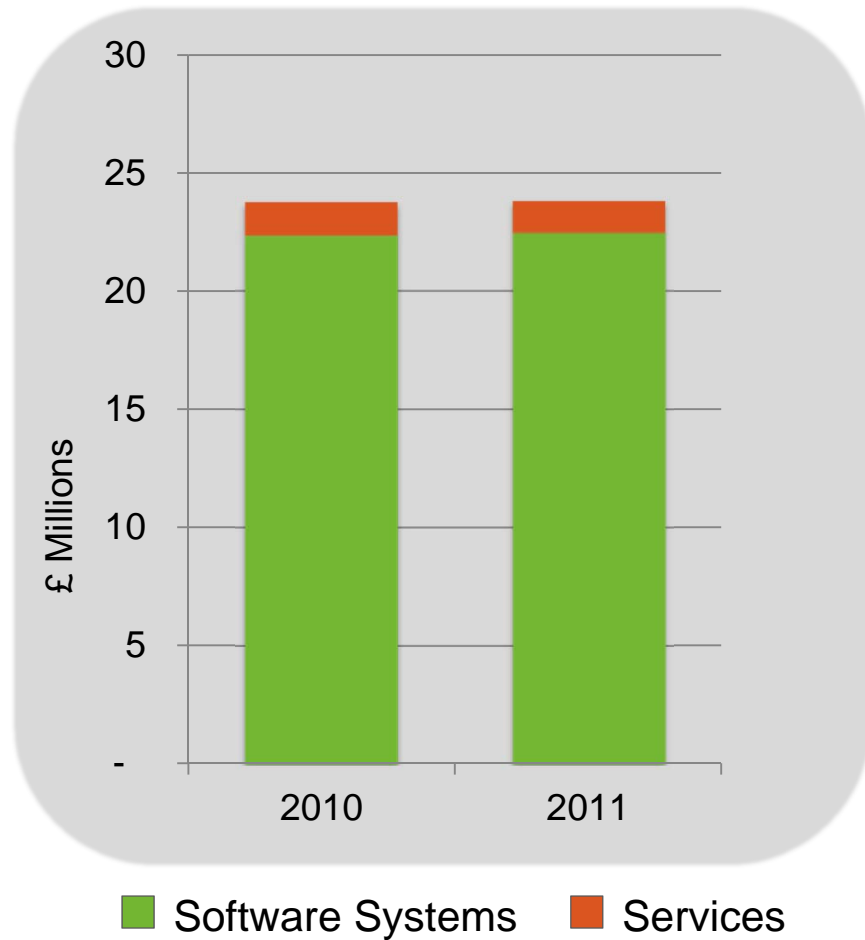
Solutions Backlog



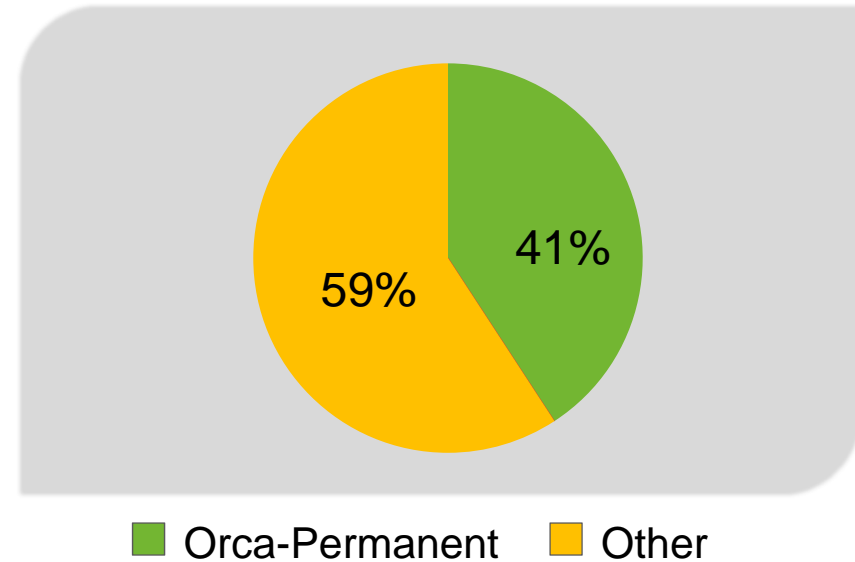
Software Segment

Financial Overview

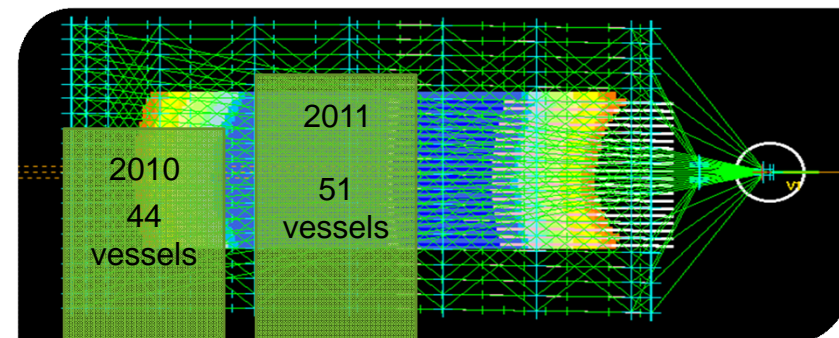
Revenue by Type (GBP)



% of Seismic Vessels with Orca



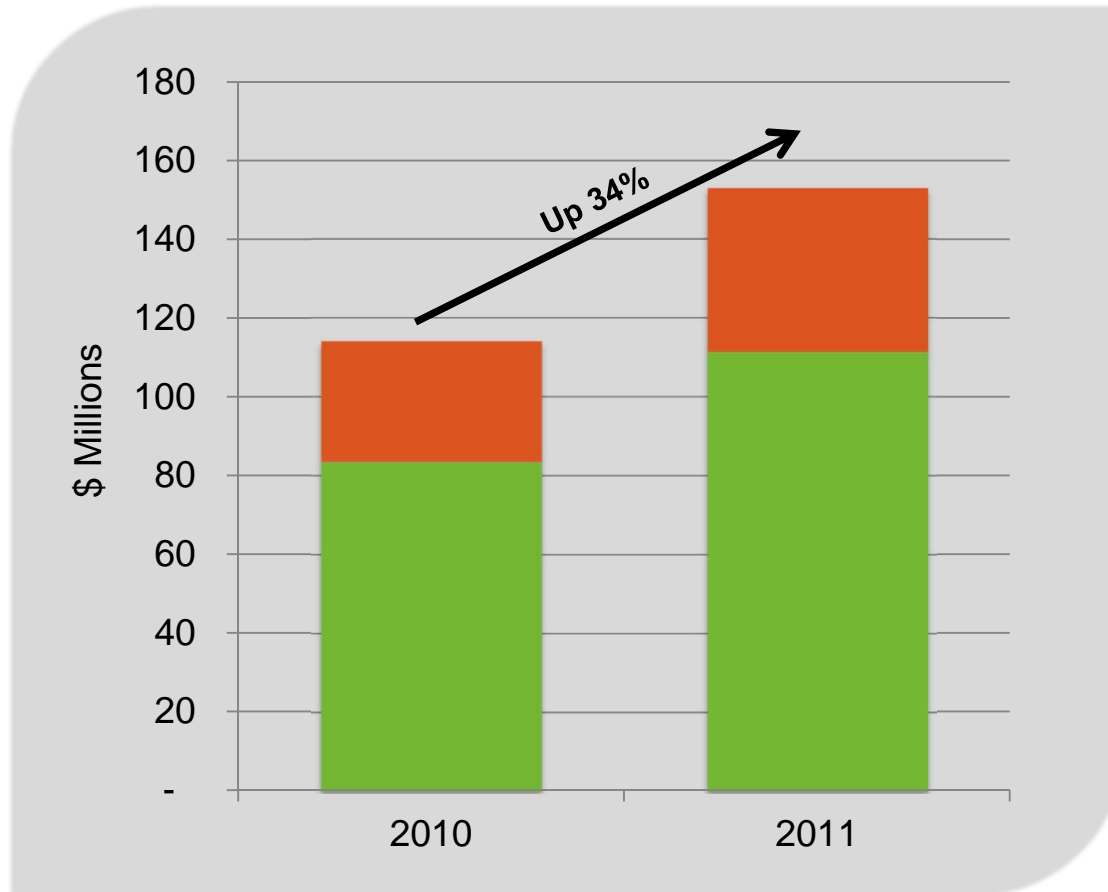
Orca Vessel Conversion



Systems Segment

Financial Overview

Revenue by Type



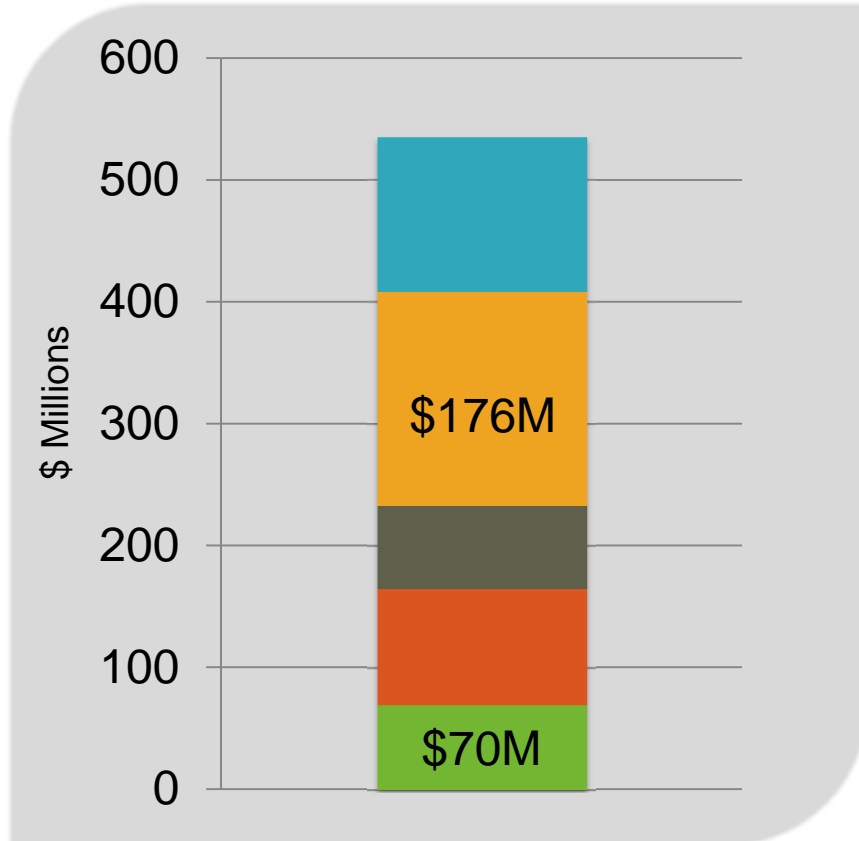
■ Towed Streamer Equipment ■ Other



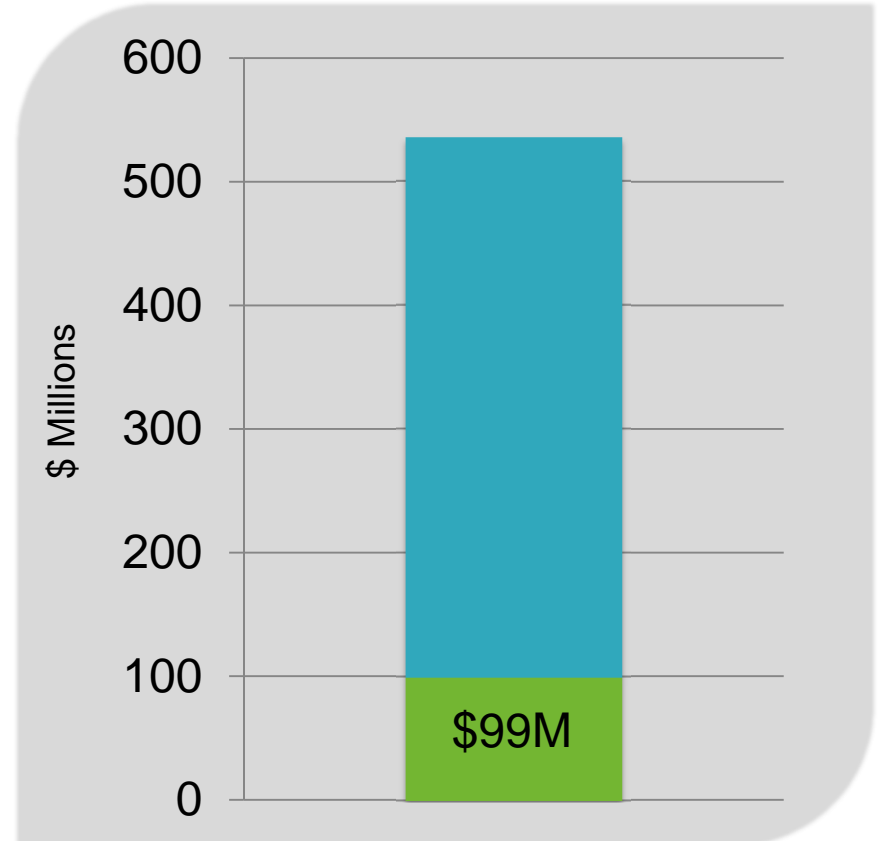
Financial Overview

Balance Sheet as of December 31, 2011

Capital Employed



Financing



- Cash & ST Investments
- Remaining Working Capital
- Net Fixed Assets
- Multi-Client Data Library
- Goodwill & Equity in INOVA

- LT Debt
- Equity

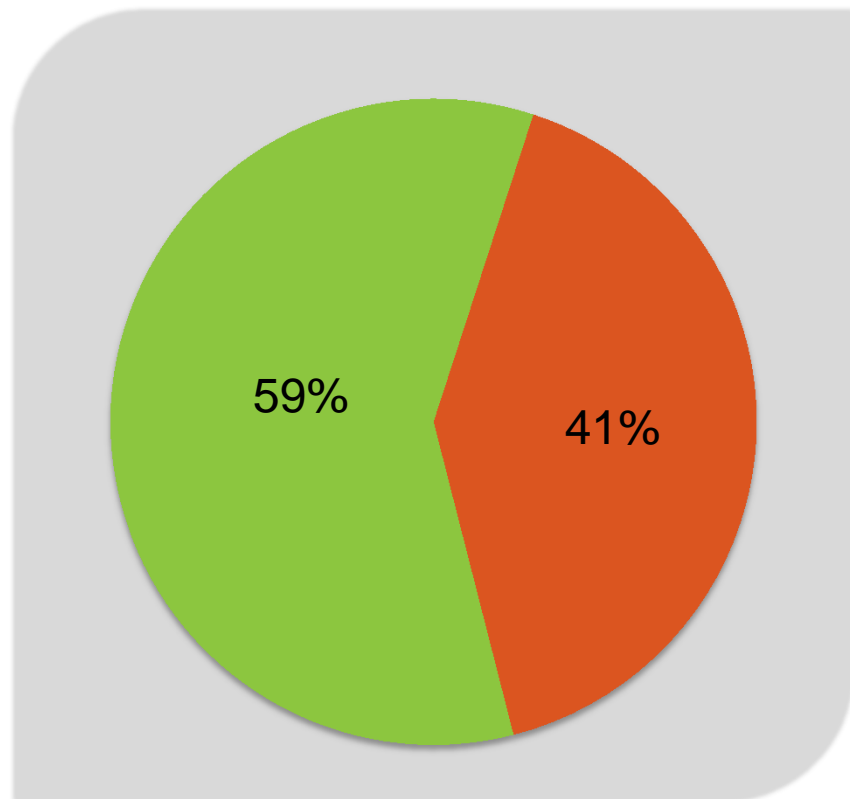
Net Debt of \$35M*

* Net Debt = Total Debt (\$99M LT & \$6M ST) less Cash & ST Investments

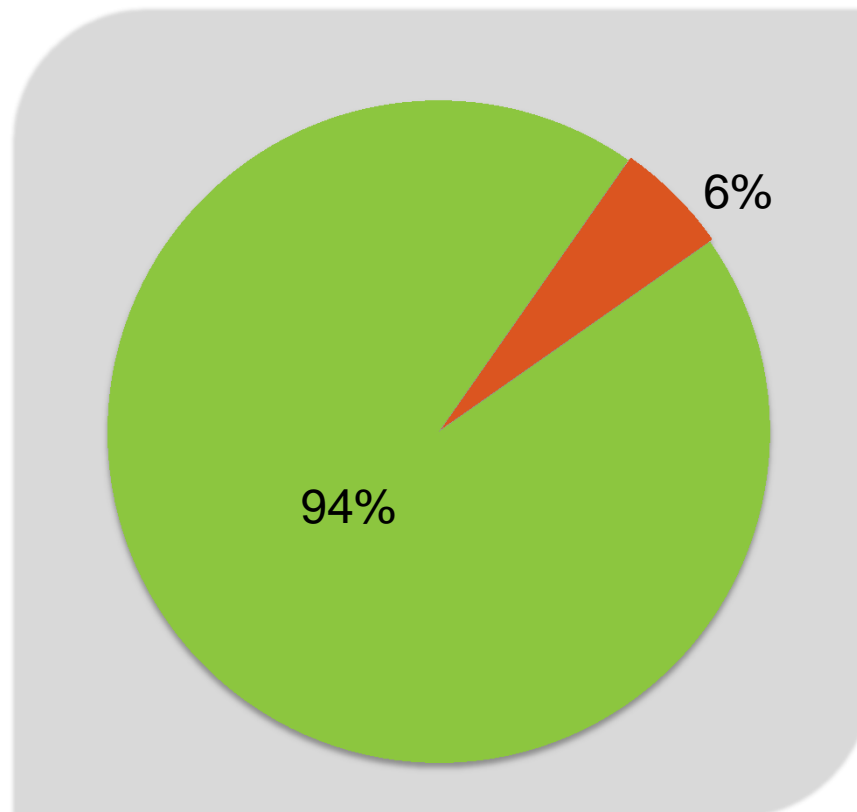
Financial Overview

Liquidity & LT Debt as of December 31, 2011

Liquidity of \$170M



LT Debt of \$99M



■ Undrawn Revolver ■ Cash & ST Investments

■ Term Loan ■ Facility & Equipment Leases

Revolver and Term A both mature in March 2015

Financial Overview

Cash Flow

SUMMARIZED CASH FLOW

	Year Ended December 31,	
	2011	2010
Cash from operations	135,307	181,490
Working capital	(5,506)	(48,050)
Multi-client investment	(143,782)	(64,426)
PP&E Capital Expenditures	<u>(11,060)</u>	<u>(7,372)</u>
Free Cash Flow*	(25,041)	61,642

*Non-GAAP Measure

- Cash from operations was impacted by \$14 million higher tax payments in 2011 and \$24.5 million of cash received from a legal settlement in 2010.
- 2011 multi-client investment up \$79 million over 2010.

Q4 2011 Highlights

- ION delivers fourth quarter diluted EPS of \$0.15 on net income of \$23 million (excluding special items).
- Consolidated revenues of \$160 million for the fourth quarter consistent with the prior year period.
- Systems revenues of \$67 million for Q4 increased 58% over the prior period due to continued strong demand for marine towed streamer equipment.
- Solutions revenues of \$83 million for Q4 decreased 22% compared to the prior period.
 - New venture revenues increased more than 60% for Q4 related to projects in the North American shales, East Africa and the Arctic.
 - Data library revenues decreased 54% for Q4 compared to the prior-year, which included exceptionally strong data library sales in Q4 2010.
 - Data processing revenues decreased 10% for Q4 compared to the prior-year attributable to the lagging effects of the Gulf of Mexico oil spill.
 - Solutions backlog reached a record level of \$134 million due to increased demand for data processing services.
- Software segment revenues of \$9 million for Q4 were essentially flat compared to the prior-year period with a steady stream of software subscription sales.
 - Total of 51 Orca® installations as of year end.

Strong momentum heading into 2012.