Houston Geological Society

Positioning For Exploration Success in the Upstream Petroleum Business

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Brian Maxted has twenty five years experience in worldwide exploration as a geoscientist and business leader. He is a founding partner of Dallas-based Kosmos Energy LLC, a private oil and gas company established in 2003 that is funded by Warburg Pincus and Blackstone Partners to focus on high impact exploration offshore West Africa.

From 2002-03, Mr. Maxted was senior vice president of global exploration and new ventures at Amerada Hess. He led a strategy and organization change process to deliver superior performance and during his tenure, the company participated in several deep water Gulf of Mexico finds and made additional new field wildcat discoveries in West Africa.

Previously, Mr. Maxted was senior vice president, exploration for Triton Energy Limited and led the team that made the basin-opening Ceiba Field discovery offshore Equatorial Guinea in 1999 and two follow-up finds.

Mr. Maxted joined Triton in 1994 and was seconded as Exploration Manager to Carigali-Triton Operating Company (CTOC) in Kuala Lumpur, Malaysia. CTOC, jointly owned by Triton, Petronas Carigali and BP, is the operator of Block A-18 in the Malaysia-Thailand Joint Development Area. During his tenure, the company found several large gas/condensate fields. One of these, Cakerawala is currently under development.

Mr. Maxted began his career in 1979 and worked in the UK sector of the North Sea before being assigned in various roles to Egypt, Canada, Colombia and Norway with BP. As Exploration Manager in Colombia, he was involved in the discovery and confirmation of the giant Cusiana-Cupiagua oil fields.

Educated in England, Mr. Maxted holds a master's degree in organic geochemistry from the University of Newcastle-upon-Tyne and a Bachelor of Science degree in geology from the University of Sheffield.

Topics…..

KOSMOS ENERGY

- *I.* ***industry drivers and trends, company strategies and performance***
- II. today's business situation and issues
- III. exploration results, opportunities and challenges, future options and key success factors

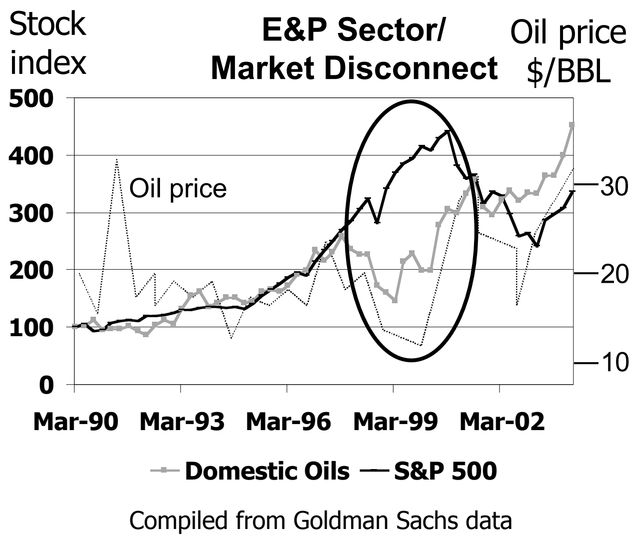
HOUSTON GEOLOGICAL SOCIETY

I would like to thank the Program Committee of the Houston Geological Society Northside Group for inviting me here today to kick off the 2004-05 season of luncheon talks…..

This presentation is in three parts, as shown…..

Primary Drivers Price & Market…..

- Extended low oil price through last decade bottomed in late 1990’s causing negative disconnect of E&P sector price with prevailing bull stock market
- industry focus on short term financial performance metrics including profitability (costs, spend) and growth (reserves/ production)



The overarching drivers of our industry are primarily, commodity price of global oil and domestic gas and secondarily, the stock market…..

Focusing here on oil, through the last decade of the 20th Century low cycle oil prices prevailed…..They bottomed in the late 1990’s, causing for the majority of companies in the E&P sector, a major negative disconnect between stock price and the prevailing bull market…..

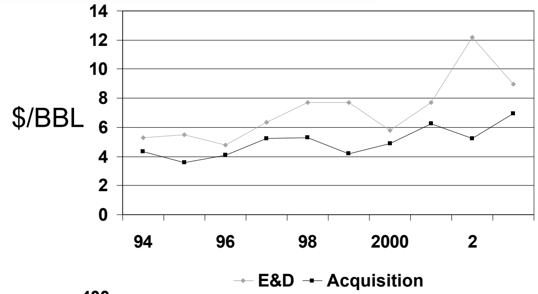
…..In response to underperforming stock prices, as the sector competed for investor capital, company focus became short term shareholder value creation…..with emphasis on quarter-on-quarter results…..

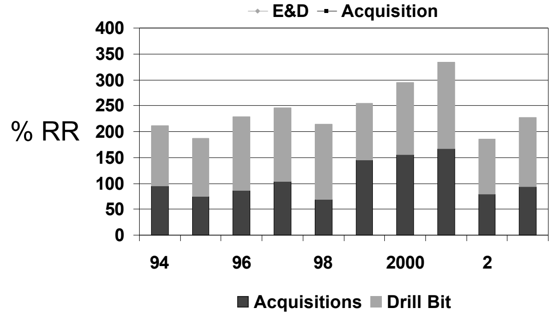
This involved attention to ongoing profitability and managing the business on real time operating and financial unit metrics of performance…..

…..With reduced revenues, cash flow and earnings, effort was principally placed on business drivers which companies had some control on, including minimizing costs and spend, as well as maximizing reserves.

To Efficiently Replace Reserves…..

- Unit acquisition costs historically less than finding and development expense
- Reserves replacement rates driven by M&A activity
- Significant post-2001increase in F&D unit costs and decrease in replacement rates with reduced M&A activity





After Banc of America Securities 2004

…..With this focus, inorganic operating strategies, either asset purchase or corporate merger/acquisition proved more efficient than organically replacing and growing reserves/production organically through finding and development (exploration and exploitation)…..

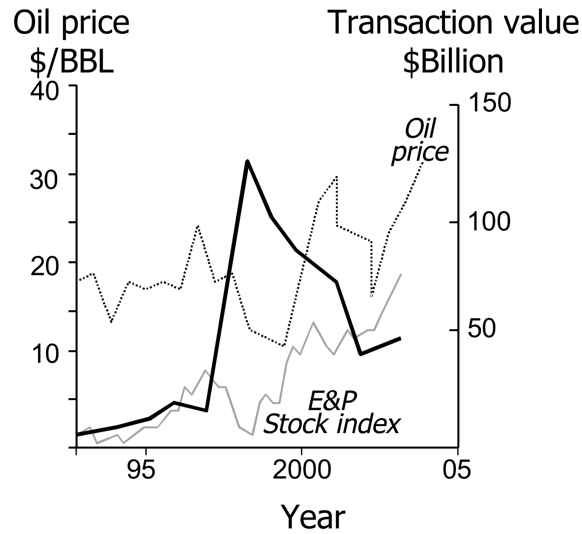
…..Thus M&A&D became the primary operating strategy of choice for companies with the balance sheets to afford it…..

…..Pursuing this strategy, during the 1990's and into this millenium, reserves replacement rates were generally strong and cost minimization measures maintained margins…..

…..In recent years however, performance of both has been less good, as unit costs have increased and volumes declined.

…..M&A the Key Growth Strategy

- Acquisitions with follow-on exploitation became the key growth strategy through the late 1990’s and early 2000’s
  - Quick, cheaper fix
  - Provided new reserve and production project inventories to exploit for replacement and growth



Source: J. S. Herold, Inc

…..As previously shown, the good reserve replacement and cost performance during the 1990’s was driven by merger and acquisition transactions…..

…..Transaction activity peaked late in the decade, as stock prices were driven down by low commodity prices to create significant under-valuations and corporate and asset ‘bargains’…..

…..As Shown By Spend

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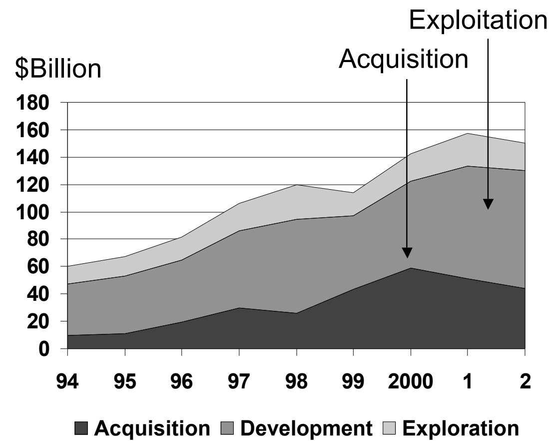
- Total upstream spending at plateau
- Increases driven by the two key operating strategies - acquisitions in late 1990's, followed by exploitation and new inventory drill-out



Source: J. S. Herold, Inc

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…..Whilst acquisitions provided quick, relatively cheap options for short term growth…..Longer term business build was achieved through exploitation of the newly-acquired development project inventories…..

The primary growth strategy of merger and/or acquisition, followed by exploitation and/or low risk exploration in the late 1990's is reflected in the industry spend profiles during this period…..

…..Acquisition expenditures peaked in 2000, and F&D costs increased thereafter, reflecting both the operating strategy and its rising capital intensity…..

…..With Follow-On Exploitation

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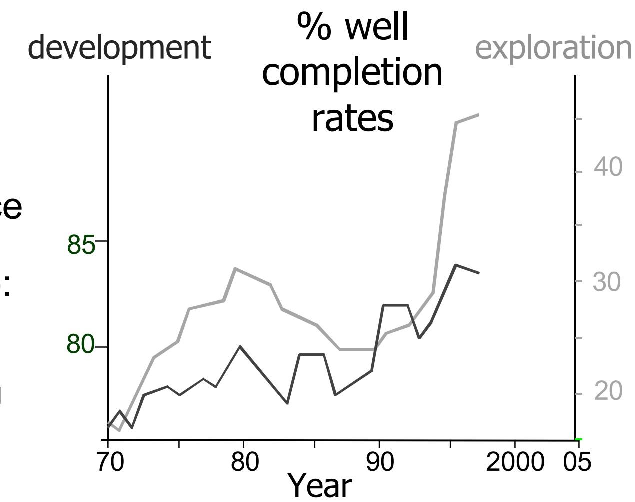
- Development and exploration success rates increased through late 1990's in service of maximizing reserves due to:
  - focus on infill and low risk step-out drilling respectively
  - 3D seismic technology



Source: DOE/EIA

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As discussed, organic re-investment during this time was focused at maximizing reserves through exploitation…..

This included both in-field development and near-field exploration…..

This inherently low risk drilling, enhanced through leverage of 3D seismic and its attributes resulted in significant improvements in completion success rates, both exploitation and exploration through the second half of the 1990's, from approximately 25% at the beginning of the decade, to between 30% and 50% in 2000.

….. Exploration De-Emphasized

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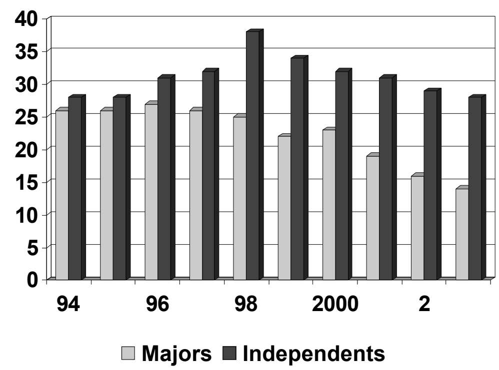
- Relative exploration spend has progressively reduced over last five years
  - Drilling inventory not replenished due to limited capital investment compounding lack of organic reserve replacement and growth opportunity through the drill bit

Exploration Outlays as a % of total E&D Spend



After Banc of America Securities 2004

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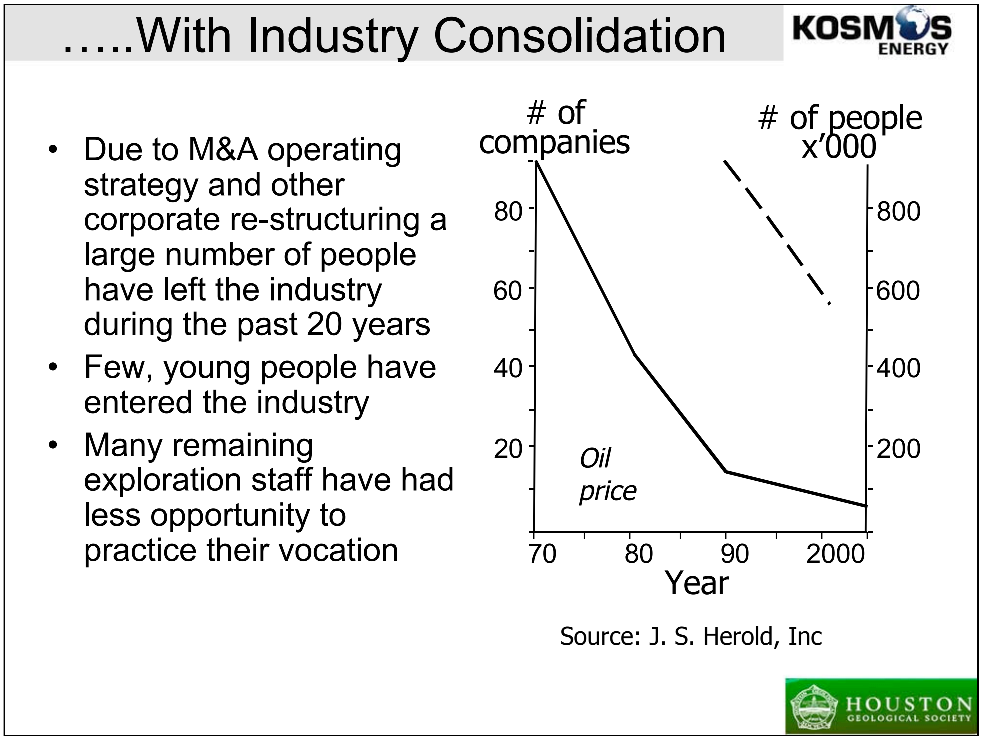
The exploitation focus was largely at the expense of new exploration, particularly in new and frontier areas, which was significantly de-emphasized during this time…..

…..Exploration spend over last five years has progressively decreased, for both majors and independents, as a percentage of total upstream expenditure……

….. In addition to the operating strategy and its increasing capital intensity, this spend profile is considered a result of rapid drill-out of limited prospect inventories, coupled with a lack of opportunity to replace them through new venture activity…..

…..Thus, whilst exploration was pursued through this time, it was dominantly low risk, step-out drilling in support of an exploitation-led strategy for growth.



As you know, the corporate merger and acquisition strategy has resulted in a large scale consolidation of the E&P industry…..

…..One-time cost reductions related to these events, together with repeated downsizing during other internal company re-structurings has seen the widespread the loss of people, particularly exploration staff…..

…..This has severely impacted the exploration manpower situation of today…..

…..Two other factors have compounded this…..Firstly, fewer, particularly younger people have entered the industry…..Secondly, many of the survivors have had less opportunity to practice their exploration skills due to a combination of the M&A/Exploitation operating strategy and/or because of new responsibilities in re-structured companies or other distractions related to corporate re-organization, including looking beyond employment, with training and professional development also given less priority…..

…..Together these factors have combined to poorly position the industry's exploration function, limiting its ability to take advantage of opportunity upturn and meeting the technical challenges of finding oil in the future.

Topics….

KOSMOS ENERGY

I. industry drivers and trends, company strategies and performance

II. today's business situation and issues,

III. exploration results, opportunities and challenges, future options and key success factors

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Let us now look at today's situation and issues for the industry…..

….. Commodity Prices are Higher

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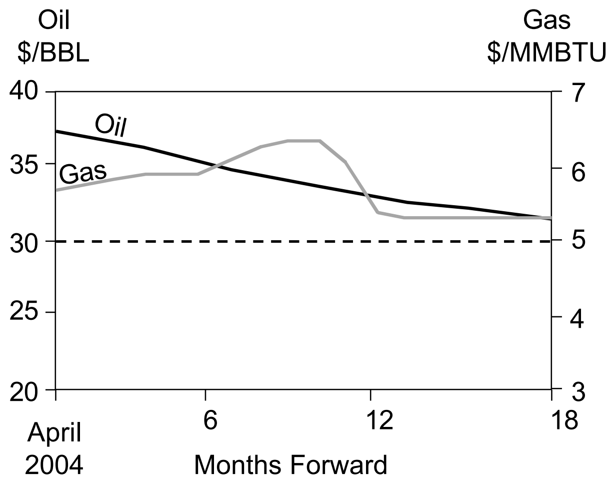
- Higher oil and gas prices in short to medium term indicated by current forward strip



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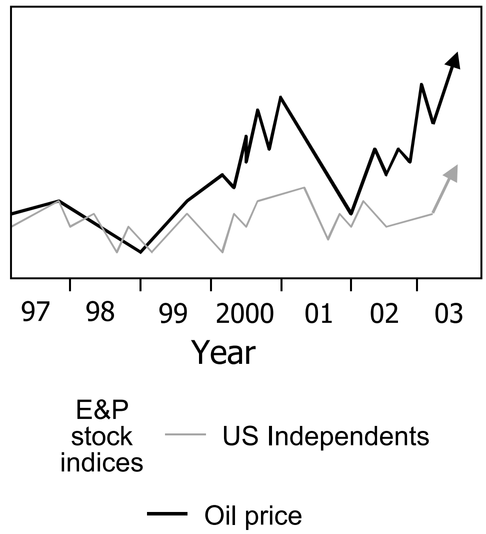
What about the situation today? Well our industry landscape is changed significantly…..

Firstly, price…..Commodity prices have reached historical highs and are expected to remain strong for the foreseeable future based on a combination of current supply/demand expectations, coupled with the global uncertainty related to prevailing geo-political issues and security threats…..

…..This price shift provides a new investment environment going forward for the upstream petroleum industry…..Why? Because it provides significant free cash flow for re-investment in the business.

Sector is Performing Better…..

- E&P stocks higher as price drives up revenues, cash flow and earnings



Compiled from Goldman Sachs Data

Secondly, the stock market…..In response to strengthening prices, E&P sector stocks have been performing well recently relative to the overall indices…..

…..Importantly, the outlook is good with strong profitability expected in the short term as the stock price drivers of revenue, cash flow and earnings per share are buoyed by cost of the commodity and are compensating for rising costs……

As price addresses the short term profitability, longer term growth should now become the primary focus.

…..But Costs are Increasing

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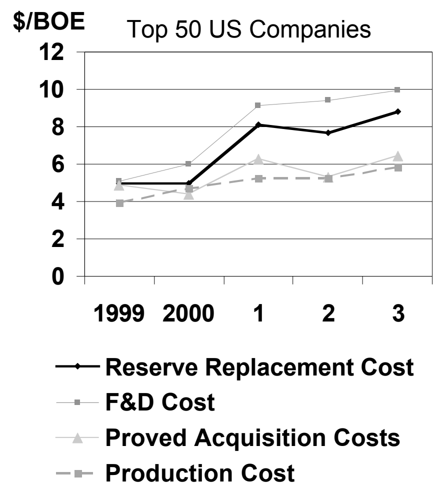
- Reserve replacement costs including F&D, Proved Acquisition, together with production costs progressively increasing
- Acquisition costs still below F&D costs



After J.S. Herold

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Three principal issue are challenging the upstream petroleum industry today…..

Firstly costs…..

…..The underlying cost base of the E&P business (including finding and development, as well as production and acquisition costs) is increasing sharply, with profitability only preserved by increasing commodity prices…..

…..This cost increase is linked to the high maturity of the reserve base…..Whilst field management of these may contain increases, average unit costs can only be reduced by portfolio management…..including divestiture of non-performing assets…..but most importantly by access to new sources of lower cost oil.

…..And Volumes are Decreasing

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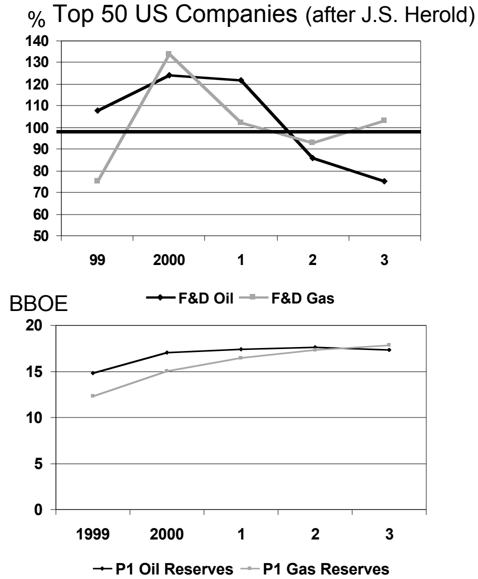
- Organic (F&D) reserve replacement rates are decreasing, particularly for oil (to below production)

- Oil reserves have peaked, gas reserves are reaching plateau



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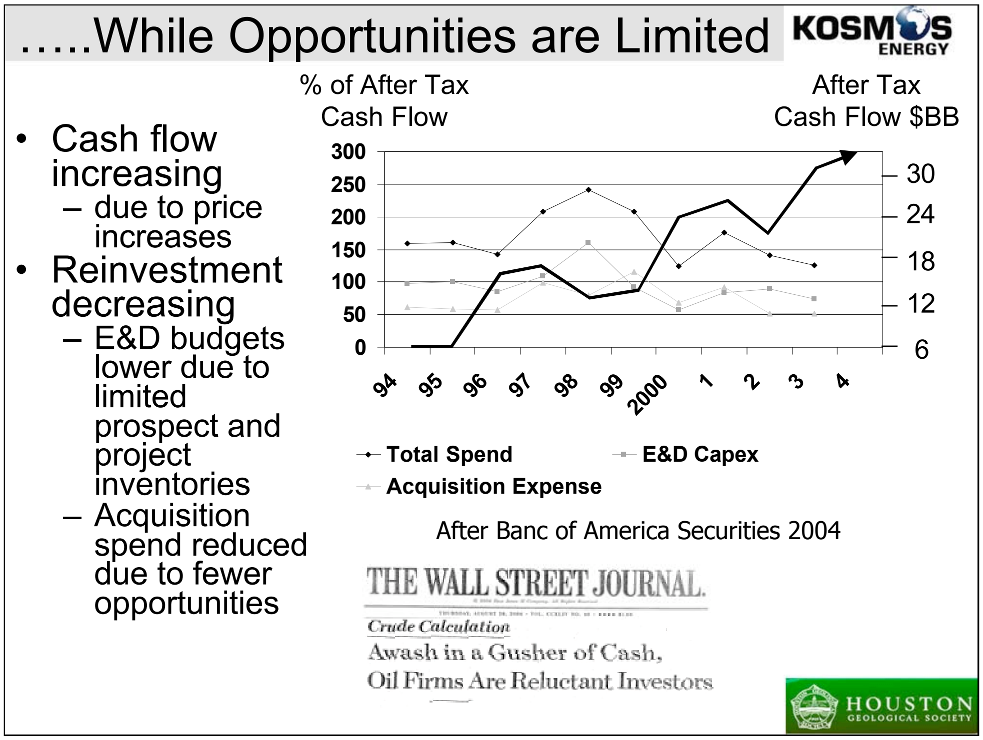
Secondly, reserve volumes…..

Reserve replacement rates are decreasing, particularly for oil…..

…..The annual organic replacement of oil reserves by the industry is now less than production…..Thus, the industry is shrinking with the resource base, and the remaining players can only grow through mergers and/or acquisition based on current performance……

…..This predicts further, significant consolidation in the industry…..with one difference! The focus on long term growth as opposed to short term profitability should mean more career opportunities and less staff reductions.



Thirdly, opportunities for re-investment are limited…..

…..Despite the record after tax cash flow being reported today as a result of the current price environment, re-investment in the business is decreasing…..

…..Whilst initially this reflected companies taking the opportunity to improving balance sheets by paying down debt and adopting financial strategies for maximizing shareholder value, such as buying back shares, it is now considered to be due to a lack of investment opportunity, both organic and inorganic.

…..And Competition is Greater

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- Domestic E&P companies pursuing new ventures overseas
- NOC's expanding internationally
  - Petrobras into US Gulf of Mexico and West Africa
  - Petronas into South East Asia and Africa
  - Indian and Chinese companies into Africa
  - Others to follow
- State, public and private equity vehicles investing domestically and regionally

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This lack of opportunity is compounded by increasing competition…..

More US independents are beginning to expand their search for growth opportunities overseas…..

…..And additional NOC's are pursuing international new ventures, both exploitation and exploration…..

…..Also other investment vehicles are investing strategically in the upstream petroleum business…..including Kosmos Energy which is financed by private equity.

…..With M&A Reduced….

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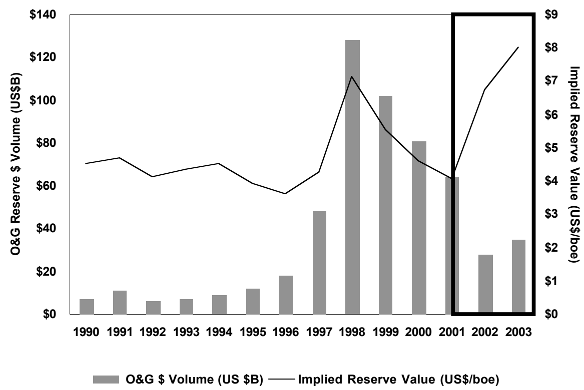
- Fewer, more expensive asset and corporate acquisitions
  - Seller's market, higher oil price – reluctance to pay
  - No "growth for growth's sake", market need to demonstrate value creation
- Companies taking advantage of higher prices
  - Retaining assets



Source: J.S. Herold

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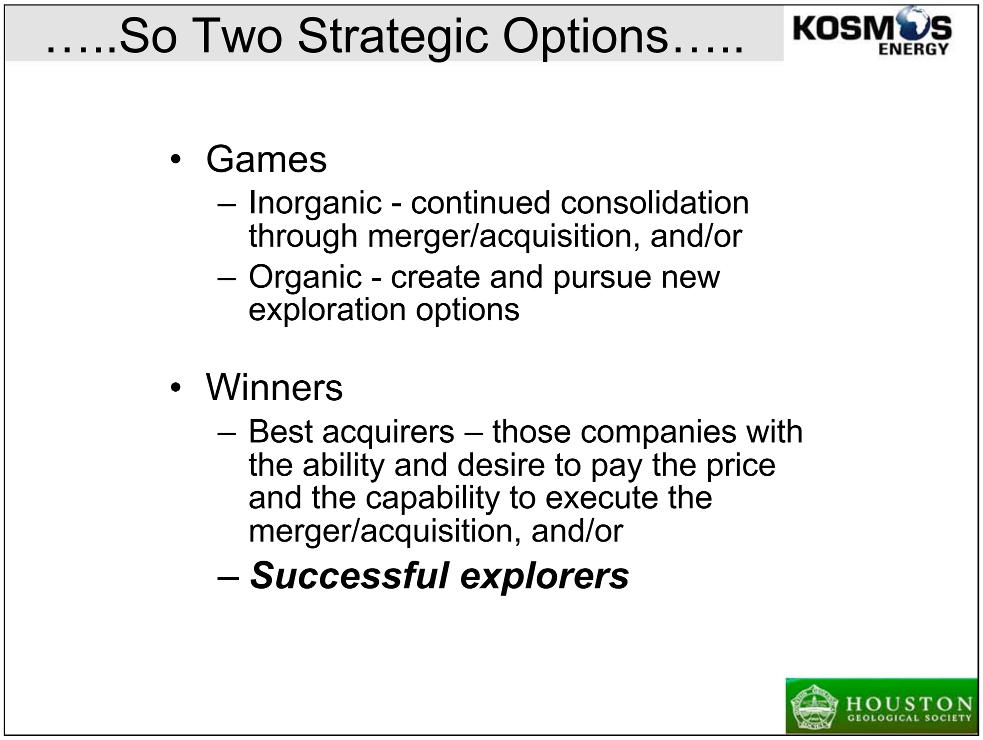
With respect to inorganic growth, further consolidation in the industry is inevitable. However, it has so far not occurred…..

…..Shown here is the transaction volume and implied unit reserve value since 1990. After the increases of the last decade, it displays a significant decrease in volume since 2001 and an associated increase in implied acquisition costs…..

With higher oil prices, the M&A&D marketplace has become a sellers domain…..Fewer acquisition opportunities are available as companies choose to take advantage of high commodity price to maximize value by liquidating their assets through production rather than sale…..

…..In addition, at the same time, companies have not yet acquired the courage to pay higher prices, even with favorable hedging opportunities…..

…..And moreover, the stock market requires clear demonstration of value creation and growth through M&A before rewarding acquirers with higher target prices.



Going forward, our business will continue to be developed by one of, or a combination of two strategies: inorganic - specifically corporate merger/acquisition and/or asset purchase, together with organic – exploration success…..

…..The corporate winners will be either those with the capability to close and execute transactions and/or the successful explorers. Let us now focus on exploration.

Topics….

KOSMOS ENERGY

I. industry drivers and trends, company strategies and performance

II. today's business situation and issues

III. exploration results, **opportunities, challenges** ***and key success factors***

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In doing this, I wish to provide a review of exploration, its recent results, current opportunities and challenges, as well as key success factors…..

Success Global & Mainly Gas….

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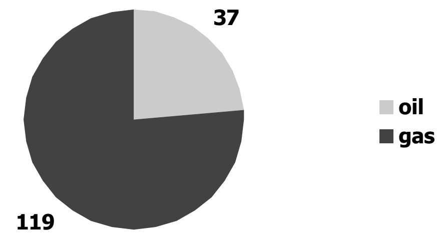
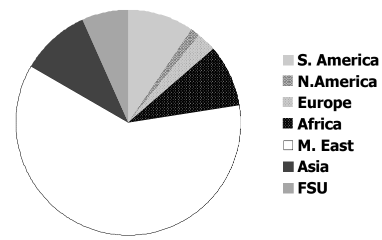
- Total petroleum found in giant fields (>500 MMBOE) through 1990’s was 156 BBOE in 77 fields
- 3 times as much gas found as oil
- Majority of new oil and gas found overseas (60% of new finds in Middle East)
- The 55 BBO found is only 25% of total production





Source: AAPG Memoir 78

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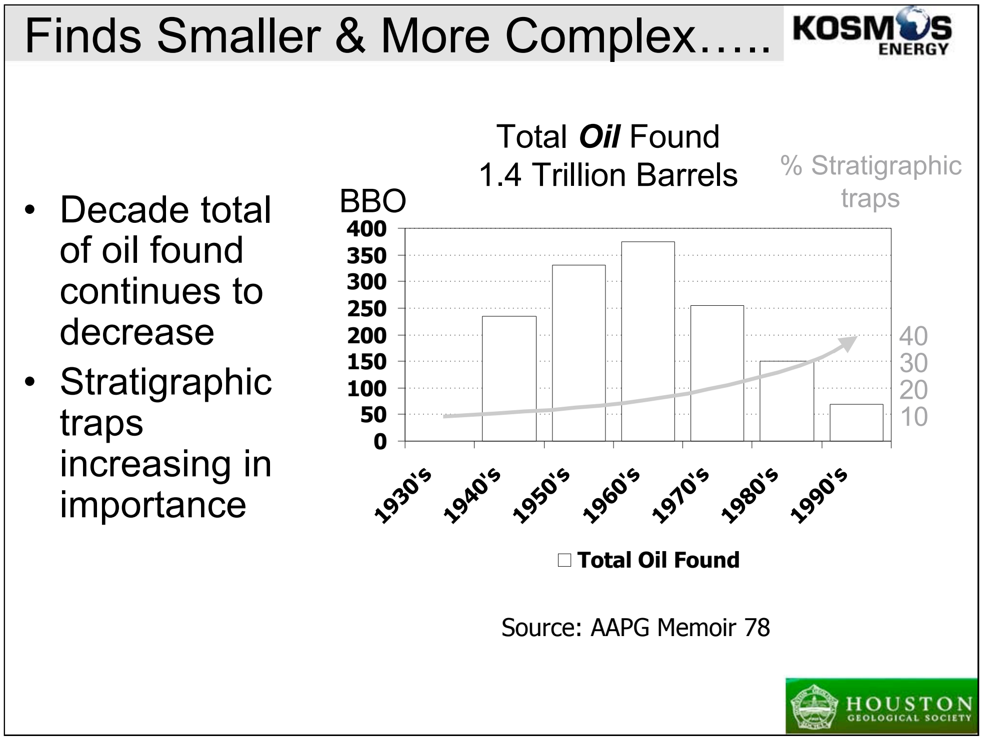
To identify the key discovery trends in our industry, I have used giant fields (>500MMBOE) as a record of proxy. Through the exploration downturn of the 1990’s, new discoveries in giant fields (>500MMB) amounted to 156BBOE. Three times as much gas as oil was found and over 60% of new fields were discovered in the Middle East…..

…..Importantly, only 25% of production was replaced by new field discoveries.

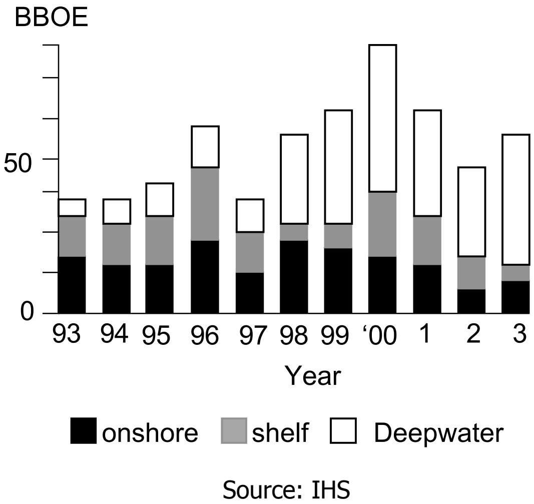


This decrease in large field discoveries through the last decade continues a rapid decline trend through the second half of the twentieth century from its peak in the mid-1960's…..

…..A secondary trend is the increasing importance of stratigraphic or combination traps. This is an important trend and key to undertsanding future opportunity.

The Deepwater is Dominant…..

- Onshore and shelf finds decreasing
- Key new area of discovery is deepwater (>200 meters) which accounts for c.40% of new finds in last decade



…..The principal reason for this is the growing importance of the deepwater over the last decade…..

…..Finds in deepwater have risen from less than 10% 10 years ago to approximately 40% today, at the expense of onshore and shelf finds.

Opportunities For Exploration…..

- Significantly improved outlook for higher commodity prices enables companies to put greater focus on longer term growth than short term profitability – can now afford to explore
- Organic growth opportunities are limited as exploration prospect portfolios have been drilled out and project inventories depleted – these need to be replenished
- Fewer options for inorganic growth through asset purchase and/or M&A - many companies have to look for internal options i.e. exploration to provide future business development
- New exploration venture opportunities emerging due to new technology, geography and geology

To summarize, let us look now at the opportunities for exploration going forward…..

…..The recent increase in commodity prices has resulted in significantly stronger cash flows for E&P companies allowing them to focus more on long term growth than short term profitability…..

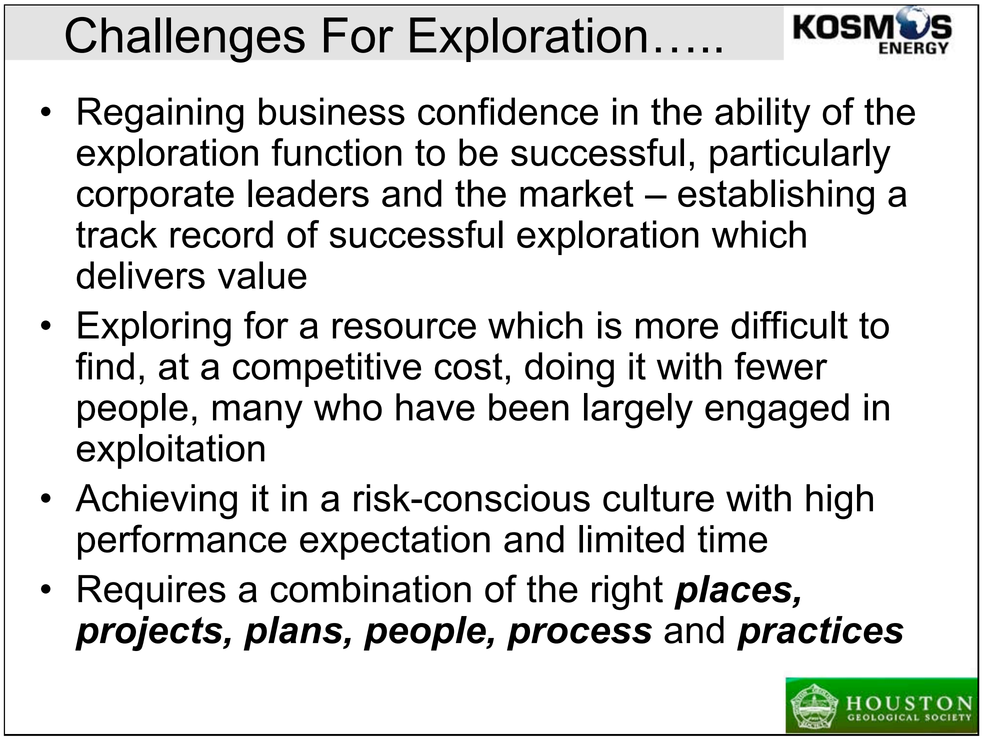
…..These monies are now available for re-investment in the operating business, including exploration…..which is now affordable to companies, even the poorer performers – indeed they can not afford not to do it…..

…..Current profitability, with recent prices rises outstripping increasing costs, has resulted in higher margins which enable companies to afford high finding (and development) costs…..

…..The unsanctioned development inventory of many companies is small and new projects are required to replenish it…..

…..Fewer options for inorganic growth as a result of these price increases means many companies have to now look for internal options for future reserves and production replacement and growth…..

.....Importantly, new exploration venture opportunities are now emerging, particularly internationally, as a result of changing technology, geography and geology.



To take advantage of these opportunities, explorers will have to overcome several key challenges…..

…..Critical among these is to regain business confidence in the ability of the exploration function to be successful…..particularly corporate leaders and their customers (the shareholders and market), as well as their management decision makers…..this can only be achieved by developing a track record of successfully designing, implementing and executing exploration programs which continually, if not consistently, discover strategic resources…..

…..in doing this, we are challenged by the resource which is becoming increasingly difficult to find, and with fewer people, many of whom have been more focused on exploitation of other company organization issues…..

…..this has to be achieved in a risk conscious culture which has high exploration performance efficiency expectations in terms of finding success rates and discovery volumes as they translate into finding costs and reserve replacement rates and is given limited time.

Importantly, it should be noted that to consistently increase profitability and grow, it is necessary to more than replace reserves and production competitively, at costs less than the margin of current barrels. With today's significantly higher margins, higher finding costs are affordable…..management will have to embrace this…..

The primary challenge is creating and accessing new exploration opportunities…..to deliver this requires a combination of strategy…..being in the right place…..and position…..with the right plan, and having the right organization…..people, process and practices…...let us now address these.

Positioning…..Places

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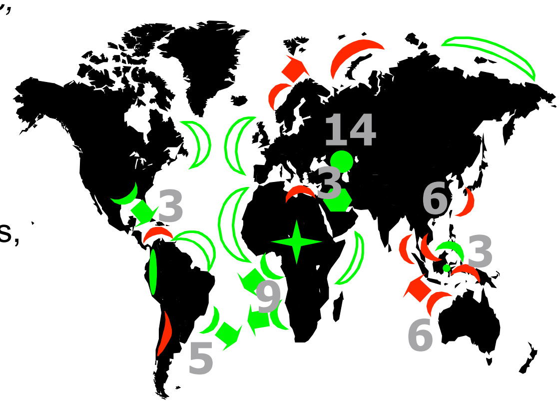
- 4 key themes
- *technology – 3D seismic, drilling and production*
  - deep water Tertiary delta systems
- *new geography – ideological change, political settlement*
  - FSU, OPEC countries, disputed zones
- *price (and market)* - Andean fold belts/forelands, African rifts,
- *new geology*
  - Cretaceous turbidites of Atlantic Margins
  - Lower Tertiary deep water Gulf of Mexico



oil gas

46 BBOE found since 2000

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To find oil in the future will require being in the right places…..

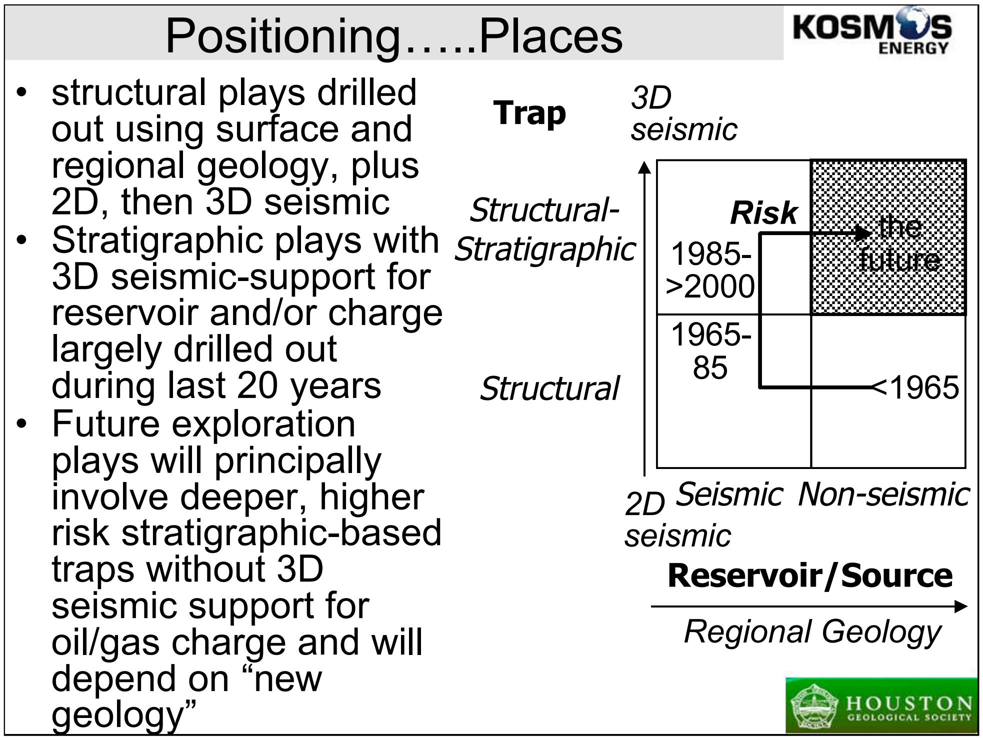
Few new petroleum provinces will be found…..Major oil and gas finds going forward will be focused in presently proved, developing and emerging petroleum provinces and their extensions. …..These new places may be characterized on the basis of four themes - technology, price, new geography and new geology…..

…..Technology will allow new deep water continental margins to emerge, for example East Africa…..and enable the ultra-deep water fairways in existing basins to be explored…..for example, the Tertiary to Recent delta systems on the continental passive margins…..

…..New geographies will continue to evolve and yield new giant finds, including OPEC countries, for example Libya, and former disputed zones, notably the Nigeria-Sao Tome Joint Development Zone in West Africa…...

…..Higher prices, and opening of markets for gas/LNG, coupled if necessary with new geography may re-start or open new frontier exploration of continental passive/rift margins in the higher latitudes of the Arctic, northern Norway and northern Russia, as well as the interior, intra-cratonic (rift) basins of Africa, and the fold/thrust/foreland basins of western South America…..

…..However, it is the generic theme of "new geology", in combination with one or more of the above, which has the most potential to create new opportunities by developing new plays and fairways in existing hydrocarbon systems and by opening new petroleum provinces…..what do we mean by this?



Secondly, proper positioning to identify new geology will create opportunity and provide competitive advantage…..where is this 'new geology'?????

…..Generically, exploration pursues the path of increased risk……

…..Prior to the emergence of 3D seismic, exploration was primarily focused at structural plays defined by surface geology or 2D seismic. Here, regional geology was the primary tool used in risking reservoir and charge. Using these tools the majority of large structural plays were explored by the late-1980's. Many of the remainder were defined and drilled on 3D seismic, except in areas unopened by price, technology, or new geography……

…..The advent of 3D seismic and the evolution of the workstation, followed by the development of attribute analysis not only enabled better trap definition but importantly allowed enhanced prediction of reservoir and charge to significantly reduce exploration risk. The technology was widely applied to explore for structural and then stratigraphic traps…..

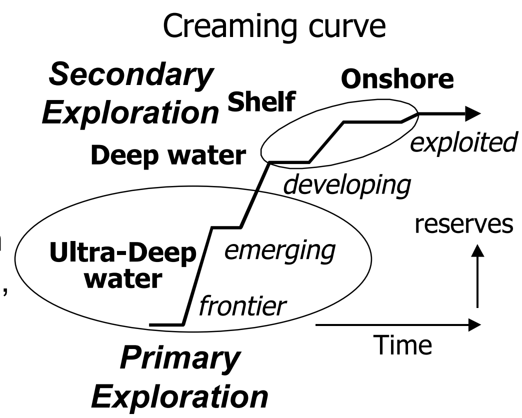
…..As a consequence, 3D seismic attributes became the principal tool of choice in prospect evaluation for both explorers and decision makers during the 1990's. However, many of the plays with 3D seismic support for reservoir and, or charge have now been drilled out, except in areas still to be opened by new geography…..

…..Thus, future exploration will be principally focused at searching for higher risk, dominantly stratigraphic traps…..and whilst 3D will be very important in exploring these plays, regional or "new geology" will once again, as in the early days of wildcatting, become critical…..

…..Transitioning to this niche will create new opportunity…..And whilst it is higher risk (and will therefore be higher cost), with strengthening commodity prices the industry can afford to find oil at a higher cost whilst preserving profitability.

Positioning…..Plan

- Portfolio
  - Strategic ventures re-current R/P projects
  - Timely capture and drill-out of new venture options
- Projects
  - explore bottom's-up - unfold petroleum system
  - design the right program, stay the course and drill only good dry holes
  - know your niche
  - enter early - stay "ahead of the curve"
  - plan exit - do not over-invest



In addition to being in the right place, successful exploration strategies require the right plan…..Shown here are a few key guidelines…..

…..Firstly a balanced and right-sized portfolio….with the appropriate mix of exploration assets in frontier, emerging, developing and exploited basins based on number and risk…..giving diversity with focus and dependency to deliver and leverage off success…..

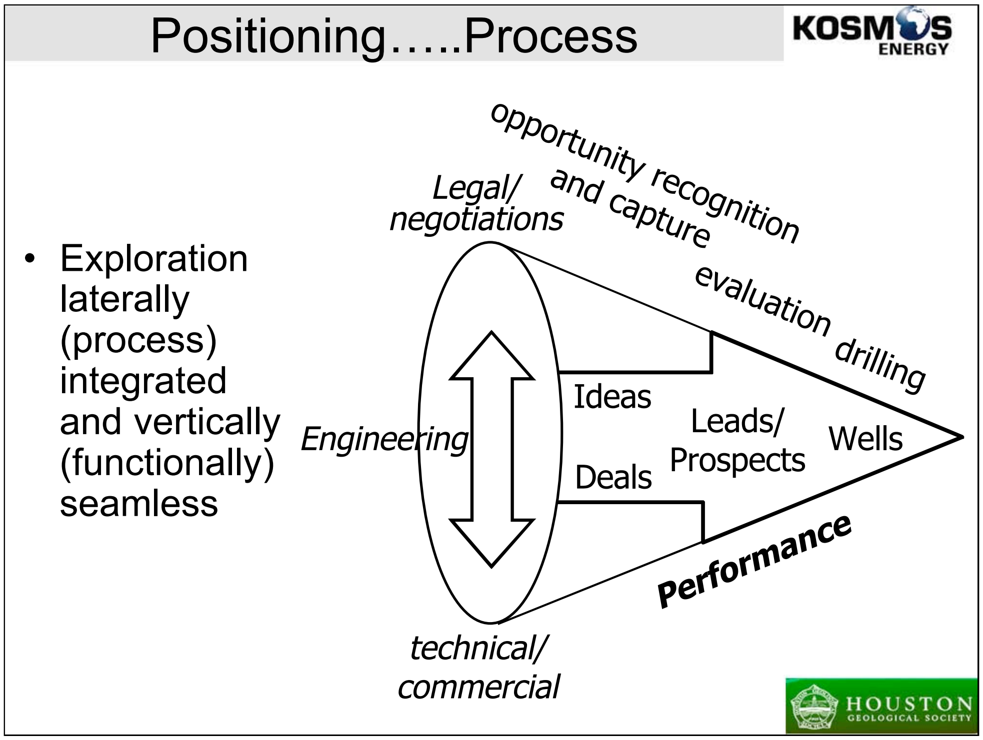
…..Timing is also important…..New projects should be captured to replace failed exploration opportunities…..

…..It is critical to explore holistically from the 'bottom-up'… By understanding the complete petroleum system from basin, play, fairway, and prospect perspectives, as well as source, timing/migration, reservoir and trap…..bet on he basin, not the prospect!

…..Designing the right program, including the number and sequencing of well to give the chance for the petroleum system to work, drilling only "good" dry holes is critical…..

…..It is essential to select an exploration niche based on corporate goals and objectives and technical, operating and financial capabilities…..

…..It is important to "stay ahead of the curve" by entering the basin, play or fairway as early as possible and planning a timely exit, not over-investing and exploiting non-strategic opportunities (based on volume and/or value)……Small finds do not replace large fields and higher costs do not improve returns.



…..The right plan requires the right entity to execute it, both from a static organization and dynamic process standpoint…..Finding oil is an iterative, multi-step process of opportunity identification, capture, evaluation and drilling, involving deal making, technical and commercial analysis, as well as operating capability……

…..The strategic core competence of finding oil is geo-science, and oil finding is generally considered an ability of geoscientists…..However, it is critical to recognize the process as a multi-disciplinary team game…..In doing so, oil finding becomes an ability of the process and organization…..

…..Oil is not only found on workstations…..Other functions play key roles….As an example, Legal and Negotiations are critical at the deal making stage…..These functions need to be fully engaged…..

Such contributors may be considered oil finders in the event of success…..However, for success, they need to ensure above-ground risks are taken in the same spirit as sub-surface risks are faced by explorers…..

…..The organization should be functionally separate to ensure quality control but the process should be seamlessly integrated to enable full evaluation, aligned by the common purpose of a project.

Positioning…..People

KOSMOS ENERGY

- ***Creativity*** and ***ability*** deliver ***capability and*** together with preparedness to take ***risk*** provides ***competitive advantage***
- ***Creativity*** and ***ability*** enable the identification and *right* characterization of exploration opportunity potential and risk
  - in-depth ***knowledge*** of basins types and their petroleum systems
  - broad range of ***technical skills*** (reservoirs, sources and trap analysis) at play, fairway and prospect scale
  - ***experience*** provides ***intuition***, ***insight*** and ***instinct*** – enables timely, good and confident ***judgment***

HOUSTON GEOLOGICAL SOCIETY

And of course, the right organization and process requires the right people…..As oil becomes more difficult to find, the successful exploration companies of the future will be those with the best oil finding teams…..

…..Some oil finders are fortunate by “being in the right place at the right time,” for example, inheriting a project at the drilling stage…These may prove to be ‘accidental’ oil finders, unable to replicate the feat…..Other “oil finders” may not be recognized as such…..They are less fortunate for having made a significant contribution prior to discovery but “not being there at the right time”…..

…..“Serial,” or true, oil finders are those proven able to repeatedly finding oil with a track record of multiple success over time, often with different teams in many geographies and in a range of basin/petroleum systems…..

…..The personal traits that differentiate repeat oil finders may be rationalized into two components…..technical competence, and culture and behavior…..

…..Let’s look first at technical competence…..This encompasses creativity and ability, which coupled with preparedness to take the right risk, create capability and provide competitive advantage…..

Creativity and ability generates opportunity…..identify and optimally evaluate exploration ideas or concepts that describe and characterize hydrocarbon potential and risk through interpretation, interpolation and extrapolation of data and by franchising (using analogy)…..The more creative and able explorers are capable of identifying and better evaluating more ideas with less data…..

…..Technical competence requires knowledge of basin types and their petroleum systems acquired through learning, together with a broad range of technical skills for the analysis of reservoirs, sources and traps at play, fairway and prospect scale. Intuition, insight and instinct are gained from experience and enable timely and good judgment with confidence.

…..The best oil finders need to be kept looking for oil.

Positioning…..Practices

- Project evaluation
  - ***accountable*** for failure to be made ***responsible*** for success
  - the ***owner*** and ***sponsor,*** but ***open*** and ***inclusive –*** for other disciplines and team players
  - ***determined*** and ***dynamic*** with ***good work ethic***, ***care*** and ***diligence*** plus ***focus*** and ***intensity*** of investigation and a strong sense of observation
  - ***discipline and integrity*** to be intellectually ***honest*** – "proper promotion of projects" without unsupportable bias, proper use of play and prospect evaluation tools – "best to be wrong right" for credibility
  - ***open-minded*** and ***humble*** but challenging of logic and assumption, contrarian and "half-full not half-empty" in thinking – maximizes ideas and upside possibility
  - shared ***learning, coaching*** and ***mentoring***
- Project capture and marketing
  - developing and maintaining strong ***relationships*** and ***networks***
  - ***vision*** and ***entrepreneurship*** – to timely identify and pursue deals
  - ***engaging*** of the in-house organization and "***co-operative*** to compete" externally
  - ***dedicated*** and ***passionate*** with ***self-confidence, belief*** and ***desire***
  - ***courageous*** and ***bold*** to become ***lucky*** - do not differentiate personal and project risk
  - ***character*** to manage outcomes

…..Secondly, the right culture and behavior are essential to execute technical competence for both team leaders and players, as well as decision makers…..

There are many practices which are critical to ensuring people's capability is successfully leveraged, and which enable the organization and process to be effective…..let us highlight these…..

…..Certain cultural and behavioral traits are key to the project evaluation process…..The geoscientist should be accountable and responsible to provide a basis for ownership and sponsorship…..Leading by example, he or she should be open and inclusive of the other disciplines and team players…..

…..Also important are determination, a good work ethic, care and diligence, as well as focus and intensity to ensure effectiveness and efficiency…..

…..Critical to the quality of work is the self-discipline and integrity to be intellectual honest and properly promote the opportunity without bias. It is important in establishing or preserving credibility to "be wrong right" in drilling dry holes…..The use and abuse of probability methods to create arbitrary 'most likely' prospect models has been a key reason for 1) over promising, with inputs and assumptions designed to 'get-the-well-drilled' and 2) not fairly representing upside prospect models…..

…..An open mind, a humble attitude, coupled with humility, and the challenging of logic and assumptions as well as pursuing a contrary and 'half full not half empty' mind set maximizes exploration possibilities…..

…..Sharing through learning, coaching and mentoring are required to ensure the team advances……

…..For project capture, the developing and maintaining of strong personal relationships and networks, coupled with vision and a sense of entrepreneurship, are key to identifying and pursuing potential deals…..

…..For project marketing, the in-house organization's co-operation with other companies is key to securing internal support of, and external involvement in, the project…..

…..Dedication, passion, self-confidence and belief, together with desire, are other key attributes…And finally, and very importantly, courage and boldness ensure the exploration opportunity is either drilled or not drilled, whatever the right decision is. The best explorers do not differentiate personal and project risk – they just get lucky?

Key Success Factors…..

KOSMOS ENERGY

- Management
  - Corporate leadership preparedness to take advantage of current cash flow and more aggressively re-invest in new exploration for longer term reserves/production replacement and growth
- Strategy
  - Pursuit of higher risk, higher impact international opportunities, including primary exploration of frontier and emerging basins as well as secondary exploration for unconventional (stratigraphic-based) plays in producing areas to create new opportunity
- Business
  - Establishing the right balance between the integrated ‘risk conscious’ systematic portfolio-based analysis and the ‘prospector myth’ approach
- Technical
  - Adoption of petroleum system, not prospect approach with re-focus on regional geology, as well as seismic attributes for play and prospect risk reduction
- People
  - Hiring, retaining and organizing the right people

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To close, I will summarize the key factors will determine the future success of exploration in the upstream petroleum business…..

…..Firstly, our ability to regain the confidence of corporate leaders in the ability of exploration to replace company reserves and production…..This is required to ensure the continued re-investment in the business…..

…..Key to this will be early management patience and changed expectation with respect to finding cost performance. Later, the key will be our ability to consistently deliver on our promises to ensure the trust and faith in the remaining resource base and our ability to find it…..

…..Strategically, success will hinge on our appetite for pursuing higher risk, higher impact international ventures, including primary exploration in frontier and emerging basins, as well as secondary exploration for unconventional (stratigraphic) plays in producing areas…..

…..To achieve this requires the right exploration philosophy, involving a balanced approach between the systematic, quantitative risk analysis and the ‘prospector myth’ mentality…..

…..Importantly, we need to adopt a petroleum system, not prospect approach, with a re-emphasis on regional geology to reduce play risk through basin analysis and petroleum system evaluation, as well as using 3D seismic attributes to describe prospect risk…

…..The key success factor is however, us, the explorers…..

This presentation, both the slides and speaker notes will be available on our website at the address shown shortly…..

…..Thank you.