



***PLANNING FOR BUSINESS MODEL
DISRUPTIONS
USING BLACK SWAN RISK PROCESS***

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DISCUSSION AGENDA

- **Harley-Davidson ERM Overview**
- **Identify emerging or “black swan” risks**
 - **Purpose of the Black Swan Risk workshop**
 - **Participants**
 - **Expected product**
- **Integrate black swans within company risk management activities**
- **Ongoing Black Swan Risk Monitoring**
- **Discussion**



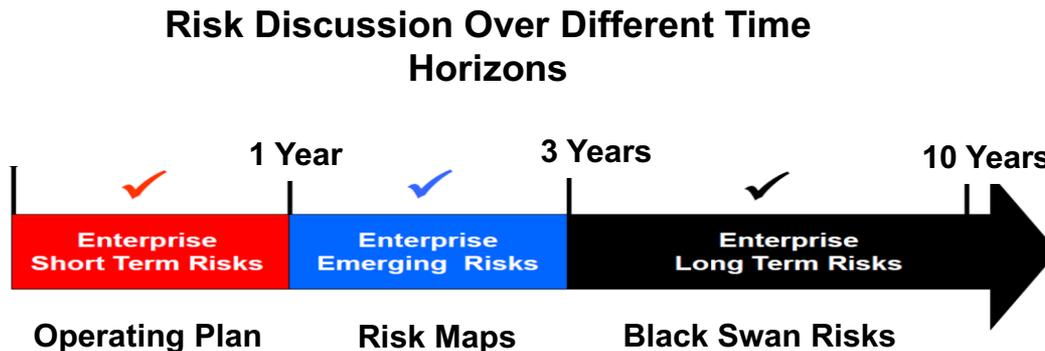
HARLEY-DAVIDSON, INC. (NYSE: HOG)

- Founded 1903 in Milwaukee, Wisconsin; America's largest motorcycle producer
- 2016 Revenues of \$6.0 billion; 260,000 motorcycle shipments; 5400 employees
- Distribute to 1461 Independently-owned Dealers (Sales, Service, Financing, Sponsor Harley Owners Group (HOG) Chapters and Rider Academy Training)
- H-D is the global leader in cruising and touring motorcycles. Rated one of strongest brands. Sales in 97 countries. In 2016, more than one-third of sales come from international customers.
 - H-D Motor Company: produces heavyweight custom, touring and cruiser motorcycles
 - Manufacturing: Milwaukee (Powertrains); Kansas City, MO (Assembly of Sportster, Dyna, Street) ; York, PA (Assembly of Softail, Touring), Tour Centers
 - Parts & Accessories, General Merchandise
 - H-D Museum (Milwaukee)
 - Harley-Davidson Financial Services: provides wholesale and retail financing, insurance

ERM OVERVIEW

Formal process for HDI Risk Management in place and actively managed

- Standard risk dashboards/reporting for 15 Strategic Risks
- Annual review of the Risk Management Policy and Charter
- Risk management planning calendar aligned with the business cycle



On-going Monitoring

- Risk Dashboard
- Risk Appetite and Tolerance

STRATEGIC RISK MANAGEMENT PROCESS – EVALUATING RISK

Risk Categories:

- *United States Sales Region*
- *International Sales Region*
- *Competition*
- *Product*
- *Brand*
- *People*
- *General Merchandise*
- *Parts, Accessories, Customization*
- *Supply Chain*
- *Information Technology*
- *Manufacturing*
- *Legal and Government Affairs*
- *Reputation*
- *Financial*
- *H-D Financial Services*

Manage plan risks on a quarterly basis

Risk evaluation criteria:

- Impact of Risk (Critical, Major, Minor)
- Likelihood of Risk (Likely, Possible, Remote)

H-D has established risk mitigation plans for the top three quadrants of risk

RECENT ENHANCEMENTS TO THE RISK MANAGEMENT PROCESS

EXPAND CAPABILITIES

(2015)

Complete:

- Online risk management training
- Partner with Legal for Compliance Risk Assurance Mapping
- Develop Risk Liaisons for each strategic risk to identify and share risk management best practices

BUILD RISK MONITORING

(2016)

Complete:

- Develop a formal method for reviewing and understanding risk moves/changes
- Enhance existing SRM processes and templates to improve ownership
- Develop Black Swan refresh process in conjunction with Strategic Planning

SUSTAIN MOMENTUM

(2017)

In Process:

- Identify how current and emerging risks impact the strategic plan
- Link risk exposures to strategic initiatives to pinpoint strategies most vulnerable to risks

HDI Risk Management Roadmap for Future State



COMMON QUESTIONS FROM BOARDS

- How prepared are we for the risks and opportunities that lie ahead?
- How can we continue to grow our brand, improve our revenue growth, operating margins and asset productivity despite uncertainty and turbulence?
- How can we find the unexpected before it finds us?
- How can the board get reassurance that executive's reports about emerging enterprise risk exposures are reliable?
- Identify the Black Swans – Audit Committee Request

BLACK SWAN RISK FACILITATION

Internal Audit facilitated an executive workshop to identify Black Swan Risks that may affect H-D's future success. Workshop activities included:

- Define the project, communication plan and identify workshop participants
- Develop process for soliciting and synthesizing executive input
- Develop pre-read materials that will educate participants regarding the Black Swan approach, describe the process and include sample Black Swans
- Facilitate the workshop to identify potential “Black Swans”; document results
- Assist in preparing a summary report that can be used to brief the Board

BLACK SWAN WORKSHOP PRE- READ



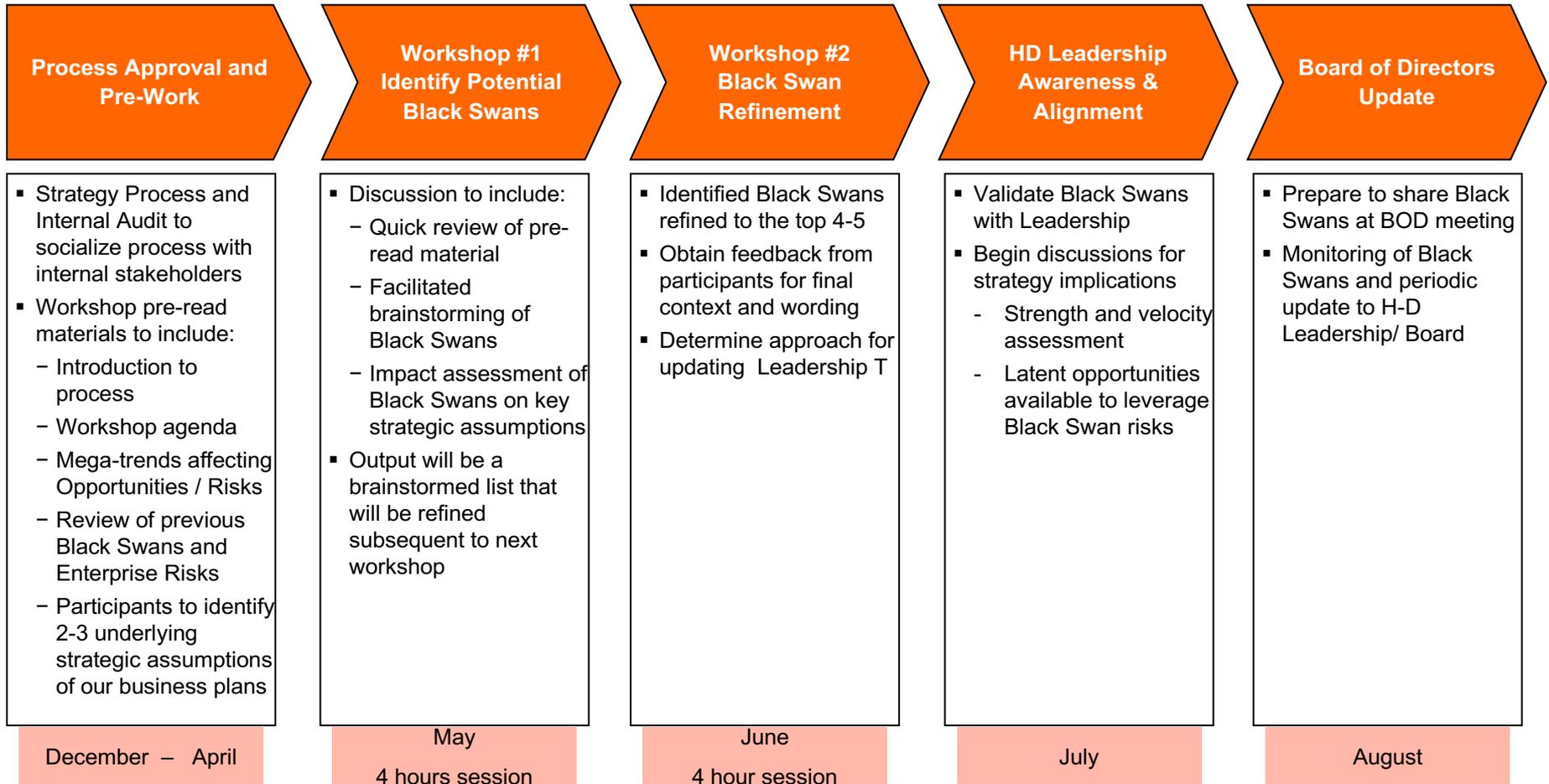
“Sooner or later, something fundamental in your business world will change.”
Andy Grove, Former chairman and CEO, Intel Corporation

BLACK SWAN PURPOSE, PROCESS AND TIMING

Purpose:

To satisfy the board's request to understand how HDI can find unexpected risks (e.g. the potential black swans) before affecting HDI's future success.

Process and Timing:



CONDITIONS OF SUCCESS

- Identify 4-5 extreme long-term, strategic and critical risks associated with underlying business plan assumptions that could significantly affect the long-term success of H-D
- Each Black Swan should have an associated mitigation plan
- Mitigation plan ownership should be integrated into the HDI Strategy process
- Focus on strategic assumptions that drive Harley-Davidson's business
- Medium to Long Term time horizon (5-10 yrs)
- Utilize a facilitated, workshop style approach
- Participants include HDLT members (or delegates)
- Report out in Board of Directors meeting

BLACK SWANS

- In *The Black Swan**, Nassim Taleb described the impact of highly improbable events and he used the metaphor of the black swan
- Prior to the European discovery of Australia and the sighting of the first black swan, Europeans firmly believed that all swans were white

H-D's view on Black Swans:

- An event beyond our current risk horizon that is not actively monitored (e.g. +5 years)
- The impact of a significant event that changes a fundamental business assumption
- The nature of the event builds over time without notice and becomes significant (i.e. boiled frog)



* Nassim Taleb (2007) "The Black Swan: The Impact of the highly improbable." Random House

WHY COMPANIES GET INTO TROUBLE

- Strategic risk missteps
- Doing the right thing too long
- Failure to reinvent
- Missing the risks
- Overconfidence in ability to control the future



BLACK SWAN SOURCES

- Actions by others (competitors, regulators)
- Shift in value generated in the market
- External events that are uncontrollable
- Flaws in strategic assumptions
- Failure to execute a strategy
- Highly expected events that do not occur
- Macroeconomic, demographic, and market changes



KEY BLACK SWAN QUESTIONS

- What has to be true in our current plans for HDI to succeed?
- What are the biggest assumptions in these plans?
- What do we not know or are not seeing?
- Which strategy has the most volatility or unknowns?
- Are we seeing around the corner?
- Are we prepared?
- What non-traditional competitors could emerge?





***HDI BLACK SWAN:
DAY 1 WORKSHOP***



AGENDA

- **Introductions**
- **Background and Meeting Objectives**
- **Process Review and Workshop Particulars**
- **ERM Background, Board Considerations and Implications**
- **Strategic Planning Overview**
- **Black Swan Examples**
- **Work Shop Activities (in groups)**
- **Groups Present Black Swans**
- **Next Steps**



WORKSHOP PARTICULARS

- **Purpose: to identify black swans and develop mitigation strategies**

- **Expected Deliverables:**
 - Identified Black Swans
 - Mitigation plans with signals (potentially workshop #2)

- **Participants representing:**
 - Motorcycle Operations
 - Global Demand
 - Legal
 - Communications
 - Marketing
 - Parts, Accessories, Customization
 - Global Information Systems
 - Human Resources
 - Asia Pacific
 - H-D Financial Services

ASSUMPTIONS & CONTRARIAN STATEMENTS

- **The fundamental assumptions are the biggest source of risk & opportunity**
 - Management's "view of the world"
 - Within the duration of the strategic planning horizon
 - Pertain to competitor capabilities and customer preferences etc.
- **Contrarian statements are the 'black swans' - statements that negate the strategic assumptions**
 - They frame impacts that could seriously damage the ability to execute strategy
 - Not all contrarian statements are black swans – look for greatest impact of limited information to predict its occurrence

EXAMPLE: AIRLINE INDUSTRY

Thesis – *Conventional Airline Wisdom*

Customer Focus

National / International
Primary markets
Assigned seats
Premium service provider
Fee for reservation changes

People

Organizational hierarchy
Formal / stiff
Salaries and wages

Equipment

Multiple types of aircraft

Process

No fuel price hedging
Conventional media
Long turnarounds
Hub and spoke
Primary airports
Multiple sources of ticket issuance

Antithesis – *Unconventional Wisdom (Southwest)*

Regional
Secondary markets
No assigned seats
Low-cost provider
No fees

Inverted pyramid
Informal / fun
First to introduce profit sharing

Single type

Fuel price hedging
One of the first to have a website
High-speed turnarounds
Point to point
Secondary airports
Direct by Southwest

DOCUMENTING STRATEGIC ASSUMPTIONS

In preparation for our Black Swan workshop on Wednesday August 18, 2010, please use the table below to identify 1 or 2 key strategic assumptions that Harley-Davidson, Inc. relies on that are critical to the success of the company.

HDI FIVE-YEAR STRATEGIC PLAN

Growth	Continuous Improvement	Leadership	Sustainability
2 or 3 Key Business Assumptions Impacting Strategy			
1)			
2)			

Key sources of assumptions include: Business strategy, market segment, product positioning, customer value proposition, competitive forces, growth drivers, value chain, resource requirements, costs and investment structure, talent assessment, retention and management, investor value proposition

ANTITHESIS (BLACK SWAN)

Identify “black” swans, i.e., the antithesis of the white swans

- HDI’s biggest strategic threats?
- HDI’s best game changing opportunities?

White Swans Key business assumptions	Antithesis Describe the opposite of these key assumptions (Black Swans)

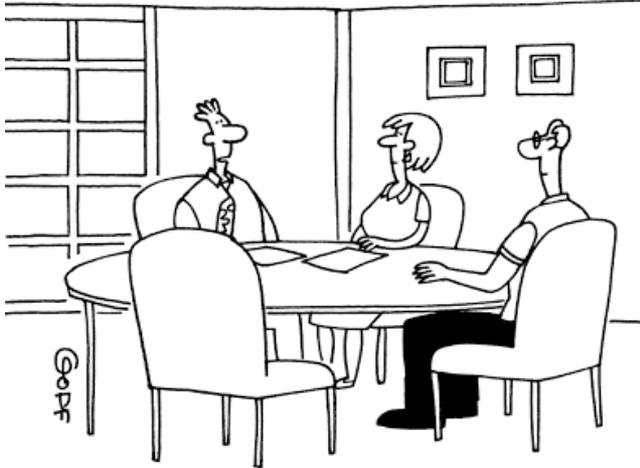
BLACK SWAN IDENTIFICATION PROCESS

- **Small group break out and present to group**
- **Identify 4-5 Black Swans**
 - Presentation criteria:
 - Explain the assumption
 - The related Black Swan
- **Group presentations**
 - Document output as discussed
 - Gain agreement on documented black swan statements

BLACK SWAN RISK OBJECTIVE

NO

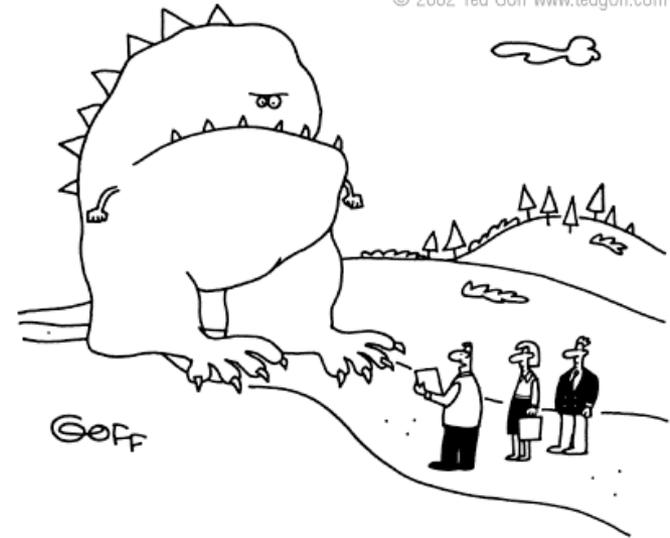
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"Yes, but what if the world is destroyed
by asteroids and falls into the sun?
What will we do then?"

YES

© 2002 Ted Goff www.tedgoff.com



"This isn't in our plan."



NEXT STEPS



PREPARATION FOR WORKSHOP #2

- Review summary of workshop 1
- Identify themes or tie to a strategic tenet category
- Distribute for team's review in preparation for next workshop
- Come prepared to Day 2 workshop to:
 - Finalize the top HDI Black Swans

WORKSHOP #2 OBJECTIVES

- Review the plan for workshop 2
- Gain agreement on Black Swans and risk statements
- Team break out: determine implications of Black Swans



Workshop #2 Activity

- Review Black Swans themes to gain high agreement
- Breakout into three groups – two Black Swan per group
- Populate Black Swan reporting template
 - warning signs and velocity
 - implications
 - Opportunities
- Group review and discussion of content

SIGNAL DETECTION

- Determine if any signs of the black swans have been detected
- Identify characteristics of patterns – identify Friend or Foe
- Verify and corroborate intelligence

Black Swans	Signs Are you detecting any signs of the Black Swan approaching?	Identify Friend or Foe
1		
2		
n		

Black Swan: “Look, Sound and Feel”

Black Swan Description: The risk of regulatory, cultural, and competitive factors will significantly compromise Harley-Davidson’s premium look, sound, and feel, which will lessen product differentiation and relevance.

White Swans	Black Swans
<ul style="list-style-type: none">▪ Minimal brand latitude beyond traditional “look, sound and feel”	<ul style="list-style-type: none">▪ Unconventional Harley “look, sound and feel”
<ul style="list-style-type: none">▪ Keep doing what we have been doing ... will continue to serve us well	<ul style="list-style-type: none">▪ Keep doing what we have been doing <i>but</i> also doing something very different
<ul style="list-style-type: none">▪ It’s been working very well for 25 years	<ul style="list-style-type: none">▪ It won’t work as well in the future
<ul style="list-style-type: none">▪ Current brand promise of “look, sound and feel” are sufficient attributes to meet sustainability and global market growth objectives	<ul style="list-style-type: none">▪ Current brand promise boundaries of “look, sound and feel” are NOT sufficient attributes to meet sustainability and global market growth objectives

BLACK SWAN #1: LOOK, SOUND AND FEEL (LSF)”

Black Swan Description: The risk of regulatory, cultural, and competitive factors will significantly compromise Harley-Davidson’s premium look, sound, and feel, which will lessen product differentiation and relevance.

Signal Strength and Velocity	Implications	Synthesis	Action Plans
<p>Stricter Regulations:</p> <ul style="list-style-type: none">Increasing regulations on emissions, CAFE, sound, and freedom (helmet, safety bars, etc.), may restrict traditional H-D look, sound and feel	<p>Regulatory Challenges:</p> <ul style="list-style-type: none">Regulations applied to H-D product challenge maintenance of LSF	<ul style="list-style-type: none">Develop innovative ways to deliver regulatory solutions without compromising look and sound	<ul style="list-style-type: none">Continue to drive more consumer-led product development (ongoing):
<p>Cultural Shifts:</p> <ul style="list-style-type: none">More global consumers are embracing “green” products and experiences	<p>Cultural Context:</p> <ul style="list-style-type: none">Convergence of social pressures, regulation, technology, and increasing competitive diversification	<ul style="list-style-type: none">Evolve a new LSF with ties to H-D heritage while maintaining a classic LSF on limited product	<ul style="list-style-type: none">Expand the perception of H-D LSF through new products
<p>Competitive In-Roads:</p>	<p>Competitive Response:</p>		

HARLEY-DAVIDSON INC. 10 K RISK DISCLOSURE

The Company's ability to remain competitive is dependent upon its capability to develop and successfully introduce new, innovative and compliant products.

The motorcycle market continues to change in terms of styling preferences and advances in new technology and, at the same time, be subject to increasing regulations related to safety and emissions. The Company must continue to distinguish its products from its competitors' products with unique styling and new technologies. As the Company incorporates new and different features and technology into its products, the Company must protect its intellectual property from imitators and ensure its products do not infringe the intellectual property of other companies. In addition, these new products must comply with applicable regulations worldwide and satisfy the potential demand for products that produce lower emissions and achieve better fuel economy. ***The Company must make product advancements while maintaining the classic look, sound and feel associated with Harley-Davidson products.*** The Company must also be able to design and manufacture these products and deliver them to a global marketplace in an efficient and timely manner. There can be no assurances that the Company will be successful in these endeavors or that existing and prospective customers will like or want the Company's new products.

BLACK SWAN UPDATE PROCESS

Signal Strength and Velocity:

- How do you know whether the Black Swan is occurring, increasing in importance and becoming riskier? What are the signs? How quickly can it change?

Implications:

- What are the underlying actions / reactions to situations that can occur from the Black Swan incident? How do you manage the reactions positive or negative?

Synthesis:

- What is the combination of actions / deliverables that may need to occur?

Example Actions:

- Identified and documented on Risk Maps and mitigation plans are in place
- Current risk concern not on the Risk Map; needs to be added with mitigation plan
- Not a near term concern, but should be monitored
- Develop metrics to sense if the signal strength or velocity is increasing

Risk Management – Black Swan Risk

Process

Objectives

- Refresh Black Swans that could affect the long-term survival & success of HDI
 - Develop a process to integrate Black Swan Risks in the Strategy Planning
-

Approach

- Conducted workshops to assess key business assumptions that underpin our strategies and black swan contrarian implications
 - Identify Risk Scenarios
 - Relationship of risks (internal vs. external, international vs. domestic)
 - Confirm whether Black Swans are addressed within existing strategy
 - Identify any gaps in risk identification and monitoring capability
 - Summarized list of Black Swans identified during the workshops
-

Outcomes

- Black Swans validated by HDLT. Strategy function to assess implications and recommend approach for risk integration within the annual planning process
-

HARLEY-DAVIDSON PROJECT LIVEWIRE PROTOTYPE



EVOLUTION OF THE BLACK SWAN RISK

PROCESS

Initial Black Swan risks identified in 2010, refreshed in 2012; confirmed initial Black Swans are relatively stable and not expected to change year-to-year.

Refreshed in 2016 after significant business environment changes.

Lessons learned:

- Be clear on your definition of what a Black Swan risk is.
- We look 5-10 years into the future and take a broad view of the possible risks that could be catastrophic.
- For us, Black Swan risk are not a disaster but primarily things you cause yourself because you are not looking.

Our approach was to consider what makes HD great (e.g.):

- (1) our dealers – what if alternate distribution models emerge for bikes?
- (2) our air-cooled engines – what if that is regulated away?

The goal was to consider how H-D could lose our competitive advantage without seeing it coming.

EVOLUTION OF THE BLACK SWAN RISK

PROCESS

- Benefits:
- Answer key questions from Boards:
 - How can we continue to grow our brand, improve our revenue growth, operating margins and asset productivity despite uncertainty and turbulence?
 - How can we find the unexpected business model disruptions (e.g. Black Swans)
- Address Black Swan risk implications to Strategic Plans
 - Strength and velocity assessment
 - Latent opportunities available to leverage Black Swan risks
- Clear connection of Black Swans to Long-Term Strategy

QUESTIONS ??



Young riders pick a destination and go...Old riders pick a direction and go.