

Artificial Intelligence in Public Markets:

Key Considerations on the IR Role September 21, 2023

Our Speaker Today: Henrik Gobel, Head of GCM, EMEA



Henrik Gobel

Head of Global Capital Markets, EMEA

Henrik Gobel



Mr Gobel is the Head of Global Capital Markets (GCM) for Europe, the Middle East and Africa at Morgan Stanley. He has over 28 years of experience in Investment Banking



Mr Gobel worked in Equity Sales & Trading before joining the GCM division in 2004. Since then he has led the Equity Syndicate desk and the Equity Capital Markets Team before becoming Co-Head of GCM in 2013. Since 2017 he has been sole head of GCM



The Global Capital Markets division in EMEA encompasses all of the firms issuance, financing and derivatives activities across Fixed Income Capital Markets, Equity Capital Markets and Leveraged & Acquisition finance



He is a member of the firm's Operating Committee for EMEA and a member of the Global Capital Markets Operating Committee



• Mr Gobel is on the Board of Directors for Morgan Stanley Bank Saudi Arabia



• Mr Gobel graduated in 1995 from the London School of Economics with an Honours degree in Economics

Table of Contents

Section 1	Artificial Intelligence at a Glance	4
Section 2	Key Opportunities for IR and Public Markets	9
Section 3	Potential Threats for IR and Public Markets	12
Section 4	Tangible Morgan Stanley's Applications	14
Section 5	Q&A	19

SECTION 1

Artificial Intelligence at a Glance

Fundamentally AI is Built Upon 1) Compute, 2) Data, 3) Models

Generative AI and Emerging Large Language Models Represent the Latest Break-Through on AI



Source: Company Data, Morgan Stanley Research

The Concept of AI Isn't New...It's Been Building for Years





But Generative LLM Models Represent A Major Breakthrough

And as Seen in Prior Tech Cycles, the Pace of Innovation and Adoption Is Accelerating







The Six Major AI Enablers

	G	a			\sim	ú
Data Center Hardware	✓	\checkmark	✓	✓	✓	
Public Cloud Offering	✓	\checkmark	✓	\checkmark		
In-House Silicon	\checkmark	\checkmark		✓		✓
Models & Apps	\checkmark	\checkmark	✓	✓	✓	✓
End User Devices	\checkmark	\checkmark	✓		✓	✓
Partnerships	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	

SECTION 2

Key Opportunities for IR and Public Markets

Key AI Opportunities for IR (1/2)

Market Intelligence and Data Analytics Enhanced Investor Targeting

Compliance





COMPLIANCE

- Streamlined monitoring of peers, competitors and industry trends
- Real time sophisticated monitoring of news, social media and market data
- Identification of potential investors through current portfolio composition, behaviour etc
- Optimised investor outreach and NDRs
- Timely identification of compliance issues

Key AI Opportunities for IR (2/2)



SECTION 3

Potential Threats for IR and Public Markets

Potential Threats Posed to Public Markets and IR



SECTION 4

Tangible Morgan Stanley's Applications

Earnings Word Analysis for Company X vs Peers (1/2)

Analyses "Word by Word" Transcripts Including Earnings Presentations and Capital Market Days



Earnings Word Analysis for Company X vs Peers (2/2)

X's Greater Frequency of Invest, Infrastructure, Valuation and Fundraising; Less Use of Capital and Fees

- Over the last four quarters, Company X focused more than US peers on:
 - Invest, infrastructure, valuation and fundraising, and somewhat more on the market
- US peers focused more on:
 - Capital and fees, and somewhat more on growth

Visual Interpretation of Scatter Plot



Company X Vis-à-Vis US Peers

Peers Word Frequency vis-à-vis Total Meaningful Words Spoken



Company X's Word Frequency vis-à-vis Total Meaningful Words Spoken

Source: Company Information, Morgan Stanley Quant Strats Team

Full Transcript Sentiment Analysis from 8 Earnings Calls of Company X

Sentiment⁽¹⁾ Can Be Derived From Each Word, Whether it is Positive, Uncertain or Negative



Quotes / paraphrased content from recent Company X earnings call to contextualize how programs will process sentiment.

Notes:

^{1.} Sentiment is measured using keywords from financial jargon dictionaries. Scores are defined by # of words that fall into a certain category / # of words that fall into every categories for this analysis are positive, negative, and uncertain. The words that fall into these categories are defined by Morgan Stanley internal dictionaries.

Research Report Sentiment Analysis

MS Research Developed a Two-Step Methodology to Extract Sentiment⁽¹⁾ From Analysts' Reports



The team developed a systematic trading strategy combining the MRAS score with revised price targets for timing and direction. Back testing of this strategy, between Jan 2013-May 2019, suggests an overall 1.2x Sharpe ratio after taking trading and financing costs into account

Notes:
1. Sentiment is measured using keywords from financial jargon dictionaries. The words that fall into these categories are defined by Morgan Stanley internal dictionaries.

SECTION 5



Legal Disclaimer

We have prepared this document solely for informational purposes. You should not definitively rely upon it or use it to form the definitive basis for any decision, contract, commitment or action whatsoever, with respect to any proposed transaction or otherwise. You and your directors, officers, employees, agents and affiliates must hold this document and any oral information provided in connection with this document in strict confidence and may not communicate, reproduce, distribute or disclose it to any other person, or refer to it publicly, in whole or in part at any time except with our prior written consent. If you are not the intended recipient of this document, please delete and destroy all copies immediately.

We have prepared this document and the analyses contained in it based, in part, on certain assumptions and information obtained by us from the recipient, its directors, officers, employees, agents, affiliates and/or from other sources. Our use of such assumptions and information does not imply that we have independently verified or necessarily agree with any of such assumptions or information, and we have assumed and relied upon the accuracy and completeness of such assumptions and information for purposes of this document. Neither we nor any of our affiliates, or our or their respective officers, employees or agents, make any representation or warranty, express or implied, in relation to the accuracy or completeness of the information contained in this document or any oral information provided in connection herewith, or any data it generates and accept no responsibility, obligation or liability (whether direct or indirect, in contract, tort or otherwise) in relation to any of such information. We and our affiliates and our and their respective officers, employees or agents, make any representation or warranty, express or implied, is expressly disclaim any and all liability which may be based on this document and any or such information. We and our affiliates and our and their respective officers, employees or agents, make any representation or any or any of such and present expressly disclaim any and all liability which may be based on this document and any errors therein or omissions thereform. Neither we nor any of our affiliates, or our or their respective officers, employees or agents, make any representation or warranty, express or imployees or agents, make any representation or warranty, express or instead in this document, or as to the accuracy or completeness of future projections, management targets, estimates, prospects or returns, if any. Any views or terms contained herein are preliminary only, and are based on financial, economic, market and other conditions prevailing as of the date of this docum

This document and the information contained herein do not constitute an offer to sell or the solicitation of an offer to buy any security, commodity or instrument or related derivative, nor do they constitute an offer or commitment to lend, syndicate or arrange a financing, underwrite or purchase or act as an agent or advisor or in any other capacity with respect to any transaction, or commit capital, or to participate in any trading strategies, and do not constitute legal, regulatory, accounting or tax advice to the recipient. We recommend that the recipient seek independent third party legal, regulatory, accounting and tax advice regarding the contents of this document. This document does not constitute and should not be considered as any form of financial opinion or recommendation by us or any of our affiliates. This document is not a research report and was not prepared by the research department of Morgan Stanley or any of its affiliates.

Notwithstanding anything herein to the contrary, each recipient hereof (and their employees, representatives, and other agents) may disclose to any and all persons, without limitation of any kind from the commencement of discussions, the U.S. federal and state income tax treatment and tax structure of the proposed transaction and all materials of any kind (including opinions or other tax analyses) that are provided relating to the tax treatment and tax structure. For this purpose, "tax structure" is limited to facts relevant to the U.S. federal and state income tax treatment of the proposed transaction and does not include information relating to the identity of the parties, their affiliates, agents or advisors.

This document is provided by Morgan Stanley & Co. LLC and/or certain of its affiliates or other applicable entities, which may include Morgan Stanley Realty Incorporated, Morgan Stanley Senior Funding, Inc., Morgan Stanley Bank, N.A., Morgan Stanley & Co. International plc, Morgan Stanley Securities Limited, Morgan Stanley Bank AG, Morgan Stanley MUFG Securities Co., Ltd., Mitsubishi UFJ Morgan Stanley Securities Co., Ltd., Morgan Stanley Asia Limited, Morgan Stanley Asia Limited, Morgan Stanley Australia Securities Limited, Morgan Stanley Australia Limited, Morgan Stanley Asia (Singapore) Pte., Morgan Stanley Services Limited, Morgan Stanley & Co. International plc Seoul Branch and/or Morgan Stanley Canada Limited Unless governing law permits otherwise, you must contact an authorized Morgan Stanley entity in your jurisdiction regarding this document or any of the information contained herein.