

Counterpoint Global Insights

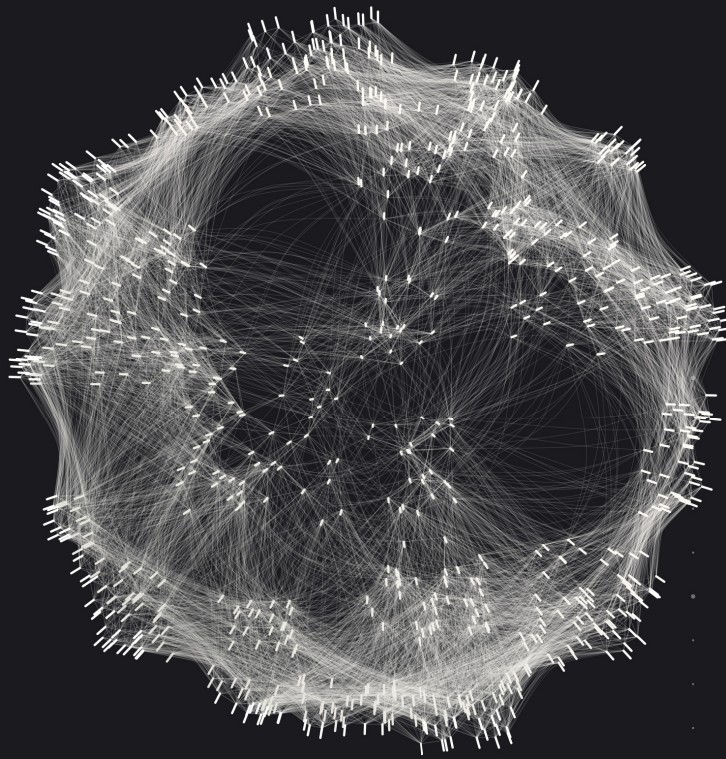
# Culture Quant Framework

CONVERGENCE | SUSTAINABILITY RESEARCH | JANUARY 2021

Company culture, the shared values and behaviors that define how employees collaborate to create value for the enterprise, remains an enigma in the field of investing. Analysts intuitively understand its influence on investment outcomes and nod knowingly when presented with examples of effective or bad cultures. But measuring culture is a subjective exercise that is open to wide interpretation, even among employees at the same company. Culture has defied quantification at a time when researchers are numerically modeling every factor that has an impact on investment performance.

In the late 1970s, tangible investments were nearly twice those of intangible investments. Today, intangible investments are roughly one and a half times those of tangible investments. This shift has transformed the nature of business. Tangible assets such as factories perform repetitive tasks and have key performance indicators (KPIs) such as capacity utilization and efficiency. Intangible investments including brand building or drug discovery rely on human creativity to create value. A company's culture is essential to unleashing ingenuity.

We believe our economy's transformation from tangible to intangible assets is secular and early in its course. As a result, investors will increasingly recognize culture as a critical determinant of value creation. That means it will be the subject of critical analysis and measurement in years to come.



Given this reality, we reviewed legacy frameworks to quantify culture and found them to be well intentioned but generally inconsistent. They were also far too broad in their scope. We believe a new approach can add value. We studied how KPIs have evolved, how they are used, and what impact they have had. Our goal is to simplify the complex topic and to create a standard set of tools that investors can use to evaluate a company's intangible assets.

For example, Barry McCarthy, the former chief financial officer of Netflix and Spotify, has highlighted the importance of customer retention as a source of competitive advantage. A company with a loyal customer base can afford to spend more to acquire new customers than can a company with less loyalty. Simply looking at the number of customers a company has can be misleading because a competitor with high customer churn will have to spend more money acquiring new customers than will a company with low churn. In this case, low customer churn will lead to a higher return on capital than will high churn.

Stable shareholders provide capital and committed customers generate revenue, but loyal employees are at the core of a thriving corporate culture. Companies derive a significant amount of their value from their intangible assets, which people create. Accordingly, we have identified employee retention as a significant indicator of culture.

Employee retention provides a signal similar to Net Promoter Score (NPS), a survey-based measure of customer satisfaction that has a positive correlation with stock performance. But employee loyalty is a much more meaningful signal of culture than NPS because a survey is anonymous while employees vote with their feet by coming to work each day. Employee retention that is above industry peer averages can indicate the presence of competitive advantage. This advantage may lead to higher levels of future profitability than past financial performance would indicate.

Sustainability Research (SR) at Counterpoint Global focuses on identifying companies that have cultivated adaptive cultures. We expect those companies to be well positioned to benefit from the long-term environmental and societal trends that are becoming increasingly important. Quantitative analysis of employee retention gives us a unique view into company culture.

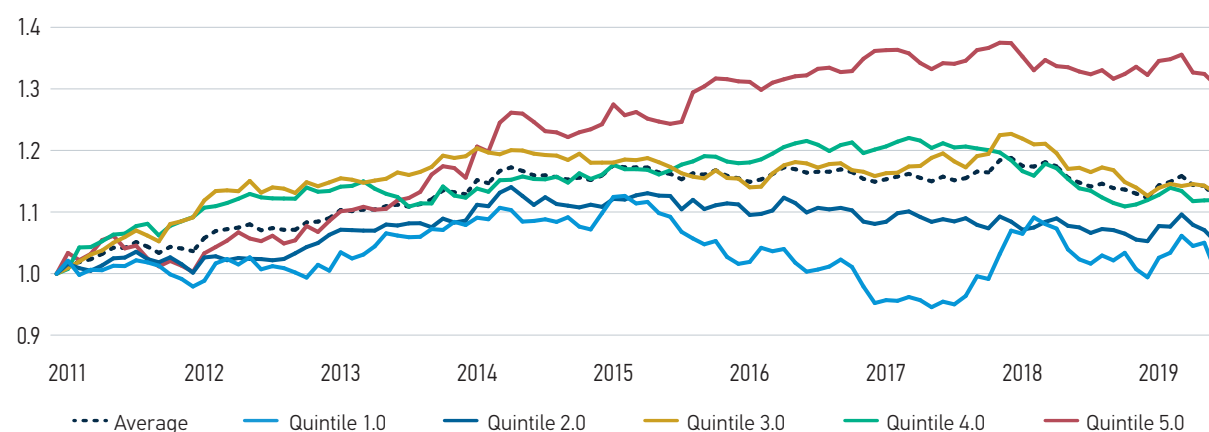
## A Quantitative Approach to Measuring Culture

To systematically measure company culture, we want to develop a single KPI that reflects the secular shift toward intangible investments and recognizes that employees are key stakeholders.

We collaborated with scholars at Harvard Business School to study whether companies with high employee retention have enjoyed higher stock returns than do companies with low employee retention. Our premise is that high employee retention is associated with a strong culture.

To test this hypothesis, we use an alternative dataset that captures monthly employer data for more than 300 million employees over the last decade. We partnered with MSIM Data & Analytics and Morgan Stanley Artificial Intelligence Center of Excellence Teams to conduct systematic analysis of nearly 2,000 publicly traded companies. We ranked and sorted the companies by quintiles based on employee retention rates. Then we created equally weighted portfolios for each quintile. The observations start in 2011 and the companies are reranked annually (see *Display 1*).

**Display 1: Quintile Portfolios Stock-Specific Returns Based on Retention Factor**



Source: MSIM Counterpoint Global, Revelio Labs, as of June 2019.

The performance is provided for illustrative purposes only and is not meant to depict the performance of a specific investment. **Past performance is no guarantee of future results.**

The results are striking. We identified a correlation between retention and stock returns: the portfolio comprised of the top quintile of employee retention had cumulative gains that were 25 percent higher, or 2.8 percent annualized, than those of the bottom quintile. Most of the excess returns reflected stock-specific factors rather than exposure to particular sectors or other market factors (e.g., Fama-French factors).

We then sought to go beyond correlation to see if high retention caused the cumulative gains. For example, employees have a unique view into the company's near-term prospects and are more probable to stay if they look good. Those prospects, in turn, are likely to translate into good stock price performance.

The statistical causality test that we designed seeks to determine whether one time series, employee retention in this case, is useful in forecasting another, stock price gains. This statistical test revealed that for the top quintile a year-over-year improvement in a company's employee retention implied positive alpha for the company's stock in the subsequent year 58.5 percent of the time. The statistical test also revealed that for the bottom quintile a year-over-year deterioration in a company's employee retention implied negative alpha for the company's stock in the subsequent year 77 percent of the time.

We hypothesize that the relationship of the attributes reinforce company culture. Companies with strong company cultures benefit from positive feedback: employee retention drives talent continuity, internal development, and cost efficiencies. These positives correlate with attractive stock returns which incentivizes retention further.

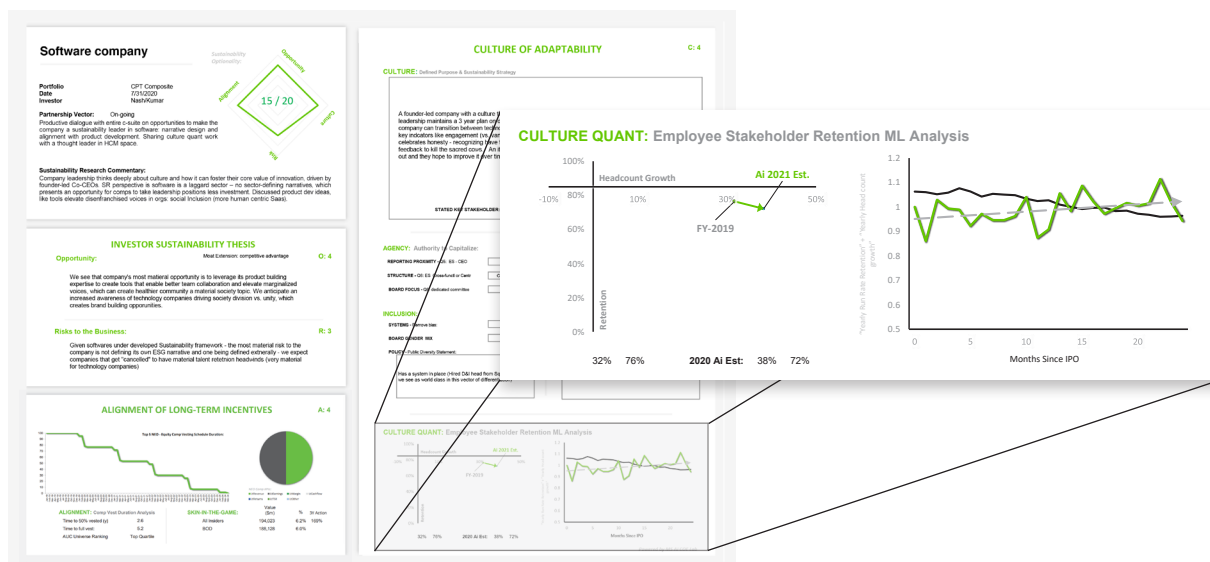
## Synergy With Our Sustainability Research Process

Counterpoint Global has a culture that fosters creativity, independence, a willingness to be different, and a long-term mindset. Our SR is designed to reflect those values and to integrate into our investment process seamlessly.

We are constantly iterating, experimenting, and searching for new ways to meld SR into our investment process. The current version seeks to identify companies where sustainability creates positive option value, an intangible asset that the consensus often overlooks. Our Sustainability Optionality framework synthesizes research that includes a business's most material Environmental and Societal (E&S) opportunities and risks, an analysis of whether incentives align with long-term value creation, and an evaluation of cultural adaptability.

We believe that a highly adaptive culture contributes to fostering talent and retaining employees. Adaptive organizations foster a common sense of purpose, empower employees to make the right decisions, and drive accountability by measuring and disclosing inclusion.

## Sustainability Research Dashboard: Culture Quant Module



Source: Counterpoint Global, Dashboard. This is provided for illustrative purposes only.

Our Culture Quant framework does not rely solely on a company's public disclosures on changes to total headcount. It provides insight by decoupling a company's headcount growth into retention and inflow. Our Sustainability Research Dashboard Culture Quant module depicts last year's headcount inflow and employee retention visually, and then uses Artificial Intelligence to predict these statistics for this year. We complement this view with a snapshot of a company at the time of its initial public offering (IPO). This presents interesting insight into a company's culture because headcount inflow often accelerates prior to an IPO in order to meet growth targets, and retention commonly falls as employees reap the benefits of their equity-based compensation.

## Implications of Findings

Businesses are increasingly investing in intangible assets such as goodwill, brands, and employees in order to differentiate themselves. We believe that investing in employee development is the foundation of a culture of adaptability. That adaptability is essential for building and strengthening durable competitive advantage over time.

We anticipate that employee retention will become an area of increased focus given the underlying trends in the economy. For example, millennials are now the largest group in the U.S. workforce and show a propensity to change jobs with higher frequency than previous demographic groups did. The rise in talent liquidity is enabled by the internet and evolving cultural norms.

Corporate executives historically relied on anecdotal evidence of their success at talent retention relative to their peers. We can partner with our portfolio companies to show them precisely how they stack up versus other businesses in their sector and how they can create targets to improve. We can also look for cultural outliers across industries and add those insights to our research. These findings potentially have significant societal implications because they quantitatively align the interests of shareholders and employees. Executives focused on long-term value creation can rely on sound financial analysis in order to justify investing in employee empowerment rather than seeing it as desirable, but unquantifiable, spending.

### HARVARD | BUSINESS | SCHOOL®

For at least 20 years, economists have been warning that the shift to a human-capital-intensive economy will wreak havoc on current valuation practices. Despite these warnings, academics and practitioners have failed to prepare. This lack of preparation comes both from comfort in the “old ways of doing things” and from a paucity of data to truly understand how the value and risk embedded in human capital impact firm performance.

In its analysis of employee turnover, Counterpoint Global has not only shown that labor flows are vital to understanding the future of companies, but has also provided a roadmap for how investors and researchers can advance the understanding of human capital.

The analysis conducted by Counterpoint Global provides concrete evidence of the value created through strong employee culture, and the statistical rigor of that analysis offers confidence in the economically meaningful abnormal returns uncovered by the collaboration.

#### ETHAN ROUEN

*Assistant Professor of Business Administration*

## Counterpoint Global

New York

**DENNIS LYNCH**, Head of Counterpoint Global

INVESTORS	RESEARCH RESPONSIBILITIES	YEARS OF EXPERIENCE	YEARS WITH FIRM	YEARS WITH TEAM
DENNIS LYNCH	Lead Investor, Head of Counterpoint Global	27	23	23
SAM CHAINANI	Communication Services, Financials, Internet	25	25	21
JASON YEUNG	Health Care	24	19	17
ARMISTEAD NASH	Business Services, Software	21	19	17
DAVID COHEN	Consumer	33	28	22
ALEX NORTON	Consumer, Industrials, Technology (ex Software)	26	21	21
MANAS GAUTAM	Generalist	9	6	6
ANNE EDELSTEIN	Health Care	10	3	3
ABHIK KUMAR	Business Services, Software	12	2	2
JOSHUA JARRETT	Generalist	16	1	1
ALEKS SAMETS	Payments	1	1	1
<b>CONSILIENT RESEARCH</b>				
MICHAEL MAUBOUSSIN	Head of Consilient Research	34	1	1
DAN CALLAHAN	Consilient Research	16	1	1
<b>DISRUPTIVE CHANGE RESEARCH</b>				
STAN DELANEY	Big Ideas, Emerging Themes	20	20	17
SASHA COHEN	Big Ideas, Emerging Themes	4	4	4
<b>SUSTAINABILITY RESEARCH</b>				
THOMAS KAMEI	Sustainability, Internet	9	9	9
DERRICK MAYO	Sustainability	16	7	<1
<b>CLIENT RELATIONSHIP AND BUSINESS MANAGEMENT</b>				
MARK TODTFELD	Chief Operating Officer	26	16	2
MARY SUE MARSHALL	Portfolio Specialist	41	21	21
PRAJAKTA NADKARNI	Portfolio Specialist	17	14	10
MCKENZIE BURKHARDT	Portfolio Specialist	18	18	18
EARL PRYCE	Portfolio Administrator	21	21	14
ROBERT ROSS	Portfolio Administrator	29	24	4
CHAYSE MORGAN	Portfolio Administrator	1	1	1
RUOBING CHANG	Business Management	9	5	1

## Global Opportunity

Asia

**KRISTIAN HEUGH**, Lead Investor

- 6 Investors, 5 Portfolio Specialists

"Investor" refers to an analyst or portfolio manager of Counterpoint Global.

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