

HUMAN CAPITAL MANAGEMENT

Marketing material for professional
investors and advisers only

Performance levers

July 2023



Schroders



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EXECUTIVE SUMMARY

Performance levers



Angus Bauer
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“Is there any law that says the corporate return on equity capital cannot adjust itself upward in response to a permanently higher average rate of inflation? There is no law, of course. On the other hand, corporate America cannot increase earnings by desire or decree. To raise that return on equity, corporations would need at least one of the following:

An increase in turnover, i.e., in the ratio between sales and total assets employed in the business;

Cheaper leverage;

More leverage;

Lower income taxes;

Wider operating margins on sales.

And that’s it. There are simply no other ways to increase returns on common equity. Let’s see what can be done with these.”¹

We have thus far defined the concepts of human capital and human capital management, explained why it matters to investors from both the cyclical and structural perspective, set out how to measure it with outcomes metrics, and sought to evidence their materiality both empirically and via the translation mechanism to profitability and ROCE. In light of the famous rules that Warren Buffett identified when setting out how to increase ROE, it is critical for us to

consider how one can drive change in human capital returns, in a way that benefits both investor and employee stakeholders.

Starting with a history of HR set against the drivers of productivity, we have considered changing human capital management practice. We move from the sociological puts and takes at macro level to the core drivers of performance at micro level within a corporate setting. Building on work that has been done by the Center for Neuroeconomic Studies in the USA, which has spent over a decade compiling an empirical database to identify the importance of oxytocin – the trust hormone – to performance, we **highlight the change makers that can drive HCROI and move the dial on company returns.**

Compared with people at low trust companies, those in high trust organizations report 74% less stress, 106% more energy at work, 50% higher productivity, 76% more engagement, 13% fewer sick days, 29% more satisfaction with their lives and 40% less burnout – among other metrics.

Figure 1: The soft features that drive returns on culture

Topic	Rationale
Leadership	Tone starts at the top, social skills among management create team spirit
Recognition	Non-financial reward through recognition can stimulate oxytocin
Challenge stress	Adrenaline associated with time bound tasks drives brain function
Autonomy	Flexibility as to how employees deliver results stimulates oxytocin
Job crafting	Flat structures that allow self selection on projects plays to individuals’ strengths
Communication	Transparency and regular interaction promote engagement and teamwork
Networks	Investment in relationship capital at individual and team level builds trust
Career development	Constant career development and check-ins facilitate whole person growth
Vulnerability	Asking for help and listening more than speaking drives inclusion and trust
Inclusion	Diversity must be accompanied by inclusion to grow levels of trust
Ownership	Building skin in the game creates accountability and higher engagement
Values	These guide the evolution of culture, informing daily habits and rituals
Purpose	Acts to govern stakeholder relations, offering guiding post for values

Source: The Trust Factor, Paul Zak, Schroders.

¹ See: How inflation swindles the equity investor, Warren Buffett.

THE EVOLUTION OF HUMAN CAPITAL MANAGEMENT?

A brief history of HR

The industrial revolution

Were you to google the history of the HR industry, it would return a variety of opinions that suggest things kicked off in the late 20th century. However, as early as a hundred years prior, companies were beginning to recognize the importance of working conditions, as the industrial revolution took hold². The early development of factory systems necessitated the creation of welfare officers to monitor and improve working conditions, as well as the emergence of schemes to offer sick leave and subsidized housing.

Taylorism became popularized toward the end of the 19th century. It was formally documented in 1911³ and somewhat set the stage for a change in tone. In the 'Principles of Scientific Management', it was argued that there was a singular 'best way' to perform a given task. So if you broke a job down into its component parts, you could develop specialists to fulfill each function. It had mixed success, and invoked an HR practice that was perhaps less supportive to upskilling workers than the idea of 'specialism' would otherwise imply.

“Taylorism represents an organizational form without any notion of a career-structure, unlike other organizational models available at the turn of the century. Therefore, Taylorism can be defined as the bureaucratization of the structure of control, but not the employment relationship. In industrial organizations calculability requires processes of determining and fixing effort levels. Taylorism represents the historical switchover to the creation of new social mechanisms for constituting effort standards within an accelerated dynamic of deskilling. It is this, not incentive wages, which is the crucial element in Taylorism in relation to wage/effort exchange.”⁴

By the late 1920s, Henry Ford's approach to 'Mass Production' was taking the industrial world by storm, building somewhat on the deskilling elements of Taylorism. Ford's application of Taylorism through the assembly line was accompanied by automation-driven increases in production, with the benefits partially recycled back into wage increases for workers. Shifts were structured so that the factory never had to close. While rising wages meant that labor experienced something akin to an improvement in bargaining power, this was an automation-driven gain. In the Fordist era, HR was similarly focused on singular tasks.

Personnel to human resources to human capital management

The industrial transition described above was consistent with a major trend in the HR industry: maximize production per labor-hour. From the employee stakeholder perspective, the deskilling that was associated with early approaches to industrialization meant that HR practice could be transactional, focused on labor relations – union disputes, for example – and personnel. Addressing these topics was core to the Taylorist or Fordist version of productivity. Jack Welch is viewed by some as a catalyst for the gradual subversion of human capital⁵ – which is ironic given the he is also credited as being the originator of the phrase 'what gets measured gets improved'. But we believe it would be more appropriate to suggest that forms of scientific management laid the foundations for the de-unionization that has been witnessed over the last fifty years in places like the USA, far earlier than the ideologies propagated by Welch. This is because the assumed bargaining power that automation-driven productivity gains were credited as having created for labor was not, in fact, related to skills or value-add in the traditional sense.

2 See [here](#) for a history of Cadbury's approach to providing housing and education to workers in the late 1800s. A few years after George and Richard Cadbury had taken over the business from their father, they built a new factory named Bournville in Birmingham and with it, housing for staff. Young workers were also encouraged to attend classes for a day per week until the age of 18 and full scholarships were available on graduation. Other benefits included a pension fund, sick pay of up to 90% of base wage, and support available for prolonged illness..

3 See more from the Harvard Business Review [here](#) on Taylorism and Fordism, both of which shot to fame in the early 1900s.

4 See: Littler, Understanding Taylorism, 1978.

5 See: The Man Who Broke Capitalism, David Gelles.

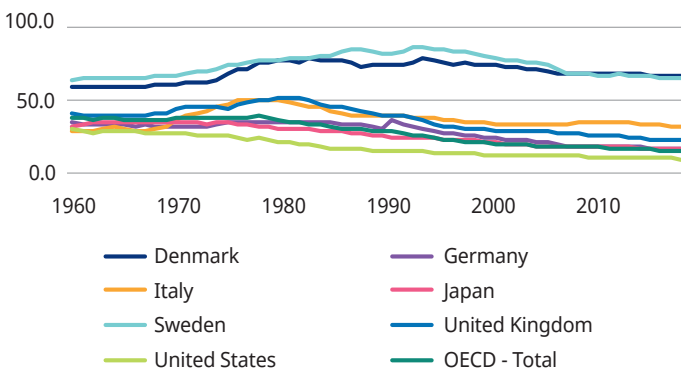
THE EVOLUTION OF HUMAN CAPITAL MANAGEMENT? (CONT'D)

Figure 2 highlights long run unionization rates. As unions' powers to contain the exogenous factors that influence real wage increases has waned – see Figure 3 as well as the Why does it matter section of our first report “Margin of Safety” for more on this – and as the world emerged from the stagflation of the 1970s, workers under mass production Taylorist regimes were left with substantially lower bargaining power, as their skillsets were meaningfully ringfenced to specific roles and tasks. This was intrinsic to the prevailing nature of productivity growth. However, we would expect this picture to evolve henceforth as human capital is a central value driver in the knowledge economy. Put simply, the bargaining power of labor should hold its own in both services and industrial segments, as human capital value creation takes center stage.

Could unionization rates start to rise more sustainably from here? If so, we would argue it does not have to be a bad thing for investors, if that increase is accompanied by effective human capital management.

Figure 2: Long run trade union membership rates

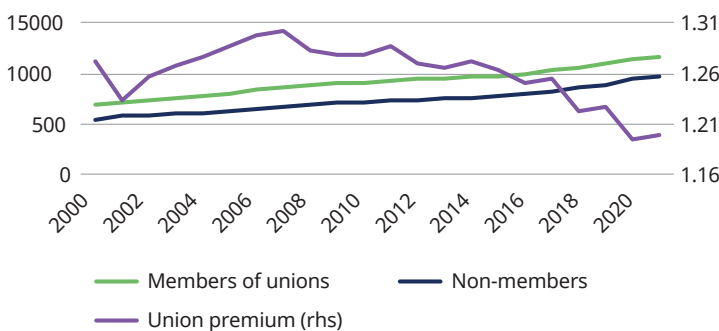
We show a selection of countries for illustration



Source: OECD.

Figure 3: Wage differentials for workers

Plots show the dollar denominated median usual weekly earnings (second quartile) for wage and salary workers with full time employment.



Source: BLS.

Enter ‘Toyotism’⁶. The end goal for the Toyota Production System (TPS) was very much aligned with the ambitions of Henry Ford: productivity gains. However, the delivery mechanism for this was predicated on an altogether different view of workers – one in which people were more versatile and responsible. The innovation potential that could be harnessed by empowering ‘collective workers’ to focus on improvement – Kaizen⁷ – was core to this approach and has been successfully deployed ever since its emergence in the 90s. The Toyota production system necessitated a focus on developing human capital – in other words, empowering people to think independently, innovate and grow.

Numerous of our conversations with experts have anecdotally acknowledged the dramatic shift in HR practice that has played out over the last 30 years. This is of course not solely attributable to the TPS but also to the significant growth experienced in the services economy, where the boundaries of specific tasks are blurred by the opportunities in innovation and creativity. Three decades ago, CPOs or CHROs were largely focused on personnel, risk mitigation and unions. Fast forward to the embrace of whole-systems thinking today, and creativity, opportunity capture and innovation are at the leading edge – for which our suite of human systems are relevant. The CHRO for a global cloud technology firm explained to us:

“Ask CPOs today how much value the HR function should bring to the business compared to how much it costs. Then ask how much of the HR team’s capacity is focused on value creation vs risk mitigation.”

As we will come onto as we discuss the drivers of change, **high value activities exist in each of the core human systems we are focused on: operating model & workforce strategy, culture & inclusion, incentive & performance management, talent & learning, and innovation. As the HR industry continues to evolve – perhaps moving beyond human capital to focus more specifically on human capability – we consider the importance of these systems to remain undimmed⁸.**

6 See more on the significance of the Toyota production system from the Economics Society [here](#).

7 Toyota describes the Kaizen approach to continuous improvement [here](#).

8 See more on the importance of human capability [here](#).

THE EVOLUTION OF HUMAN CAPITAL MANAGEMENT? (CONT'D)

Self actualization

Maslow's hierarchy of needs

As the HR industry evolved along with the changes in economic growth drivers, so too did the sociological backdrop, further emphasizing the changes that have been taking place latterly in HR. Neatly encapsulated by Ronald Inglehart's theory of post-materialism⁹, post-industrial societies are understood by social scientists to experience a gradual shift toward a focus on quality of life, moving away from material things.

For most people, over the course of life the only thing you spend more time doing than working is sleeping¹⁰. Simplistically, the average full time worker spends eight hours per day working and seven hours asleep. So, during the course of one's career, work is likely to be the number one consumer of active time. At a very basic level this means that the way you feel at work is inescapably influential on your quality of life. Gallup's 2022 and 2023 reports on the State of the Global Workplace hence present considerable cause for concern:

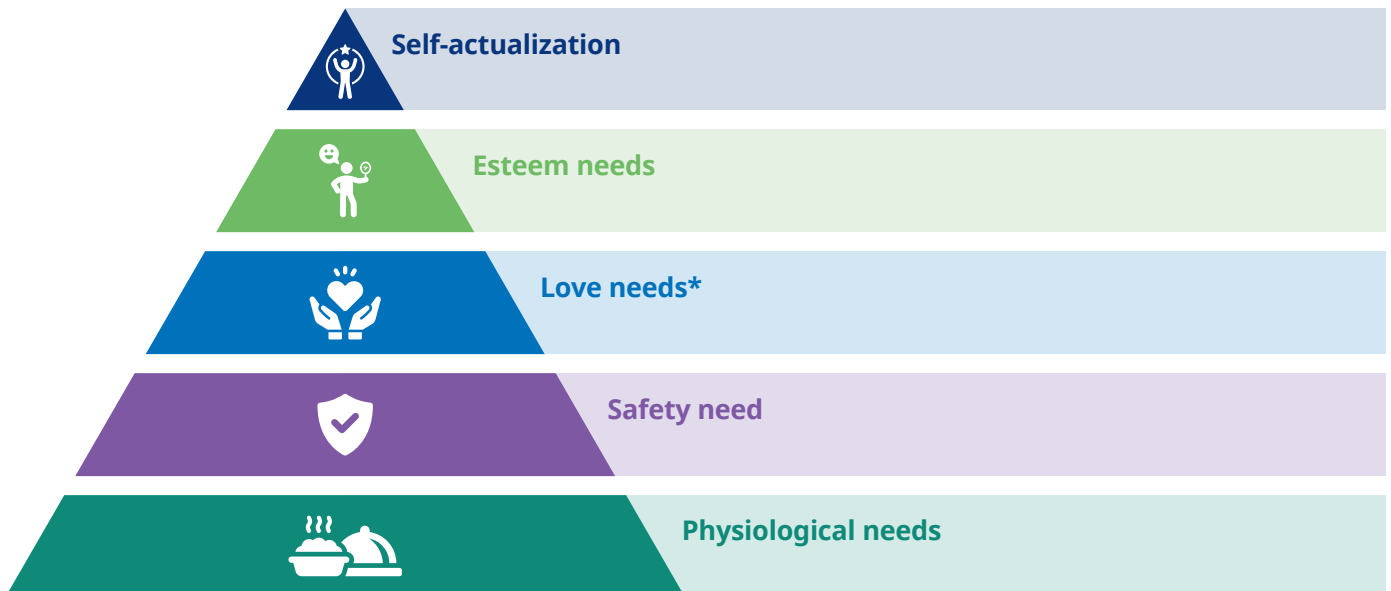
“60% of people are emotionally detached at work and 19% are miserable”

This is yet another in the long list of reasons that underscores the need for investors to analyze human capital management.

Given the mental health consequences of such a backdrop, it is conceivable that the impact of workplace culture – and hence, human capital management – on people's mental health can therefore also be thought of as a societal externality currently going unpriced; as well as being intrinsically linked to stakeholder value creation. However, as already discussed, we are focused in the first order on the company specific implications of human capital and may explore the macro – externality – consequences as a follow up. As it pertains to the importance of human capital management, workplace culture is the crucial link between evolving social sentiment and effective HR. This link is of paramount importance, because employees – unlike a firm's other productive assets – can get up and leave for a variety of reasons, not solely linked to pay. It is therefore instructive to consider Maslow's hierarchy of needs, as a familiar parallel to post-materialism.

US psychologist, Abraham Maslow's original 1943 paper ([here](#)) did not actually contain the pyramid represented in Figure 4. It was originally intended as pure psychology. However, its application in management theory has evolved.

Figure 4: Maslow's hierarchy of needs



Source: A theory of human motivation, Abraham Maslow. *Note: in the application of Maslow's hierarchy, the love and belonging needs are synonymous with social needs: friendship, affection, belonging.

9 See: The Silent Revolution, Ronald Inglehart.

10 Gallup estimates the average worker spends 41.4 hours per week working. Assume 48 work weeks per year, that means 1,985 hours per year working. Work from the age of 22 to 65 and you end up having spent 85,355 hours at work. This compares to 109,865 hours of sleep over the course of a career (accounting for weekends). All in, 30% of one's time over the full course of a career is spent asleep, and 23% at work.

THE EVOLUTION OF HUMAN CAPITAL MANAGEMENT? (CONT'D)

In the latter stages of the 20th century, organizational leadership woke up to the importance of Maslow's five needs¹¹. And over time, while the five levels got scrutinized, pulled apart and on many occasions refined to reflect a better appreciation of the fluidity of needs¹², business has evolved to incorporate more of a focus on its idiosyncratic value proposition to employees. In today's parlance, this is conceptually thought of as the employer brand proposition.

In 1990, MIT Sloan Management Review famously interviewed William O'Brien following the ascent of Hanover Insurance under his tenure ([here](#)). As it pertains to the articulation of the importance of psychological safety in a corporate environment, it could be seen as something of a seminal moment:

Q: Why do you think there is so much change occurring in management and organizations today? Is it primarily because of increased competitive pressures?

A: That's a factor, but not the most significant factor. The ferment in management will continue until we find models that are more congruent with human nature. One of the great insights of modern psychology is the hierarchy of human needs. As Maslow expressed this idea, the most basic needs are food and shelter. Then comes belonging. Once these three basic needs are satisfied, people begin to aspire toward self-respect and esteem, and toward self-actualization — the fourth- and fifth-order needs. Our traditional hierarchical organizations are designed to provide for the first three levels, but not the fourth and fifth. These first three levels are now widely available to members of industrial society, but our organizations do not offer people sufficient opportunities for growth.

Fast forward to today and there are more definitions of corporate culture in academic literature than can be easily counted; over 80% of companies publish their corporate values on their websites¹³; and organizations have been

falling over themselves to publish their purpose, (in)famously evidenced when 181 CEOs in the US Business Roundtable signed the Statement on the Purpose of a Corporation – to benefit all stakeholders¹⁴. What Bill O'Brien called for in terms of evolution in business mindset followed the well trodden path of innovative technology adoption: gradually, then suddenly.

To be clear, we are somewhat skeptical of the demand-side claims made (oftentimes by marketers) around purpose. As has been thrust into the limelight by the debate last year on whether consumers care about “purposeful mayonnaise”, there are certainly exceptions. Whether or not these prove the rule is actually less important, however, because we believe the consumer-focused argument somewhat misses the point. Purpose serves to govern all stakeholder relations, and specifically to drive culture and the suite of systems that comprise human capital management. The mechanism through which this impacts demand is partially dependent on the organization, but there are other exogenous variables. Purpose – among other things – stimulates human capital, driving the productivity of people within an organization. In turn this directly affects the way people apply themselves either to innovation, or customer service for example, as well as influencing the way they feel about their employer. This may consequently have a societal spillover by way of brand reputation, but the latter is indirect and subject to all manner of other influences. Of course, consumers increasingly pay attention to the sustainability credentials of the brands behind the goods they purchase¹⁵, but again these externalities are the second or even third derivatives of purpose, rather than pure reflections themselves.

Circling back to Maslow and Alderfer, the workplace has a role to play at each level of a person's needs. A living wage is critical to meeting one's physiological and safety needs. Being part of a team is core to fulfilling people's social (love) needs. Esteem can be achieved by status or prominence within one's workplace as well as remuneration. And finally, self-actualization – the fulfillment delivered by doing the thing that you were 'meant to do' – is reflected neatly in the modern appreciation of corporate purpose. In pursuit of satisfying these needs, human capital can become more valuable to an enterprise; it can become a more sustainable source of competitive advantage.

11 Many people credit the 1960s best seller, *The Human Side of Enterprise*, by Douglas McGregor, for acting as a catalyst here, but as noted above in the section on the history of HR, a confluence of drivers was at play, not least the shift in workplace automation, its associated deskilling effect, and the introduction of technology. Not only did the latter lead to a greater emphasis on services and growth of the knowledge based economy, but it has also been attributed with an almost uninterrupted rise in work intensity, itself requiring consistently better human capital management.

12 See Clayton Alderfer's ERG theory for example (existence, relatedness and growth), which argued that there is a constant fluidity between different needs. Maslow contended that an individual remains at a particular need level until it is satisfied. Alderfer, on the other hand, suggested that depending on what aggravates, individuals may refocus their attention on satisfying that particular issue.

13 See: <https://sloanreview.mit.edu/article/when-it-comes-to-culture-does-your-company-walk-the-talk/>

14 Our work with the Oxford Rethinking Performance Initiative (ORP) focuses on applying financial and sustainability frameworks to measuring and valuing the role of purpose to business and society. We are specifically focused on its importance to human capital.

15 There are numerous arguments and consultant reports that attest to this. For example: McKinsey research finds that 66% of consumers consider sustainability before purchasing products and around 88% want brands to be more eco-friendly. However, data from Exane's Survey of Shoppers, for example, illustrates that despite a majority of consumers caring about sustainability, it still ranks toward the lower end of the top ten purchase considerations.

THE EVOLUTION OF HUMAN CAPITAL MANAGEMENT? (CONT'D)

Case study: family companies

Reflecting on the Hierarchy of Needs, or indeed the Existence-Relatedness-Growth theory, brings the concept of family to the fore. Much is made of how family companies are compelling investments for minority investors. Ask oneself about what characteristics might set family companies apart and things like long time horizon, financial prudence or values would probably be on the tip of the tongue. There is much academic work on family companies, but we draw out the most common conclusions from our review of the literature here.

Family firms outperform in periods of economic stress (Kachaner et al, 2012) because they focus more on resilience than performance. This is to say they forgo excess returns in boom years by taking an anti-cyclical approach to decision making and capital allocation. Among the characteristics that set family firms apart, they:

- Act frugally in good times and bad;
- Keep the bar high for capex;
- Carry little debt;
- Acquire fewer (and smaller) companies;
- Tend toward strategic diversification;
- Have internationally balanced portfolios;
- Retain talent better than their competitors.

The final point here is striking in the context of human capital. A more recent investigation (Huang et al, 2015) into the role of corporate culture in family firms advances this argument. Outcomes for the employee stakeholder group are strongest at family firms, particularly when they are still run by founders. Conversely, employee satisfaction is systematically undermined in firms where founders have retired and passed the reins over to their offspring or other relatives. Among the stakeholder KPIs that are found to be advanced by family company superiority, employees appear more satisfied with their company, career opportunities, pay, work vs life balance, management, and the overall CEO.



From an investment perspective, these employee stakeholder outcomes also flow through to company and shareholder outcomes. While the relationship between employee satisfaction and long run stock returns was first established with empirical data over a decade ago (Edmans, 2011), the test was re-run in 2021 (Boustanifar, Kang, 2021). Conclusions as to the 'happiness premium' in terms of market performance have been reinforced, particularly in times of crisis.

We all know the proverb 'find a job that you enjoy doing and you will never have to work a day in your life'. It's perhaps better linked than one might think to another equally well known phrase: 'there's nothing more important than family'. As we are about to establish through a foray into neuroscience and then management theory, there are reasons to believe that the principles of strong human capital management can be applied to all types of firm – family companies and non-family companies alike – with outcomes that are measurable and attractive for investors. Trust holds the key.

WHAT DRIVES CHANGE?

Companies are founded on trust

The neuroscience of trust

'Any company can create a strong culture if it pays people enough'. This is often the criticism leveled at human capital enthusiasts. But the truth is, culture and human capital are far more nuanced than that. The interrogation of HCROI shows that salaries are by no means the be all and end all when it comes to driving returns. It is the leverage on investment in people that matters more to company returns, as discussed in depth in our second report in this series "Sustainable Competitive Advantage".

We all know and recognize culture. And yet, we struggle to offer clear definition. The entire premise of this research is not to value human capital or culture per se, but instead seek to understand the way companies manage the former and its associated human systems, for the benefit of stakeholders and, for example, margin of safety. Culture is not static. It evolves as people and purpose change; and it can be managed continuously over time. As such, we return to the definition cited in our first report "Margin of Safety":



"When corporate culture is working at its best, it reduces dramatically the agency costs within an organization because you have an invisible hand at work inside of each of the employees that helps to guide their decisions and judgments in a way that the overall corporation would desire it to be. Culture is a form of agency cost reduction in that it keeps people aligned and behaving in a way that works well. Culture is like the air, it can be almost invisible and easy to move through, but if it's extremely strong it can be a hell of a tailwind or a headwind" (Graham et al, 2019)."

Among the ways that culture reduces agency cost is by reinforcing a sense of trust. As we saw from various employee surveys, compensation was important as employees quit jobs during the great resignation, but a host of other factors was also at play, many of which hinge on trust – see Figure 5 below. In the employer-to-employee axis, trust is critical to flexible working, navigating burnout, and career development, among others. Company culture is predicated on trust, because the latter underpins agency – as implied in the quote above.

Figure 5: Why workers in the USA were quitting their jobs (% of respondents referencing these issues)

Topic	November 2021	May 2022	Change
Compensation	33.5%	26.5%	-7%
Feeling burned out	31.6%	29.5%	-2.1%
Need flexibility	25.6%	26.9%	1.3%
Lack of opportunity	21.9%	22.6%	0.8%
Working conditions	19.5%	20.1%	0.6%
Health concerns	19.1%	22.2%	3.2%
Looking for sense of purpose	18.1%	21.8%	3.7%
Working hours	16.3%	23.1%	6.8%
Location	15.8%	18.8%	3.0%

Source: Jefferies research.

WHAT DRIVES CHANGE? (CONT'D)

Numerous iterations of the Edleman Trust Barometer in recent years have noted that while trust in business may ebb and flow in the long run, it now consistently ranks higher than trust in other institutions. Again, this speaks to the societal importance of this issue, potentially in terms of externalities. In its annual CEO Survey, PWC has been documenting the importance of trust for years too, with intriguing findings in the last two years:

In 2021, PWC's global CEO survey ([here](#)) noted:

“A real real correlation exists between progress in upskilling and CEO optimism and confidence. CEOs of more advanced upskilling organizations are far more optimistic about global economic growth — 34% expect improvement versus 15% of CEOs of beginning upskilling organizations. And the ‘advanced’ CEOs express greater confidence in their revenue growth over the next 12 months — 38% are ‘very confident’ versus 20% of ‘beginning’ CEOs. This correlation suggests that employers who make good-faith efforts to upskill their employees build trust, and that, in turn, can enhance returns in a world where trust is an increasingly valuable commodity.”

In 2022, PWC's global CEO survey ([here](#)) noted:

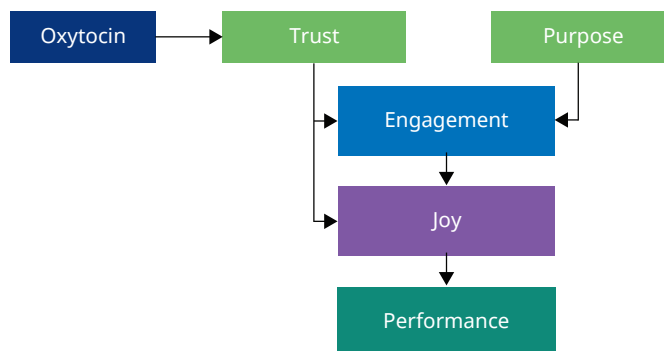
“CEOs of companies ranking highest on our customer trust index are significantly more likely to have nonfinancial outcomes (such as customer satisfaction, employee engagement, and gender, race and ethnicity representation) tied to their compensation. In fact, the most highly trusted companies are 1.4 times more likely to have gender diversity targets in their chief executive compensation plans.”

Trust is a driver of performance, because it manifests in the daily habits and rituals of employees in the long run. It is encapsulated in a virtuous circle that is characterized by faith-based investment and reciprocity. **From a neurological perspective, the explanation for trust is found in the hormone, oxytocin.**

While the power of trust was demonstrated in the early years during lab experiments addressing the oxytocin levels in people's bloodstreams and various trust-driven outcomes – such as giving money to strangers, for example – Paul Zak and a team of scientists spent many years seeking to identify the promoters and inhibitors of oxytocin in real world settings, notably the workplace¹⁷. The results can be summarized in the schematic in Figure 6.

Effective workplace cultures are those in which the release of oxytocin is stimulated at multiple points in the day by positive social interactions (back to Maslow again). These in turn lead to more such interactions, driving engagement, joy at work – aka satisfaction – and performance.

Figure 6: How oxytocin creates trust and drives operational performance



Source: The Trust Factor.

17 See: The Trust Factor, Paul Zak



WHAT DRIVES CHANGE? (CONT'D)

Zak's team used this "culture-to-performance" model, to identify eight empirically tested managerial behaviors that foster trust. As summarized below, managers can do a lot to drive oxytocin, with all that entails. At a psychological level, trust is a driver of human capital. The eight actions below represent critical drivers of change.

1. **Recognize excellence** – the neuroscience implies recognition has the highest effect on oxytocin if it comes immediately after a goal has been met;
2. **Induce 'challenge stress'** – brain activity can be most effectively coordinated when there is a modest stress associated with overcoming a challenge;
3. **Create autonomy** – allowing people control over how they get their work done delivers a sense of empowerment (and has also been found to be an intriguing substitute for higher pay, per the LinkedIn survey reported [here](#));
4. **Enable 'job crafting'** – Zak explains that when companies trust employees to self-select into projects, they focus their energies on topics they care most about (organizational structures such as Nvidia are real world examples of this);
5. **Share information broadly** – communication is key to creating transparency (and note that Gallup has also found meaningful links between this and higher engagement – [here](#));
6. **Build relationships intentionally** – otherwise known as caring, this deliberate networking is seen as being a major stimulant of oxytocin;
7. **Facilitate 'whole person growth'** – investing in career development is as critical here as doing away with annual performance appraisal and moving to real time check-ins that focus on personal and professional growth;
8. **Show vulnerability** – leaders who ask for help, listen twice as much as they speak and are seen to empathize stimulate oxytocin amongst team members.

These 'management levers' were identified through research by Zak and team into the hormonal markers of trust, as indicated by oxytocin, across a nationally representative sample of corporate America. The results of these actions

are striking. **Compared with people at low trust companies, those in high trust organizations report 74% less stress, 106% more energy at work, 50% higher productivity, 76% more engagement, 13% fewer sick days, 29% more satisfaction with their lives and 40% less burnout – among other metrics.** Thinking back to many of the factors cited in the reasons for quitting during the great resignation, work vs life balance (stress), burnout, health are all featured in Zak's outcomes. The shoe fits: trust matters.

Taking the theory and applying it from the outside – human systems

The challenge for investors here is that we cannot easily screen for the drivers set out above. Certain of these actions are quantitative and can be identified in financial statements, while others are more difficult to pin down. An entire consulting industry exists to help companies measure and monitor their cultures, but few (that we have come across are rooted in the biological science of oxytocin; and for good reason. What would you say if your employer asked to run blood tests instead of annual, bi-annual, or quarterly engagement or pulse surveys? This is why outcomes KPIs are important. As explained in our second report – "Sustainable Competitive Advantage" – we believe that Human Capital Return on Investment (HCROI) is a meaningful outcomes indicator that serves multiple functions. It is the leverage factor.

In its full fat form, the human capital cost factor offers a gross investment number – including the opportunity costs of employee turnover and sickness or absenteeism – meaning we can calculate a fully loaded returns profile. HCROI is thus the KPI that wraps up the individual elements involved in shaping culture materially. And by calculating this, we are able to triangulate to the 'residual' – the moving parts that are not dollarized, that in many cases represent the 'warm and fuzzy' feelings associated with high trust, high performance cultures.

This does not mean to say, however, that one should ignore all other metrics in favor of focusing only on HCROI. Context is key. It can give us a sense of what goes on beneath the surface. It is also critical to engage companies at numerous levels of an organization, specifically middle management. These individuals operate at the intersection between theory and action.

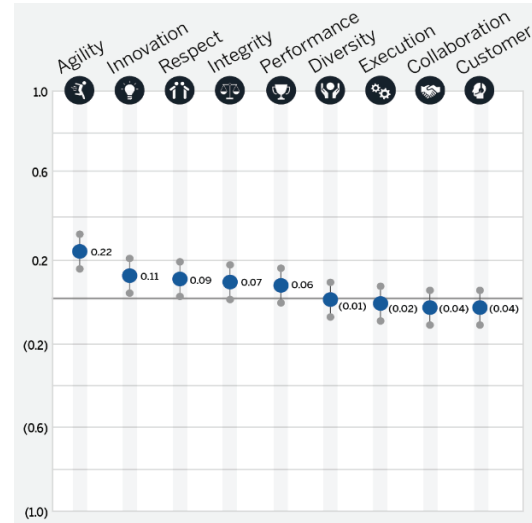
WHAT DRIVES CHANGE? (CONT'D)

As well as measuring the overall output of a functioning business via HCROI and the gain-sharing we described in the previous report, it is important to reiterate that each of the human capital systems we have sought to identify discretely – workforce planning, culture, incentives & performance, talent & learning and innovation – should be interrogated actively.

The Schroders [Engagement Blueprint](#) for Human Capital Management sets out a variety of the ways in which investors can engage on many of these topics. Our next report – “Codifying Best Practice” – sets out our current research view on what effective human capital management looks like in terms of disclosure and action..

Focusing our attention back on the drivers of change, and accepting the reality that habits and rituals are continuously evolving, it is critical to build a sense of how a company seeks to manage and influence each of its foundations and human systems, as well as seeking to monitor how they translate to outcomes. As noted above, 80% of companies appear to have their values on their websites. In isolation, this is almost meaningless, however. There is no correlation between official values and the culture described in surveys. Investors wishing to take human capital into account need to engage.

Figure 7: No correlation between official values and how well firms live up to those values according to employees



Source: Sull, Turconi and Sull, 2020: MIT Sloan Management Review.



WHAT DRIVES CHANGE? (CONT'D)

What are the features that move the dial?

Weighing the interdependencies

The first two pieces of our research dealt with definitions, interdependencies and materiality. We touch on the objective moving parts again here, by way of reminder, and then dig into the theory in follow up.

Looking specifically to the Human Capital Cost Factor (HCCF), one can test a selection of rule of thumb scenarios. For example, one might assume that a company loses half a day's individual output for every lost-day taken by that individual. This can of course be easily flexed to reflect company or industry specifics and the nature of the value added of a particular role. It might also be moderated to reflect engagement or wellbeing as a potential positive offset to that productivity shortfall. However, whatever the starting point, the sensitivities are predicated on the compensatory effort that either is put in by the team to cover for the absent colleague, or on that person working harder, smarter, longer, or faster to catch up thereafter. We note that in certain sectors this could be wildly optimistic. In the textiles supply chain, for example, we learned recently that strict rules on overtime combined with practical limitations on financing mean that if a garment factory loses four days of production, it takes a month to compensate.

For employee turnover, cost estimates that we have focused on range from three to 18 months of salary to replace and adequately train a replacement following an employee departure. There are numerous variables at play, both hard and soft features, including physical costs of lost time, recruitment, and training, combined with productivity loss associated with integration and, for example, the time it takes to rebuild the trust in a team.

Stock-based compensation and benefits can be factored into HCCF calculations where reported, and training costs can be too, once one has an adequate understanding of the costs and benefits involved. Certain workplace reporting frameworks ask for companies to report on how they are evaluating the ROI of training. But quantitative response rates to these questions – to our knowledge – have unfortunately tended to be limited; so it is important to press companies here. Bluntly, if 90% of the workforce spends one week per year in training that is of little to no incremental benefit, the opportunity cost of such a scheme is equivalent to 2% of output and is incremental to the direct expense of paying for that training.

While each of salary, churn, sickness, injuries, benefits, stock-based compensation, and training can be translated into dollars, the benefits that other levers – such as those trust drivers identified by Paul Zak and team, for example – bring are harder to pin down. As explained above, we tend to think of these as the 'residuals', to which we might triangulate having controlled for the financially denominated variables.

We also note that the significance of different variables baked into HCROI can be affected by other factors. In situations where workers are paid a living wage only, and are prepared to move for what may appear to be small incremental changes in pay, the importance of compensation far outweighs the other human systems. Conversely, in accordance with the diminishing returns on pay – i.e., wages above a certain level create less of an incremental societal value or productivity benefit – there is an argument that the significance of the softer features of culture, for example, grows at higher earnings. Several conversations with former CHROs attest to this anecdotally, albeit we have experienced some division of opinion. Needless to say, all of our expert interviewees agreed companies need to have specific employer brand propositions for different types of worker, as well as different regions and even specific sites. There is nuance here that is hard for investors to unpack, but our backtesting of HCROI when controlled for average pay – see "Sustainable Competitive Advantage" – highlights that markets are most discerning in instances where average pay is high, but the leverage is undermined by poor culture and human capital management.

Considering the drivers

Each of the interdependencies we describe above can be dollarized relatively objectively. The 'residual' human capital management effect that we have referenced several times in this report is the component that one might attribute to the softer features such as, but not limited to, culture, inclusion, purpose etc. These include the levers identified by Paul Zak and his team as being meaningful drivers of trust. And there are other issues at play too. The full suite of soft indicators that our research implies are relevant to driving the residual component of HCROI are set out in Figure 8.

WHAT DRIVES CHANGE? (CONT'D)

Figure 8: The soft features that drive returns on culture

Topic	Rationale
Leadership	Tone starts at the top, social skills among management create team spirit
Recognition	Non-financial reward through recognition can stimulate oxytocin
Challenge stress	Adrenaline associated with time bound tasks drives brain function
Autonomy	Flexibility as to how employees deliver results stimulates oxytocin
Job Crafting	Flat structures that allow self selection on projects plays to individuals' strengths
Communication	Transparency and regular interaction promote engagement and teamwork
Networks	Investment in relationship capital at individual and team level builds trust
Career Development	Constant career development and check-ins facilitate whole person growth
Vulnerability	Asking for help and listening more than speaking drives inclusion and trust
Inclusion	Diversity must be accompanied by inclusion to grow levels of trust
Ownership	Building skin in the game creates accountability and higher engagement
Values	These guide the evolution of culture, informing daily habits and rituals
Purpose	Acts to govern stakeholder relations, offering guiding post for values

Source: The Trust Factor, Paul Zak, Schroders.

The importance of leadership

Leadership matters. We all know that tone is set at the top. Two pieces from the latest edition of the Harvard Business Review struck us on this topic: "[The C-Suite Skills that Matter Most](#)" and "[When Hiring CEOs, Focus on Character](#)". As Figure 9 highlights, there has been a recalibration in the list of desirable traits for C-suite executives implied by job adverts. While attributes that would traditionally be thought of as prerequisites for top jobs – adept management of financial and operational resources, for example – remain relevant, when companies today search for the next crop of top leaders, they are increasingly prioritizing strong social skills.

The empirical evidence that supports this runs as follows. True team players are able to cause the groups around them to overdeliver consistently (Weidman, Deming, 2020). An individual that scores one standard deviation higher on the 'team player index' increases overall team performance by 0.13 standard deviations. These 'people people' also score significantly higher on the "Reading the Mind in the Eyes Test", an established measure of social intelligence. Being a team player is correlated with social intelligence, but independent of cognitive ability. This is intuitive: oxytocin underpins trust, after all. Trust is built up by behaviors and actions that are part and parcel of

teamwork. As work intensification continues, perpetuated by the infusion of technology into more tasks, the relevance of managing the social nuances becomes more acute: integration. As articulated by David Epstein¹⁸, there is a growing role for 'specialist generalists' in leadership positions, capable of understanding complex or technological subject matter and social nuance. This allows such leaders to create harmony across individuals or teams with very different skillsets and very different personalities.

As the second article we linked above argues, there may be merit in investors avoiding the CEOs that do not act as team players. Rule breaking and materialism are among the personal character traits that have been found to be correlated to a list of undesired business outcomes. Firms whose CEOs have criminal infractions such as minor traffic offenses, disturbing the peace, reckless behavior (among others) are found to be more than twice as likely to be involved in fraud; and those led by CEOs with excessive personal spending habits – houses more than twice the local median, or owning luxury cars or boats, for example – exhibit weaker governance, more liberal use of stock-based compensation and had more unintentional reporting errors.

18 See: Range, David Epstein

WHAT DRIVES CHANGE? (CONT'D)

Figure 9: Focus areas of C-Suite job advertisements

Since 2007, C-Suite job adverts have increasingly emphasized soft skills – social skills – in preference to financial.



Source: Harvard Business Review

We are less inclined to argue these links between infractions and fraud, and more inclined to focus on how such CEOs galvanize the people around them. Put differently, it's about hubris. In the Merriam-Webster dictionary this is defined as exaggerated pride or excessive self-confidence. The entry then goes on:

“In classical Greek tragedy, hubris was often a fatal shortcoming that brought about the fall of the tragic hero. Typically, overconfidence led the hero to attempt to overstep the boundaries or human limitations and assume a godlike status, and the gods inevitably humbled the offender with a sharp reminder of their mortality.”

Again, as with oxytocin, one cannot pinpoint hubris beyond all reasonable doubt. But active engagement, particularly built around the best practice framework represented in our fourth report – “Codifying Best Practice” – can allow us to ask more focused questions, zeroing in further, on human capital strengths and weaknesses across the organizational hierarchy.

We also note here the other similar streams of literature have been focused on worker performance. These can be cut three ways: pay-for-performance, the importance of employee ownership, and the relevance of creating meaningfulness, aka purpose. Empirical evidence has been found, for example, to document relationships between employee share schemes and absenteeism (Bryson, Freeman, 2014), while the Institute of Labor Economics has found that employees who perceive their work to be meaningful report fewer sick days (Nikolova, Cnossen, 2020).

Finally, we note the importance of diversity and inclusion. We have been deliberate in leaving this topic out of the core focus of this research. This is partially down to our desire to address D&I specifically in separate pieces of future work, and partially due to our desire to root the case for human capital returns in empirical data, where possible.

WHAT DRIVES CHANGE? (CONT'D)

Our thinking on this issue is evolving as follows: taking the theories from the neuroscience of trust through to questions of D&I, inclusion is critical. To the extent that a given company's diversity promise would ring hollow if it were not backed up by sufficient policies and systems to promote inclusion, inclusion is the human capital 'system' – along with culture – that needs to be addressed discretely. Companies' strategic workforce planning, their talent development and training processes – all of their human capital systems in fact – should have diversity running through them; but given findings implied by those assessing the nature of challenges identified in employee reviews, inclusion demands investor attention.

Technology and data firm, Diversio, has recently published a study ([here](#)) in collaboration with the 30% Club on the state of inclusion. Given the gender diversity rules that sit above large UK listed organizations, it is striking to observe that "79% of negative [employee] reviews (i.e., dissatisfied employees) cited inclusion related issues as the reason for their dissatisfaction." Among the 'inclusion pain points' analyzed by Diversio, management style, siloed structures, profit focus, poor work/life balance and career development are all noted frequently. The list echoes the oxytocin stimulants. Inclusion sits alongside trust.

SUMMARIZING THE DRIVERS OF CHANGE

Our work on the psychological and organizational design theory suggests that effective human capital management relies heavily on tone from the top.

Leadership plays a critical role in setting the precedent, particularly when it comes to the company's desired culture. It is also the first step in the process of building an organization founded on trust.

Given the physiological markers of trust – the hormone oxytocin – investors cannot easily pinpoint this from the outside of an organization. However, effective engagement with companies that are not delivering strong outcomes – as measured for example by low HCROI in a sector adjusted context, or elevated employee turnover – can dig into the drivers we have summarized in this piece to build a clear picture of where there may be room for improvement.

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