The Measurement of Employee Engagement

A literature review and statistical analysis of the TalentMap Standard Questionnaire

October 2018
Whitepaper

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Introduction

To measure and improve employee engagement in our client-organizations, TalentMap has developed a comprehensive survey instrument which has been rigorously tested for validity and reliability. Since our inception in the early 2000s, we have used the survey on thousands of surveys, surveying well over a million employees. As a result, we have amassed a very large database from which to conduct extensive statistical analysis.

In addition, we also regularly monitor and review trends in both workforce measurement and surveying, as well as employee engagement and the employee experience more generally to ensure that our survey instrument accurately measures true employee engagement, as well as the various themes (we call them 'dimensions') which management can use to improve engagement.

In this paper we present a review of the literature describing the concept of employee engagement; and more importantly, trends in the measurement and questionnaire development for employee engagement surveys. With that background, we provide the statistical analysis which was used to test the validity and reliability of the TalentMap questionnaire.

Review of employee engagement literature and trends

DEFINITIONS OF EMPLOYEE ENGAGEMENT

As one would expect, there are many different definitions of 'employee engagement.' In order to properly develop, or assess, an instrument which will purport to measure employee engagement in any organization, we must first establish and achieve consensus on the concept which we are measuring.

While there are many definitions of engagement, one can also ascertain that there is also a relatively high degree of commonality in most of those definitions. However, definitions tend to differ in emphasis between those provided by academic versus corporate research sources.

Corporate Definitions

The following is a sample of the definitions used by the major corporate practitioners of employee engagement [1]:

"Employee engagement is a property of the relationship between an organization and its employees. An "engaged employee" is defined as one who is **fully absorbed** by and **enthusiastic** about their work and **so takes positive action** to further the organization's reputation and interests." (Wikipedia, 2016)

"We define - engagement - as the **emotional and intellectual involvement** that motivates employees to **do their best work** and contribute to your organization's success." – (Aon Hewitt 2016)

"Sustainable engagement, which refers to employees maintaining a **positive connection** to their companies that yields **consistent productivity**, is the sum of three distinct elements. The first is traditional engagement, defined as employees' **commitment to the organization and willingness to give extra effort to their employer.** The second is enablement, defined as having the tools, resources, and support to get work done efficiently. The third is energy, defined as a work environment that actively supports physical, emotional and interpersonal well-being. Effective performance depends on all three elements of sustainable engagement. When the three elements are well balanced, employees are highly engaged in a way that yields sustainable productivity over time". (Towers Watson, 2013)

"Employee engagement is the **emotional commitment** the employee has to the organization and its goals." (Forbes, 2012)

The Conference Board, Inc. defines employee engagement as a **heightened emotional and intellectual connection** that an employee has for his/her job, organization, manager, or co-workers that, in turn influences him/her to apply additional **discretionary effort** to his/her work. (Conference Board of Canada website 2016). TalentMap also uses this as our working definition.

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[1] **Bold** emphasis added by TalentMap.

As the reader can see, there are a number of common elements in most, if not all, of these definitions:

- The notion of "**discretionary effort**", productivity, or a heightened contribution to the organization from the employee which is of the employee's **own volition**, i.e. it cannot be imposed, tasked, or coerced by the organization;

- An **emotional connection** with the organization; some definitions (e.g. Conference Board, Towers Watson) also include an **intellectual or rational** component;

- In fact, while it is not stated overtly, one can infer through a reading of these definitions that there is causality in these relationships: it is the emotional and/or intellectual connection which causes the employee to want to provide extra effort.

Academic Definitions

The following summary is extracted from a report conducted by the Institute of Employee Studies (IES):

"Whilst academic definitions of engagement also tend to focus on the outcomes of engagement (advocacy, dedication, discretionary effort), much in the same way as companies, they do, however, pay more attention to **the psychological state of engagement.** They describe engaged employees as being **fully involved in their task, absorbed, charged with energy, vigour and focused,** so much so that they lose track of time at work. The academic definitions are consistent with those posed by the companies in their view of engagement as an outcome. However, they pick up on additional outcomes such as fostering change, being innovative and doing something different. They also point to the two-way beneficial relationship between employer and employee, but do not mention anything about what organizations do in practice to enable experience of the state of engagement and to experience the outcomes."

Some of the more cited academic definitions include the following:

- "The harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (Kahn, 1990 – the most often cited definition)

- "A persistent, positive affective-motivational state of fulfillment" (Maslach, Schaufeli and Leiter (2001)

- "An engaged employee extends themselves to meet the organization's needs, takes initiative, is proactive, reinforces and supports the organization's culture and values, is in the flow, shares the values of the organization, stays focused and vigilant, and believes he/she can make a difference" (Macey, 2006, cited in Kaufman et. al. 2007)

As the reader can observe, this selection of the many academic definitions tends to focus more on the psychological state of the employee, while the Macey definition is more of a description of the employee behaviours which are exhibited, and which is similar to the notion of discretionary effort espoused by many of the corporate definitions.
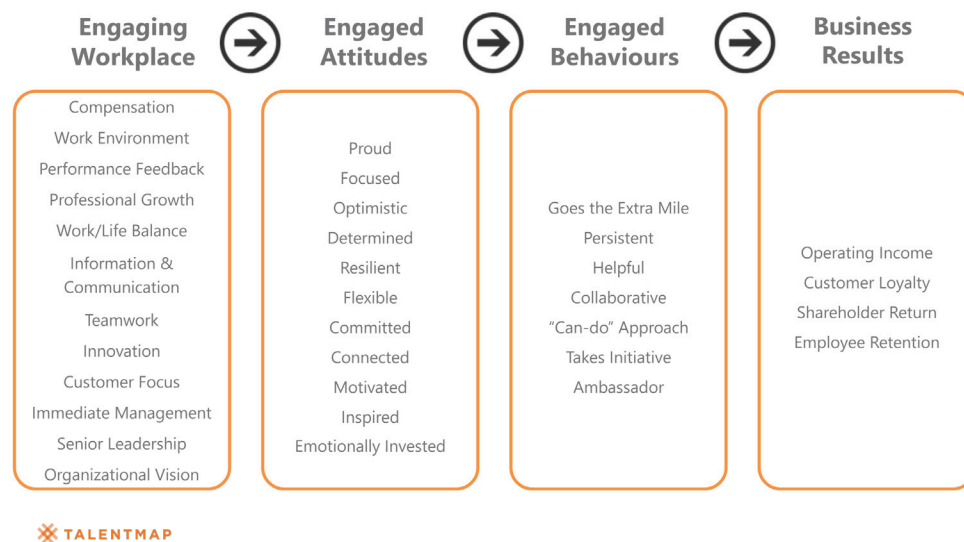
Implications for the Survey Design

It is clear from the many definitions provided that the measurement of employee engagement will need to establish the conditions upon which the employee will exhibit the desired discretionary effort; however, this provides a quandary for questionnaire designers. It is commonly accepted in social research that while survey respondents will provide relatively accurate self-assessments of their feelings and attitudes on a certain issue (or stimuli), self-reporting of discretionary effort behaviours will be fraught with issues of social desirability or acceptance bias. More simply put, employees are not likely to admit that they do not exhibit discretionary effort in the workplace, as there is a very powerful incentive to maximize such behaviour.

The survey instrument, therefore, cannot reliably measure discretionary effort behaviours directly, but rather, must measure those attitudes which are reliable predictors of discretionary effort.

EMPLOYEE ENGAGEMENT OUTCOMES

Since attempting to directly measure employee behaviours which are the result of discretionary effort is very difficult at best (and highly unreliable at worst), measuring employee engagement successfully requires the identification, and subsequent measurement, of those feelings and attitudes that serve to best predict those behaviours. But what are they? TalentMap's own research shows a link between a number of attitudes and discretionary effort, as pictured below.

TalentMap's Engagement Model

Engaging Workplace	→	Engaged Attitudes	→	Engaged Behaviours	→	Business Results
Compensation		Proud		Goes the Extra Mile		
Work Environment		Focused		Persistent		
Performance Feedback		Optimistic		Helpful		Operating Income
Professional Growth		Determined		Collaborative		Customer Loyalty
Work/Life Balance		Resilient		"Can-do" Approach		Shareholder Return
Information & Communication		Flexible		Takes Initiative		Employee Retention
Teamwork		Committed		Ambassador		
Innovation		Connected				
Customer Focus		Motivated				
Immediate Management		Inspired				
Senior Leadership		Emotionally Invested				
Organizational Vision						

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We will comment on the first and fourth columns subsequently in this report; however, the attitudes presented in the second column entitled "Engaged Attitudes", have been shown in the research to be among the best predictors of the discretionary effort (third column, "Engaged Behaviours"). In fact, at TalentMap we often refer to the research itself which indicates that the state of employee engagement "is a positive experience in itself" (Schaufeli et. al. 2002). As well as the fact that "employee engagement is a hard-nosed proposition that not only shows results but can be measured in costs of recruitment and employee output" (Johnson, 2004).

The attitudes and employee engagement outcomes that have been shown by the research (beyond TalentMap's) to be most closely linked to engagement behaviours include the following:

- **Pride** in working for the organization (IES, Gallup, Aon Hewitt, et. al.)

- Good **understanding of organization's business goals and steps needed to reach those goals** and understanding of **how one's job contributes** to the organization achieving its business goals (Towers Watson, 2014)

- **Meaningfulness** of one's job (Kahn, Lockwood, 2007). Meaningfulness represents "the sense of return on investing the self and exerting energies into a task and occurs when people feel they are valued and making a difference". TalentMap has interpreted this in our own survey instrument as a "sense of personal accomplishment".

- **Recommendation** or "NetPromoter®". Barclays (Bank) suggests that it is possible to "gain a good sense of someone's engagement by asking a simple question: would you recommend Barclay's as a good place to work?" Research suggests that being a positive advocate for the organization is a key outcome of employee engagement (e.g. Scottish Executive Social Research, 2007; Penna, 2006). Similarly, to customer experience research, being an advocate encapsulates a number of attitudes, feelings and experiences towards a product (or an organization). Also, TalentMap post-survey research has shown that acting as an advocate for the organization (i.e. recommending it to others as a good place to work) serves as an effective proxy for the intellectual connection one has for the organization: the premise being that one would only recommend a product/organization in which one has full confidence so as to protect their own individual relationship.

- **Commitment**, in particular: organizational commitment, meaning affective commitment (i.e., the emotional attachment to the organization) and continuance commitment (i.e., the desire to stay with the organization). (Schaufeli and Bakker, 2010).

- **Inspiration.** In fact, being 'inspired' is considered an emotional step beyond engagement, as depicted in the diagram. Studies such the one referred to in the exhibit opposite (Bain & Co., published in Harvard Business Review, 2015) are pointing to the "inspired employee" as the one who acts the most forcefully on behalf of their organization.

The Pyramid of Employee Needs

INSPIRED EMPLOYEES...

| Get meaning and inspiration from their company's mission | Are inspired by the leaders in their company |

ENGAGED EMPLOYEES...

| Are part of an extraordinary team | Have autonomy to do their jobs | Learn and grow every day | Make a difference and have an impact |

SATISFIED EMPLOYEES...

| Have a safe work environment | Have the tools, training, and resources to do their jobs well | Can get their jobs done efficiently, without excess bureaucracy | Are valued and rewarded fairly |

SOURCE BAIN & COMPANY   © HBR.ORG

- Leaders and managers who inspire confidence in employees, giving them autonomy to make decisions with clear goals and accountability, are perceived as engaging (IES, p. 28). In fact, all of the literature reviewed as part of this evaluation draws links between leadership, management, and employee engagement. However, we must draw a distinction between the inspiration drawn from trust and confidence in leadership (an engagement outcome) which motivates discretionary effort, and leadership and manager behaviours, which will instill that confidence, or not. At this point, we refer to the former concept, although we will also address leadership and manager/supervisor behaviours in the next section on 'drivers' of engagement.

- Job satisfaction. Previous research (e.g. IES Engagement Survey, 2005) suggests that satisfaction was considered a pre-condition to engagement. More recent research, most notably conducted by TalentMap and The Conference Board, shows that job satisfaction and employee engagement, while highly correlated, are in effect two distinct concepts. Job satisfaction tends to be a driver of disengagement rather than an outcome of engagement. That is because job satisfaction tends to decrease when key rational or intellectual considerations such as pay, and rewards decrease but does not increase in tandem with increases in these variables. Therefore, it is highly likely that one can be satisfied in their job, but not engaged. However, it also has been shown that one can be highly engaged as a result of positive attitudes (especially around meaningfulness) yet be dissatisfied with the organization.

ORGANIZATIONAL BENEFITS DERIVED FROM HIGHER LEVELS EMPLOYEE ENGAGEMENT

Although not technically part of the scope of this paper, we would be remiss if we didn't point out that the body of research and literature clearly shows empirical links between higher levels of employee engagement and organizational performance.

While there are other organizational benefits more relevant to the private sector (e.g. higher customer loyalty, higher profitability and shareholder value), the following benefits have been demonstrated repeatedly in the research and literature:

Employee retention: numerous studies link higher levels of employee retention and commitment to higher employee engagement (Levinson 2007, Sonnentag, 2003, BlessingWhite, 2008).

Employee productivity: "Engaged employees work harder, are more loyal and are more likely to go the extra mile for the corporation" (Lockwood, 2007, p3.). Numerous other studies have made the direct link between employee engagement and productivity, including Wellins and Concelman (2005), (Corporate Leadership Council, 2004), Sonnentag (2003), and Towers Watson (2007).

Manager Self-Efficacy: Luthans and Peterson (2002) found employees who are engaged in their organization and their work are more likely to respond positively to their managers, demonstrate good performance and achieve success. This then helps their manager to be more effective and successful, which in turn increases the manager's self-efficacy. (IES, 2009).

Other Benefits: A Meta-Analysis Conducted by Gallup in 2009 showed differences in several key metrics in organizations. Organizations where employee engagement measured in the top quartile showed the following differences compared to organizations in the bottom quartile: [2]

– 49% fewer safety incidents

– 37% lower absenteeism

– 18% higher productivity

– 41% lower patient safety incidents

– 25% lower turnover (high-turnover orgs.)

– 60% fewer quality defects

– 49% lower turnover (low-turnover orgs.)

DRIVERS OF ENGAGEMENT (TRADITIONAL)

Until now, we have discussed the results and benefits of having greater employee engagement in organizations. However, unless management can have an influence on these engagement outcomes, there would be little benefit in an organizational context. The literature has tended to be consistent in one respect: "there is no easy answer as far as engagement is concerned – no simple pulling of one or two levers to raise engagement levels. (Robinson et. al., 2004). However, TalentMap and The Conference Board of Canada's own research [3] on the relative importance of different drivers shows that there are indeed consistencies and trends. This research establishes the relative importance of twelve (12) different drivers of employee engagement.

The review of literature establishes that there are both drivers of engagement, and drivers of disengagement. Drivers of engagement are those attitudes towards the job and organization which, when improved, result in higher employee engagement. The converse is also true, i.e. when the attitude towards the driver decreases, so too does the level of engagement. The extent of this correlation differs on a case-by-case basis by organization, but the same themes appear in multiple research studies.

In terms of drivers of disengagement, engagement will decrease when attitudes towards the driver decline; however, the converse is not true, i.e. when attitudes towards these disengagers improve, there is little to no positive correlation with engagement.

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[2] A Q12® Meta-Analysis: The Relationship Between Engagement at Work and Organizational Outcomes, Gallup, 2009 (examination of 199 research studies across 152 organizations in 44 industries and 26 countries.)

[3] Based on research on TalentMap's employee engagement benchmark database, composed of more than one million employees from 2001- 2015.

Drivers of Engagement

Most literature prior to 2010 frequently highlights seven key drivers of employee engagement (IES 2009). To that, we add more recent TalentMap/Conference Board research which indicates another key driver: Innovation.

The nature of the work: in line with many of the definitions of engagement, the nature of the employee's work has a clear influence on their level of engagement. Much of the literature has spoken of the importance of having challenging and varied work that utilizes old and new skills. The work needs to be perceived as creative and exciting for the employee. Employees also need to feel that the work they are doing is important for themselves and for others. This is a key driver highlighted in both the practitioner and academic literature.

Meaningful and purposeful work: a perception that the work undertaken is important, and has **a clear purpose and meaning**, is an important precursor for engagement. Employees need to feel proud of the work they and their organization do, and they need to feel as though they are making a difference. Having a line of sight between individual and organizational performance, and an organization that shows how important individuals' roles are to organizational success, may be important in enabling this. This is seen as a key driver in both the practitioner and academic literature.

Professional development opportunities: having opportunities for, and access to, career growth, development and training are considered important in enabling employees to engage with the organization. For employees to perform well they need to have (and feel they have) the right skills for the job, and their roles need to encompass work that the employee knows how to do but with scope to learn new skills and develop the role. This development needs to be encouraged by managers and the organization, and continuous feedback mechanisms should be in place to tackle development needs as they arise. Employees who are engaged feel empowered, are confident in achieving in their role and have opportunities to perform at their best. While the development of new skills is mentioned in the academic literature, it is proposed more strongly in the practitioner research.

Recognition and reward (acknowledgement): receiving timely recognition and rewards is a key driver of engagement. The degree of formality of such recognition is determined by circumstances and what is appropriate. Compensation, such as salary and performance bonuses are important, but more as disengagers than engagers. Employees need to feel valued and appreciated in the work they do. In fact, in practice, we at TalentMap prefer the term 'acknowledgement' to recognition and reward; because recognition often implies providing a reward with extrinsic value (e.g. bonus, gift card, etc.), and as a result are avoided by many organizations due both to the costs involved, as well as charges of favouritism amongst those employees not duly recognized. Simply acknowledging good work through peer-to-peer recognition, "thank-you's", etc. provides the feeling of one's contribution being valued, without the need for reward.

Effective and assertive relationships: building good relationships between coworkers is important, especially the relationship between employee and manager. This critical relationship needs to be a reciprocal one of making time for, and listening to, one another. This is potentially achieved by rewarding achievement and **demonstrating trust by allowing autonomy.** Developing mutual respect and trust between colleagues and managers is seen as key to enabling employees to engage with the organization. Employees want to be respected as individuals and the culture needs to deliver this.

Quality communications: employees may engage in an organization if they can understand the **organization's values and goals,** and developments in these. **They need to understand how their own role contributes to these,** and the resources available to deliver them, as well **as feeling well informed about what is happening** in the organization. Only through having formal and open two-way communication between managers and staff, such as having opportunities for upwards feedback without fear of repercussions, can employees access this information. Consulting employees in decision-making processes enables them to feel that they are being heard and may instill a sense of ownership over the outcomes.

Inspiring leadership: leaders and managers who inspire confidence in individuals, giving them autonomy to make decisions with clear goals and accountability, are perceived as engaging. Organizational processes must give managers the flexibility to instill this in employees and adopt a collaborative management style. The actions and integrity of leaders and line managers are vitally important in enabling engagement. Managers must also be visibly committed to the organization and display a genuine responsibility to their employees and the wider communities, particularly in terms of their well-being. Particular leadership behaviours which have been shown to contribute to employee engagement include:

Survey Dimension	Relative Weight (Impact on Engagement)
Professional Growth	**17.3%**
Innovation	**12.1%**
Senior Leadership Team	**10.7%**
Organizational Vision	10.6%
Teamwork	10.4%
Immediate Supervisor	8.8%
Work Environment	6.3%
Customer Focus	6.2%
Information & Communication	4.8%
Compensation	4.6%
Work/Life Balance	4.1%
Performance Feedback	4.0%

– Demonstrating competence in the organization's line of business

– High ethical standards

– Acting consistently, a.k.a. "walking the talk"

– Setting clear and realistic goals

– Being present, visible and connecting with employees

Source: Relative Weight Analysis conducted on TalentMap benchmark data – 2010-2015, comprising ~130,000 employees across Canada.

Innovation: TalentMap's research and database comprising more than one million employees over the past fifteen-year period indicates that the concept of "innovation" is also a key driver of engagement. The chart opposite shows that innovation is the second most important driver of engagement in TalentMap's benchmark database, accounting for more than 12% of the variation of employee engagement. Innovation, in the engagement context, refers to the feeling or sentiment that the organization: a) regularly or systematically encourages and adopts new ways of working; b) provides for a culture where employees feel they can innovate and improve within their own sphere of influence (otherwise known as "job crafting"); and, c) where employees feel that minor mistakes will be treated as a learning experience and where they will not fear blame.

DRIVERS OF DISENGAGEMENT

While the literature is somewhat less clear on this issue, there are consistent findings which point to a series of themes or issues which do not "drive" engagement as do the above (in other words, improving attitudes have little impact on improving engagement). However, they can act as important barriers, obstacles, or drivers of disengagement.

The literature points to seven key factors [4] which can limit or damage employee engagement:

– Job insecurity, to which we would add uncertainty due to organizational change;

– Perceptions of unfairness or inequity, particularly in reward and pay systems (this is often mistaken for compensation alone);

– Repetitive work with short-cycle times such as call centre work, repetitive factory work, etc.

– Jobs with little flexibility or autonomy, i.e. having input into decisions which affect one's work

– Poor work-life balance and stress due to perceived excessive workload

– Poor behaviours by immediate supervisors, such as:

  – Not recognizing or valuing one's contribution

  – Not defining goals or expectations

  – Not emphasizing cooperation and teamwork

  – Not allowing the freedom one needs to do their job effectively (i.e. micromanaging)

  – Not providing constructive feedback

– Work environment, which includes the concept of "enablement", i.e. employees' perception that they are provided adequate resources and support to do their job effectively. This tends to include elements such as: adequate job space, training (to do one's job, as opposed to future professional development) and materials, equipment and technology.

EMERGING DRIVERS OF ENGAGEMENT

In addition to the drivers of engagement and disengagement discussed above, both the literature and TalentMap research are pointing to the fact that several "new" factors are emerging which are becoming increasingly important in the employment landscape. The fact that we mention these factors here is a result of both commentary in the literature, as well as our own observation in the conduct of several hundred employee engagement surveys annually.

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[4] John Purcell, Strategic Academic Advisor at Acas National, Speaking at the Employee Engagement. TalentMap/ Conference Board of Canada, Towers Watson

Corporate Social Responsibility

According to IES: "The importance of displaying a genuine responsibility to employees and communities, and investing in CSR activities in order to secure engagement, is upheld by many researchers. Sirota Survey Intelligence's (cited in Levinson, 2007b) survey of employees from more than 70 organizations found that 86 per cent of employees who are satisfied with their organization's CSR commitment have high levels of engagement and have positive views of their employer's sense of direction, integrity, and interest in employee well-being among others. However, when employees were skeptical of the organization's commitment to CSR, only 37 per cent were engaged" (Sirota Survey Intelligence of Purchase, 2007 cited in Smith, 2007).

In TalentMap post-survey research (post-survey focus groups with employees), we have found that "Corporate Social Responsibility" has two components: a) link to pride in one's brand and reputation; and b) link to the sense of meaningfulness, sense of purpose, and mission of the organization. In short, while CSR became a major concern of the corporate world, particularly in the early 2000s (and arguably remains so), employees articulating a concern with their organization's CSR are both yearning to have a greater purpose than solely the profit motive; and also want to have a level of pride in the reputation of their employer as one that "gives back to society" in some way. Upon a closer look, these attitudes are already encapsulated (and highly correlated) with existing drivers of meaningfulness and purpose, as well as pride in the organization.

In the context of the public and not-for-profit sectors, TalentMap research shows consistently that these sectors tend to rate higher on the abovementioned drivers: i.e. pride and organizational vision (meaningfulness of mission and purpose) given the societal vocation of these organizations.

Diversity and Inclusion

Diversity and inclusion has emerged as a significant issue in TalentMap research, especially since the early 2010s. This is particularly true among public sector, not-for-profit, and major corporations with well- known brands.

More importantly, where TalentMap measures diversity and inclusion as a potential driver of employee engagement, it tends to act as either an engagement driver, or a driver of disengagement.

The chart below presents results for a client in the Alberta (Canada) municipal sector [5]. The chart shows clearly that diversity and inclusion is a key positive driver of engagement. While the same research indicates that this driver (similar to corporate social responsibility) correlates with pride in one's organization, a factor analysis also shows that the attitudes on this driver differ enough to load on a separate factor. In other words, while there is an overlap between positive perceptions of diversity and pride, there are enough differences for it to form its own attitudinal construct or be a separate driver.

Survey Dimension	Relative Weight (Impact on Engagement)
Professional Growth	**14.5%**
Diversity, Respect & Inclusion	**12.0%**
Innovation	**10.1%**
Immediate Supervision	7.8%
Teamwork	7.1%
The City's Vision	7.0%
Department Manager	7.0%
Work Environment	6.4%
Corporation Leadership Team	5.4%
Performance Feedback	4.7%
Safety	4.7%
Citizen Focus	4.3%
Information & Communication	3.8%
Work/Life Balance	3.2%
Compensation	1.8%

[5] Recent examples of types of organizations measuring diversity and inclusion: municipal governments (including in some of Canada's major cities), police forces, provincial public sector agencies and organizations, and federal agencies and crown corporations.

Key Strength & Opportunity Areas
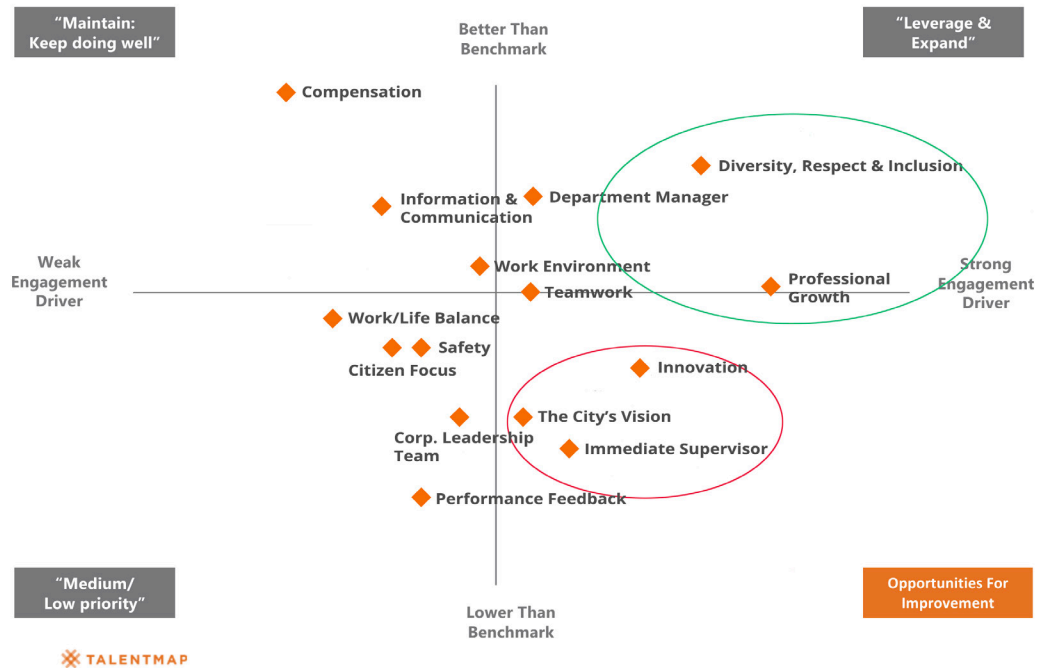
Diversity and inclusion can also act as a driver of disengagement. In organizations where diversity and inclusion is not rated as highly, we observe lower levels of engagement [6]. We also observe that key diversity groups, such as those identifying as aboriginal, employees with a disability, visible minorities, and those identifying as part of a sexual minority, all rate several engagement drivers lower, but are not consistently less engaged than the majority population in their organizations.

Mental Health

The rise in awareness of the issue of mental health (made prominent by several major public relations and advertising campaigns, such as the Bell Let's Talk™ [7] Initiative in Canada, among others) is also causing for an increasing number of organizations to examine the role of mental health in the workplace; and, to integrate the measurement of mental health into employee engagement instruments [8]. This phenomenon has only begun in the latter half of the 2010s, and it is very early to draw definitive observations or conclusions beyond the individual organizations themselves. We raise it in this report solely to provide a window into issues which may need to be included in future employee engagement survey instruments. [9]

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[6] Recent TalentMap research for a number of organizations in the municipal sector (policing), and financial institutions showed links between lower employee engagement among certain diversity minorities and their attitudes towards their feeling of inclusion, differing professional growth prospects, and the nature of their work.

[7] https://letstalk.bell.ca/en/

[8] Clients that have requested and included questions regarding mental health within the past year include a major financial institution, several health care organizations, and several major not-for-profit associations.

[9] At the time of writing (October 2018), TalentMap is working closely with the Centre for Addition and Mental Health, a world-leader in the diagnosis, treatment, and promotion of mental health issues, in developing a survey instrument to measure the state of mental health in the workplace, both as an influencer of employee engagement, and a stand-alone measure.

Safety and Security

Robinson et al. (2007) found that individuals who have had an accident at work tend to have lower levels of engagement. Being harassed at work also had a detrimental impact on engagement, particularly if the perpetrator of the harassment was a manager. When organizations demonstrate a commitment to 'improving the human or environmental condition, it creates meaning and value for employees, customers, and shareholders alike' and is most likely to encourage engagement in employees when they understand how this commitment is making a difference (Levinson, 2007b).

TalentMap research also confirms that "safety culture", i.e. employees' perception that their organization, including their co-workers, take adequate measures to ensure that their work environment will not cause them physical or mental harm, acts as an important driver of disengagement. Employee engagement suffers in organizations with issues around safety and safety culture but is not higher when safety and safety culture are rated high.

TRENDS IN THE MEASUREMENT OF EMPLOYEE ENGAGEMENT

In 2009, IES wrote: "Engagement is a measurable construct. There are numerous employee attitude surveys in use currently, many developed by organizations' HR departments with the aim of measuring engagement levels in the [organization]…the lack of clear definition of employee engagement and the differing requirements of each organization means there is likely to be considerable variation in what is measured in engagement surveys."

In 2016, this variation of what is measured has expanded as technology [10] has allowed for many organizations to easily survey their own employees, often with little formal training in social research or instrument design. The result is a plethora of survey instruments and questions that are easily available using a simple GoogleTM search.

The implications for measurement of employee engagement is that there is no "hard and fast" truth as to what should or should not be measured, and each organization is at liberty to customize its instrument to its own needs. Therefore, as stated in IES: Organizations are therefore left with a dilemma when choosing how to go about measuring engagement." [11]

As Robinson et. al, stated: "Organizations may have to choose between a standard measure that does not quite meet their requirements, but enables benchmarking, and a customized measure that is ideal in every way except for the ability to compare with other organizations" (Robinson et. al., 2007).

Existing Measurement Tools

Attempting to identify a single survey instrument as a "best practice" or "gold standard" in this context is next to impossible, as each reputable employee engagement model and survey instrument is the result of a similar research exercise as is being conducted here, but also the inherent trade-off between customization to the organization's specific needs and comparability with other similar organizations. In fact, the current TalentMap standard survey instrument is exactly the result of that trade-off; and therefore, we take care in our survey design to respect both the needs of customization and comparability, while recommending adaptations which reflect emerging trends.

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[10] Notably "do-it-yourself" survey platforms such as SurveyMonkeyTM, Qualtrics, CultureAmp, and many more.

[11] IES, p. 44

That being said, this report would not be complete without at least a review of the most commonly known and accepted models and instruments available [12] in the marketplace, including:

- The Gallup Workplace Audit (Q12)
- Aon Hewitt's 3S Model
- Towers Watson Measure of Sustainable Engagement
- TalentMap's TalentGage Employee Engagement Model

The Gallup Workplace Audit (Q12)

This measure of employee engagement is based upon the work of Buckingham and Coffman (1999), who derived 12 questions to measure employee engagement from thousands of focus groups across 2,500 business, healthcare and education units (Luthans and Peterson, 2002). The questions address issues such as understanding what is expected of you at work, having the resources to perform well, recognition and praise, encouragement to develop, being listened to and friendships at work (Bates, 2004). Responses to these questions have been linked to business outcomes such as bottom-line profit, productivity, employee retention, and customer loyalty and engagement. While the tool has undergone tests of its reliability, Bhatnagar (2007) asserts that the q12 contains some contamination from concepts such as employee satisfaction, commitment and involvement and so further work is required to determine the validity of this measure.

While the instrument's strengths are its brevity and conciseness, Q12 also has been criticized by many organizations as not providing sufficient managerial insight to act on the feedback received.

Gallup's Q12

1. Do you know what is expected of you at work? (role clarity)
2. Do you have the materials and equipment you need to do your work right? (material resources)
3. At work, do you have the opportunity to do what you do best every day? (opportunity for skill development)
4. In the last seven days, have you received recognition or praise for doing good work? (social support, positive feedback)
5. Does your supervisor, or someone at work, seem to care about you as a person? (supervisor support)
6. Is there someone at work who encourages your development? (coaching)
7. At work, do your opinions seem to count? (voice)
8. Does the mission/purpose of your company make you feel your job is work?
9. Are your associates commited to doing quality work? (quality culture)
10. Do you have a best friend at work? (social support)
11. In the last six months, has someone at work talked to you about your progress? (feedback)
12. In the last year, have you had opportunities at work to learn and grow? (learning opportunities)

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[12] While these firms (including TalentMap) are some of the best known in Canada, there are many other firms, each with variations on engagement models, and many claiming a high degree of statistical reliability and validity. These include the major management consulting firms (PwC, Ernst & Young, KPMG, IBM Kennexa etc.) Their models can be viewed by visiting their respective websites.

Aon Hewitt

The Aon Hewitt 3S or "Say, Stay, Strive" Model tends to be widely used among many large organizations. As the exhibit below presents, the engagement drivers tend to be similar to those which have been discussed as part of this review.
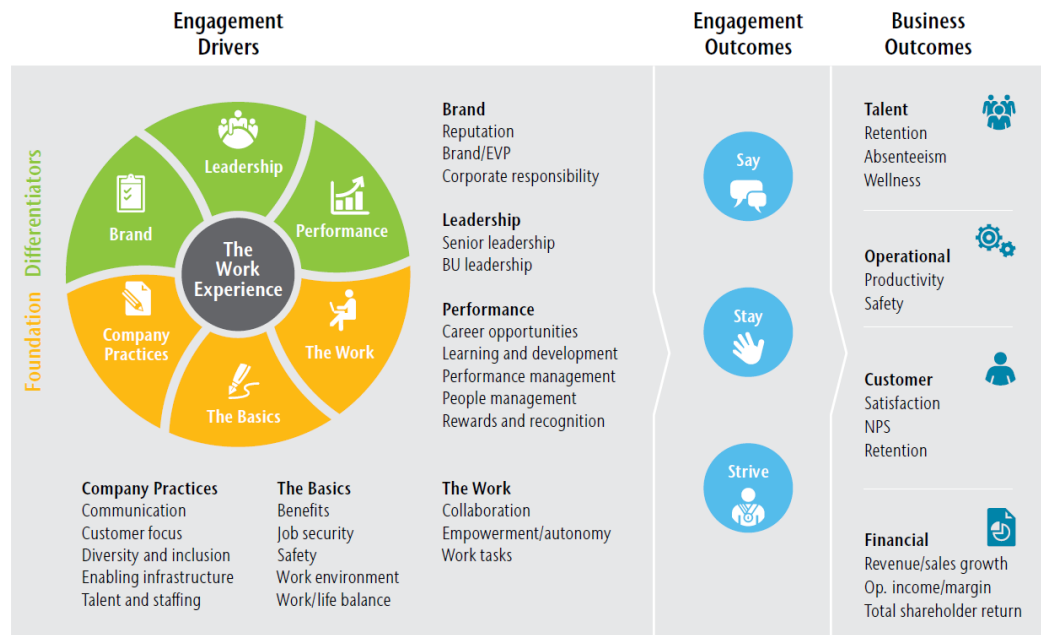
Aon Hewitt's White Paper and Model of Engagement is provided under separate cover and can be inserted as Appendix III.

Willis Towers Watson

In its 2014 Global Workforce Study, Willis Towers Watson espouses the concept of "sustainable engagement": where they expand on the concept of employee engagement as exemplified by attitudes which lead to discretionary effort.

Towers Watson research has shown that there are three measurable elements essential to sustainable engagement: [13]

– Traditional engagement — employees' willingness to expend discretionary effort on their job

– Enablement — having the tools, resources and support (typically through direct-line supervisors) to do their job effectively

– Energy — having a work environment that actively supports physical, emotional and interpersonal well-being

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[13] Willis Towers Watson, 2014 Global Workforce Study. The Towers Watson Global Talent Management and Rewards Study was conducted from April to June 2014 in 31 markets around the world and includes responses from 1,637 organizations. The participants represent a wide range of industries and geographic regions.

The extract below illustrates the key drivers of sustainable engagement overall, as well as its three components.

Figure 4. Global top drivers of sustainable engagement

	Sustainable engagement	Engagement	Energy	Enablement
1	Leadership	Leadership	Leadership	Leadership
2	Goals and objectives	Image	Goals and objectives	Workload and work/life balance
3	Workload and work/life balance	Goals and objectives	Workload and work/life balance	Empowerment
4	Image	Workload and work/life balance	Supervision	Goals and objectives
5	Empowerment	Communications	Image	Supervision

towerswatson.com   2014 G

The TalentGage Employee Engagement Survey, by TalentMap

Like many other vendors and consulting experts in the field of employee engagement, TalentMap has conducted its own research and developed a survey instrument that has been in use since 2001, with updates conducted approximately every two years.

The TalentMap survey measures employee engagement using six uncorrelated engagement attitudes which have been shown as predictors of discretionary effort. Thirteen dimensions which encapsulate the key drivers of engagement and disengagement discussed in this report are then measured, all using a five-point Likert agreement scale, as illustrated in the charts below and on the following page.
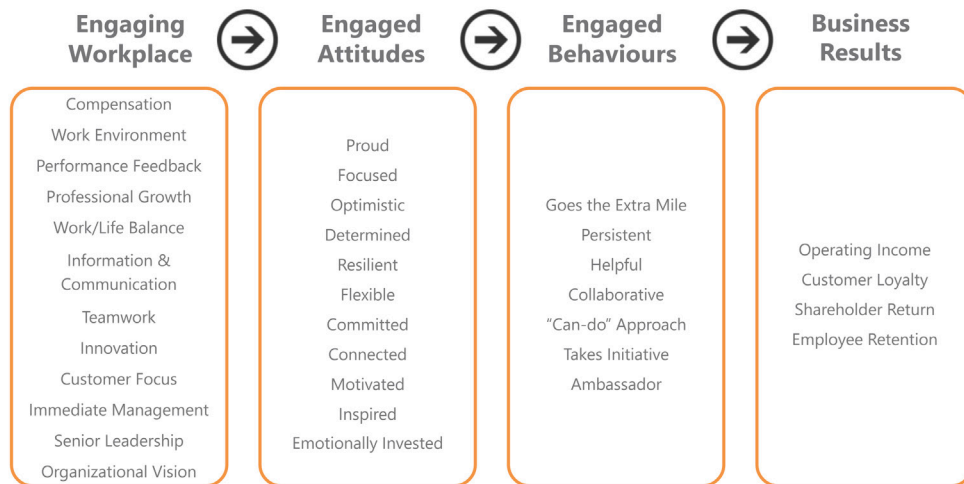
The TalentMap survey also contains open-ended questions for employees to explain their scale responses on each driver. Considerably longer than the Gallup Q12 at 68 questions (requiring 15-20 minutes to complete), the TalentMap survey provides a robust predictive model of engagement [14].

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[14] R-squared of 71%, meaning more than 70% of the variation of employee engagement outcomes are explained by the drivers, when combined with insight from open-ended questions, provides management with substantial insight from which to take action to improve engagement.

A full statistical analysis of the TalentGage Survey is provided in the following chapter.

TalentMap's Engagement Model

Engaging Workplace	→	Engaged Attitudes	→	Engaged Behaviours	→	Business Results
Compensation Work Environment Performance Feedback Professional Growth Work/Life Balance Information & Communication Teamwork Innovation Customer Focus Immediate Management Senior Leadership Organizational Vision		Proud Focused Optimistic Determined Resilient Flexible Committed Connected Motivated Inspired Emotionally Invested		Goes the Extra Mile Persistent Helpful Collaborative "Can-do" Approach Takes Initiative Ambassador		Operating Income Customer Loyalty Shareholder Return Employee Retention

※ TALENTMAP

Engagement

TalentMap calculates an engagement score for your organization as a whole based on answers to the six engagement questions.

Engagement items are as follows:

Read each statement and indicate your level of agreement.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
I am proud to tell others I work for my organization.	○	○	○	○	○
I am optimistic about the future of my organization.	○	○	○	○	○
My organization inspires me to do my best work.	○	○	○	○	○
I would recommend my organization to a friend as a great place to work.	○	○	○	○	○
My job provides me with a sense of personal accomplishment.	○	○	○	○	○
I can see a clear link between my work and my organization's long-term objectives.	○	○	○	○	○

※ TALENTMAP

THE IMPORTANCE OF ACTIONABILITY AND ACTING ON FEEDBACK.

"For any organization wishing to understand their levels of engagement, they need to consider how the results will be translated into action. To achieve employee buy-in, confidence and trust in the survey, actions that will be taken as a result of the survey feedback need to be transparent. Employees also need to be aware that actions taken will be directly related to the feedback received, so they feel listened to and that what they say counts (Ayers, quoted in Bates, 2004)."

Research, including TalentMap's, consistently shows that the single most important predictor of participation on an employee engagement survey is the belief that survey results will be acted upon. When a previous survey has been conducted, taking action on this survey in and of itself drives employee engagement.

TalentMap surveys on several clients who have had repeat surveys have shown that engagement is significantly higher when employees are aware that survey results have been acted upon. In one recent study: engagement among those who have noticed action taken as a result of the last survey was 84%, compared to engagement among those who have not noticed similar actions, where only 48% are engaged. [15]

Anecdotally, employees in organizations that have actively worked to improve their own engagement are also quite excited to complete the next survey – they want to see how well they have done. The length of the survey instrument (always 20 minutes or below) has little bearing on the response rate, and abandonment rates are typically below 1%.

[15] Edmonton International Airport, Employee Engagement surveys conducted by TalentMap, January and November 2014.

Analysis of the statistical properties of the TalentMap standard employee engagement survey [16]

TalentMap has been offering an online employee engagement survey for nearly 20 years. The reports from this survey have been standardized based on the data collected. This analysis was intended to review the measurement properties of the items in the survey and look for relationships within the data.

ITEMS

An item level analysis was done to look at the statistical properties of each item. Items are generally scored on a five-point scale that ranges in value from strongly negative (i.e., very dissatisfied or very unimportant) to strongly positive (i.e., very satisfied or very important). For the purposes of this analysis, these items were assigned values from −2 (strongly negative) through 0 (neutral) to +2 (strongly positive). There was a maximum of 110,506 observations drawn from about 479 different companies. These were companies varying in size from 15 to 90,000 employees.

Experience from engagement surveys suggests that items should be neutral to slightly positive, with a standard deviation of approximately one category, but should use the full range of responses. All the items rating satisfaction fit this general description. The arithmetic means for these items ranged from 0.01 to 1.44. With significantly skewed items removed, the item means range from 0.01 to 0.74. Median and modal response values were typically 1 or "satisfied" which is also consistent with expectations. Standard deviations for these items ranged from 0.68 to 1.19, which again is consistent with survey data gathered on a five-point scale. (See Table 1)

The fact that the modal response on these items is at the fourth point on a five-point scale means the distribution is skewed. The items nearer the top end of the scale were significantly negatively skewed (meaning a tendency to score higher), and generally fell within the Work Environment dimension. This skewness is mild however, and generally does not represent a problem in the use of the data.

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[16] The basic structure of this report was created by Tom Foard.

SCALES

The reporting of results is currently separated into 13 dimensions – compensation, work environment, performance feedback, professional growth, work/life balance, information and communication, teamwork, innovation, customer focus, immediate management, senior leadership, organizational vision and, the central dimension of measurement, engagement. The questionnaire is structured around the engagement dimension in that it is frequently used as a dependent variable. After the value of this overall item is reported and compared to normative statistics, the other items are believed to measure components of the overall construct and are reported individually. This method makes no assumptions about the underlying relationships of these items, except at the level of face validity.

A Cronbach's Alpha reliability analysis was conducted in order to confirm that the existing 13 survey dimensions are statistically reliable. When evaluated, all 13 dimensions fall within the acceptable range of reliability at an alpha score of >0.7 through to 1.0. A score lower than 0.7 would call into question the reliability of the scale; whereas a score too close to 1.0 may also indicate issues, as this would mean the items comprising the scale are too similar. Compensation came out on the lower end at 0.74, while Immediate Manager came out at the higher end with an alpha coefficient of 0.93. (See Table 2)

This analysis confirmed that the established scales are statistically reliable. However, this does not necessarily mean that they are as reliable as they could be. Is there a better organization of the items within the questionnaire? The answer to this question can be aided by a factor analysis.

FACTOR ANALYSIS

The next logical step beyond the reliability analyses was to look for relational structures inherent in the data itself. Only dimensional items were used. A principal component extraction with varimax rotation was the methodology used in the analysis.

Unlike the previous iteration of this report, the current factor analysis was confirmatory in nature. This means that we already have dimensions created and we are using factor analysis to confirm that the items are indeed structured properly. The factor analysis re-produced 10 of the 13 existing factor dimensions exactly (See Table 3). Two notable factor structures, on the other hand, combined three of the existing dimensions:

– All of the items within the current Organizational Vision dimension combined with 5 of the 6 items in the current Engagement dimension to form a single factor.

– All of the items within the current Professional Growth dimension combined with 1 of the items within the current Engagement dimension to form a single factor.

What we have here is a breakup of the Engagement dimension spread amongst the Organizational Vision and Professional Growth dimension. In a way, from an analytical perspective, this is not necessarily an unfavourable result. It shows that Engagement is linked to the other dimensions; which is ultimately the relationship we want to see between the dependent variable of engagement and the independent variables included in the survey. The face validity of the Engagement dimension is enough to warrant keeping it as a separate dimension.

Another way of interpreting this factor analysis is in terms of drivers analyses that we do for our clients. Having experience with conducting these analyses, we know that Organizational Vision and Professional Growth are among the dimensions that are the strongest drivers of Engagement. This relationship is showing itself in the factor analysis by grouping Engagement items within the independent variable factors. A further confirmation of this relationship can be conducted through a regression analysis.

REGRESSION

A regression analysis was performed on the items using the current overall engagement dimension as the dependent variable and having the remaining 12 survey dimensions entered into the model as independent variables. The intent was to determine the degree to which the various survey dimensions measure engagement and also which items were most strongly related to the concept (i.e. the strongest drivers). The procedure used was a stepwise removal of items until the impact of the removal of the next item produced a significant change in the value of R. The final model has an R of 0.840, which shows that the independent survey dimensions included in the model are a robust way to measure overall engagement. Of the 12 dimensions that were available, 2 were excluded; suggesting that there were also specific areas of engagement that might not coincide with employees' general perception of overall engagement (See Table 4). The two excluded items were:

1. Teamwork ($\beta = 0.004$; $p = 0.255$)
2. Performance Feedback ($\beta = 0.006$; $p = 0.076$)

Although these dimensions do not significantly add any value to the engagement model after all other dimensions have been accounted for, because of the strong alpha results and the results of the factor analysis discussed earlier, these items should continue to be included in their respective scales. Also, these two dimensions are significant drivers of engagement when analyzed against the dimension independently. Scale and item results may be an important indicator of areas of specific concern for an organization.

The previous iteration of this report had an R2 value of 48%; meaning that 48% of the overall engagement could be account for by the other items included in the survey. The consultant noted, correctly, that this left some room for improvement in the survey as over half of the variance (52%) was account for by some other set of factors or items that were not being measured in the then current version of the questionnaire. The recommendation was to develop a set of 'test' items that were thought to influence engagement. Valid questionnaire items based on a solid understanding of employee engagement were developed and tested. Among these additional items were:

– Flexibility (Work/Life Balance)

– Customer Focus

– Recognition (Immediate Management)

– Innovation

After the addition of these new items / dimensions, the overall 'variance explained' by the independent variable dimensions in the questionnaire has jumped from 48% to 71%; a very healthy increase.

CONCLUSIONS

The current TalentMap standard survey has a sound statistical structure for assessing employee engagement. The dimensions throughout the questionnaire had appropriate statistical properties for the desired measurement. Items / dimensions added to the TalentMap standard survey served to increase the total amount of variance explained for the engagement dimension. Generally, the following conclusions can be drawn from the analysis:

– The dimensional groupings of items made on the basis of face validity are generally found to have reasonable properties as scales. This supports the idea that the items in a group are measuring a common construct and they can appropriately be reported as a group. Both the reliability analysis on the current dimensional groups and the outputs from the exploratory factor analysis confirm the statistical strength of these dimensions.

– A factor analysis of the dimension items indicates that the relationships among these items support the structure of the survey. While the overall engagement dimension has been removed as a separate factor, the fact that the items comprising the engagement dimension were inserted into the factors representing the two strongest drivers of engagement (organizational vision and professional growth) does not necessarily need to be viewed negatively. This indicates that Engagement is closely related to other dimensions in the questionnaire – a desirable characteristic of any dependent variable.

– A regression analysis finds that 71% of the variance in the rating of overall engagement can be accounted for by including 10 of the 12 dimensions in the model. This is a strong result and further supports the appropriateness of the dimensions to the overall construct being measured.

Appendix I

LIST OF REFERENCES

– Armstrong, Todd and Wright, Ruth: *"Employee Engagement: Leveraging the Science to Inspire Great Performance"* (2016), The Conference Board of Canada.

– Gemma Robertson-Smith and Carl Markwick: *"Employee Engagement: A Review of Current Thinking"* (2009), Institute for Employment Studies.

– Bakker, Arnold B. and Leiter, Michael P.: *"Work Engagement: A Handbook of Essential Theory and Research"* Psychology Press, Apr 5, 2010

– Barclays (2008), *Definition*, www.business.barclays.co.uk/BRC1/jsp/brccontrol?task=articleFWvi6&value= 7220&target=_blank&site=bbb#definition

– Bhatnagar J (2007), 'Talent management strategy of employee engagement in Indian ITES employees: key to retention', *Employment Relations,* 29(6), 640-663

– Conference Board (2006), *Employee Engagement: A review of current research and its implications,* The Conference Board

– Corporate Leadership Council (2004), *Driving Performance and Retention Through Employee Engagement,* Corporate Executive Board

– Gallup (2006), 'Gallup study: engaged employees inspire company innovation: national survey finds that passionate workers are most likely to drive organisations forward', *The Gallup Management Journal,* http://gmj.gallup.com/content/24880/Gallup-Study-Engaged-Employees- Inspire-Company.aspx

– Kahn WA (1990), 'Psychological conditions of personal engagement and disengagement at work', Academy of Management Journal, 33(4), 692–724

– Kaufman JD, Mead AD, Rauzi T, DeVille JO (2007), An Empirical Investigation of the Stability of Employee Engagement, www.iit.edu/~mead/KaufmanMeadRauziDeville2007.pdf

– Levinson E (2007a), Developing High Employee Engagement Makes Good Business Sense, www.interactionassociates.com/ideas/2007/05/developing_high_ employee_engagement_makes_good_business_sense.php

– Levinson E (2007b), Authentic CSR Creates Higher Employee Engagement, www.interactionassociates.com/ideas/2007/08/authentic_csr_creates_higher_employee_engagement_.php

– Penna (2006), *Meaning at Work Research Report,* www.e-penna.com/newsopinion/research.aspx

– Purcell J (2009), 'Maintaining employee engagement in difficult times', *Employee Engagement Summit* 2009

– Robinson D (2005), 'I want to be proud of the firm I work for', *The Times,* 2 June

– Robinson D (2007), 'Engagement is marriage of various factors at work', *Thought Leaders*

– Schaufeli WB, Bakker AB, Salanova M (2006), 'The measurement of work engagement with a short questionnaire', *Educational and Psychological Measurement,* 66(4), 701–716

– Schaufeli WB, Leiter MP, Maslach C, Jackson SE (1996), 'Maslach burnout inventory – general survey', in Maslach C, Jackson SE, Leiter MP (eds), *The Maslach Burnout Inventory-test Manual,* Palo AltoCa: Consulting Psychologists Press, edition 3, pp. 22–26

– Schaufeli WB, Salanova M, Gonzalez-Roma V, Bakker AB (2002), 'The measurement of engagement and burnout: a two sample confirmatory factor analytic approach', Journal of Happiness Studies, 3, 71–92

– Scottish Executive Social Research (2007), Employee engagement in the Public Sector: a review of literature, www.scotland.gov.uk/Publications/2007/05/09111348/3

– Sonnentag S (2003), 'Recovery, work engagement, and proactive behaviour: a new look at the interface between non-work and work', *Journal of Applied Psychology,* 88(3), 518–528