Human capital trends in alternative energy
Focusing on people to sustain growth
Executive summary

The renewables sector ended 2015 on a very high note, primarily due to the extension of US federal tax credits and a heightened global interest in low carbon energy resources. Looking ahead, 2016 could be a year of robust growth for the sector, driven by regulatory directives and attractive economics.1 As the sector continues to grow, so will the organizations that support it—in terms of both size and complexity. This poses a challenging set of issues for alternative energy companies to handle as they design organizations ready to meet their business objectives.

Meanwhile, businesses all over the world are undergoing a series of radical changes driven by ubiquitous digital technology, changing demographics, the speed of innovation, and a new social contract between employers and workers. This shift transforms organizations from hierarchies to fluid “networks of teams”: people operating in teams that work together around the world, integrated through a shared culture and values, transparent and open information, and a new digital work environment.

According to Deloitte’s Global Human Capital Trends 2016—The new organization: Different by design2 (the Trends Report), organizational design ranks as the top trend for alternative energy companies, the energy and resources industry as a whole, and globally across all industries. For alternative energy, people analytics (the use of analytics in HR) and design thinking (redesigning the employee experience) rank as the second and third most important talent trends respectively.
Introduction

From our perspective, the days are dwindling when alternative energy companies were confined to startups. As the sector makes way for large and scalable enterprises, companies are starting to grapple with organizational questions tied to their rapid growth. As shown in Figure 1, according to the International Renewable Energy Agency, jobs in renewable energy reached 7.7 million globally at the end of 2014—up 18% over those estimated the prior year.

Given these circumstances, for the first year ever, Deloitte included the alternative energy sector in its annual report on global human capital trends. The report, *Global Human Capital Trends 2016—The new organization: Different by design* (the Trends Report), is one of the largest longitudinal studies of talent, leadership, and HR challenges and readiness around the world. Surveying and interviewing more than 7,000 business and HR leaders from 130 countries and 8 industries—including 551 from the Energy & Resources industry, with 30 from the alternative energy sector—business and HR respondents assessed the importance of specific talent challenges facing their organization. In 2016, organizational design rocketed to the top of the agenda among senior executives and HR leaders worldwide, with 92 percent of respondents across industries rating it a key priority. Perennial issues such as leadership, learning, and HR skills continue to rank high in importance, as they have in each of the four years of this annual study. Yet this year, a key shift is under way, as corporate leaders turn a more focused eye toward adapting their organization’s design to compete successfully in today’s highly challenging business environment and competitive talent market.

**Figure 1: Renewable energy jobs globally in 2014**

<table>
<thead>
<tr>
<th>Renewable Energy Type</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrated solar power</td>
<td>22</td>
</tr>
<tr>
<td>Geothermal</td>
<td>154</td>
</tr>
<tr>
<td>Small hydropower</td>
<td>209</td>
</tr>
<tr>
<td>Biogas</td>
<td>381</td>
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<tr>
<td>Solar heating</td>
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<tr>
<td>Biomass</td>
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<tr>
<td>Windpower</td>
<td>1027</td>
</tr>
<tr>
<td>Liquid biofuels</td>
<td>1788</td>
</tr>
<tr>
<td>Solar photovoltaic</td>
<td>2495</td>
</tr>
</tbody>
</table>

*Source: International Renewable Energy Agency*
2016 Global trends

The theme of this year’s Trends Report—“The new organization: Different by design”—reflects a major finding: After three years of struggling to drive employee engagement and retention, improve leadership, and build a meaningful culture, executives see a need to redesign the organization itself, with 92 percent of survey participants rating this as a critical priority. The “new organization,” as we call it, is built around highly empowered teams, driven by a new model of management, and led by a breed of younger, more globally diverse leaders given the generational demographics in the marketplace.

This year’s Trends Report focuses on the following ten trends:

The new organization—different by design

Organizational design: The rise of teams
Hierarchical organizational models aren’t just being turned upside down—they’re being deconstructed from the inside out. Businesses are reinventing themselves to operate as networks of teams to keep pace with the challenges of a fluid, unpredictable world.

New mission and purpose

Shape culture: Drive strategy
The impact of culture on business is hard to overstate: 82 percent of respondents to the 2016 Global Human Capital Trends survey believe that culture is a potential competitive advantage. Today, new tools can help leaders measure and manage culture towards alignment with business goals.

Engagement: Always on
Employee engagement and retention today means understanding an empowered workforce’s desire for flexibility, creativity, and purpose. Under the evolving social contract between employer and employee, workers become “volunteers” to be reengaged and re-recruited each day.

Leadership and careers

Leadership awakened: Generations, teams, science
Leaders of all ages, genders, and cultures are now poised to take the reins at organizations around the world. How ready will these future business leaders be to take charge in an increasingly complex global marketplace?

Learning: Employees take charge
Corporate learning departments are changing from education providers to content curators and experience facilitators, developing innovative platforms that turn employee learning and development into a self-driven pursuit.
New workplace

**Design thinking: Crafting the employee experience**
Design thinking takes aim at the heart of unnecessary workplace complexity by putting the employee experience first—helping to improve productivity by designing solutions that are at once compelling, enjoyable, and simple.

**Digital HR: Revolution, not evolution**
A new world for HR technology and design teams is on the horizon. Mobile and other technologies could allow HR leaders to revolutionize the employee experience through new digital platforms, apps, and ways of delivering HR services.

The new HR

**People analytics: Gaining speed**
The use of analytics in HR is growing, with organizations aggressively building people analytics teams, buying analytics offerings, and developing analytics solutions.

**HR: Growing momentum toward a new mandate**
Good news: This year’s Global Human Capital Trends survey shows an improvement in the HR organization’s skills, business alignment, and ability to innovate.

**The gig economy: Distraction or disruption?**
How can a business manage talent effectively when many, or even most, of its people are not actually its employees? Networks of people who work without any formal employment agreement are reshaping the talent management equation.
Top human capital trends in alternative energy

Of the 7,000 responses, 551 were from the energy and resources industry—with 30 from the alternative energy sector. On the whole, both energy and resources and alternative energy reflect the global trends—especially in terms of clearly ranking organizational design as the most important trend. What stands out for alternative energy is the focus on both design thinking and people analytics. As Figure 2 shows, respondents from the alternative energy sector rated these two trends markedly higher than respondents from the energy and resources industry as a whole, and globally across all industries.

These responses lead us to believe the following questions are keeping alternative energy executives up at night:

- **“Do we have the right structure in place to scale and accommodate our vision?”** A business strategy needs the right organizational design to enable it. Effective design requires a clear articulation of your vision and an understanding of the potential impact of proposed organizational changes on your people, their ways of working, and your customers.

- **“Are we doing everything we can to simplify life for our employees and let them focus on their jobs?”** Exciting digital trends can help simplify and improve the employee experience for learning, performance management, or even benefits, helping your employees do what they should be doing—their jobs.

- **“Are we being smart about using data to attract, hire, and develop the best talent we can?”** As good talent becomes more and more scarce and the competition for it becomes higher, businesses have recognized they need data to figure out what makes people join, stay, excel within, and lead an organization.

Figure 2: Global vs. alternative energy trends (Number indicates percent ranked important/very important)

<table>
<thead>
<tr>
<th>Trends</th>
<th>Global</th>
<th>Energy &amp; Resources</th>
<th>Alternative Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational design</td>
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<td>92</td>
<td>97</td>
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<tr>
<td>Leadership</td>
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<td>Culture</td>
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<td>83</td>
<td>80</td>
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<td>Engagement</td>
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<td>82</td>
<td>80</td>
</tr>
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<td>Learning</td>
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<td>81</td>
<td>83</td>
</tr>
<tr>
<td>Design thinking</td>
<td>79</td>
<td>75</td>
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</tr>
<tr>
<td>HR organization</td>
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<td>79</td>
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</tr>
<tr>
<td>People analytics</td>
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<td>86</td>
</tr>
<tr>
<td>Digital HR</td>
<td>74</td>
<td>72</td>
<td>74</td>
</tr>
<tr>
<td>Workforce management</td>
<td>71</td>
<td>73</td>
<td>70</td>
</tr>
</tbody>
</table>

Higher percentages | Lower percentages
A word on readiness
In addition to measuring importance, the Trends Report evaluated the respondents' perception of their companies’ “readiness” to meet each HR issue. We asked survey respondents to rate their organization’s readiness to address each of several issues (including HR skills) on a four-point scale: “not ready,” “somewhat ready,” “ready,” and “very ready.” These ratings were indexed on a 0–100 scale in which 0 represents the lowest possible degree of readiness (“not ready”), and 100 represents the highest possible degree of readiness (“very ready”). An overall readiness index score was then calculated for each issue using these scores. We refer to the difference between “importance” and “readiness” as the “capability gap.” The capability gap is an effective way to show how effectively companies are responding to the issues they see as most important.

Figure 3: Gap scores for top alternative energy human capital trends

<table>
<thead>
<tr>
<th>Trends</th>
<th>Importance (A)</th>
<th>Readiness (B)</th>
<th>Gap (A-B)</th>
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</thead>
<tbody>
<tr>
<td>Organizational design</td>
<td>97</td>
<td>53</td>
<td>39</td>
</tr>
<tr>
<td>Design thinking</td>
<td>87</td>
<td>50</td>
<td>47</td>
</tr>
<tr>
<td>People analytics</td>
<td>86</td>
<td>83</td>
<td>80</td>
</tr>
</tbody>
</table>

While the Trends Report provides critical insights on all ten trends, and the factors driving them within and across industries—this report boils them down to what’s most relevant to alternative energy. Specifically, it covers organizational structure, design thinking in human resources, and people analytics—the issues that underpin the questions asked above.

The new organization: Different by design
Echoing the responses across industries, and within energy and resources as a whole, alternative energy respondents agreed that organizational structure was the most important trend for 2016. In fact, more alternative energy respondents rated this as a critical priority than other industries. While alternative energy respondents recognize the importance of this trend, their self-reported readiness was lower than the rest of the energy and resources industry.

Figure 4: Organizational design importance vs. readiness scores

<table>
<thead>
<tr>
<th>Global</th>
<th>Energy &amp; Resources</th>
<th>Alternative Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance</td>
<td>Readiness</td>
<td>Importance</td>
</tr>
<tr>
<td>92%</td>
<td>92%</td>
<td>97%</td>
</tr>
<tr>
<td>57%</td>
<td>60%</td>
<td>53%</td>
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</tbody>
</table>

Importance | Readiness
Alternative energy leaders may not be surprised to discover that organizational structure was highlighted as the top trend in the Trends Report, but they may be surprised to learn the scale and speed with which organizations are undertaking organizational restructuring efforts. Within energy and resources, over 92% of respondents to the report indicated that they are either currently restructuring or have recently completed restructuring their organizations. In other words, a company that isn’t currently restructuring or recently restructured is possibly falling behind.

Deloitte identifies the new structure of effective organizations as being built around a “network of teams” that are organized by product, program, or a combination of the two. These teams are enabled by central information that is quickly accessed and disseminated, empowered by the encouragement to work across teams, and energized by individuals who move from team to team as projects begin and end.

There are a number of factors driving this structural revolution, and they’re closely related to a number of market trends that are currently impacting the alternative energy sector:

• **The increasingly influential voice of the socially responsible Millennial generation is heard acutely in the energy industry.** Millennials aren’t just central to the continued increase in demand for more innovative and socially conscious energy solutions, but they’re also a major driving force behind a foundational shift in how companies are structured. The Millennial generation has already surpassed all other generations to become the largest in the workforce, currently accounting for approximately 35% of all workers. That number will only continue to grow: By 2025, the Millennial generation will account for as much as 75% of the workforce, and thusly, a huge portion of the world’s buying power. As alternative energy companies grow out of startup mode and blossom into powerful, scalable enterprises, they will have to consider the demands of the Millennial workforce that the employer value proposition include flexibility, diversity of opportunity, and continuous connectivity. Many organizations have already embraced these ideals, and that is increasingly reflected in the rate at which companies are restructuring their organizations to accommodate them.

• **Continued merger and acquisition (M&A) activity drives the need for an organizational shift.** While certain leaders are banking their organizations’ futures on attracting and retaining the Millennial workforce, the wishes of America’s largest generation aren’t the only factors driving an increase in organizational restructuring in the energy and resources industry. According to a report from Deloitte’s Center for Energy Solutions, 2015 saw a rapid acceleration of M&A activity for alternative energy companies (with no signs of slowing), and with each acquisition comes questions of how to best integrate the workforce across the new mix of assets in order to prepare for the new normal. While many of these deals represent an exchange of renewable energy assets, rather than workforce, the acquisition or divestiture of power producing capacity has the potential for very real impacts on the acquiring and divesting companies’ workforces. These organizations need to be positioned to act nimbly to ensure the needs of the business and the capabilities of the workforce can quickly be reconciled in times of rapid change.
Despite rapidly growing rates of restructuring, at the present 38 percent of all companies across industries remain primarily functionally organized today. Those that are considering a move to a “network of teams” approach should consider taking the following steps:

- Define your company’s strategy, vision, and direction—and create teams empowered to deliver on these results.
- Consider how your current organizational structure could be adapted to work in “mission driven” teams focused on customers, markets, or products, rather than business functions.
- Consider planning an organizational network analysis to determine your organization’s maturity level in regards to the tools and structures that facilitate information sharing and collaboration across teams, as well as performance measurement systems that encourage people to move across teams.
- Revisit incentive structures and the behaviors that they are actually driving. Rewarding employees for project results rather than individual performance can help drive collaborative teams that help others.

Based on trends impacting the alternative energy sector, specifically the demographics shifts and acquisitions detailed above, organizations must be increasingly willing to adjust their organizational structure to keep up. But they can’t just think their way to a new way of acting—they must challenge the traditional confines of organizational structure and information sharing, empower their teams, enable as well as hold their people accountable, and focus on building a culture of shared information, shared vision, and shared direction if they truly want to build a “network of teams.”
Design thinking: Crafting the employee experience

In the Trends Report, Deloitte challenges HR organizations to create a productive and meaningful employee experience through solutions that are compelling, enjoyable, and simple. A well-designed employee experience can help workers who are increasingly busy and overwhelmed, yet no more productive than they were. It’s easy to recognize the exciting digital trends that can help simplify and improve the employee experience for learning, performance management, or even benefits, helping your employees spend more time on value-added activities.

Figure 6: Design thinking importance vs. readiness scores

It’s another thing to effectively incorporate these trends into your organization. The alternative energy sector understands the importance of this challenge, and stands out from the rest of its energy cohorts in thinking critically about design in relation to the employee experience. A full 87 percent of alternative energy respondents considered this important or very important, compared to 74 percent of the energy industry as whole, and 79 percent across all industries. It’s no wonder that an innovative industry places an emphasis on design. Yet while 87 percent of alternative energy companies recognize the importance of design thinking, only 50 percent believe that they are tackling the challenge effectively. Going forward, design thinking will play a key role in overall employee satisfaction and alternative energy companies may choose to consider the following tactics:

- **Digitize corporate experience with simple apps.** The latest generation of talent has come of age using apps for everything from paying their friends back for drinks or hailing a taxi to adjusting their thermostats and finding a parking space. Why should their corporate experience be any different? The Millennial generation has strong opinions about the future of the energy industry, as well as their preferred methods of working, which are largely digital. The largest generation in the US will account for as much as 75 percent of the workforce by 2025, and the first millennials are approaching their years of peak buying power. Not only will Millennials dictate the future of energy consumption, they’re already showing increased influence over the ways in which organizations share information, work across physical, cultural, and organizational borders, and develop and deliver the employer value proposition. Navigating through a clunky performance management website, or squaring off with an unhelpful time and expense tool are not how anyone wants to spend his time or energy. For Millennials, 25 percent of whom expect to leave their job within a year, why take a chance on increasing these odds by unnecessarily antagonizing them?
• **Streamline recruiting and other HR interactions.** In a rapidly scaling industry, where the search for talent becomes more and more challenging, every interaction colors a candidate's or employee's impression of a company. The TalentBoard, a non-profit devoted to aggregating candidate data, found that more than half the candidates who find the job application experience difficult develop a negative impression of a company.\(^1\) Streamlining the recruiting process with the candidate's perception in mind could be the edge between you and a competitor. Now, think about every time an employee fills out an HR form, a performance review, or struggles to find the right learning module. How are these interactions shaping the way your employees feel about your company? Could this be a difference maker in retaining a future leader?

To effectively incorporate design thinking, alternative energy companies can take a few important first steps.

• Start by teaching your HR and IT functions about design thinking, and empower every department to think critically about every aspect of the employee experience. One chief human resources officer, whose organization has embraced design thinking, summarizes her refreshed job role by calling herself the “chief employee experience officer.”\(^2\)

• Make simplification a priority. Workers are already stressed enough. Reducing the number of choices they need to make—from deciding between benefits plans, to performance review ratings, to picking the right charge code—will help free up time and energy.

Respondents from the alternative energy sector who ranked design thinking so highly on their priority list in 2016 probably realize the impact it can have on all the other key human capital issues. A well-designed recruiting experience will help attract top talent, a well-designed learning program will create a more skilled workforce, and a well-designed performance review process will assure the right employees are retained and developed into future leaders, to name a few examples.

**People analytics: Gaining speed**

The concept of people analytics, the use of people-related data to improve and inform all types of management, business, and HR decisions throughout the company, is growing in importance and popularity, and the alternative energy sector appears to be ahead of the curve in emphasizing and building the capability. Eighty-six percent of alternative energy respondents indicated that this was an “important” or “very important” issue, and 40 percent of alternative energy respondents categorized themselves as “ready” or “very ready” to respond to this trend—well ahead of both the energy and resources industry as a whole, and the average across all industries. Given Deloitte’s perspective that the way forward is to utilize the important insights from people analytics, it would appear that the alternative energy sector is positioning itself to improve management, business, and HR decisions.

**Figure 7: People analytics importance vs. readiness scores**

<table>
<thead>
<tr>
<th></th>
<th>Global</th>
<th>Energy &amp; Resources</th>
<th>Alternative energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance</td>
<td>32%</td>
<td>34%</td>
<td>40%</td>
</tr>
<tr>
<td>Readiness</td>
<td>77%</td>
<td>77%</td>
<td>86%</td>
</tr>
</tbody>
</table>
• **It is no surprise that alternative energy companies need to make the most of the available talent pool.** Rapid growth will require companies to be more efficient in turning candidates into successful employees. The US solar energy subsector alone grew by 20.2 percent in 2015, and is adding jobs at a rate 12 times faster than the overall US economy.18 This rapid growth brings significant challenges to identifying potential high performers. For example, about one in five solar employers say that it is “very difficult” to find well-qualified employees.19 When growth demands outpace an organization’s ability to attract qualified talent, a company must decide between slowing the pace of hiring or relaxing its qualifications. People analytics can help identify the characteristics that truly drive success. Insurance companies, for example, have recently discovered that grade point average is no longer an indicator of success for future sales performance. This allows them to focus on other, more predictive attributes when screening candidates, such as fit with the role, and the organization.20

• **Alternative Energy companies should think about how to use analytics to gauge another key trend—culture.** Only 25 percent of energy and resources respondents to the Trends Report survey believe their current culture is a strong competitive advantage, and even fewer, just 10 percent, believe that their culture is strongly defined, communicated, and measured throughout the company. Accelerating rates of mergers and acquisitions, fast growth, and shifting demographics in the alternative energy sector all combine to complicate the adoption of cultural values. Companies that successfully use people analytics do a strong job of combing internal survey data and combining it with external benchmarking data, to get a complete perspective of how the market perceives the company’s culture. (Culture is another important human capital trend in 2016, ranking third in importance globally, with 87 percent of alternative energy respondents indicating that it is an important issue for their company.) As mentioned, alternative energy companies appear to be on the leading edge of the people analytics trend, but organizations as a whole have a long way to go to truly capitalize on the benefits that this concept presents.

Alternative energy companies looking for a place to start with people analytics can think about the following:

• **Companies that need help developing internal analytics capabilities should look outside for help.** Industry-specific working groups can be a great opportunity for HR professionals to develop these skills.

• **At most companies, deep analytics skills do not usually sit within HR.** Use the analytics experts in marketing or IT to help support specific projects or share their knowledge in order to help build the capability within HR.

• **Focus on business objectives,** and make sure that project sponsors can communicate the link between data analysis and business outcomes. Building a data model does not in itself solve any problems. It’s what the team does with those findings to improve processes or drive change that actually creates value. Insights into what makes the perfect candidate only add value only if they impact the recruiting process.

Bottom line—in the not too distant future, we predict it will become more challenging to make HR decisions without analytics. Companies not proactively using analytics to drive their strategies around recruiting, retention, or culture will be at a significant competitive disadvantage.

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**A word on culture**

Culture is a trend of high importance for the alternative energy sector and across industries. Culture is an organization’s values, beliefs, behaviors, artifacts, and reward systems that contribute to “how things work around here.”

• Just 9 percent of alternative energy companies consider culture a strong competitive advantage, while 64 percent are actively seeking to amend their culture.

• Some organizations must be willing to sacrifice a portion of productivity, temporarily, to invest in the time it takes to build a healthy corporate culture.
Conclusion

It’s impossible for HR executives to tackle all their people related issues at once, but it is possible to begin thinking critically about which trends in HR to focus on this year. As the Trends Report lays out, the pace of change in HR will only continue to accelerate. Those leaders who move first to capitalize on them stand to gain a significant advantage over their competition in the quest for talent. As the Trends Report shows, for most alternative energy leaders, the focus should begin with organizational design, people analytics, and design thinking.

When examining your organizational structure, remember that the days of the top-down hierarchical organization are slowly coming to an end, but changing the organization chart is only a small part of the transition to a network of teams. The larger, more important, and more urgent part is to change how an organization actually works. Now, more than ever, is the time to challenge traditional organizational structures, empower teams, hold people accountable, and focus on building a culture of shared information, shared vision, and shared direction.

Across industries, companies are no longer “stuck in neutral” in their deployment of people analytics. As analytics moves into the corporate mainstream, organizations that are still in the early stages of adopting technology and building teams with data skills risk being left behind. In the not-too-distant future, it will become increasingly difficult to make any HR decisions without analytics. Indeed, analytics capabilities will be a fundamental requirement for the effective HR business partner.

With their primary focus on people, HR leaders have an opportunity to be designers, creating more engaging and effective HR solutions for their organizations’ employees. Applied correctly, design thinking is a rigorous, disciplined method of problem-solving. It represents an opportunity for HR to reshape how it works with the organization and to redesign its own procedures, using technology to ensure positive employee interactions.
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Endnotes
6. Ibid.
7. Ibid.
8. Ibid.
15. Deloitte, The Deloitte Millennial Survey 2016,
19. Ibid.
20. HiringSmart.com, Fit is the single most reliable predictor of success, http://www.hiringsmart.com/articles/393/Fit_is_the_single_most_reliable_predictor_of_success/, Accessed April 18, 2016
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