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POWERTILT™

EXAMINING POWER, INFLUENCE, AND THE MYTH OF MERITOCRACY WITHIN TECHNOLOGY TEAMS
BRAD MCLAIN, PH.D.
DIRECTOR OF CORPORATE RESEARCH, NCWIT

CATHERINE ASHCRAFT, PH.D.
DIRECTOR OF RESEARCH, NCWIT

JOANNE ESCH
RESEARCH ASSOCIATE, NCWIT

POWERTILT™:

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INTRODUCTION

To date, a relatively homogenous slice of the population—disproportionately white and male—creates the bulk of the technology that so profoundly shapes our world. Most companies now recognize that this lack of diversity is both a social justice problem and a business problem. Simply increasing diverse headcounts is not enough to address these concerns. Evidence demonstrates that even when companies increasingly diversify their workforces, members of historically marginalized groups still face disproportionate difficulty accessing core, creative, technical roles (and associated resources) and influencing work team decisions—the place where innovation so often happens. This lack of access and influence in key innovation processes results in what we term a powertilt phenomenon—that is, a differential distribution of power and influence along lines of gender, race, and other intersecting social identities. This powertilt ensures that influence in innovation remains primarily a majority-group advantage, maintaining the status quo.

To meaningfully increase the influential participation of historically marginalized groups, we need to move beyond headcount metrics alone and toward additional metrics that call attention to and describe this powertilt. These new powertilt metrics will help us understand and assess how power and influence work on technical teams and who is able to access them, especially when it comes to decision making and technical innovation. To do so, we first need to better understand what influential participation looks like and how it is operationalized within tech teams. Then we need to create an instrument that both helps teams examine who has access to influence and guides leaders in more equitably distributing that influence among team members. This two-stage NCWIT research project—sponsored by Intuit—aims to do just that. In stage one we ask: How do members of technical teams engaged in innovation think influence operates on their teams, including what makes someone more or less influential in team decisions? In stage two, we will build on this work to develop an instrument that helps teams assess how influence is distributed within their teams—particularly in terms of demographics related to gender, race, class, age, and other social identities. This instrument will also help teams identify how biases may be affecting power distribution and implement strategies for creating more inclusive team cultures that are ultimately influenced by more voices.

In what follows, we present key findings from the first stage of the study, identifying team members’ perceptions of what characteristics and behaviors make someone more or less influential. We also examine these findings in light of prior research related to meritocracy, implicit bias, and intersectional social identities, exploring how these insights may complicate team members’ initial responses and perceptions and what these complications might mean for stage two—the development of a powertilt assessment tool.
Prior research into influence has primarily focused on dyads or person-to-person compliance (e.g., French & Raven, 1959, Hinkin & Schriesheim, 1989; Raven, 1992). This project builds on this research but shifts the focus to team culture and team decision making in light of research showing that teams tend to be the epicenters of technical innovation (Kratzer, Leenders, & Engelen, 2004; Chatenier, Verstegen, Biemans, Mulder & Omta, 2010; Johnsson, 2018). We define “influence” as an individual’s ability to affect the outcomes of team decisions, as determined by the interplay between individual team members, collective team culture, and a team’s processes of innovation.

Importantly, prior research indicates that one’s ability to influence is strongly linked to one’s sources of power. So what are these sources of power, or power bases? The most widely accepted answer in industry contexts comes from the work of social psychologists French and Raven (1959), whose power base typology includes: 1) having formal authority (position or legitimate power), 2) being able to give someone something they want (reward power) or take something away (coercive power), 3) being liked, respected, or personally valued (referent power), 4) being regarded as an expert (expert power), or 5) being able to compellingly present information or logic (persuasive or informational power). We used these power bases as a starting point for identifying how power and influence operate on technical teams.

However, for the most part, past research fails to adequately account for the important role that sociopolitical factors like social identity, role identity, and bias play in shaping what counts as influence, how it operates, and who can access it. Given this oversight, the research is also unable to account for how team culture, in general, shapes power and influence. Indeed, we propose that culture and influence mutually produce each other and that one can not be understood without the other. This means team culture — a shared set of defining norms, values, and practices — plays a large role in shaping what forms of influence are effective and who can wield these forms of influence. Conversely, what counts as influence indicates and reinforces the kind of culture a team has.

For example, reward or coercive power (carrot-and-stick) tactics are found to be less common and less effective in organizations that deal with complex (as opposed to routine) tasks, as well as in team cultures that are less hierarchical and more collaborative in nature. Such findings are
relevant for technical organizations, which tend to deal with complex tasks and have less formal hierarchy.

Social identities (e.g., gender, race, class, age) and role identities (e.g., job level, title, position) are also important components of team culture, so their impact on power and influence is important to consider here. The societal expectations and biases associated with these identities, conscious or unconscious, powerful shape who can most successfully access and exert different types of influence. It is important to ask, therefore, how biases related to gender, race, age, class, etc. may affect who is influential or may impede some people’s access to influence. For example, research (e.g., Snyder, 2014) shows that women and members from marginalized racial/ethnic groups are more frequently interrupted; similarly, they are more often critiqued for their tone, style or personality (e.g., being told to “be less aggressive, “tone it down” or be more “professional”) compared to majority-group members engaged in similar behavior. These biases affect people’s perceptions of how effective or competent an individual is and, by extension, likely affect how influential one can be in certain contexts.

Recognizing how these biases affect power and influence also challenges the notion of meritocracy so commonly found in tech cultures — that is, that the best ideas and most qualified people are the most influential. Examining the relationship between influence and ideals of meritocracy is important because one of the biggest hurdles to leveling the playing field across gender, race/ethnicity, and other social identities is the widespread assumption in tech that a meritocracy already exists. This study aims to connect the dots of these many variables, identifying team members’ perceptions about influence and who has access to it, examining how these perceptions may be shaped by cultural norms and biases, considering the challenges these dynamics pose to meritocracy, and articulating the implications of all this for purposively creating more inclusive cultures.

**INITIAL FINDINGS & DISCUSSION**

Here we present the findings from our initial stage one survey, intended to examine people’s perceptions of power and influence within technical teams engaged in some form of innovation. Respondents included 265 technical professionals, representing a range of job levels, from individual contributors to executives. 95% of respondents indicated that their team engages in innovation sometimes or often, with 70% landing in the often category. We distributed the survey through NCWIT’s network of Workforce Alliance member organizations.

Research shows that women and members from marginalized racial/ethnic groups are more frequently interrupted and critiqued for their tone, style or personality than majority-group members engaged in similar behavior.
Over half of survey respondents identified as women, and about three-quarters identified as white. The average age of respondents was 45. Additionally, a qualitative focus group was convened to explore the survey issues more deeply. Some of those responses are also presented here.

Takeaways from the investigation fall into two main categories: (1) Perceptions of what characteristics and behaviors are most frequently influential in technical team decision-making and (2) Gaps between how influence actually operates and how people wish it operated on their team.

(1) What characteristics and behaviors are most frequently influential on technical teams?

To get a sense for how influence on technical teams operates, we asked respondents how often different individual characteristics and individual behaviors successfully influenced team decisions. Respondents were asked to identify each characteristic and behavior as “often,” “sometimes,” “rarely,” or “never” influential. The questions about characteristics were drawn from prior work (e.g., French & Raven, 1959) that has identified particular characteristics as reliable proxies for the different power bases affecting influence mentioned earlier. We also added additional characteristics or behaviors based on our previous research and experience working with technical teams.

Influential Characteristics

What qualities or individual characteristics were perceived to make someone more influential? The top-four most frequently influential characteristics, according to survey respondents, were: (1) Subject matter expertise; (2) Positive reputation; (3) Official title/position, and; (4) Being well-liked by other team members.

<table>
<thead>
<tr>
<th>Top Influential Characteristics</th>
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<tbody>
<tr>
<td><strong>Subject Matter Expertise</strong></td>
</tr>
<tr>
<td><strong>Positive Reputation</strong></td>
</tr>
<tr>
<td><strong>Official Title/Position</strong></td>
</tr>
<tr>
<td><strong>Well Liked</strong></td>
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% Responding “Often Influential”
At first glance, the top results are not too surprising. Subject matter expertise, official title, and being well-liked correspond to the power bases known as “expert power,” “legitimate power,” and “referent power”, which are well described in literature dating back to French and Raven’s landmark 1959 typology. Of these, “subject matter expertise” — and possibly “positive reputation” (if it is based on demonstrated track record) — would seem, on the surface, to align with a meritocracy based on technical ability. “Official title” and “being well-liked” might not. It is important, though, to consider further how one comes to be known as a subject matter expert or how one develops a positive reputation. In our focus groups, respondents (not surprisingly) attributed positive reputation to an individual’s past performance, e.g., “having a proven track record” or “demonstrated ability.” As one respondent put it:

*An* demonstrated track record of accomplishments
gives someone more credibility when they try to
influence others.

However, the issue gets more complex when we look at how reputations based on track record are developed. Research has shown that biases related to race, gender and other social identities greatly affect opportunities to demonstrate ability and to prove oneself. These biases influence how resources and opportunities are distributed, how people are mentored or sponsored, and how they are ultimately evaluated (Ibarra, Carter & Silva, 2010).

Task assignment, for example, is something that is largely out of each individual contributor’s immediate control and is notoriously subject to bias (Hewlett, Luce & Servon, 2008; Hewlett & Marshall, 2014). The types of assignments one receives, however, greatly affects one’s chances to build a track record of success — and therefore a positive reputation. Opportunity then begets more opportunity, creating a positive feedback loop that can accelerate career progression and ability to influence, assuming opportunities are met with good performance and/or favorable outcomes. This *reputation reinforcement spiral* can spiral up or down. When spiraling up, the increasing levels of competency, expertise, and track record that accrue along the way are as much *causes* of success as they are effects. This is not to suggest that outcomes do not matter or that success is not earned, or that factors such as hard work, intelligence, ingenuity, etc. are unrelated to success, but rather that these characteristics co-develop over time along with opportunities given. As such, they are *both* causes and effects of success.

Importantly, *reputation reinforcement spirals* can also spiral downward. When one simply does not have access to those valuable task assignments to gain experience and visibility, a negative reputation may result. Similarly, when someone produces lackluster or poor outcomes, a negative reputation based on past track record is generated. This is not to suggest that people should not be held accountable for outcomes.
But, notably, the way a team thinks about and deals with risk and failure has a large impact on how negative outcomes are interpreted and accounted for. As two respondents described it:

*I think as a culture, we have yet to come to a place where we accept someone’s failure. It’s almost like a stigma that sticks with you for a long time. It puts a lid on people’s abilities. You don’t want to take a risk on something that’s a 50-50 chance of success.*

*It’s a cultural thing to appreciate attempts and see those as learning opportunities. In the IT world it’s hard for us to embrace that because we don’t have wiggle room.*

The penalties of risking and failing are large in such situations. If developing a positive reputation is critically important, but that importance exists within a culture in which mistakes stick to you for a long time, this can be a recipe for risk aversion and/or failure denial. This risk-averse culture can also disproportionately affect members of marginalized groups. Research shows that when one is a minority in a majority group environment, that individual’s shortcomings or failures are often subtly attributed to membership in that group (Ryan, Haslam & Postmes, 2007; Steele & Aronson, 1995). This tendency becomes even more detrimental if a single mistake or early mistakes are more likely to stick, due to a team’s culture regarding risk. Furthermore, merely recognizing that something one does or says might reinforce a negative stereotype about an identity group one belongs to — a phenomenon called stereotype threat — can cause otherwise highly capable team members to become less willing to volunteer for risks or take stretch assignments. These factors combine to accelerate a negative *reputation reinforcement spiral* for members of marginalized groups.

**Influential Behaviors**

Turning from characteristics to behaviors, the top-four most frequently influential behaviors, according to survey respondents, were: (1) Addressing other team members’ needs or perspectives; (2) Presenting relevant data or information to make a compelling case; (3) Building coalitions among team members, and; (4) Compromising with other team members.

Of these four, it is perhaps not surprising that “Presenting relevant data or information to make a compelling case” is near the top. Once again, this highly-ranked item aligns with tech’s belief in meritocracy as a cultural expectation — or at least an aspiration. However, the matter becomes more complicated when asking what is perceived as relevant data and/or a compelling case. Prior research has indicated that these perceptions are strongly influenced by *who* presents the data and *who* makes the case (e.g., Snyder, 1994). Subtle biases around who is perceived as an expert or
authority or even as an effective communicator potentially challenge meritocratic ideals that base credibility on knowledge alone.

The respondents’ identification of “Addressing other team members’ needs or perspectives,” “Building coalitions among team members,” and “Compromising with other team members,” as among the four top influential behaviors is somewhat surprising in light of the meritocratic ideals of most tech cultures. These three behaviors, it could be argued, fall into social or so-called “soft-skills” categories. Unless one were to expand the schema for what constitutes merit or meritorious qualities, these fall outside the typical view of what should count as influence.

While many might argue that technology contexts are expanding what counts as merit in this way, this is not always understood or agreed upon. And this brings us to look at respondents’ ideas about what ideally should count as influence versus what actually does on their teams.

(2) Differences Between Ideal and Actual Influence Conditions

We also wanted to understand more about the difference between actual and ideal conditions — that is, how people saw influence operating on their team as compared to how they would ideally like to see it operate. This data provides a basic sense of whether norms around influence are generally meeting people’s needs or desires and aligning with their ideals and values or not. Potential gaps in actual and ideal conditions also can provide tentative insight into how teams might alter influence norms in ways that improve inclusive decision-making and enhance
innovation. To examine this dichotomy, we asked respondents to rate their *ideal* influential characteristics and behaviors and compared those choices to their previous selections for how influence *actually* operates on tech teams.

**Differences in Influential Characteristics**
The following four characteristics — (1) “Official title/position,” (2) “Being well-liked,” (3) “Having budget control,” and (4) "Having seniority in the company" (time)—demonstrated the biggest gaps between ideal and actual conditions, with all of these being perceived as *more* influential than they ideally *should* be. These gaps indicate that respondents see these characteristics as not necessarily associated with the best ideas, solutions, or decisions, further challenging meritocratic beliefs that the best ideas rise to the top. Interestingly, “Positive reputation,” which was earlier identified as one of the top four influential characteristics, was also seen as somewhat more influential than it ideally should be (though not appearing in the top four here). This gap might indicate an implicit recognition that positive reputation is not always derived from merit-based performance alone, but is rather influenced by other factors (e.g., social/professional networks, communication skills and abilities, etc.). Along these lines, being well-connected demonstrated a similar gap being somewhat more influential than respondents thought was ideal.

![Actual vs. Ideal Influential Characteristics](chart)

The smallest gaps occurred in “Ability to penalize and reward,” (also not in above chart) with these being only slightly more influential than people thought they should be. These gaps were
small, in part because respondents also generally rated these characteristics as low in influence to begin with (even in actual conditions). This finding aligns with previous research showing that reward and punishment are more influential in low-complexity occupations and less so in high-complexity ones, such as technology organizations. Respondents also perceived “Subject matter expertise” as being fairly close to ideal expectations, but just slightly less influential than they thought it should be.

Differences in Influential Behaviors
When it comes to behaviors, “Presenting relevant data” demonstrated the biggest difference between ideal and actual conditions, with respondents wishing it were more often influential than it is. “Dominating the conversation” is the only behavior that is more influential than team members would like it to be, with no one identifying it as “often influential” in ideal conditions but with 15% identifying it as “often influential” in actual conditions. That number increases to 43% when you include those who also identified it as “sometimes influential” in actual conditions. This gap is interesting in light of our practical experience working with tech companies that often value “debate cultures” that feature frequent (and sometimes somewhat combative) interruptions. Likewise, it may prove to be an important area to attend to in order to enhance inclusion given research showing that members from marginalized groups are more frequently interrupted.

Actual vs. Ideal Influential Behaviors

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Actual</th>
<th>Ideal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presenting data</td>
<td>70%</td>
<td>93%</td>
</tr>
<tr>
<td>Addressing needs</td>
<td>71%</td>
<td>83%</td>
</tr>
</tbody>
</table>

% Responding “Often Influential”
The next most significant gaps occurred in “Presenting relevant data,” and “Addressing other team members’ needs and perspectives,” which were among the top four influential behaviors, but were still both ranked as less influential than respondents wanted them to be. This may speak to team members’ implicit or explicit recognition that while they may desire or aspire to a meritocracy, the current team culture falls short of it. An awareness of such gaps between aspirations for meritocracy and actual conditions is essential to motivate more inclusive culture construction. Whereas a failure to recognize such gaps — that is, a belief that a meritocracy already exists — may be a critical barrier to greater inclusivity.

**CONCLUSION**

These preliminary findings provide valuable initial insights into the way influence operates on technical teams and the powertilt phenomenon that places power and influence primarily in the hands of majority-group members. First, many of these findings help to further illuminate the mismatch between our aspirations for meritocracy and the difficulties in actually achieving it. Awareness of, and attention to, this mismatch is an important first step in creating inclusive cultures that foster broader access to influence. And identifying the gaps between how influence actually operates and how we would ideally like it to operate, is one important and practical first step that technical teams can take to work toward more inclusive cultures.

Second, it is important to recognize the way that myriad biases play into accessing even the types of influence that initially seem more based on “merit” such as subject matter expertise, positive reputation, and presenting relevant data. By addressing bias in task assignment, sponsorship, access to networks, and so on, we can remove barriers that currently prevent people from marginalized groups from getting key opportunities to shine and create the track records of success necessary for supporting their influential participation. This also may include adopting a growth mindset in how we treat failure and addressing biases by asking questions about how our schemas for who can be a “subject matter expert” may be influenced by subtle biases. Such alterations in thinking would constitute a change in team culture towards more inclusivity and inclusive influence in particular.

In the next stage of this study, we intend to further investigate these forms of influence and develop a power tilt assessment tool that helps technical teams accomplish the above tasks. The assessment tool will help organizations and managers identify 1) the primary ways influence operates in a specific team and 2) *patterns in who* might be favored or disadvantaged by the current culture of influence, particularly in terms of intersectional identities related to gender, race, class, and age. Once these influence patterns have been identified, the tool will guide technical teams through the process of having important conversations about these patterns and
taking concrete actions to improve the way influence operates in their teams, thereby enhancing innovation in the process.

**Call to Action: How Leaders Can Get Started Now**
Meanwhile, there are several ways technology leaders can take advantage of what we already know from research about influence and inclusive culture construction. By focusing on fixing cultures rather than fixing people or specific groups of people, we can expand the opportunities and possibilities for influence rather than trying to make individuals fit into the current system of influence.

<table>
<thead>
<tr>
<th>Invitational Leadership Tools That Teams Can Implement Today:</th>
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<tbody>
<tr>
<td>1. Paying attention to competitive vs collaborative dynamics: needing to be right vs. being open to others’ perspectives</td>
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<tr>
<td>2. Paying attention to turn-taking, who gets interrupted, and ensuring all voices are heard in meetings</td>
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<tr>
<td>3. Fostering growth mindset within a team culture</td>
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<tr>
<td>4. Soliciting opinions of quieter team members either before, during, or after meetings</td>
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<tr>
<td>5. Noticing when someone repeats an earlier stated idea and ensuring that credit is given where due</td>
</tr>
<tr>
<td>6. Employing meeting structures that foster broader participation (e.g., sending agendas or key decision points ahead of the meeting).</td>
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These may initially seem like small changes, but research shows they can make a significant difference in employees’ daily work experience, as well as their ability to meaningfully contribute to team decisions and how we might create environments that foster more inclusive forms of power and influence.
References


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