

Uncovering the “hidden figures” of innovation

Women remain woefully under-represented among IP-owning inventors. Facebook and 3M provide exclusive insight into what they are doing to boost female innovation – strategies from which other companies could benefit

By Suzanne Harrison, Charu Kurani, Jeremiah Chan and Sandra Nowak

Set against the thrilling background of the space race, Oscar-nominated *Hidden Figures* tells the remarkable story of three female, African American mathematicians who played a key role at NASA in the 1950s and 1960s. The film focuses on the extraordinary innovation released by listening to different voices and how the trio helped to dismantle many barriers facing women and minorities in the workplace.

However, fast-forward to 2019 and a recent USPTO study shows that women make up only 12% of all US inventors. Clearly much remains to be done to make inventorship far more diverse – and the importance of getting this right cannot be overstated.

The US economy relies on continuous innovation to fuel its performance, but that engine is beginning to slow down. When Katherine Johnson, Dorothy Vaughan and Mary Jackson were plying their trade at NASA in 1960, the United States accounted for roughly 69% of all worldwide innovation. By 2016 that share had dropped to just 28%, with China close behind at 25%, according to a 2018 report by the Council on Competitiveness. In order to maintain its leadership position, the US technological industry will need to think and act differently going forward.

Within large companies, patents are often used as a measure of R&D output. Although not a perfect proxy, they are an easy metric to quantify and compare worldwide. Currently, China is out-patenting the United States and the rest of the world on a massive scale. Around the world, patents are a geopolitical and economic tool for governments, as well as a value driver for many companies.

The United States needs to adjust its mindset if it is to maintain an innovative edge. To do this, companies need to find new ways to engage more employees in the innovation and IP pipeline, to allow for faster innovation cycles, shorter times to market and better connections with customers. One solution may be as easy as engaging innovators who until now have been sitting on the bench. As the above-mentioned USPTO study demonstrates, increasing the number of women inventors on patents would increase the rate of innovation both within companies and for the country as a whole. But of course, the devil is in the detail.

When companies come together and share information to create best practices, they can quickly affect change. To this end, IP best practices group The Gathering and the Intellectual Property Owners Association (IPO)

have joined forces with the USPTO to help create and disseminate best practices around getting more women into intellectual property and patenting. In its last issue, *IAM* published the Boston Manifesto, which highlighted steps that companies are taking to improve gender disparity in the IP realm.

This article drills a little deeper, detailing the collective efforts of organisations such as the USPTO and IPO to first create and then share best practices. It then takes a deep dive into initiatives launched by Facebook and 3M to improve the role of women in patenting.

Despite being in different industries and at different stages of their journey, these companies, as well as many others, are leading the advancement of gender diversity in innovation. However, no one organisation can achieve a national and global shift in gender disparity on its own – we are strongest when we are united and coordinated in our efforts.

While we do not currently know enough to create a best practice around this issue, we are far enough along to begin to see the effects of different strategies between companies and industries.

Facebook's journey

Innovation is at the heart of Facebook's mission. The company invested over \$10 billion – almost 20% of its revenue – in R&D in 2018 and continues to be an active participant in the patent system, with more than 16,000 patents relating to hardware and software, including virtual and augmented reality, infrastructure, connectivity, communication, commerce and AI.

The products and experiences that the company creates are closely tied to individual preferences and use cases. To determine those preferences, Facebook needs a workforce that reflects its diverse user base as much as possible. For this reason, it has made significant investments to increase the percentage of women in technical roles. According to its 2019 diversity report, this figure increased from 15% in 2014 to 23% in 2019, highlighting some of the progress that it has made so far. Among the changes implemented, Facebook has:

- invested \$4.2 million in The Align Programme, which aims to increase the number of women and under-represented people pursuing careers in computer science by providing students with the opportunity to obtain a master's in the subject; and
- invested in Women LEAD and LEAP programmes, internal leadership programmes that help women at

the company build a community and tackle various challenges, from supporting other women to scaling impact while maintaining balance.

While the number of women at Facebook has steadily increased, there is still much to be done to improve diversity and inclusion across the company. The patent team is doing its part to identify and improve under-representation in the patent system by launching a diversity initiative that focuses on closing the equity gap in inventing and patenting for women.

Understanding the company's baseline

To track the number of female inventors named on patent applications, we first need to determine a baseline – the number of Facebook's organic patent applications that name at least one woman inventor (the same metric used by the USPTO to measure women inventorship in the aforementioned study).

However, the gender identification of inventors can be difficult to ascertain, given that this information is not required by the USPTO in filing applications and the various data privacy rules around gender. Indeed, the USPTO acknowledged this difficulty in its own report.

As a result, the Facebook patent team worked closely with the internal HR and diversity offices to obtain anonymised and aggregated data to determine the percentage of organic patent applications that name at least one woman, while maintaining the gender privacy of individual inventors. The team determined that, as of February 2019, 24% of Facebook's organic patent applications named at least one woman inventor. While this number is higher than the industry average as referenced by the USPTO (where 11% of patent applications are filed by women in the electrical engineering technology category, which includes telecommunications, digital communication, computer technology, IT methods for management and semiconductors), there is still work needed to increase this further.

Piloting the IPO toolkit

After determining the baseline of women inventors at Facebook, the patent team decided to pilot the IPO's Gender Diversity in Innovation Toolkit, with the assistance of IPO women inventors sub-committee members Michelle Bugbee (Eastman Chemical Company), Ahsan Sheikh (McDermott Will & Emery) and Sandra Nowak (3M).

The toolkit breaks down the diversity action plan into four critical focus areas:

- to raise awareness;
- to determine root causes;
- to select programmes that will address the specific root causes in the organisation; and
- to monitor and create metrics to measure progress.

Raise awareness

To raise awareness about advancing gender diversity in innovation, Facebook's patent team has participated in several internal and external speaking engagements, involving key stakeholders. Presenting at two internal events – Women Engineers' Day in Menlo Park and Women in Tech Day in Seattle – the team invited

women inventors and senior leaders to share their experiences with the company's patent programme.

To raise awareness outside of the company, the patent team has participated in a number of industry-wide events and conferences, including IPBC Global in Boston this summer and meetings with The Gathering, where it has been working with members to promote the use of the IPO toolkit.

"In today's highly competitive global economy, it is increasingly important to ensure that all US citizens who are willing to work hard and persevere have the opportunity to innovate, start new companies, succeed in established companies and ultimately achieve the American dream"

Andrei Iancu, USPTO director

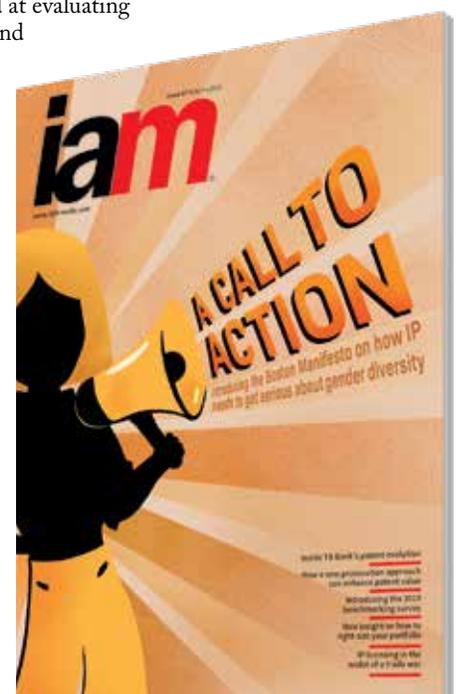
Determine root causes

Before Facebook can address gender disparity in patenting, it needs to better understand the barriers that women face in participating in the patent programme. The first step is to gain an empathic understanding of the problem that it is trying to solve. To that end, an anonymous questionnaire is under development to better understand the views of the female inventor population and why they may not be participating in the patent programme. The questionnaire will be distributed to both men and women internally, with the aim of collecting feedback from all inventors about their experiences with the programme in order to identify the barriers that are unique to women.

The questionnaire is specifically aimed at evaluating Facebook's methods of collecting ideas and invention harvesting, its patent incentive programme and its filing and application review process, among other aspects of the patent programme, to determine whether any of these present barriers or obstacles for participation by the company's female inventors.

Select programmes that will address specific root causes in the organisation

After reviewing the IPO toolkit and speaking with patent attorneys at companies that have achieved some measure of success for women inventors, Facebook has been experimenting with different types of programming to determine how best to increase the number of women named on patent applications. In addition, it is employing design thinking techniques to discover additional programming that may be effective in increasing the number of women inventors at the company.



The launch of the Boston Manifesto in IAM 97

As described above, Facebook has held internal speaking engagements to provide female employees with additional information about patents and the process by which patents are obtained at the company. In addition, the patent team hosted a company-wide patent harvest session for women inventors sponsored by female members of the leadership team and facilitated by female outside counsel. Based on the learnings from the session, the company aims to host a series of smaller group brainstorming sessions for women inventors around specific technologies and problems – a format that has seen success at other companies.

A number of additional initiatives are also in the pipeline, including:

- hosting a career panel with prolific women inventors who will talk about the positive impact that patents have had on their career;
- deploying a variety of awards to incentivise participation based on the questionnaire results;
- developing a mentorship programme for women inventors; and
- creating a private internal Facebook group for women inventors in the company to share updates on internal and external events, and information and thoughts about the patent programme.

These are just some of the programmes that the patent team will need to implement, as well as future programming to specific needs based on the results of the anonymous questionnaires, if it is going to address the unique barriers that women face at the company.

Monitor and create metrics to measure progress

Lastly, monitoring the programmes that are implemented will be critical to determining whether they are effective in increasing female inventorship at

Facebook. In using the toolkit and obtaining results, Facebook plans to provide feedback to IPO, the USPTO and The Gathering about the barriers to participation and the best practices that it has implemented to address these. In doing so, the company is hoping to set an example and encourage other businesses to follow suit so that positive change can be scaled across the industry. The recent blog “How Patents Drive Innovation at Facebook” lays out the company’s approach to patents and its commitment to promoting greater diversity in innovation. We must not be content with waiting another lifetime for gender parity in innovation.

3M’s journey

3M has been developing solutions and products to improve people’s lives for over 100 years, and in 2014 it obtained its 100,000th patent. Many of 3M’s employees are prolific patent applicants, with six inducted into the National Inventor Hall of Fame, two of whom are women. Acknowledging that diversity and inclusion are essential to a company’s success, 3M aims to build an inclusive culture that fuels collaboration, which is key to unlocking the power of diverse perspectives and creating opportunities for innovative solutions that benefit customers and communities.

Similar to Facebook, 3M has sought to understand its current level of diversity in innovation metrics. As such, the WIPO and USPTO statistics for the company were taken as a proxy that would be macroscopically accurate. This meant that it was possible to spend time obtaining and understanding the company’s true metrics without slowing down its efforts.

Also similar to Facebook, 3M has been raising awareness both internally and externally. From an internal perspective, the company’s senior management has established a sub-committee devoted specifically

Andrei Iancu: more must be done to unleash untapped innovation potential

The USPTO’s mission is a critical one: directed towards fostering innovation and economic growth, it aims to provide innovators and entrepreneurs with the protection and certainty that they need to raise capital, build their businesses and bring their products and services to the marketplace. At the Department of Commerce and the USPTO, we are especially committed to broadening the innovation ecosphere – demographically, geographically and economically. Doing so holds tremendous potential for the United States and all US citizens. A recent Harvard study found that increasing invention rates among women, minorities and children from low-income families could quadruple the rate of US innovation. Well, let us do that! Let us all work together to unleash these untapped possibilities. To that end, we need industry, academia and the government to increase our collective focus on these issues and work together to solve the so-called ‘lost Einsteins’ problem.

The USPTO is committed to playing a leading role in this effort. On 11 February 2019 the office published a report titled “Progress and Potential:

A profile of women inventors on US patents”. The report, released by the USPTO Office of the Chief Economist, analysed the US women named as inventors on US patents between 1976 and 2016 and revealed that women still comprise a small minority of patented inventors, highlighting the untapped potential of women to spur innovation in the United States. Notably, the report found that recent gains in female participation in science and engineering roles and entrepreneurship are not leading to extensive increases in female inventors earning a patent. Indeed, in 2016 women comprised only 12% of inventors named on US patents. Broadening the innovation ecosphere to include women – and other under-represented groups – is critical to inspiring novel inventions, driving economic growth and maintaining the United States’ global competitiveness. The USPTO has undertaken a proactive approach to encourage women and minority groups to innovate and secure patents to protect their innovations, including through its inventor assistance resources, hosting an

annual Women’s Entrepreneurship Symposium, supporting *pro bono* networks around the country and building *pro se* resources in patents to make navigating the patent process more accessible – especially to first-time applicants.

Resources such as the USPTO’s Patent and Trademark Resource Center Programme are located in more than 80 public, state and academic libraries – many in minority and under-served communities – providing a direct link to the sector through regular programming, virtual offices hours with USPTO subject matter experts and librarians trained to assist with IP searching and information. The bottom line is this: in today’s highly competitive global economy, it is increasingly important to ensure that all US citizens who are willing to work hard and persevere have the opportunity to innovate, start new companies, succeed in established companies and ultimately achieve the American dream.

Andrei Iancu is the director of the USPTO

IPO toolkit

In 2016 IPO formed the Women in IP Law Committee and in 2018 it established the Women Inventors sub-committee, whose efforts are aimed at helping member organisations to address gender disparity in innovation.

The IPO Women Inventors sub-committee has two primary goals:

- to bring awareness to the issue of gender disparity in innovation; and
- to offer tools to help organisations move towards gender parity in innovation.

To deliver on the first goal, members of the sub-committee routinely speak on gender disparity to raise awareness and form a broad, global network of organisations looking at ways to address this issue. What has become clear is that gender disparity is not solely a women's issue, but rather a fundamental business problem. If companies and universities do not innovate faster, better and more efficiently, they will lose market

share, customers and even funding. More than 50% of customers are women and they are no longer willing to spend money on male-focused products and services. Thus, the principal step is to raise awareness.

To deliver on the second goal, the IPO Women Inventors sub-committee has created the Gender Diversity in Innovation Toolkit that is publicly available on the IPO and USPTO websites. This helps organisations to assess and improve their diversity in innovation by breaking down advancing diversity in innovation into four critical focus areas:

- raising awareness;
- determining root causes;
- selecting programmes that will address the specific root causes in the organisation; and
- monitoring and creating metrics to measure progress.

Through these steps, organisations can assess their current innovative gender diversity status

and – depending on the results – follow the recommendations of the toolkit that will be most effective in improving this. For some organisations, this is a novel issue, so simply raising awareness is essential. For others, there is already a good level of awareness, so the next step is to conduct a deep dive into the root causes. Finally, some organisations already understand their key root causes but are looking for ideas on how to address them and what has worked in other places facing similar challenges. Developed through the involvement of a global network of corporations, the toolkit facilitates best practice sharing across companies, technologies and industries to better identify and address some of the root causes of gender disparity in innovation. The toolkit is not meant to be a final answer; rather, it is meant to be a living document or storehouse of information that organisations constantly review and revise. As such, much of its value comes from the input of the organisations using it.

to raising awareness within 3M and driving change around diversity in innovation. To do this, the committee aims to target the company's technical community as well as its affinity networks, including the African American Network, the Women's Leadership Forum, the LGBTQ Network and the Latin American Network.

Outside the company, 3M is a founder and sustaining board member of IPO and routinely engages with other organisations to discuss best practices. The company has been highly involved with efforts to develop the IPO toolkit, and 3M representatives have spoken at various conferences, continuing legal education seminars and USPTO roundtables, as well as regularly meeting with USPTO representatives – including Director Andrei Iancu, who is committed to driving innovative diversity – and testifying at the Senate Judiciary Committee hearing on this issue.

Despite these efforts, additional steps to raise awareness and connect with others in the field are essential to any long-term success.

Through its work, 3M hopes to uncover the root causes for gender disparity in innovation by:

- surveying all technical employees through an anonymous questionnaire;
- conducting small group discussions with a diverse range of technical employees; and
- conducting one-on-one discussions with a diverse range of prolific inventors to understand their experiences.

While the macroscopic data from these efforts will be important, just as crucial are the individual stories that breathe life into such data.

Select programmes to address root causes

Until the root causes for gender disparity have been fully understood, the following programmes are being worked on at 3M.

Community outreach to increase the science, technology, engineering and maths (STEM) pipeline

Community outreach and volunteer-based activities have long been integral to 3M's culture worldwide, with legal advisers routinely assisting low-income or entrepreneurial enterprises with their IP queries through the USPTO Inventors Assistance Centre. Another strategy adopted by the company is to expose young people to science and technology at an early age through a variety of educational outreach programmes. Through the Visiting Wizards programme, 3M employees visit students in grades 1 to 6 at local schools and showcase interesting and fun science demonstrations and hands-on experiments on a variety of topics. 3M is also active in promoting STEM education at university level, having recently teamed up with the University of Minnesota on the Driven campaign, which involves a \$26 million investment over 10 years to promote scholarships and outreach programmes. This investment aims to build a diverse pipeline of high-performing global talent, integrate STEM subjects into K-12 education and help students to succeed in science and business.

Internal and external recognition for inventive activities

3M sets out to recognise inventors at the company by highlighting individuals and their work on the internal website, broadcasting videos on their inventions in communal areas and showcasing their assets through internal presentations, conferences and discussion groups. Inventors who have recently received a patent are honoured at monthly or quarterly lab meetings, where they receive a patent plaque. This internal publicity not only recognises and supports inventive activities by female and under-represented inventors, but also inspires others on the path to becoming inventors. On the theory that "you can't be it if you can't see it", 3M celebrates role models as examples and resources for others.

3M also actively promotes and recognises its female inventors externally through social media and other communication platforms. For example, the company recently posted an article on its website and Twitter celebrating the efforts of Audrey Sherman, the first woman there to obtain more than 100 US patents. The company has also created a film series entitled *Beyond the Beaker*, which aims to step outside the lab and into the everyday lives of its scientists. These individuals tell their own stories through short films that capture their lives outside of work, showcasing their diverse backgrounds, hobbies and home lives. Finally, 3M recently appointed Jayshree Seth – a corporate scientist with more than 60 US patents – as its first chief science advocate. In her role, Dr Seth aims to raise awareness and appreciation of science by breaking down the barriers, boundaries and biases that prevent people from entering a career in STEM.

Mentoring, coaching and development programmes

On the topic of empowering others, 3M has various mentoring, coaching and development programmes

for employees, ranging from formal, corporate-wide mentorship programmes to informal, localised coaching programmes. Each year, the company holds more than 20 ‘lean in’ circles, led by female 3M executives. It also engages with active affinity groups, including the Women’s Leadership Forum, a global effort to accelerate the inclusion and advancement of women worldwide by developing female leaders at all levels of the organisation. The Women’s Leadership Forum has a technical chapter (T-WLF), which actively engages female technical employees at 3M in various activities, including in a Men as Allies programme, which pairs them with a male mentor who works within the organisation but outside of their immediate cohort.

3M’s global initiative, “I’m in. Accelerating Women’s Leadership”, focuses on a variety of talent management and leadership development activities, including networking, mentoring, talent development, work-life balance, workplace flexibility programmes and external community efforts. While the initiative focuses on the advancement of women in the pipeline and across

The importance of allyship and intersectionality

When you look at diversity and inclusion (D&I) efforts across a variety of contexts, they all share an alarming similarity – they place the responsibility for change on the shoulders of the very people who are deprived of equity in the system. Gender disparity in patents is no exception. In many organisations, women are the ones who are asked to drive change and lead programmes to improve their own under-representation. The problem is framed as a women’s issue that needs to be addressed by women, rather than a shared challenge that must be addressed by women and men alike. Perhaps this is one reason why progress has been so slow.

Discriminatory laws against women have been well documented over many decades and around the globe. Many of the systems, structures and laws that govern society were created to preserve the power and privilege that institutionalise lower-class status for women and deny them access to fundamental rights, benefits and opportunities. Even in places where many of these discriminatory laws have been abolished, women continue to experience the legacy effects of discrimination and sexism. The under-representation of women in patents is just one manifestation of the discrimination that has existed for so long.

Before commencing any particular D&I effort, it is imperative to understand the larger system at play – to identify those who are burdened by it and those who benefit from positions of power and privilege. We need to recognise the long-lasting repercussions of women being held at the bottom of various structures and bring to the surface the discrimination and bias that they experience. The Study of Under-represented

Classes Chasing Engineering and Science Success Act, which was passed by the US Congress in 2018, is a first step to understanding why women have not participated in the patent process and the barriers and obstacles that stand in their way. We also need to understand intersectionality – how different aspects of discrimination overlap with one another (eg, the intersection of gender, race and religion). For example, the discrimination that a black woman may experience could differ significantly from that of a white woman, disabled woman, Islamic woman or transgender woman. In order to truly achieve equity in the system and to improve the representation of women as patent inventors, we must take into account the unique experiences of all women. To do anything less is to leave groups of women behind. Intersectionality is non-negotiable.

Most leadership roles in engineering and technical fields are held by men and without their support, it will continue to be difficult to increase the participation of women in patents. In order to accelerate progress, men must take an active role in the movement. The first step is to establish that this is a shared problem, so we all have a sense of ownership. Equity for women in patents does not just help women, it benefits everyone – our teams, companies and society as a whole. Diverse ideas fuel greater innovation and creativity, and those ideas help global companies to create a growing number of better products and experiences that meet the needs of their diverse end-user population. The past five years of D&I efforts in intellectual property have been about righting a wrong or proving that D&I is the right thing to do. Now, with the innovation gap and US companies primed to lose their technological edge, D&I efforts just make

business sense. Corporations are good at solving business problems, so let us put this one first on the list. But in order to bring more women to the table, we must shine a light on the conscious and unconscious bias that women experience and educate everyone on the value of diversity and inclusion. How men can support D&I efforts and what it means for them to be an ally should also be better articulated. Here are some of the responsibilities that an ally should take:

- Learn about the history of the particular inequality.
- Listen and seek to understand the experiences of those who have experienced bias.
- Uncover your own implicit biases.
- Acknowledge your position of power and privilege and how you participate in unequal systems.
- Look for opportunities to amplify the voices of those without your privilege.
- Explore ways to change the unequal systems and partner with others to take action.

Without the support and partnership of men who are willing to take on the struggle as their own, women will continue to carry the burden of changing a system in which the power and privilege is largely held by men. The integral role that men play in this system should be acknowledged and ways to improve education and allyship should be identified. At the current rate of change, most readers will not live to see a different story for our daughters and granddaughters. Male inventors will continue to dominate the patent world, women will continue to be left behind and the United States will lose its innovation leadership position. This is a burning business issue that must be addressed now.

Lessons learned

While there is no concise best practice for the issue of gender disparity in innovation yet, we can still share what we have collectively learned thus far.

- Do not assume that this is solely a pipeline issue – you will encounter people at the company who strongly believe that by increasing the diversity of upcoming inventors, the issue of under-representation in patents will be resolved. They are wrong, and many studies show that the pipeline is only one part of the larger problem.
- Beware of analysis-paralysis – you will probably face challenges in trying to determine your organisation's exact numbers. Be persistent and do not let these difficulties stop or delay your organisation from moving forward on this issue. If you cannot get the specific data that you want (eg, trying to determine gender on existing patents), work with what you have. Macroscopic data for all organisations is sufficient to get started.
- Link diversity to a real business issue – people and organisations are incentivised to tackle these. Connecting diversity to something that affects the bottom line will make it easier to address.
- Create awareness and lay the groundwork – before launching any programmes, be sure to raise the issue with the relevant people and teams (ie, those who may be able to create significant roadblocks and those who may be able to influence large parts of the company).
- Be prepared for set-backs – remember that you are blazing new trails and there is a high likelihood that initial efforts will be unsuccessful. It is okay and to be expected. The most important thing is to learn and iterate.
- Do not assume that all women will welcome this initiative – in the short term, your diversity plans may require more time and effort from women and may increase their workload. Be mindful and respectful of the repercussions.

Action plan



There are a range of actions that companies can take to help improve gender diversity among their patent applicants. These are just a few of them:

- Download and review the USPTO report, “Progress & Potential: A profile of women inventors on US patents”, to understand the data and the problem.
- Download and review the IPO Gender Diversity in Innovation Toolkit to understand the process for change.
- Establish your company's baseline to determine how it is doing (be sure to use the same metrics that are used in the USPTO report and/or by other peer companies so that you can compare results).
- Begin raising awareness of the gender disparity issue internally with key stakeholders (eg, senior leaders, prolific women inventors, team members and the company's diversity office).
- Create a team of people who are committed to change and willing to contribute and lead efforts as a part of their job.
- Collect feedback from women (eg, in the form of surveys and focus groups) to better understand their experiences and any roadblocks to their participation.
- Identify any root causes for the lack of participation of women inventors (eg, from the surveys and focus groups).
- Develop and deploy programmes based on this feedback and the identified root causes, and establish a success measurement criteria that is falsifiable and measurable.
- Track and measure progress (or lack of progress) based the success measurement criteria.
- Learn, iterate and keep pushing forward!

the organisation, the company's communications and programmes appeal to all 3M employees worldwide, and have been proven to positively affect individuals, the workplace environment and the company culture.

Leadership in engaging with other companies

As mentioned previously, 3M actively engages with other corporations to discuss the advancement of gender diversity in innovation. As a founder and sustaining board member of IPO, it routinely meets with other organisations to address best practices on this issue.

Results

In 2011 3M announced its global initiative to accelerate women's progress throughout the company. Between 2011 and 2016 this initiative resulted in the representation of women increasing from:

- 18.2% to 23% at the director level;
- 16.7% to 24.2% at the vice president and above levels;
- 19.1% to 23.9% among technical and lab managers;
- 11.4% to 17.4% among plant managers;
- 2.4% to 22.7% among those leading 3M subsidiaries; and
- 12.5% to 20% among those reporting to the CEO.

In 2015 it announced its goal to double the pipeline of diverse talent in management by 2025. To measure progress, the company uses a diversity index, which represents the total number of future leaders from minority backgrounds within the company globally. Since the fourth quarter of 2015, the number of such employees in the management pipeline has increased from 32.6% to 38.3%.

A business-critical issue

Gender diversity is first and foremost a business issue and one that all companies must address. Based on the experiences detailed here, companies should be encouraged to follow suit and work with others in an effort to ensure that we see gender parity in innovation in our lifetime, because corporate success and a continued strong economy require it – and, quite frankly, we cannot afford to continue to let the innovations of “hidden figures” go unnoticed. **iam**

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