Advances in Project Management Series[1]

How to herd cats: the art of hacker paradigm leadership[2]

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ABSTRACT

This article defines six core elements of hacker paradigm leadership – a style of leadership required in agile, lean, and collaborative design environments. Hacker paradigm leaders start with human connection, creating a foundation of trust and ownership in teams. They give people a sense of purpose. They cultivate a tribal mindset, focused on shared potential and rewards. They challenge teams to identify unverified assumptions and resolve unknowns through experiments. They spur teams to create value for customers and to work collaboratively to sustain a generative space where life is good and great things get done.

Hackers have a bad reputation. Thanks to the high profile Distributed Denial of Service (DDoS) attacks of hacktivist groups like Anonymous, political hacks like attempts to interfere with voter registration databases in the 2016 US election, and criminal hacks like the Sony cyber-attack of 2014, in which hackers stole over 100 terabytes of data and planted malware to erase content from the company's servers, many people have a dim view of hacking. Hacking is seen as a subversive, immoral activity. Films like *Hackers* (1995) and the HBO series *Mr Robot* portray hackers as lonely outsiders who fight governments and corporations. When hackers appear in the media, the article is typically headed with a shot of a shadowy figure hunched over a keyboard, looking like the Grim Reaper in a hoodie.

While the media's depiction of hackers is not factually incorrect, it is a partial and misleading view, focused exclusively on 'black hat hackers', or file breakers. Steven Levy's seminal book, *Hackers: Heroes of the Computer Revolution* (1984), offers a different perspective on hacking that is vital for understanding the broader impact and influence of hacking today. Levy's account focuses on the True Hackers, a tradition that started at Massachusetts University of Technology (MIT) in the 1960s, where a ragtag band of young electronics engineers volunteered their passion, knowledge, and coding skills to write software for the first generation of user-programmable computers. These hackers created a culture of open, collaborative, exploratory coding (Levy, 2010). In subsequent decades, this tradition fueled the rise of personal computing (and Apple Computers), inspired the free and open source software (FOSS) movement, and

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contributed massively to the culture and technical infrastructure of the internet. It continues to shape the world of technology today.

In the wake of the dot.com crash of 2001-2002, a new generation of tech entrepreneurs emerged inspired by the practices and principles of hacking. Entrepreneurs like Facebook's CEO Mark Zuckerberg and Twitter's Jack Dorsey cut their teeth on open source hacking. The success of their companies helped drive a new wave of interest in fast, cheap, exploratory approaches to product design and small business development. This interest subsequently cohered around three methods: agile development, lean startup and design thinking. These methods, used today by developers, entrepreneurs, and designers internationally, are deeply indebted to the positive tradition of hacking that started at MIT (Rayner, 2018).

Today, hacking is a ubiquitous approach to innovation, a way of solving problems through collaborative, iterated sprints. It is not just for programmers. Anyone can be a hacker, assuming an experimental mindset and a willingness to get hands on, build and learn.

Hacker paradigm leadership

Project managers should attend to these developments. They imply new challenges and vast new opportunities. They require a new kind of leader and a new style of leadership.

We see this new style of leadership in the startup sector. The kind of leadership required to get an early stage startup off the ground is radically different to that required to run an established business. As Steven Blank argues, a startup is not a small version of an established business. It is a different entity – an idea in search of a workable business model, requiring a different set of strategies, mindsets and practices to get up and running. In an early-stage startup, the ultimate shape and nature of the enterprise is fundamentally unknown. It must be discovered before it can be developed. This is the advantage of hacking, which is essentially a method for treating the unknown, teasing out new paths and possibilities through lightweight experiments.

Hackers' creative response to the unknown explains why the hacker way has proved so successful in new business and product development environments, especially in contexts where time is short, customer preferences are uncertain, and there are many complexities to be resolved. Methods like agile development, lean startup and design thinking cut through complexity by empowering small teams to rapidly ideate, prototype and test ideas, exploring possibilities rather than leaping forth to execute on a plan.

The style of leadership required to enable these kinds of teams is light touch, inspirational, customer-focused and geared towards experimentation. Hacker paradigm leaders *make space* for innovation, in the sense of empowering teams to autonomously hack their way to success. Instead of stipulating what needs to be done by when, these leaders champion an ambitious vision and invite people to participate to figure out how to deliver on it. They cultivate a tribal mindset, coaching teams to believe in their potential, so that people contribute for intrinsic rewards like autonomy, mastery and purpose, not just a paycheck.

If you want troops, act like a general. If you want to make space for innovation, and inspire self-motivated individuals to collaborate on solutions, you need a different style of leadership and a

different set of people management skills. The best hacker paradigm leaders are transformational leaders (Bass, 1999). These leaders inspire and motivate teams by championing a vision that people *want* to make their own. There are few things more important for a team than a leader who can inspire people to rise to great heights, without trying to control them. This encourages team members to take risks and embrace uncertainty, trusting in their leader's support and the camaraderie of the team.

Hacker paradigm leaders:

1. Trust in people
2. Lead with purpose
3. Cultivate a tribal mindset
4. Are 'Chief Experimenters'
5. Create user value
6. Make space for innovation

This article defines six core elements of hacker paradigm leadership – a style of leadership required for success in agile development, lean startup, and collaborative design contexts. These six elements build on one another to form a coherent leadership system. Hacker paradigm leaders start with human connection, creating a foundation of trust and ownership. They give people a sense of purpose. They cultivate a tribal mindset, focused on shared potential and rewards. They challenge teams to identify unverified assumptions and resolve unknowns through experiments. They spur teams to create value for customers and to work together to sustain a generative space where life is good and great things get done.

Hacker paradigm leaders do more than just steer people into work. They create meaningful work and the opportunity for meaningful lives.

Trust in people

Learning to trust in a team, and communicating this trust to every member of the team, is a prerequisite for creating a safe environment where people feel comfortable taking risks, running experiments and exploring new terrain. Accordingly, the best hacker paradigm leaders automatically defer to trusting in people's capacity and potential. They trust in people's inventiveness and resourcefulness, their capacity to deliver under pressure, and their ability to put their heads together and create. Based on this trust, they set their people free, empowering them to try things out, make mistakes and learn from them.

This level of trust can terrify leaders who are used to being in control of things. Certain of these leaders have reason to feel nervous. Leaders can put their reputations, and even livelihoods, on the line when investing trust in teams. If the team fails, it is the leader who takes the hit. Yet, carrying risk is the only way that a leader can demonstrate to his team how much he trusts them, believing in them and the project. Hacker paradigm leaders carry risk so that their teams feel trusted and supported to take risks of their own. They inspire people to believe in themselves by standing tall for the team, defending it against the intrusion of outside forces and championing its capacities and mission.

Smart leaders don't gamble on just any team. Good business involves minimizing risk and so does hacker paradigm leadership. Smart leaders take calculated risks on teams and projects they truly believe in. They invest in projects in an entrepreneurial way, carrying risk strategically so that trustworthy teams can cut loose and innovate for mutual reward.

Teams are only as strong as the people who contribute to them. To create a trustworthy team, leaders need to recruit a set of trustworthy people. Leaders also need to ensure that these people can work as a team. The fact of working together does not make a group of people a team. Unless these people can communicate and collaborate effectively, they are unworthy of the title 'team' and unworthy of the leader's trust in them to perform as such.

The upshot is that there are two entities hacker paradigm leaders must learn to trust: individuals and teams. Since teams are only as strong as the people who contribute to them, it makes sense that we start by reflecting on trustworthy individuals.

- **Trusting people**

Recruiting is critically important in the startup industry. Startup founders need to find people they can genuinely believe in, and so they typically put applicants through a rigorous recruiting process. In addition to looking for evidence that the applicants can perform the tasks required of them, founders look for a T-shaped skill set and cultural fit.

T-shaped people have core expertise in a certain area (for example, UX design, software development, marketing and so on), as well as a broad range of additional skills, talents and interests. This mix of core and ancillary skills makes T-shaped people ideally suited for working in cross-functional team environments. These people can head up key aspects of projects by leading with their core expertise, playing to their strengths in design, programming, strategy or whatever their skills may be. Because they have a broader range of skills and talents to draw on, they can also slot in with and contribute to other parts of the project, standing in for other team members and tackling various tasks as they arise.

Cultural fit implies both an intuitive understanding of hacker culture and the desire to apply it. Hacker paradigm leaders look for people who are passionate about collaboration, who enjoy getting hands-on with problems and figuring things out, and who aren't afraid to work in environments of high stress and uncertainty. They seek out candidates who see challenges as opportunities to learn, and who want to contribute to changing the world.

When a startup founder finds an applicant with both a T-shaped skill set and a hacker sensibility, he knows he has someone he can believe in and potentially trust. The decisive factor is whether the applicant is prepared to step up and unleash their abilities, investing themselves conceptually, emotionally and behaviourally in the work of the team.

The best way to test an applicant's commitment to the job is to give them the opportunity to demonstrate it in practice. New recruits to startups are often invited to spend a day or two working with the team, to see how they fit. Rather than give them a specific task to perform, leaders should introduce them to the team and leave it up to them to figure out how they can contribute to the work in progress. This quickly establishes whether the applicant has what it takes to work in a self-organizing hacker environment.

- **Trusting teams**

Hacker paradigm leaders also look for potential in teams. This shared potential is underwritten by the trustworthiness of the individual team members. Team potential is defined by the chemistry between team members, together with their ability to communicate and combine their powers. Until the leader can trust in a team's potential, he will remain ambivalent about the team's capacity for success, which invariably impacts on team members' confidence and the performance of the team as a whole.

Hacker paradigm leaders are always on the lookout for teams with extraordinary potential. These teams are comprised of people with unique qualities, who also possess critical interpersonal abilities, such as an enhanced ability to communicate and exchange ideas, to build, test and learn at speed, to manage time in a productive way, and to support one another and invest emotional energy in the work, feeding the spirit and vitality of the team.

When a leader identifies these qualities in a team, he can feel confident he has a team he can trust. Leaders should not be shy to express this trust. Here are some characteristic statements leaders use to express their trust in teams:

> 'You people are great!'
>
> 'I see amazing potential on this team'.
>
> 'I'm convinced we can do incredible things together'.
>
> 'You are always teaching me things. I love learning from you'.

Lead with purpose

The greatest hacker teams through history have been driven by a sense of purpose. The MIT hackers didn't stay up late at nights playing around with computers just because they were curious about the machines. A powerful sense of purpose drove them. They believed that computers could, and one day would, change the world. Their goal was to make it happen.

Thanks to their sense of purpose, the MIT hackers were unstoppable. Few people outside their circle were aware they existed, but the hackers knew they were creating value nonetheless. Their sense of purpose gave meaning to their work. It transformed them from a rag tag collective into a learning organization and tribe.

Purpose is a buzzword in business today. Behind the hype, it reflects a major transition in the nature of work, as team work and innovation become central features of organizational productivity. Aaron Hurst, author of *The Purpose Economy* (2014), argues that running a business today without an emphasis on purpose 'is like running an organization in the early 1990s and failing to implement technology' (Hurst, 2014). Like enterprise software, purpose brings teams together, creating efficiencies and maximizing engagement and commitment. Purpose catalyses magic by inspiring people to believe in the work and to give it everything they've got.

Simon Sinek was one of the first people to see the new paradigm emerging. In *Start With Why* (2009), Sinek explains how great leaders use purpose to inspire their followers to action. For

great companies, purpose is more than just sexy marketing and sales patter. It is an answer to the question: 'Why are we doing this?' This answer changes everything.

Sinek cites Apple as an example of a company that is guided by purpose. Apple, Sinek points out, isn't just in the business of selling computers, phones, watches and services. Apple is selling a mindset and a way of life. Apple sells an echo of the hacker ethos that animated the company in its formative years, when Apple was a startup launched by a hacker and a college dropout who dreamed of changing the world by giving everyone a computer.

Steve Jobs crystallized this ethos in Apple's famous 'Think Different' campaign. 'Here's to the crazy ones', the campaign ran. 'They push the human race forward. … Because the people who are crazy enough to think they can change the world, are the ones who do'.

Apple's sense of purpose is essentially Job's sense of purpose, infused in the company. Inspiring and enabling people to 'think different' has become key to Apple's brand. This answer to the question 'why?' has accelerated Apple's success over the years. In Apple's early days, it inspired hacker teams to work around the clock and endure Jobs' volatile temperament to get the job done. Apple's sense of purpose continues to inform design decisions on every product it releases and every marketing decision it makes.

Drop into an Apple store and you can feel this sense of purpose at work. Apple store employees are clearly proud of the job they are doing and thrilled to be associated with the brand. They engage you directly, listen to your problem, solve it, take your payment and send you on your way in a matter of minutes. Microsoft has tried to replicate the model in its stores, but there is a reverence among Apple employees that is hard to replicate. This is because Apple offers its employees a clear sense of purpose. As Apple store employees see it, in serving customers, they are contributing to changing the world.

Early stage startup founders need to lead with purpose. Consider the work that is involved in getting an early stage startup off the ground. At first, the work is fun, as ideas get thrown around and everyone figures out what to do. But once the work gets underway, things get hectic and it takes a lot of energy to maintain momentum.

People are working long hours on the project. Employees sweat through endless cycles of hacking and customer development. The pressure and anxiety ratchet up as the company scales. Budgets are tight and there is never enough cash. Sometimes people don't get paid. No one sees a share of equity if the company fails. Employees need a good reason to continue giving their best under these conditions, day after day. When they ask the founder: 'Why am I doing this?', she better have a good answer, or the company will lose employees.

Leading with purpose requires that leaders genuinely engage with people and connect with them on an emotional level. It requires that leaders speak to people's intrinsic passions, celebrate their potential and cultivate their desire to make a difference. Most importantly, it requires that leaders articulate why the work is important and shouldn't be treated lightly. When employees ask: 'Why am I doing this?' the right answer is: 'Because it matters'.

Here are the mission statements of five of the most valuable tech companies in the world. All of them offer an answer to the question: 'why?'.

- Google: to organize the world's information and make it accessible to everyone
- Facebook: to enable the world to connect and share
- Airbnb: to create great travel experiences defined by authenticity and connection
- Uber: to provide safe and reliable transpiration, everywhere to everyone
- Tesla: to accelerate the transition to a global clean energy regime.

Cultivate a tribal mindset

A third component of hacker paradigm leadership concerns how leaders catalyse the collective energies of their teams. Purpose works as a broad motivational tool, but something more specific is required to cultivate top performance in teams. We touched on this earlier when we considered how a leader should speak to a team to express trust in its potential. Trusting a team involves believing in team members' collective potential for greatness. When a team believes it can do amazing things, people commit beyond the call of duty. They work hard, help each other out and move mountains to achieve their goals.

Some people feel uncomfortable with the word 'greatness'. Applied to individuals, the term sounds egoistic. But there is nothing egoistic about a team aspiring to greatness. This is something that the best sports teams do all the time. On great teams, team members bury their egos and focus on the shared prize. They work together to achieve something great that none of them could achieve alone and they share the kudos equally across the team.

Every talented team is capable of greatness. The art of hacker leadership hinges on seeing the potential for greatness in a team, affirming it and teaching the team members to affirm it themselves. Leaders need to coach individuals to appreciate what they're capable of achieving in concert with others and to see their potential for greatness. They need to help the team as a whole to understand what it can achieve by working as a unit, and to inspire team members to commit to realising this potential in practice.

In their book, *Tribal Leadership* (2008), Dave Logan, John King and Halee Fischer-Wright offer a set of coaching techniques for leaders who want to build high performing teams inspired by a sense of greatness. Their approach hinges on creating a shared mindset in teams, such that team members appreciate their collective potential. By coaching teams to appreciate their collective potential, tribal leaders instil a collaborative mindset in teams. Teams affirm collaboration as an intrinsically valuable feature of work, one that enables the whole team to enjoy an extraordinary sense of empowerment and achievement.

Tribal leadership requires leaders to diagnose and change the cultural status quo in their organizations. Logan, King and Fischer-Wright distinguish five levels of organizational culture, each with its characteristic vocabulary and mindset. Stage 1 cultures are pathological. People with Stage 1 mindsets believe that life sucks – end of story. Logan, King and Fischer-Wright claim that Stage 1 mindsets are mostly found in criminal subcultures. They calculate that 'about 2% of American professionals operate [at the Stage 1 level]' (they wryly suggest these are 'people who come to work with shotguns' (Logan et al., 2008: 18)).

The Stage 2 mindset is more widespread, accounting for about 25 percent of workplace cultures. People at a Stage 2 level have the mindset that 'my life sucks', while conceding that others have it better. Stage 2 agents tend to be depressive, resigned and hostile to management. Logan, King and Fischer-Wright observe that in Stage 2 cultures '[t]here is little to no innovation and almost no sense of urgency' (Logan et al., 2008: 19).

Most coaching strategies focus on hauling people up to the Stage 3 level. Stage 3 cultures are intrinsically individualistic and highly competitive. People in these cultures behave like lone wolves, each convinced that he or she is the only capable person in the company. The governing language and mindset of Stage 3 is: 'I'm great (and you're not)'. Logan, King and Fischer-Wright estimate that around 50% of companies operate at this level.

Stage 4 cultures can also be highly competitive. But, at Stage 4 level, competition is played out in the struggle between teams, not individuals. The governing language and mindset of a Stage 4 level team is: 'We're great (and they're not)', where 'they' is the opposing team. Precisely who a Stage 4 team selects as their 'they' is important. Logan, King and Fischer-Wright reflect: 'The bigger the foe, the more powerful the tribe' (Logan et al., 2008: 23).

Stage 4 teams reflect the extraordinary cultures that hacker paradigm leaders should try to create. Within each team, individuals compete in a virtuous manner, trying to outperform one another to advance the tribe. Every individual works to empower the team, seeking to unleash the team's potential. Leaders rarely need to crack the whip on Stage 4 teams. They often feel like they're being 'pulled by the group' as it seeks to achieve its goals (Logan et al., 2008: 23).

Stage 4 teams are the springboard to the highest and most fulfilling form of workplace culture, the Stage 5 form. Stage 5 level cultures emerge when a Stage 4 team chases a world-changing vision and noble cause, like curing cancer or developing the next generation of renewable energy technologies, and finds itself on the winning side of history.

At Stage 5 level, teams have a sense that 'life's great'. This sensibility is borne out in their language and relationships with one another. Stage 5 level teams are not interested in competing with one another, or competing with other teams, companies or organizations. They are too busy making history. Rather than compete, Stage 5 teams would rather look for opportunities to collaborate with other teams working in the same direction. As Stage 5 level, competitors become 'frenemies', collaborating for mutual benefit and the opportunity to learn from one another (Gupta et al., 2013).

Stage 5 culture is hard to maintain. Logan, King and Fisher-Write claim that, typically, a Stage 4 team spikes to Stage 5 at the height of its achievements, then 'recedes to Stage 4 to regroup' before making a fresh attempt (Logan et al., 2008: 25). Under the steady hand of a tribal leader, however, it is possible to sustain a team at Stage 4 level, taking tilts at Stage 5. Logan, King and Fischer-Wright suggest that the team that built the Apple Macintosh sustained a Stage 5 culture throughout its life (Logan et al., 2008: 25). The purpose driven, hacker generation companies listed at the end of the last section are all Stage 4 organizations and launching pads for Stage 5 team experiences.

Logan, King and Fischer-Wright's focus in *Tribal Leadership* is on how to transform organizations from Stage 3 to Stages 4 and 5. Leading with purpose is a prerequisite for levelling up. Higher-level cultures are powered by a sense that the tribe is doing something extraordinary together. Greatness is not a confidence trick. Companies and individuals need to aspire to great things, otherwise the language of greatness rings hollow.

Purpose alone is rarely enough to shift a team of people out of a Stage 3 mindset. In a lone wolf culture, no one wants to let their guard down for fear of being savaged by the pack. To get a team out of a Stage 3 rut, leaders must do two things. First, leaders must coach lone wolves to see the limits of a Stage 3 mindset by reflecting on what they could achieve by working collaboratively with others. Second, they should create the conditions for a Stage 4 epiphany by challenging lone wolves to form empowering workplace triads.

- The first strategy involves teaching people that no matter how great they are independently, there are many things they will never be able to achieve alone. Logan, King and Fischer-Wright recommend that leaders encourage lone wolves to work on projects that require collaboration as a condition of success. This teaches people to see the limited nature of lone wolf mindsets. Meanwhile, leaders should offer these individuals Stage 4 mentorship, coaching them to see that real power comes from relationships and networks, not from personal expertise.

- The second strategy involves teaching lone wolves to build and lead collaborative cultures. Lone wolves tend to form dyadic relationships with other Stage 3 operators, shutting themselves off from others. To get the wolves mingling with friendlier animals, leaders should encourage them to proactively create triadic relationships in the workplace, introducing coworkers to talented third parties they would benefit from knowing.

  By pushing lone wolves to broker profitable encounters between two or more parties, tribal leaders teach wolves to see themselves as bonding elements in a team, as opposed to isolated nodes. It is important that lone wolves reflect on how good it feels to create a 'we' environment. Finding themselves in a great team of their own making, they embrace a Stage 4 mindset as a matter of pride. As the people they have brought together express their gratitude, it creates a sense of friendship and mutuality that helps concretize and maintain a Stage 4 perspective.

Be a 'Chief Experimenter'

In December 2009, Dean McEvoy was at the Pollenizer Christmas party in Sydney, Australia. Pollenizer, a startup incubator, was a growing force in Sydney's startup scene, and the party was packed with hustlers, hackers and hipsters, soaking up the energy of the night.

McEvoy's startup, Booking Angel, was part of the Pollenizer stable. As of December, McEvoy had been working on Booking Angel for about 5 years. While he maintained a brave face at the party, McEvoy was worried that the business was failing to grow.

Recently, McEvoy had been nosing around for new opportunities. Earlier that year, a Silicon Valley investor had introduced him to Groupon, a Chicago group buying site that had recently pivoted its model and was growing fast. McEvoy was impressed with the group buying concept. He could see that it resulted in an exciting user experience that kept customers coming back. Booking Angel's pay-per-booking model lacked this spark. McEvoy was wondering what an Australian Groupon might look like and how it might work.

Pollenizer co-founder and CEO Phil Morle was also at the party. After a couple of drinks, McEvoy mustered up courage and pitched Morle on his idea for a group buying site. McEvoy knew Pollenizer had a couple of developers kicking around over the summer without much to do. Why not set them on the job, he suggested, and see what they could create?

Morle was intrigued. He liked the idea but he wanted to test it. Morle said: 'Let's do this lean. We don't want to waste time and money. Let's find out if the model works'.

McEvoy and Morle sprang into action. Between Christmas and New Year, they mapped out the dimensions of their business concept, making educated guesses about who their customer was, the value the business created for the customer, how the sales and marketing channels worked and where the money would come from. They knew that some of these assumptions were possibly false. They also knew that some of them had to be true for the business model to work. They focused on identifying their *riskiest* assumptions – the assumptions that needed to be right for the business to succeed. These were the assumptions they needed to test.

Working with a developer, McEvoy and Morle built a series of prototypes that would enable them to test these assumptions. Tapping into Pollenizer's networks, they began running experiments with potential customers to see if the group buying concept had traction. For one experiment, they hosted a private party and invited guests to use their prototype to 'group buy' drinks. It was a simple face-to-face experiment. McEvoy and Morle figured that if the group buying concept worked, it should work for people standing together in a room.

McEvoy and Morle continued testing their ideas in online and offline environments. They ran tests with a range of products from pizzas to fashion footwear. They ran A/B tests to isolate and measure the impact of their design ideas. They set up 'Wizard of Oz' environments in which customers would interact with a web interface, with human beings manually performing the back-end processes. The whole time, they sought to validate or disprove key aspects of their business model. Those assumptions they successfully validated they baked into the model. Those that they disproved were dumped or reworked.

By the end of January, McEvoy, Morle and their new business partner, Justus Hammer, had a business model they felt confident about, with hard data to dispel any doubts. Through many iterations, their startup had evolved into a 'deal of the day' site that gave customers the opportunity to scoop deals on the most exciting things happening in their city. They called the startup, 'Spreets' – a mashup of 'spree' (as in 'shopping spree') and 'treats'.

Spreets went live on the February 4, 2010 (which happened to be McEvoy's birthday). The site processed $4000 worth of sales in the first 24 hours. The team immediately knew they were onto something. They buckled in, hit overdrive and clung on for the ride.

Spreets grew rapidly through the following months. The founders went looking for venture capital investment as memberships soared and traffic went through the roof. By June, Spreets was opening internationally in one new city a week. By September, it was bringing in $1 million dollars a week. By December 2010, Spreets had 500,000 members and had processed 270,000 voucher sales. The team could barely keep up with the pace of growth.

Then, in January 2011, the gods of startup entrepreneurship reached down and anointed the team. Yahoo!7 made an offer to buy Spreets for $40 million Australian dollars. This is what the startup game is all about. McEvoy, Morle and Hammer scarcely hesitated. They accepted Yahoo!7's offer, sold the company and became wealthy entrepreneurs as a result.

The story of Spreets is the startup entrepreneur's dream. A small team of disruptors design a novel business that launches fast and scales faster, and which is snapped up by a corporate buyer for a multi-million-dollar sum. Most large companies spend as much time planning new ventures as it took Spreets to scale and exit. Morle told me: 'Spreets got [Pollenizer] a lot of attention from corporates, because they said: "Wait – that took you 11 months to go from an idea to $40 million? We're still thinking about things in that time"'.

It is hard for a corporation to innovate at this speed. Hard – but not impossible. The key to enabling any organization to innovate like a startup is to build a culture of experiments. To achieve this, the organization needs 'Chief Experimenters' who lead by the power of example. This is how McEvoy, Morle and Hammer got Spreets off the ground. The founders led with experimental method, questioning the tenets of their venture and testing every assumption. A lean feedback cycle doesn't run itself. It requires the will and determination of a hacker paradigm leader to initiate the cycle, help teams identify assumptions that need to be tested and keep the learnings coming fast.

Nathan Furr and Jeff Dyer (2014: 49-51) coined the idea of a Chief Experimenter to counter the command and control mentality of traditionally-minded business executives. Most executives see themselves as Chief Decision Makers. In their view, their job is to anticipate the future, decide on a direction and set their company on a course to success. This attitude is reasonable enough in well-defined environments with clear challenges, opportunities and risks. It is foolishness or lunacy in uncertain and unstable environments where no one understands the opportunities and risks or even what success looks like.

The challenge of leading innovation projects calls for a different kind of leadership. Leaders must think and act like hackers, teaching teams to acknowledge their assumptions and to run experiments to test them. Instead of making decisions on behalf of teams, Chief Experimenters '[let] decisions move downwards in the hierarchy', letting data reveal 'what the next experiment should be' (Furr and Dyer, 2014: 50). They work with teams to identify 'leap-of-faith' assumptions that need to be tested and support them as they validate these assumptions through customer experiments.

Insisting on experiments can be a thankless task. When a team has struck on a great idea, people like to think they are on the road to success. Enthusiasm levels run sky high. Egos bloat out of proportion. No one wants to hear it when someone says: 'Hold on. We have no idea if this will

work. Let's run some experiments to figure it out'. This pops everyone's bubble. But this is precisely what the Chief Experimenter must do.

The most important thing a Chief Experimenter must do is set an example by running experiments every day. Running experiments doesn't always involve building prototypes and MVPs. Hacker paradigm leaders run regular workplace experiments to streamline processes and improve team performance. They start with a problem and take the measure of the situation, trying to figure out what is going wrong. They make a guess about how to fix things and formulate a practical hypothesis, along the lines of: 'If I try X, I'll get Y'. They run an experiment, intervening in the situation in a constructive way, and monitor the results. If their hypothesis plays out, the leader may institute a new rule or process. If the hypothesis doesn't stand up to testing, the leader tries something different.

This is how Chief Experimenters hack the workplace every day. They lead with experiments and encourage their teams to do the same.

Create user value

When Brian Chesky and Joe Gebbia decided to rent out their loft apartment in 2007, they weren't thinking of launching a billion-dollar business. It was a way to cover the rent while they hatched their big idea. Chesky and Gebbia figured they could earn some money and perhaps make some friends in the process. They were proud of their apartment and they looked forward to showing it off to guests.

Chesky and Gebbia called their venture: AirBed and Breakfast.com. They built a website and put out a call: three airbeds for rent, with a homecooked breakfast thrown in. Three guests booked, followed by a flurry of emails from all over the world asking if Airbed & Breakfast's services were available in other cities. Inspired by this response, Chesky and Gebbia wondered if there might be a business model in the idea. They started brainstorming plans for a startup, one that would enable people to rent out their homes to strangers.

Nathan Blecharczyk, a former roommate, was impressed with Chesky and Gebbia's idea, but he thought their website sucked. Blecharczyk came onboard and helped the team build a more sophisticated site. The three founders ran a second experiment to test the AirBed and Breakfast.com idea, offering the service during the 2008 Democratic National Convention, in San Francisco. Once again, the experiment was a success. But when the convention finished, traffic on the site slowed to a crawl. Clearly, world domination was a long way off.

Uncertain of how to proceed, Chesky, Gebbia and Blecharczyk enrolled in Y Combinator, a Silicon Valley startup incubator. Paul Graham, CEO of Y Combinator, was sceptical that anyone would want to rent rooms in other people's homes, but he liked the chutzpah of the founding team and thought their idea was worth testing. Y Combinator was a fresh start for the team. They shortened their name to Airbnb and dedicated themselves to making the company a success.

Graham gave the Airbnb team permission to think small. To this point, the team had focused on building a robust backend system ready to scale. Inspired by the Silicon Valley mantra of scaling and growth, they'd obsessed over how their site would handle one million or more users a day. Graham proposed a counter-intuitive experiment. Instead of making something for millions of

people, what if you were creating a special experience for one hundred people. It is better to create something awesome for a core group of customers than something mediocre that is targeted at everyone. If you can create real value for these customers, they will market the product for you. Scaling comes later in the sequence. First, define an offering that changes people's lives.

Thinking small forced the Airbnb team to acknowledge that they didn't really know who their customer was. To find out, they needed to get out of the building. New Yorkers were using Airbnb, so the founders travelled to New York and started renting rooms on the site and interviewing the hosts. What did they love about Airbnb? What did they think could be improved? Meanwhile, the founders were drilling down into the deeper question: 'Who are you, anyway?'

The founders were encouraged to learn that many of the hosts using Airbnb were doing it for the same reasons as Chesky and Gebbia had initially rented out their own apartment. They wanted to make some extra money, but they were also keen to show off their spaces to guests. The problem was, the photos they were uploading to Airbnb failed to achieve this. They were poor quality photos that didn't reflect the charm of the spaces themselves.

Intrigued by this disjunction, the team decided to try another experiment. They went about New York taking glossy colour photographs of select lodgings that captured their spaces in their full glory. When these photos were posted on the Airbnb site, the lodgings secured two to three times the number of rentals of other spaces in the city.

This was an 'aha' moment for the Airbnb team. It turned out to be the cornerstone of a remarkable insight. After several experiments of this nature, Chesky, Gebbia and Blecharczyk realised that Airbnb's guests weren't just looking to find cheap accommodation. They wanted to have unique travel experiences. They specifically wanted a personalized experience – something friendly, authentic and human – the kind of experience they'd rarely enjoy when booking a room at a standard hotel.

Reversing this insight, Chesky, Gebbia and Blecharczyk reflected on what the best Airbnb hosts offered their guests. The highest rating hosts in New York were passionate about providing guests with unique experiences. They loved their homes and neighbourhoods and they wanted guests to enjoy them too. Chesky and Gebbia had wanted much the same thing when they started their venture. When they'd rented out their loft apartment, they'd sought the simple pleasure of showing off their space, in addition to earning extra cash. Since then, they'd lost focus on the values that first inspired them. Caught up in the challenge of creating a scalable platform, they had forgotten why it was that Airbnb had seemed like such a great idea from the start.

Airbnb's mission from this point was clear. Airbnb would bring together people who wanted to create and enjoy unique travel experiences. Inspired by this insight, Chesky, Gebbia and Blecharczyk leapt into a wholesale redesign of the Airbnb website, enabling hosts to post large, colour pictures of their spaces, thereby to sell them on character as much as price. They enabled hosts and guests to profile themselves in detail, so that individuals felt like they were connecting with real human beings, not just parties to a commercial transaction.

The strategy worked. By the end of 2010, Airbnb was scaling fast. Through 2011, the startup grew from 2 million, to 4 million, to 10 million users by mid-2012. With investment capital flooding in, the founders shifted gear from being struggling entrepreneurs to leaders of a ground-breaking company, the poster child of the so-called 'sharing economy'.

The story of Airbnb reflects an important lesson for hacker leaders and their teams. A hacker team's foremost concern should be to create value for customers or users, whether this is by simplifying their lives or enhancing them, or enabling them to achieve something they would struggle to achieve independently. The leader's role is to challenge and assist the team in zeroing in on *how* they are creating value, and to ensure that they maintain this focus through the design, development and delivery of work. Ideally, the value the team seeks to create will be an extension of their own values. This ensures that a clear and consistent set of values runs through the project and, in the case of a company, the brand.

Great companies are defined not just by the value they create in the world, but by the way they embody their mission in core values their employees live out every day. Airbnb is a fine example. Thanks to its founders' insight into their core values and motivations, Airbnb is staffed by people who are genuinely passionate about creating unique travel experiences. This creates an emotional connection between the company and its customers, reflected at every point of the customer journey, from the first visit to the final review.

Great companies and teams are defined by people who pull together because they passionately believe in what they're doing and the value they are creating for customers. Value, in this case, is more than just a set of abstract nouns (like 'honesty' and 'integrity') on the company's value statement. To build a great company, leaders must identify the core values that *really* drive them, and build these values into the DNA of the culture and brand. This enables employees to say, 'Life's great' and believe it, because they know they are living by their values and making the world a better place.

Make space for innovation

In August 1983, the Apple Macintosh team moved into the Bandley 3 building, across the street from their previous digs in Texaco Towers. A few days before the shift, Steve Capps, an engineer on the team, had a flash of inspiration. Capps was thinking about Steve Jobs' speech at the Carmel retreat, earlier that year. Something Jobs said at the retreat had stuck in Capps' mind: 'It's better to be a pirate than join the navy'. This was one of Jobs' pet maxims. The Macintosh team had recently celebrated Jobs' birthday by paying for a billboard that read: 'Happy 28th Steve. The Journey is the Reward. The Pirates'.

Capps had a blazing insight. If the Macintosh team were pirates, then Bandley 3 should fly a Jolly Roger! It was the perfect prank. Capps shared the idea with Andy Hertzfeld, lead developer on the team, who declared he was on board. The night before the team took occupancy of Bandley 3, Capps, Hertzfeld and a band of miscreants crept out and hung a handcrafted, black and white, skull and crossbones flag from the roof of the building, with a rainbow Apple decal in place of an eyepatch (Hertzfeld, 2013).

The Bandley 3 pirates weren't sure how their prank would be received. They were thrilled to discover, the following morning, that Jobs and other senior people at Apple loved the flag. The pirate flag became a permanent fixture on the roof of Bandley 3 during the Macintosh team's tenure at the building. Jobs defended the flag right up to the launch of the Macintosh in 1984. He loved the pirate metaphor. 'We were the renegades, and we wanted people to know it', Jobs recalled (Isaacson, 2015: 133).

Bandley 3 was nothing special. But the pirate flag transformed the building into a home base and play space for hackers. In their time at Bandley 3, the Macintosh team took high performance hacking to a new level. They built on the work of the Bandley pirates to create a generative environment within the space, an environment defined by energy and limitless possibility, in which the future was open and life was great.

Given Jobs' familiarity with hacker culture, it is no surprise that he affirmed the pirate flag prank. When team members establish cultural norms in this way, the leaders' work is done. Leadership, on hacker teams, should ultimately come from team members themselves, as they model the attitudes and behaviours of the Chief Experimenter. A good leader trusts the team to culture hack their environment to define a space that's right for them.

Making space for innovation is the ultimate task of hacker paradigm leadership. It starts with establishing a physical space for work, but it doesn't end there. It fundamentally concerns the mindsets and values the leader brings to the space and the behaviours through which the leader expresses and consolidates these mindsets and values in teams. The other five elements of hacker paradigm leadership feed into this activity. Hacker paradigm leaders create an opportunity space for hacking, which they work to sustain with their teams.

Making space for innovation involves a variety of actions and initiatives. Leaders must establish a physical environment suitable for hacking. They must work to cultivate a social space within the environment, so that people take ownership of the space and contribute to it. Crucially, leaders must seed appropriate cultural mindsets and values within the space. This work of cultural engineering draws on all the elements of hacker paradigm leadership. It involves establishing trust, purpose, a collaborative sensibility, an experimental mindset and a customer orientation. It involves creating a shared understanding of 'how we get things done around here', which is ultimately the most important hack of all.

To complete our inquiry into hacker paradigm leadership, we will consider these elements in brief.

Innovation space has three dimensions.

1. Physical space

- Space design
- Messaging
- Props

2. Social space

- Trust
- Authenticity
- Ownership

3. Cultural space

- Values
- Mindsets
- Practices

Create a physical space. This might involve requisitioning office space or designing a bespoke workshop for team activities. A raw, unfurnished warehouse space typically sets the right tone, conjuring up notions of tinkering and experimentation and reminding people of the long history of startups that have launched from garages.

Hacker generation companies tend to emphasise the cultural dimensions of innovation space, and consequently fill their physical environments with messaging and props reflecting a playful, anarchic culture. Facebook, for example, covers its walls with motivational posters that encourage its employees to 'Keep on shipping' and 'Move fast and break things'. Google fills its spaces with toys, exercise balls, ping-pong tables and more.

Messaging and props can be valuable cultural signifiers. But it is easy to overdo a playroom atmosphere. Every company is different, and an innovation space should be customized to suit a company's unique culture and its situation. The important thing is that team members feel they belong in the environment. People should feel comfortable, relaxed and at home.

Cultivate a social space. An innovation space should be a fun and relaxed environment. People should feel free to hang out and socialize between bouts of work. Videos of Jobs working with the Macintosh team indicate the kind of social atmosphere that leaders should try to create. The mood is cheerful and relaxed. Team members talk to one another as equals. In team meetings, Jobs sits on the floor in lotus position. The laid-back vibe of the counterculture is in full effect.

The contents and layout of an innovation space can contribute to a social atmosphere. Jobs installed video games in the foyer of Bandley 3 to underscore that hacking and play are of a piece. When people felt blocked or frustrated, they could loosen up by playing Defender or Joust and return to work when they were ready. Hacker leaders should enable people, as much as reasonably possible, to determine the pace of work. This is all a matter of trusting teams to deliver, letting their sense of purpose be their guide.

The ideal social environment makes people feel comfortable being authentic with one another and to contribute to work as they see fit. The payoff for hacker teams is to enable T-shaped people to unleash their full range of talents and skills. When people feel threatened by authority and under pressure to perform, they tend to play to their professional roles, trying to meet their manager's expectations. This stifles creative self-expression and limits the range of contributions that people offer their teams. In a safe environment, where diversity is affirmed and eccentric behaviour is tolerated or even encouraged, people can freely share ideas without worrying about being shot down by others. This unleashes the creativity in T-shaped people and boosts the realm of resources that teams can apply to work.

Creating space for trust, authenticity and personal expression inspires people to take ownership of their work. With ownership comes engagement and a sense of commitment. People give more to the work and to the innovation space itself. Teams will 'do amazing things – even and particularly in the face of rapid change and uncertainty' (Pixton, et al., 2014: 3). Teams work at holding space because they identify with the work on a personal level and believe in the people they work with. United in a shared sense of purpose, they become a Stage 4 tribe, aspiring to greatness.

Seed cultural mindsets and values in the space. Culture catalyses the psycho-social dimensions of an innovation space. It is the 'operating system' that guides team activities and determines what is possible in the space. If the culture is vague and inconsistent, nothing works. With a clear set of cultural values in place, work happens fast and organically and management can be pared back to a minimum.

Culture is mindset. This makes it difficult to perceive. When you walk into an innovation space, you can see that work is taking place and perhaps see that people are enjoying doing it too. But, unless you observe people's practices over time, it is impossible to tell *how* the work is being done (beyond making basic observations like: 'They are using computers'). The 'how' is invisible, embedded in people's hearts and minds. It is manifested when team members engage in collaborative activities and engage in discussion to figure out how to tackle problems. But it happens behind the scenes. Like the operating system of a computer, culture determines everything that happens, but is fundamentally hidden from view.

A good way to think about culture is to see it as the collective imagination of a team. Culture is the way that a team imagines what it can do and achieve together. It is how the team imagines 'how we get things done around here'. On this count, the fundamental task of the hacker paradigm leader is to inspire teams to imagine themselves into being. Teams that are incapable of imagining what they could do and achieve together are really just groups of individuals. It takes a transformational leader to convince people to see life through the lens of their collective potential and to dream a common dream.

Capturing a team's imagination in this way requires leaders to do several things at once. The leader must establish that he trusts the team, so that the team trusts him. He must lead with purpose, focus people on their potential for greatness, offer them a roadmap to running experiments, and excite them about the idea of creating customer value. He must provide the team with a physical environment for completing work, and ensure this space has a social vibe, so that work and play are of a piece.

Only once these pieces are in place can the hacker paradigm leader ignite a shared cultural mindset. Once these pieces are in place, a simple suggestion can set a team on fire. The leader says: 'People! Let's imagine we can change the world'. The team understands precisely how to set to work. They start brainstorming possibilities and begin to hack.

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