VELOCITY NETWORK™

UNLEASHING THE INTERNET OF CAREERS®

velocity

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VISION

Reinventing how career records are shared across the global market. Empowering individuals, businesses and educational institutions through transformational blockchain technology - public, open, trusted and self-sovereign.

We call it the Internet of Careers®.

Skills shortage, accelerated turnover, contingent workforce and gig economy drive a volatile and disruptive labor market. Yet, individuals and businesses still rely on costly, self reported and slow methods to exchange former employment, professional achievements and educational certifications data, that are key to most employment-related processes.

As a matter of fact, today's labor market's tech infrastructure has more in common with the outdated postal service than this generation's digital world.

The right to work, to free choice of employment, is a basic human right. We envision a world in which every person has access to personalized career and development opportunities at the time it matters. Breadth of individual career data and the free flow of it are key to personalized guidance and better opportunities.

Velocity is built to be the world's network for verifiable and trusted career credentials, designed for the digital age.

It's governed by a non-for-profit foundation, set out to put people back in control and build a globally accessible, trustworthy Internet of Careers®.

It's powered by blockchain, making it trusted, private and effortless for **people to take ownership on their career credentials**, choose whether to share them, decide how that data is used by others, and in the future even sell it and earn income on that sale, creating an economy around the ownership and transfer of valuable career-related data.

At the same time, employers and education vendors will be able to **rely on trusted, immutable and verifiable employee and candidate data**, seamlessly and cost effectively eliminating hiring risks, boosting productively, improving employee experience and achieving regulatory compliance.

VELOCITY NETWORK™

TOGETHER: BUILDING THE INTERNET OF CAREERS®

EXECUTIVE SUMMARY

Career Credentials Data is key to sustaining labor markets' efficiencies and has enormous potential upside for individuals and businesses. And, as Artificial Intelligence solutions in HR develop, we expect to see incredible new opportunities to leverage career data, further increasing its importance and value.

Currently individuals share their resume with prospective employers when they apply for a job. In the best case they update their LinkedIn profile on major career events, so we get a snapshot every now and then of what's going on. If we were to have a continuously updated picture of the individual's career records, the result would be a movie rather than a set of discrete, static pictures. As a result, we could begin to see a broader context and trends over time. Data could be used in a richer and more meaningful ways than today, guiding people as they develop and manage their careers.

Organizations have made significant progress in their ability to manage data regarding employees, but individuals may divide their time working for two or more employers, take gig assignments and move between jobs more frequently than before. In this environment no single employer has the holistic picture of an individual person that is needed to drive personalized solutions and drive value through analytics and AI.

To add to this complexity, as individuals' concerns about data privacy grow and new regulations such as GDPR are introduced, it is reasonable to expect that we will gradually face a reality where employees and alumni will demand increasing limitations on the processing of their records by employers.

In fact, most of the relevant career related data needed for more effective analytics and AI is generated and held outside the organization, scattered across multiple platforms and service provider databases. However, proprietary restrictions can make accessing such rich data either difficult or prohibitively expensive, and this data is mostly self-reported, which has been widely recognized as untrustworthy.

These trends are a fundamental threat to the entire HR Tech industry. If its value proposition to its users is heavily based on intelligent data processing, and this data is mostly locked out of the enterprise, in a broken data-sharing system, there is a real threat to the prevailing vision of smart data collection and processing.

Our vision for the future is to harness distributed ledger technology to build the Internet of Careers®.

The Velocity Network™ is a blockchain-based open-source verifiable credential exchange utility layer with its basic elements and token mechanics that provides standardized communication protocols, governance, compliance and payment rails, that enable trusted, private and secured exchange of career credentials between individuals and organizations.

This utility layer enables HR and Ed Tech vendors, employment marketplaces and freelancer platforms, staffing and recruiting providers, background and assessment processors to offer their constituents the ability to issue, share and verify career credentials, and develop new added-value use cases and innovative applications.

Individuals can now turn their career achievements into digital credentials. verifiable, secured and truly global. Own them, use them to access better opportunities.

At the same time, employers, education institutions and other interested parties will be able rely on trusted, immutable, and verifiable applicant, candidate, employee and student data, seamlessly and cost effectively eliminating hiring risks, boosting productivity, improving employee and student experience and achieving regulatory compliance.

The Velocity Network™ is governed by the Velocity Foundation, a cooperative non-profit entity with its mission being to promote and support the globally accessible, trustworthy Internet of Careers®.

DATA IS KEY TO SUSTAIN LABOR MARKETS' EFFICIENCY

The data on people's career credentials: employment history, education, experiences, skills, assessments, compensation, assignments, trainings, certifications, etc, is key to sustaining labor markets' efficiencies and has enormous potential upside for individuals and businesses. As Artificial Intelligence solutions in HR develop, we expect to see even more incredible and new opportunities to leverage career data, further increasing its importance and value.

Currently individuals share their resume with prospective employers when they apply for a job. In the best case they update their LinkedIn profile on major career events, so we get a snapshot every now and then of what's going on. If we were to have a continuously updated picture of the individual's career records, the result would be a movie rather than a set of discrete, static pictures. As a result, we could begin to see a broader context and trends over time. Data could be used in a richer and more meaningful way than today, guiding people as they develop and manage their careers.

In 1978, Jac Fitz-Enz, Ph.D. published "The Measurement Imperative" proposing a radical idea. In it, he proposed that human resource activities, and their impact on the bottom line, could be measured. This article triggered debate and interest by scholars and spurred more research into measuring HR. Dr. Fitz-Enz's work literally initiated the beginning of data capturing and benchmarking key HR activities, such as retention, staffing, compensation, and competency development. Yet, it was quickly then found that benchmarks alone could provide limited actionable insight, and only provide a momentary comparison of a company's human resource activities to others.

A more advanced and comprehensive use of metrics was later discovered in 2002 by the Oakland Athletics baseball team. Their general manager Billy Beane was able to assess players' value and employ sabermetrics (player data based on extensive analysis of baseball) in the selection of players. Billy realized that players with strong sabermetrics correlated better to winning games versus players who were strong in traditional metrics, like batting average. Sabermetrics also enabled the coach to form a winning team utilizing data versus expensive rookie recruiting. With Oakland Athletics' limited $41 million budget, significantly less than competitors with larger budgets, he was able to create a winning team - the result was phenomenal.

Based on Oakland Athletics success in sourcing winning athletes at less cost, in 2003 Michael Lewis developed a path-breaking strategy on metrics-based selection models, known as the Moneyball concept[1]. And later in 2009, global leader Google started Project Oxygen to identify the attributes of effective managers.

Google's Project Oxygen became globally renown, when in 2011, Google shared the results, highlighting data-based findings about the perfect manager. Soon thereafter, there were a series of research publications, which highlighted the benefits of using analytics in workforce management. Amongst them, a study by Patrick and Auke[2] generating 20 articles alone on the different aspects of workforce analytics. What evolved at this stage, based on Project Oxygen and subsequent research, was a dynamic shift from traditional metrics-based HR measurements to predictive analysis, which was a futuristic development.

It is clear that the potential upside is enormous. Most companies' largest spend is on their people, and much of this enormous expense is driven by management decisions that are made by gut feeling and individual heuristics.

With the help of technology, organizations and individuals are now able to make informed decisions and more importantly, transform daily recruiting, assessment, onboarding and management practices in the labor market.

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[1] Moneyball: The Art of Winning an Unfair Game is a book by Michael Lewis, published in 2003

[2] A practitioner's view on HR analytics, Patrick Coolen and Auke Ijsselstein, Published on May 25, 2015

54% Of respondents use AI in at least 1 HR process

78% Expect to use AI in at least 1 HR process in 2 years

Workforce planning and staffing	Performance management	Compensation, benefits	Learning and development	
Today: 43	Today: 43	Today: 39	Today: 37	
In 2 years: 69	In 2 years: 64	In 2 years: 59	In 2 years: 61	

In 2 years
Today
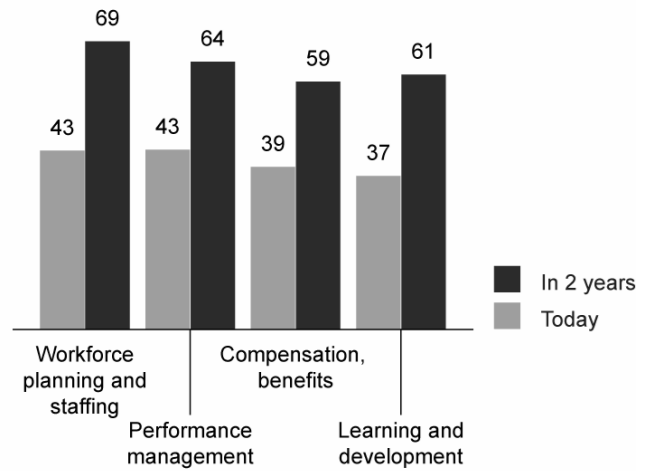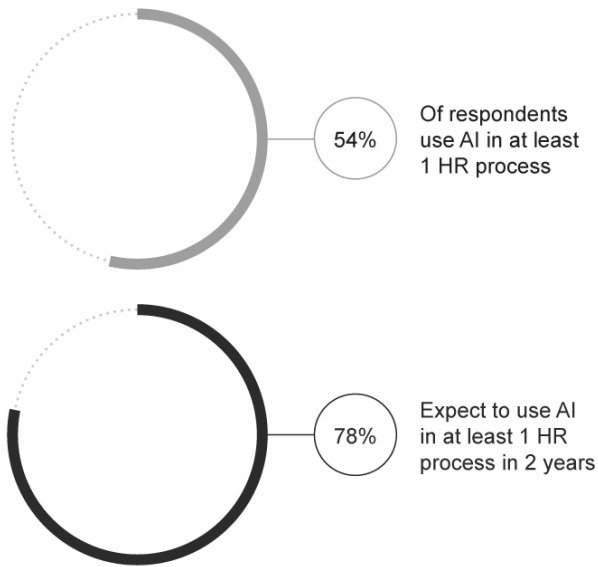
Source: Bain HR Decision Maker Survey, May 2018 (N=500)

HR TECH IS BETTING BIG ON ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

As Artificial Intelligence (AI) systems in HR get smarter and more focused on solving specific problems, industry experts expect to see dramatic improvements in productivity, performance, and employee wellbeing.

According to IBM's recent global survey of more than 6,000 executives, 66% of CEOs believe AI can drive significant value in HR[1].

HR Tech incumbents are investing heavily in AI and Machine Learning functions. Industry analysts found that nearly half of HR Tech venture capital funding events in the last few years went to AI-focused startups[2].

HR ACCELERATES TO KEEP UP WITH MEGA-TRENDS FOR THE FUTURE OF WORK

In the meantime, economic factors, social changes and technological advances are driving multiple changes in and outside the workplace, posing even greater challenges for the HR profession.

Businesses are struggling to get the skills they need to execute their strategy. Even companies that are using more automation, AI and machine learning foresee a growing gap in the skills and experience workers need to utilize these advanced tools. A recent Korn Ferry study found that by 2030, there will be a global human talent shortage of more than 85 million people, roughly equivalent to the population of Germany. Left unchecked, in 2030 that talent shortage could result in about USD 8.5 trillion in unrealized annual revenues[3].

Workplace turnover is increasing and an estimated 42 million, or one in four, employees in the U.S. will leave their jobs in 2018. In September 2018, the Bureau of Labor Statistics reported the average employee tenure was 4.2 years, down from 4.6 years in January 2014[4]. In the US alone, 2018 had an average of 6.9 million open positions at any given month with only 5.7 million hires every month[5].

Freelancers are predicted to become the U.S. workforce majority within a decade, with nearly 50% of millennial workers already freelancing. In fact, most jobs created in advanced economies don't offer permanent contracts but are self-employed or freelance work[6].

In this reality, finding, engaging and retaining the right talent and tracking the skills and expertise available across an organization's total talent supply chain of incumbent, contingent and alumni workforce, proves to be even more challenging without access to the latest big data and AI technologies.

[1] Extending expertise: How cognitive computing is transforming HR and the employee experience, IBM Smarter Workforce Institute, 2017

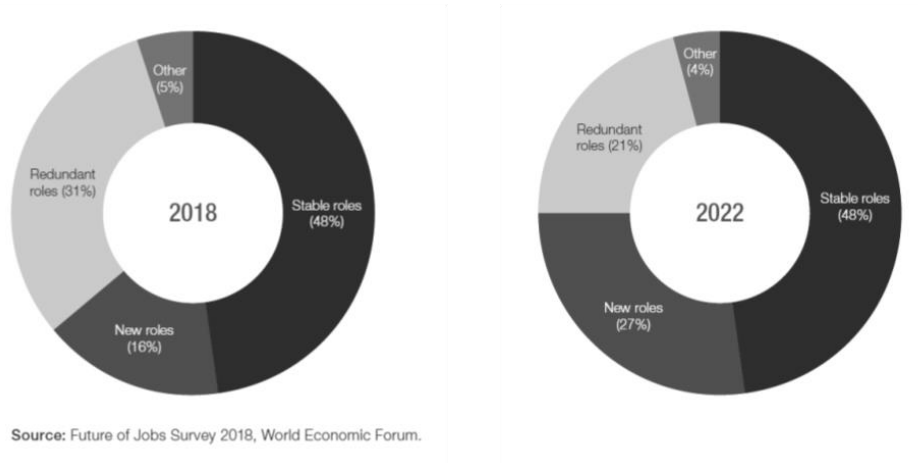[2] Lighthouse Research and Advisory, 2018

[3] The Global Talent Crunch, Korn Ferry, 2018

[4] Employee Tenure in 2018, U.S. Bureau of Labor Statistics, September 2018

[5] Job Openings and Labor Turnover Summary, U.S. Bureau of Labor Statistics, September 2018

[6] Freelancing in America, Upwork, October 2019

Share of stable, new and redundant roles,
2018 vs. 2022 (projected)

2018
- Other (5%)
- Redundant roles (31%)
- New roles (16%)
- Stable roles (48%)

2022
- Other (4%)
- Redundant roles (21%)
- New roles (27%)
- Stable roles (48%)

Source: Future of Jobs Survey 2018, World Economic Forum.

400M
Employees displaces by 2030 under a med-point automation scenario[1].

75M to 357M
Number of people who may need to switch occupational categories by 2030, under our midpoint to rapid automation adoption scenarios[1].

Fluid Labor Market
The shifting occupational mix will require greater mobility and better job matching.

The 4th Industrial Revolution trends are disrupting long-established business models: growing demand for customized products; shifts and skill mismatches in production value chains; digitization across every dimension of manufacturing; and a volatile socioeconomic climate marked by protectionism and populism.

The most relevant question to businesses, governments and individuals is not to what extent automation will affect current employment numbers, but how and under what conditions the global labor market can be supported in reaching a new equilibrium in the division of labor between human workers, robots and algorithms.

More and more, employers are seeking workers with new skills from further afield to retain a competitive edge for their enterprises and expand their workforce productivity. Some workers are experiencing rapidly expanding opportunities in a variety of new and emerging job roles, while others are experiencing a rapidly declining outlook in a range of job roles traditionally considered "safe bets" and gateways to a lifetime career.

The right to work, to free choice of employment, is a basic human right. The modern labor market is fragmented, ultra-specialized, filled with all sorts of alternative work arrangements or gig-employment. It becomes an extremely confusing and Darwinist environment for individuals, as the growing sense of job insecurity cuts to the core of identity and social stability.

The emerging contours of the new world of work are rapidly becoming a lived reality for millions of workers around the world. The inherent opportunities for economic prosperity, societal progress and individual flourishing in this new world of work are enormous yet depend crucially on the ability of all concerned stakeholders to instigate reforms in education and training systems, labor market policies, business approaches to developing skills, employment arrangements and existing social contracts.

For this to happen, every person must have access to personalized career and development opportunities at the time it matters, and the free flow and wealth of the individual's career data is key to personalized guidance and better opportunities.

Currently individuals share their resume with an employer when applying for a job. In the best case they update their LinkedIn profile with major career events, so we get a snapshot every now and then of their career profile.

If we would have a continuously updated and changing picture of the individual's career records, we would get the equivalent of a movie rather than the scarce pictures we have now. Then we could begin to harness the latest technology to see the context of where things are heading, and the changes over time. To mitigate the impact of the 4th industrial revolution data must be used in much more meaningful ways than today, guiding people as they develop and manage their careers.

[1] Jobs Lost, Jobs Gained, McKinsey Global Institute, Dec 2017

THE PROBLEM: THE LABOR MARKET DATA-SHARING ECOSYSTEM IS BROKEN

Organizations have made significant progress in their ability to manage data regarding employees' education, skills, training, workplace performance, engagement and motivational drivers. By applying analytics and AI to these types of data, companies hope to more accurately and effectively match employees to the right jobs, staff projects and drive personal development while personalizing people management practices, rewards and recognition.

This vision, however, faces behavioral and cultural obstacles along with a younger demographic who frequently change jobs or opt into portfolio careers (multiple part-time or freelance jobs at once rather than one full-time job). Therefore, the amount of data footprint, generated for the individual while working in each organization shrinks to an extent that it might be insufficient to algorithmically make valuable predictions and drive value through analytics and AI. We are approaching a reality where most of the relevant talent data is actually generated and held outside the organization and divided between various labor market data aggregators (e.g., job boards, LinkedIn, gig platforms), each maintaining and controlling pieces of the holistic employee picture.

To add to this complexity, GDPR introduces a standard for global legislation in data privacy and states: "personal data should be processed on the basis of the consent of the data subject concerned or some other legitimate basis." Obtaining consent is in itself cumbersome; and moreover, the purpose of data processing should be clear and also require consent. A further obstacle is that individuals have the right to have their personal data erased from any platform, including backups and archives. It is therefore not unreasonable that we will gradually face a reality where employees and alumni will request to limit their records processed by employers.

ACCESS, TRANSPARENCY, INTEROPERABILITY AND PORTABILITY

The past two decades have been marked by an emerging market for third-party job search and gig platforms. These entities cultivate some of the richest labor market information and individuals' career records. Yet, third parties can also apply frictions on the reuse of this aggregated data, largely on account of intellectual property issues, normalization and organization of that data. Proprietary restrictions can make accessing such real-time data either difficult or prohibitively expensive. This, in turn, hinders utility while the proprietary firms naturally desire to maximize profits from selling the data.

Restrictions on use of this data can stymie the development of new products, services or analysis while serving as a competitive moat for existing platforms and aggregators; it also poses a barrier to innovation in HR. This barrier is further compounded by the fact that third-party platforms have grown fairly concentrated, with a limited number of players that aggregate a substantial portion of the relevant data. To illustrate this, to date: Indeed.com has processed over 100 million searchable resumes; ZipRecruiter over 430 million job applications; LinkedIn 500 million active profiles. And, Upwork and Freelance.com together have 40 million self-employed professionals using their platform to manage their gig businesses.
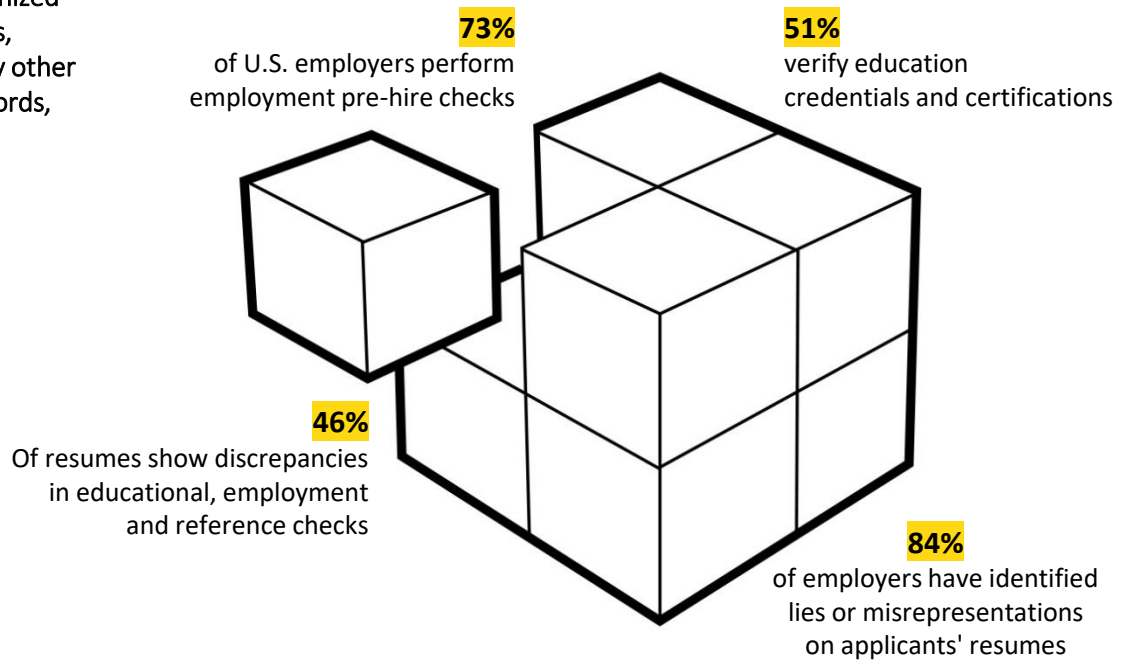
There is also an issue of interoperability and standardization of this data. A central element in the labor market is that workers and jobs vary greatly. This heterogeneity among skills, industries and credentials makes preserving a consistent level of quality naturally more difficult. Without a consistent format or structure, algorithmically making sense of the data becomes harder. This constrains the interoperability and ultimately leads to siloed data.

SELF-REPORTED DATA CANNOT BE TRUSTED

It has been widely recognized that individuals' resumes, LinkedIn profiles and any other self-reported career records, cannot be taken as a trustworthy source of information. According to HireRight's 2018 employment screening benchmark report, 84% of employers have identified lies or misrepresentations on applicants' resumes; up dramatically from 2012, when 66% reported finding fabrications[1]. This study found some comical fabrications, like a high school principal claiming two degrees from a university that had closed years before she supposedly graduated, or a government appointee who withdrew his nomination after allegations of resume padding — the nominee blamed the discrepancies on a tornado that hit his prior employer.

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[1] Employment Screening Benchmark Report, HireRight, 2018

It has been widely recognized that individuals' resumes, LinkedIn profiles and any other self-reported career records, cannot be taken as a trustworthy source of information.

73%
of U.S. employers perform employment pre-hire checks

51%
verify education credentials and certifications

46%
Of resumes show discrepancies in educational, employment and reference checks

84%
of employers have identified lies or misrepresentations on applicants' resumes

In a recent survey 78% of candidates admitted to lie on their resumes[1]. Apparently, this explains why 73% of U.S. employers perform employment pre-hire checks and 51% verify education credentials and certifications, and why the Employment Background Checks market is expected to grow to USD 5.46 billion by 2025 from USD 3.74 billion in 2016[2].

On top of this, regulations regarding candidate screening raise compliance concerns for HR professionals; for example, in the U.S. an employer is responsible and can be held accountable for verifying the background and references of any job applicant before hiring that applicant. A claim can be made by any injured party against an employer based on the theory that the employer should have known about the employee's background which, if known, indicates a dangerous or untrustworthy character. According to HireRight's report, the average cost to settle a negligent hiring lawsuit is roughly one million dollars[3].

DATA PRIVACY CONCERNS

When it comes to data privacy, we often refer to rules set by centralized platforms that determine who has permission to access data and who gets informed when it happens. Yet, the real threat to online privacy lies in the fact that we give our information to multiple players freely, with each storing this information in their centralized databases, which have become easy targets for hackers. The answer to this doesn't rely on giving users the ability to control how platforms use their information, but it requires a fundamentally new technological approach that handles information in a different way.

[1] Ethical Hiring Alignment survey, Checkster, 2020

[2] The Employment Screening Service Market to 2025, ResearchAndMarkets.com, February 2018

[3] Negligent Hiring – The Million Dollar Mistake, HireRight, 2009

There is a clear need in the labor market for an interoperable, transparent and fair data exchange architecture that restores trust. An opt-in and mutually beneficial data-sharing ecosystem that ensures user control of their data.

2.5 quintillion
bytes of personal
Data every day

84%
agree that the protection
of privacy is top priority[1]

40%
deleted at least one
social media account

60%
Do not trust social media
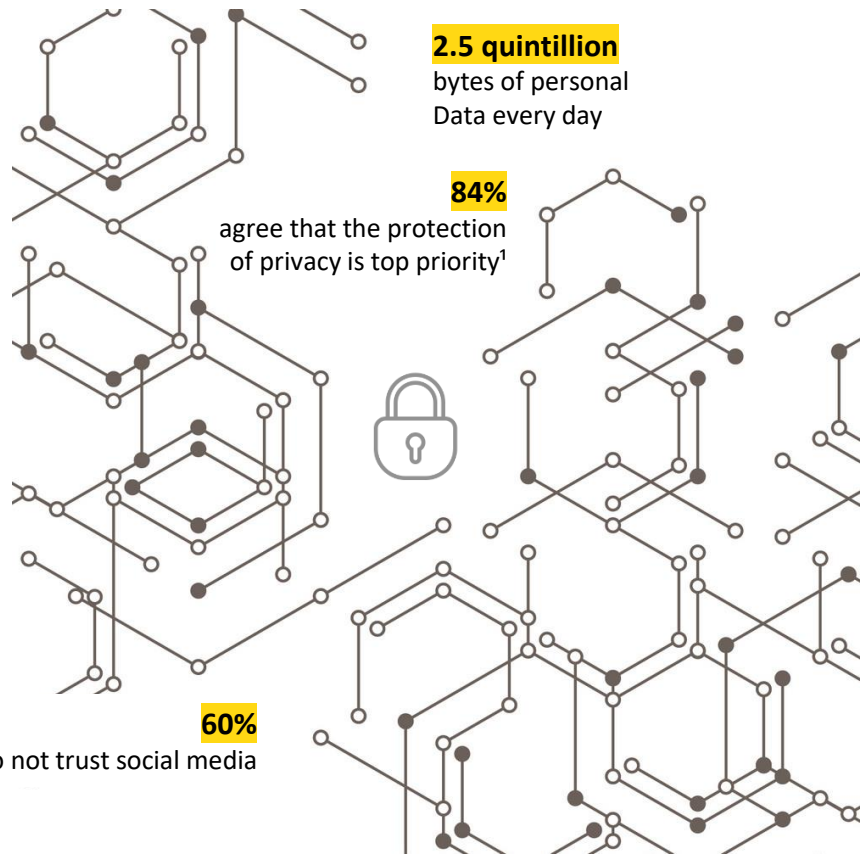
THE RISE OF SELF-SOVEREIGNTY

Recently, people's concerns about social media have metastasized with the revelations of privacy violations by Cambridge Analytica and evidence of Russia-produced fake news undermining the electoral process in the U.S., UK, Italy, and Germany. There's heightened worry as well of data-sharing between platforms and top device makers, without users' consent. A study surveying over 33,000 respondents in 28 countries shows the decline of users' trust in social media and other tech providers with regard to privacy measures and data collection: 84% agree that the protection of privacy and personal information is one of the most important responsibilities for social media platforms, while only 40% (less than half) indicate that they actually trust social media platforms to behave responsibly with user data. And, 40% responded that they have deleted at least one social media account in the past year because they didn't trust the platform to treat their personal information properly[1].

Personal data is becoming one of the most valuable things in society. Every day, internet users provide 2.5 quintillion bytes of data[2] to companies for free. These centralized platforms that determine who has permission to access data, use this totally free resource to make billions in profits, support business decisions, sell to marketing companies, and draw people onto their websites, while the users become "economically disenfranchised".

Given the above, it is clear that we need a new data-sharing architecture that ensures user control of their data. The idea of Self Sovereign personal data is not new. Now with the emergence of new technologies, all interested stakeholders are converging to make it happen.

[1] The 2018 Edelman Trust Barometer, Edelman, 2018

[2] How Much Data Do We Create Every Day?, Forbes, 2018

PERSONAL DATA IN THE WORKPLACE

A disconcerting result from a survey conducted by Accenture and released at the 2019 World Economic Forum in Davos, Switzerland[1] shows almost eight in every ten business leaders globally said using workforce data will help them grow their existing business, but more than two-thirds (70%) of those business leaders say they are "not very confident" that they are using new sources of workplace data in a "highly responsible" way.

Research showed that in response to ethical concerns, some businesses are leaving value on the table by holding back on collecting workforce data.

While employees have concerns, however, they are overwhelmingly in favor of the practice, if the data is collected responsibly and benefits them. Employees say that in return for their permission to collect data, employers will have to give them more control over how it is used. The most common benefits gained in return for data are improved productivity and performance; safety at work; and fairer pay, promotions and appraisals.

The research also found that people want to own their work-related data and take it with them when they leave. That doesn't mean employers need to give up their own rights, just that they must extend those rights to workers.

The research has identified the factors of workforce data practices that employees say most influence their level of trust in their employers. One of the key recommendations is to empower people with greater control of their own data: organizations must grant more control to individuals so they can manage and even own their data.

58%
of employees are unwilling to let employers collect data without their approval

70%
of business leaders globally say they are "not very confident" that they are using new sources of workplace data in a "highly responsible" way

73%
of people want to own their work-related data and take it with them when they leave

92%
of employees are open to the collection of data on them and their work in exchange for an improvement in their productivity, their wellbeing or other benefits

56%
of business leaders are open to co-own data with employees

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[1] Putting Trust to Work, Accenture, 2019

THE INTERNET OF CAREERS®

UNIFIED, IMMUTABLE AND verifiable CAREER RECORDS

Velocity will provide a frictionless experience to exchange trusted employment, professional achievements, assessment reports and educational certification data, using the power of Blockchain; Instantly, reliably and cost-effectively. The Velocity Network™ is a blockchain-based open-source verifiable credential exchange utility layer with its basic elements and token mechanics that provides standardized communication protocols, governance, compliance and payment rails, that enable trusted, private and secured exchange of career credentials between individuals and organizations.

This utility layer enables HR and Ed Tech vendors, employment marketplaces and freelancer platforms, staffing and recruiting providers, background and assessment processors to offer their constituents the ability to issue, share and verify career credentials, and develop new added-value use cases and innovative applications.

Individuals will be able to turn career achievements into digital credentials. verifiable, secured and truly global. Own them, use them to access better opportunities.

At the same time, employers, education institutions and other interested parties will be able rely on trusted, immutable, and verifiable applicant, candidate, employee and student data, seamlessly and cost effectively eliminating hiring risks, boosting productivity, improving employee and student experience and achieving regulatory compliance.

UPLIFT TO PRODUCTIVITY

Velocity will have a major positive impact for both employees and employers, springing from the ability for people to maintain and control access to comprehensive, trustworthy records of their education, skills, training and other career related data.

By providing potential employers, recruiters, education vendors and service providers with access to their data, individuals will be able to turn their skills, training and experience into genuine value in the labor market, and access better career and development opportunities. By the same token, by applying analytics and AI to the data, organizations will be able to match individuals to roles much more effectively and accurately, recommend learning, education and development activities, and design bespoke talent management and retention activities, which in turn will provide the much- needed uplift to productivity, which has been below par since 2011 despite huge technological advancements[1].

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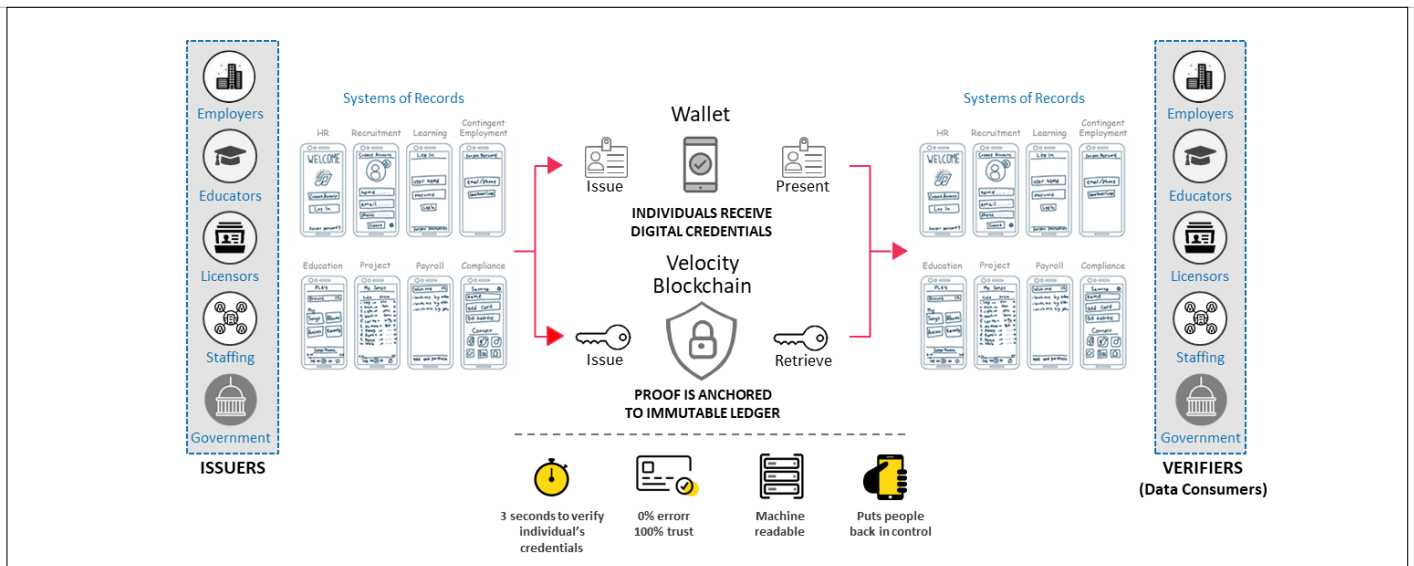
[1] Below trend: the U.S. productivity slowdown, US Bureau of Labor Statistics, 2017
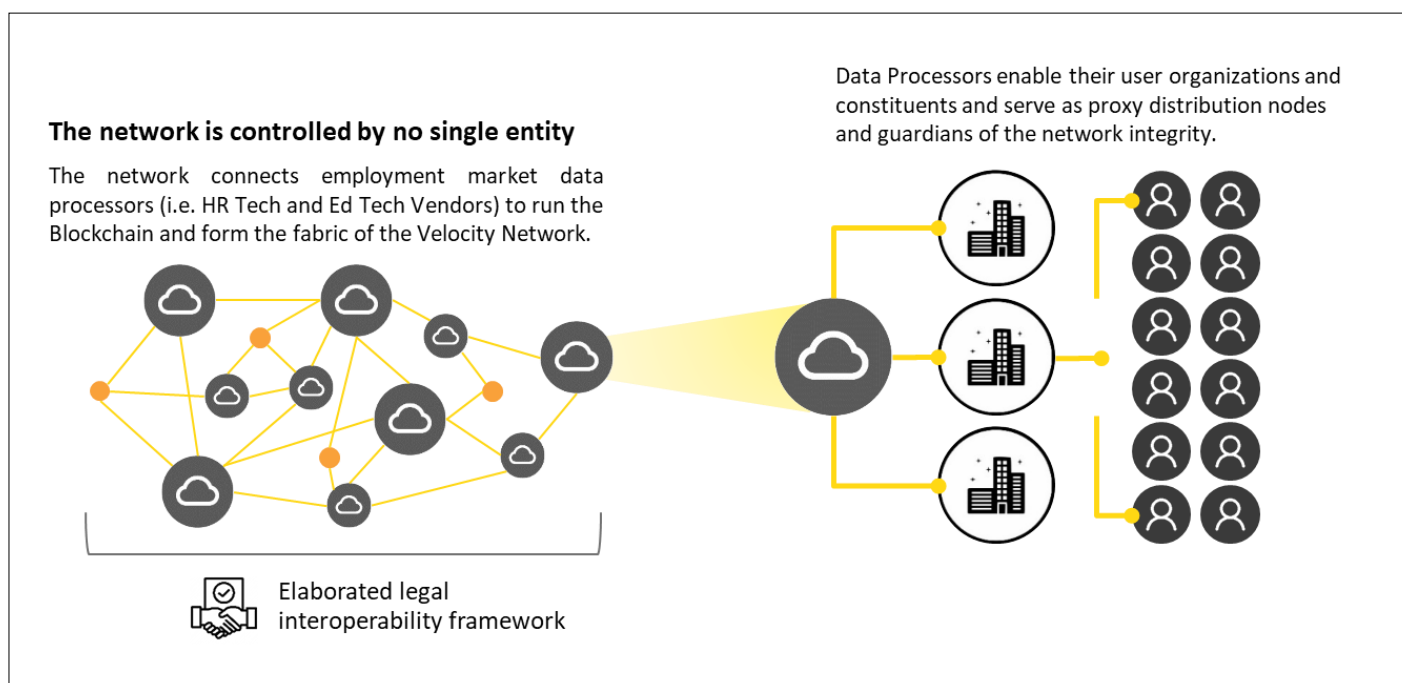
THE VELOCITY NETWORK™

CONSENSUS NETWORK

Velocity is implemented as a public service on top of a permissioned blockchain network running the distributed ledger that is shared, replicated and synchronized among the members of a decentralized network (nodes). A public utility enabling self-sovereign career identity on the Internet, allowing Individuals to collect, hold, and choose which verifiable career credentials - jobs, gigs, education, skills, performance, etc. - they share with interested parties. Every record in the network has a timestamp and unique cryptographic signature, thus making the ledger an auditable, immutable history of a user's career. The nodes communicate with each other in order to gain consensus on the contents of the ledger and do not require a central authority to coordinate and validate transactions. Consensus algorithms ensure that the shared ledgers are exact copies and lower the risk of fraudulent transactions. The decentralized peer-to-peer network prevents any single participant or group of participants from controlling the underlying infrastructure or undermining the entire system. Participants in the network are all equal, adhering to the same protocols. The network belongs to no one and is run by its members. For these players, the driver to join the network is to provide their users the enhanced value proposition that comes with the interoperability of validated career records.

CREDENTIAL ISSUERS

The Credential Issuers, such as employers, academic institutions, education providers, trade associations, government agencies and others that can contribute verifiable career records, participate via the provisioning and automated processes that will be offered by their data processors or specialized software vendors that will emerge to capture this massive opportunity.

GOVERNANCE: THE VELOCITY NETWORK FOUNDTION

The Velocity Network™ is governed by the Velocity Network Foundation®, a cooperative, nonprofit organization, established to: govern the use of the Velocity Network™ by all involved parties; continuously build the rulebook, a common framework that ensures operational consistency and legal clarity for every transaction; promote global adoption and support among stakeholders and constituents; guide the development of the decentralized protocols; and support research and development of applications and associated services, fostering a community of open-source developers.

The network is controlled by no single entity

The network connects employment market data processors (i.e. HR Tech and Ed Tech Vendors) to run the Blockchain and form the fabric of the Velocity Network.

Data Processors enable their user organizations and constituents and serve as proxy distribution nodes and guardians of the network integrity.

Elaborated legal interoperability framework

UNIFIED, IMMUTABLE AND INVULNERABLE verifiable SINGLE SOURCE OF TRUTH

Consensus ensures that the shared ledgers are exact copies and lowers the risk of fraudulent transactions because tampering would have to occur across many points at the same time. **Cryptographic hashes** ensure that any alteration to transaction input — even the most minuscule change — results in a different hash value being computed, which indicates potentially compromised transaction input. **Digital signatures** ensure that transactions originated from senders (signed with private keys) and not imposters.

The **decentralized** peer-to-peer network prevents any single participant or group of participants from controlling the underlying infrastructure or undermining the entire system. Participants in the network are all equal, adhering to the same protocols. They can be individuals, state actors, organizations or a combination of all these types of participants. At its core, the system records the chronological order of transactions with all nodes agreeing to the validity of transactions using the chosen consensus model. The result is transactions that cannot be altered or reversed unless the change is agreed to by all members in the network in a subsequent transaction.

PUBLIC UTILITY - PERMISSIONED NETWORK

The Velocity Network™ provides a public utility for individuals that allows them to collect, hold, and choose which verifiable career credentials - jobs, gigs, education, skills, performance, etc. - they share with interested parties.

On the other hand, organizations that wish to engage as Credential Issuers, Inspectors, Data Processors or Application Developers, must be permissioned to participate, and the Network is enabled by a multiple server nodes located around the world, hosted and administered by a diverse, yet restricted, group of trusted organizations, members of the Velocity Network Foundation®. Each node contains a copy of the ledger, a record of publicly accessed information needed to verify the validity of credentials issued within the network.

The question to be asked is this: why put restrictions on the identity of the participating players? this is done to assure trust, security and compliance to data privacy regulations. The restrictions on participant entry allow only the right kind of participant in the network and leave out malicious actors, **allowing us to provide assurances of security, stability, compliance and speed –** things which a public Blockchains cannot fully offer at this point, at least when it comes to perceptions.

BLOCKCHAIN ARCHITECTURE

DATA ON BLOCKCHAIN

Velocity Network™ implements a self-sovereign identity solution in which the individual is in complete control of their records. Personal data and credentials are stored on the individual's device(s) and their elected cloud storage services. In both cases the individual has sole ownership and control over their data.

The Blockchain will not be used to store any personal data but only the proofs required for supporting verifiable credentials. It will also be used for handling credentials that end up being revoked. Additionally, issuers and inspectors' profiles will be stored on-chain, as well as all Velocity Token transactions. Finally, the smart contracts that govern the network will be on-chain.

Blockchain data is composed of block headers that form the "chain" of data that is used to cryptographically verify blockchain state; block bodies that contain the list of ordered transactions included in each block; and transaction receipts that contain metadata related to transaction execution including transaction logs.

There is a shared state that is maintained by every node in the ledger. The nodes (Data Processors) take transactions and share them throughout the network. Then all nodes run the consensus algorithm to reach agreement on a consensus what each block contains and its position in the history of blocks.

CONSENSUS ALGORITHM

Velocity will initially implement a Byzantine Fault Tolerant (BFT) protocol - IBFT 2.0 . BFT consensus protocols are used when participants are known to each other and there is a level of trust between them but at the same time is able to tolerate a small number of malicious or infected nodes - which is the case with the Velocity Network™ permissioned consortium network.

In IBFT 2.0 networks, transactions and blocks are validated by approved accounts, known as validators. Validators take turns creating the next block. IBFT 2.0 has immediate finality. When using IBFT 2.0, there are no forks, and all valid blocks are included in the main chain.

In general, BFT consensus algorithms enable distributed consensus in an innovative, efficient way while still being fair and secure. It allows Velocity constituents to achieve fast, low-latency transactions with guaranteed finality in seconds or less.

Velocity Network™ will also embed a staking mechanism to incentivize participants to adhere to network policies. The objective is to ensure that participants will be issuing real credentials to real people. In case of fraudulent behavior, the node will lose all its tokens.

PRIVACY

Velocity Network™ keeps transactions private between the involved parties. Other parties cannot access the transaction content, identify the sending party, or list of participating parties.

INTEROPERABILITY

We are monitoring closely the work done by W3C and DIF on standards and interoperability for distributed identity networks, and we adhere to the developed standards for verifiable Credentials and DIDs.

AN OPEN SOURCE PROJECT

The crypto network and decentralized applications named Velocity Network™ are developed under an open-source framework and will be licensed to be freely used, modified, and shared by the Foundation and its members.
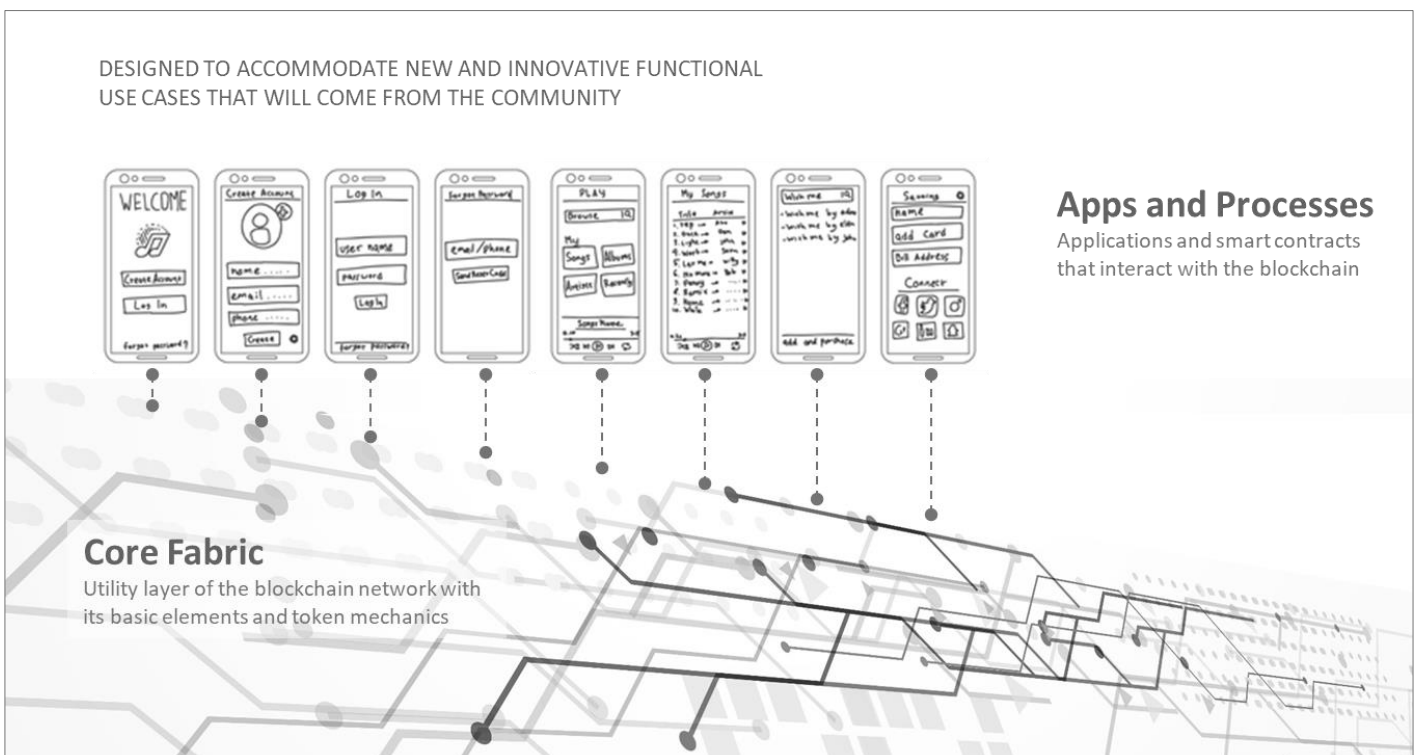
This will serve two main goals:

Drive adoption and innovation. Releasing the project as open source allows others to adapt and build on top of it. This reinforces the ecosystem's growth in addition to benefitting from diverse viewpoints to the project. We plan to develop a thriving ecosystem of contributors providing upgraded functionality and encourage the development of additional Apps that utilize the protocol. A broader community will be able to extend the user base through both free and paid Apps, which benefit all – the network operators, the consensus network members, the users and all other stakeholders in their different roles.

This is a particularly effective strategy when the core project has a clear and robust extensibility mechanism, as does the Velocity Protocol. The architecture of Velocity that separates the utility layer of the Blockchain network with its basic elements and token mechanics from the different Apps that interact with the network is designed to accommodate new and innovative functional use cases that will come from the community. In fact, contrary to the innate tension we sometimes see between complementing solutions in the Tech market, being a utility layer, we would welcome and encourage new functional use cases that utilize the network and drive stronger network effects.

Enhance trust. A recent research surveying over 33,000 respondents in 28 countries shows a world of distrust in businesses[1]. The decision to have human capital data processors make up the Consensus Network and power the Velocity protocol, although contributing to the security of the network, is prone to be criticized as we continue to let corporations hold personal data. An open -ource approach will let interested parties audit the code to assure privacy is kept and the protocol can be trusted.

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[1] The 2018 Edelman Trust Barometer, Edelman, 2018

DESIGNED TO ACCOMMODATE NEW AND INNOVATIVE FUNCTIONAL USE CASES THAT WILL COME FROM THE COMMUNITY

Apps and Processes
Applications and smart contracts that interact with the blockchain

Core Fabric
Utility layer of the blockchain network with its basic elements and token mechanics
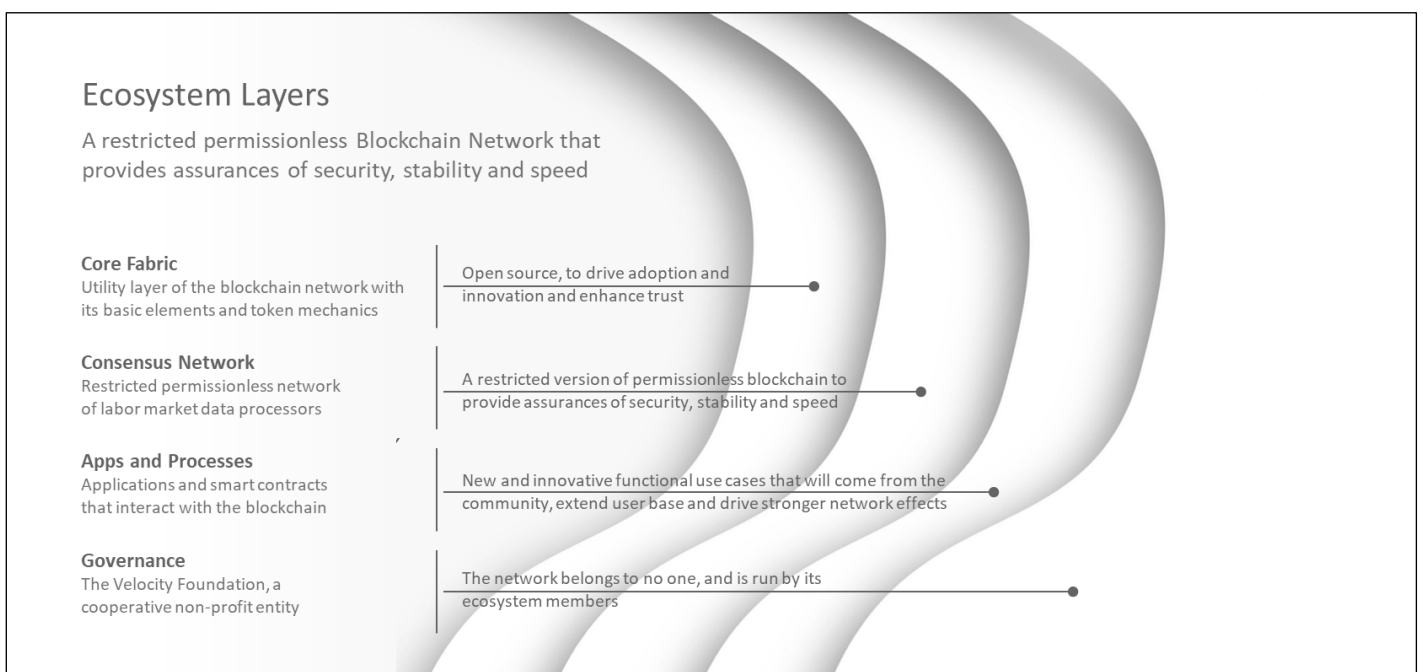
GOVERNANCE: THE VELOCITY NETWORK FOUNDATION®

The Velocity Network Foundation® is a Delaware non-stock corporation, a cooperative, nonprofit organization, established to develop, support, protect, and promote the Internet of Career®. Its goals are to: govern the use of the Velocity Network™ by all involved parties; continuously build the rulebook, a common framework that ensures operational consistency and legal clarity for every transaction; promote global adoption and support among stakeholders and constituents; guide the development of the decentralized protocols; and support research and development of applications and associated services, fostering a community of open-source developers.
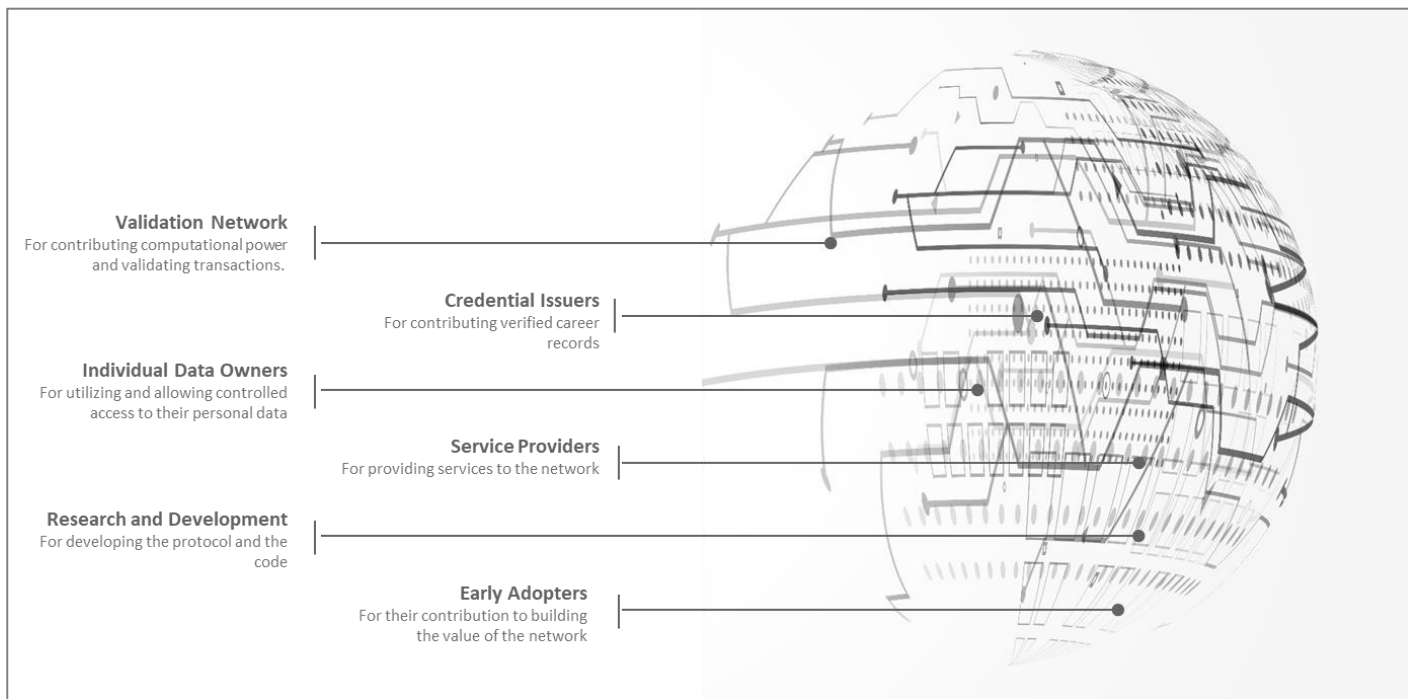
The Foundation is comprised of diverse labor market stakeholders from across HR Tech, Education Tech, gig and freelance platforms, contingency workforce, job search platforms, background providers, assessment processor, nonprofit and multilateral organizations, employers and educational institutions.

The business and affairs of the Foundation shall be managed by or under the direction of a Board of Directors. Elections to the board by the general membership are held annually. Elected member organizations appoint a single member of the Board of Directors.

An initial group of 16 innovative trailblazers, industry global leaders from across HR Tech, Education Tech, gig and contingent workforce platforms, employment marketplaces, background and credential services, assessment and people insights providers, recruitment, development and advisory firms came together to define, deploy, and champion the Velocity Network™: a globally accessible, trustworthy Internet of Careers®. Founding Members are presented in alphabetical order: Aon's Assessment Solutions, Cisive, Cornerstone, HireRight, Korn Ferry, National Student Clearinghouse, Oracle Randstad, SAP, SumTotal Systems, SHL, Ultimate Software, Unit4, Upwork, Velocity Career Labs and ZipRecruiter.

Ecosystem Layers

A restricted permissionless Blockchain Network that provides assurances of security, stability and speed

Core Fabric
Utility layer of the blockchain network with its basic elements and token mechanics

Open source, to drive adoption and innovation and enhance trust

Consensus Network
Restricted permissionless network of labor market data processors

A restricted version of permissionless blockchain to provide assurances of security, stability and speed

Apps and Processes
Applications and smart contracts that interact with the blockchain

New and innovative functional use cases that will come from the community, extend user base and drive stronger network effects

Governance
The Velocity Foundation, a cooperative non-profit entity

The network belongs to no one, and is run by its ecosystem members

TOKEN MECHANICS TO DRIVE MOTIVATION OF ALL STAKEHOLDERS

Validation Network
For contributing computational power and validating transactions.

Credential Issuers
For contributing verified career records

Individual Data Owners
For utilizing and allowing controlled access to their personal data

Service Providers
For providing services to the network

Research and Development
For developing the protocol and the code

Early Adopters
For their contribution to building the value of the network

POWERING THE ECOSYSTEM

Utility tokens can be used to define the new rules of the market, and with mechanism design – a field in economics and game theory that takes an engineering approach to designing economic mechanisms or incentives – we can design certain rules to create the desired behavior of different stakeholders toward desired objectives.

The Velocity Network™ comes embedded with an elaborated incentives system and an economic model that fuel the ecosystem and drive global adoption.

Velocity Network Foundation® will introduce a utility token that will act as a proprietary payment currency within the Velocity ecosystem. The key objectives we want to achieve with the Velocity token mechanics are:

• Reward Node Operators, for the computational power they contribute and for validating transactions while maintaining complete integrity.

• Incentivize Credential Issuers to provide assertations

• Reward early adopters for their contribution to building the value of the network

TOKEN MECHANICS

Let us review some of the Velocity token characteristics that will impact its use and value to the ecosystem growth:

Designated: the sole use is for obtaining the rights to participate in the ecosystem;

Scarce: limited in number; 100B tokens will be minted at network genesis, capping the number of tokens in circulation;

Fungible: all tokens carry the same value and are identical;

Transferable: can be transferred between parties;

Not Circular: will not be traded outside the network, hence not exchangeable back and forth as with currencies.

The next paragraphs will demonstrate how these mechanics contribute to a sustainable, thriving network.

SPENDERS AND EARNERS

The Velocity token is the essential element which powers the Velocity Network™ ecosystem. As the network grows, we expect to see many additional use cases with new players, conducting token-based transactions. For the basic use case of processing, validating and accessing records, the primary entities involved are as follows:

Credential Issuers: entities that contribute verifiable career records, such as employers, educational institutions, certification bodies and employee assessment vendors. These authorities earn tokens for each verifiable record they contribute. In many cases, these entities are also interested in accessing career data and will use these earned tokens as currency when they are requested to pay access fees.

Consensus Network Members: the connected labor market data processors, these entities run a validation node and participate in the consensus protocol that verifies records, earning tokens in exchange for their involved in verifying.

Inspectors: employers, businesses, educational institutions that were granted permission by the individual to review their data, pay the network access fee. Most of the Inspectors serve also as **Credential Issuers** and earn tokens for verifying records. Access fees can be paid in earned tokens or be by purchasing new tokens on the internal exchange.

Network Operator: the entity that defines, develops, manages and monitors the network. In our case, this is Velocity Career Labs, Inc., a for-profit entity that receives tokens for services performed on the network.

Network Regulator: the overall authority that audits and governs the use of the network and manages the different certifications required for users to access the Blockchain. Within the Velocity Network™, this Network Regulator will serve as a proxy for the Foundation, operating on behalf of the Foundation, receiving access fees paid for network transactions. Of these accumulated tokens, it is the Network Regulator that is responsible for rewarding Consensus Network Members and Credential Issuers for their contribution.

TOKEN PRICE

The Velocity token supply is limited to 100 Billion coins. This means that the more Velocity Network™ is utilized, the more Velocity tokens are sourced from the supply. The limited supply of tokens will result in the token price materially appreciating, creating a wave effect of demand that will slow but steadily increase the fiat money value of the digital currency.

An important factor is that there are no players external to the ecosystem that can speculate and affect the token price. You can buy tokens only if you are spending them immediately to access verifiable career records. Token price is therefore set only by balancing demand and supply and in accordance with the value of the transaction to the interested parties.

MONETARY AND FISCAL POLICY HIGHLIGHTS

Monetary policy establishes the supply and availability of tokens. At network genesis 40B tokens will be transferred to the Foundation to start rewarding the players, while the remaining 60B will be kept by the Network Operator, acting as a Market Maker.

We expect the Velocity token to be an inflationary token. Transaction fees are a fixed number of tokens. As increased employers and education institutions join the ecosystem, the value of each transaction increases as there are more entries to the ledger. In parallel, the limited supply of tokens will result in the token price in fiat money materially appreciating.

A limited-supply token becomes a de-facto store of value, but it also leads to speculation and volatility. To maintain ecosystem efficiencies, we need token price to reflect transaction value to the market and avoid speculations.

Two mechanisms are put in place to prevent speculation: First, an important factor is that there are no players external to the ecosystem that can speculate and affect the token price. Token price is therefore set only by balancing demand and supply and in accordance with the value of data to the spenders. Second, tokens can either be earned through participating in the ecosystem or be purchased with fiat money for immediate use as an access fee. You can store earned tokens and maybe enjoy appreciation in value but not buy tokens as an investment and speculation instrument.

LIQUIDITY

Since the Velocity token is first and foremost a utility token, instant liquidity is mandatory to sustain network efficiencies. In any given time, if an Inspector is asking to buy tokens in order to complete an access fee transaction, there must be a corresponding supply on these tokens in the market. To serve this purpose the Network Operator must serve also as a market maker and take the bid or the ask on exchanges. This improves liquidity. The market maker will also sell tokens into a spiking market to avoid counterproductive drastic changes in token price. We can also expect most of this will be done algorithmically, through smart contracts on the Blockchain.

REWARDING EARLY ADOPTERS

Velocity shows clear Network Effects that need to kick in for the network to provide value to its constituents. When the network is in its infancy stage, there is limited value-add to the participants. As more Credential Issuers participate, each user's Velocity account becomes completer and more valuable to any Inspector. On the other side, as more employers, organizations and service providers participate and process validated career records, individuals will see more value in maintaining Velocity accounts so they could turn their skills, training and experience into better and more accurate career, learning and development opportunities.

The following mechanisms will be put in place to reward participants who join the network at early stages: First, participation tokens per transaction will decrease 10% for each of the first 6 years. This means that Consensus Network Members and Credential Issuers will earn 5 times the number of tokens per transaction in the first year compared to the 7th year.

REGULATORY COMPLIANCE

COMPLIANCE WITH DATA PRIVACY REGULATIONS

Compliance of Blockchain implementations with privacy regulations including GDPR and the California Consumer Privacy Act, set to take effect in 2020, is not a trivial discussion. These regulations emerged in a world of traditional, centralized data models and certainly did not anticipate an innovation like distributed ledgers. The GDPR assumes a tri-party data model, while Blockchain sets out a fundamentally different data model that is flat, decentralized, and peer-to-peer.

Nevertheless, the simple fact is that Blockchain is data privacy protection's friend, not its enemy. It is useful to remember that data protection regulations operate in a wider context. GDPR, for example, promotes two objectives: data protection and free movement of data. This second objective is concerned with stimulating economic growth by creating the trust that will allow the digital economy to develop. Blockchain shares similar goals to GDPR. Privacy regulators will collaborate with the industry in defining standards and finding solutions that will allow for the adoption of blockchain and other Distributed Ledger Technologies.

As an example, the European Commission has paid close attention to blockchain and believes it could bring tremendous value to businesses, governments and individuals based in the European Union. To further align privacy regulations with the latest Distributed Ledger Technologies developments, the Commission has launched the EU Blockchain Observatory and Forum which focuses on promoting blockchain throughout Europe. The Forum recently ran a series of insightful workshops on the impact of GDPR on Distributed Ledger Technologies.

We would claim that Blockchain and Self-Sovereign Identity are the ultimate GDPR compliance tool.

Consent: Article 6 of the GDPR sets out six lawful bases for the processing of personal data. It seems that the "highest" basis is Data Subject consent for its data to be processed. Valid consent must be: freely given; obtained through an affirmative act of the Data Subject; revocable; and provable. In the Velocity Network™ all data transactions (sharing and use of data) is directly authorized by the Identity owner through an affirmative act by accepting a Data Access Request from an interested party. Both the Identity Owner and the receiving party track all such acceptances. the Identity Owner can easily later revoke access to the shared Credential and also has full data portability.

Purpose limitation: Personal data collected for one purpose should not be used or repurposed for a new, incompatible purpose. In Velocity Network™, a data access Request shows the purpose for which data is being requested. A receiving party can delete this data once it has executed whatever transaction it was needed for, and then can simply request it again if and when it's needed.

Data minimization: limiting the personal data that is collected, processed, and stored. In Velocity Network™, the Identity Owner decides precisely which, if any, Career Credentials it wants to disclose.

Accuracy: data controllers are responsible for taking reasonable steps to ensure that the personal data they hold, and process is kept accurate and up to date. In Velocity, Credential Issuers update Credential status in near-real time, to keep it always up to date and accurate.

Now let's review the rights of individuals under the GDPR and examine how each one is supported by Velocity Network™:

Right to Subject Access Request (Article 15): a user can ask for a report anywhere their data is held. In Velocity Network™, users own their data and have complete access to it.

Right to Rectification (Article 16): a user can ask to update data that is inaccurate. This is a more challenging issue due to the immutable nature of the Blockchain. Based on our experience working closely with a diverse set of Credential Issuers such as employers and education vendors, we anticipate cases where data on individuals would have inaccuracies, resulting in inaccuracies in credentials offered. The Velocity Network™ protocol will allow corrections to career records. The process would require filing a claim with the Velocity Network™ ombudsman office that will execute an investigation aiming to rectify inaccurate data.

Right to Erasure (Article17): Also known as the "right to be forgotten," this provision refers to when a user can request to delete all data held on them. GDPR does not precisely define what the term "erasure of data" means; does it mean the complete destruction of data or would encryption of the data rendering it incomprehensible be sufficient? To begin with, as the users themselves privately store the private key and the credentials themselves, and no one can access their data without it, there is the question of why users would ask to erase it. Also, theoretically, it would be possible for a user to destroy their private key and erase the credentials thereby leaving only proofs on chain that cannot be linked back to the Individual.

Right to Restriction of Processing (Article 18): a user can request that their data will not be "processed" because it is incorrect, there is no reason for it to be held, or they have raised a request to object. The fundamental architecture of the Velocity Network™ assures the user self-sovereignty of their data and how it is processed, hence complying with the regulations in that sense.

Right to Receive Personal Data (Article 20): a user can request that their data be provided to them in a "structured, commonly used and machine-readable format" so that they can pass it to another company. A key objective furthered by Velocity Network™ is interoperability, and data transfer is built into the protocol.

Right to Object (Article 21): a user can object to your holding their data because you have no reason to and hence it should be deleted. Same as with previous clauses, the fundamental architecture of Velocity Network™ assures the user self-sovereignty of their data and how it is processed. To delete the data, it would be possible for a user to destroy their private key and credentials, thereby leaving no trace of their personal data.

Data Transfers out of the EEA: GDPR restricts the transfer of EU citizens' personal data to countries outside the EEA or international organizations. These restrictions apply to all transfers, no matter the size of transfer or how often you carry them out. A central theme of Blockchain is the distributed ledger, where every node in the Consensus Network can access, store and add to the ledger, and since many of these nodes would be located outside the EEA, we can see the challenge in compliance. First and foremost the Velocity Network Blockchain does not contain any personal data. What is stored on chains are parts of the proof needed to verify the credential authenticity. Second, GDPR does permit personal data transfers to a third country or international organization, subject to compliance with set conditions, and only to countries whose legal regime is deemed by the European Commission to provide for an adequate level of personal data protection. In the absence of an adequacy decision, however, transfers are also allowed outside non-EU states under certain circumstances, such as by use of standard contractual clauses or binding corporate rules (BCRs). By using an access-restricted, permissioned Blockchain network, the Velocity Network Foundation® can assure that network access is granted in compliance with privacy regulations.

COMPLIANCE WITH FINANCIAL REGULATIONS

At the moment, cryptocurrencies are defined by financial regulators as commodities, a form of currency, securities or other financial assets, and are subject to regulation by monetary or commodity authorities.

If classified as securities, tokens are subject to certain disclosures and registration requirements.

Utility tokens represent future access to a product or service. The defining characteristic of utility tokens is that they are not designed as investments; if properly structured, this feature supposedly exempts utility tokens from laws governing securities, but regulators in most jurisdictions have not given official guidance on utility tokens yet, so the industry does not have certainty in which exact situations crypto tokens can be clearly classified as utility tokens.

A big milestone for the industry was June 2018, when The U.S. Securities and Exchange Commission (SEC) published a statement on Ethereum where it was described as a utility rather than a security — the first time that an American regulator has publicly accepted the existence of utility tokens. Another big announcement came early April 2019, when the SEC has published fresh regulatory guidance for token issuers, nearly half a year in the making. The guidance focuses on tokens and outlines how and when these cryptocurrencies may fall under a securities classification. The framework itself outlines several factors that token issuers must consider before evaluating whether their offerings qualify as securities. While this guidance has been a long time coming, and provides some legal clarity for token issuers, it is not a legally binding document, and should be seen more as a guideline.

There is no doubt that the issue of compliance with financial regulations requires further analysis. We continue to work with leading legal advisors in this filed to achieve more certainty and maintain full compliance to financial regulations.

In this light it's important to mention few defining characteristics of the Velocity token:

It will not be offered in an ICO under the promise to build a business or operation but rather be used as an internal currency to pay for services within a fully operational network.

Tokens can be purchased in exchange for Fiat only to be immediately spent on access to network services.

Token price is set only by the market in accordance with the value of the services that can be acquired in exchange for the token.

There are no participants external to the ecosystem that can trade speculatively and affect the token price. Tokens can be earned by contributing to the network or purchased to access services. The token is available in increments that correlate with a consumptive intent versus an investment or speculative purpose, and the network services can only be acquired using the token.

The token is not transferable outside the network and the demand comes only from inspectors as they wish to pay for network services. Transfers of the Tokens may only be made by and among users of the platform.

GETTING THE "NETWORK EFFECT" FLYWHEEL ROTATED

A key question to the success of the Velocity Network™ is how do we start rotating the adoption flywheel? This is a clear case of a network effect that needs to kick in for the network to provide value to its constituents.

MULTI-SIDED NETWORK EFFECT

The main characteristic of a multi-sided network is that there are two different classes of users: supply-side and demand-side users. They each come to the network for different reasons, and they produce complementary value for the other side.

Velocity shows multi-sided network effects as increased usage of the utility layer by all parties leads to a direct increase in its value to its users. As more Credential Issuers such as employers, academic institutions, certification bodies participate, each user's Velocity account will be increasingly complete and valuable to any Inspector. On the other side, as more Inspectors (e.g., employers, academic institutions, certification bodies) require applicants to provide access to their validated career records as part of any application process, users will be prone to utilize their Velocity accounts. In a Multi-sided network, the features and benefits of the platform itself can play a greater role in the utility of a platform relative to the network. Therefore working with members of the ecosystem as we develop the rulebook and grow an effective ecosystem is critical to the success of this endeavor.

PROXY DISTRIBUTION

How a platform is sold can also matter a great deal to how well adopted it becomes by its users and constituents. Velocity Network™ will leverage what we call Proxy Distribution. For the career data processors that make up the Consensus Network and power the protocol, the main driver to join the Foundation is to provide their constituents the enhanced value proposition that comes with the interoperability of validated career records. It is in their interest to drive awareness and adoption within their user community, thus promoting the network to tens of thousands of employers, organizations and educational institutions as well as hundreds of millions of students, employees and self-employed professionals.

BANDWAGON EFFECT

Bandwagoning happens when social pressure to join a network causes people to feel they don't want to be left out. We intend to create a bandwagon effect by inviting the larger, high profile Silicon Valley employers to be founding members of the Foundation. As organizations that employ the gold standard in their people management processes, the inherent advantages of the Velocity to individual users and employers are expected to drive membership in this consortium, with the founding members effectively helping write its rulebook. The advantage of having this type of employer as members of the Foundation is, of course, huge, and as members of this initiative, these organizations will additionally advocate its concepts and enable it for their employees, arguably the most sought-after talent segment in the world. As employees of these marquis organizations begin using Velocity to manage their career records, the bandwagon effect will kick in.

There is additional promotional value by these marquee name employers adding the option to apply to jobs in their organization via the Velocity Network™, signaling the labor market on the direction the industry is going toward.

AN INDUSTRY PLAY: EMBRACING THE CHANGE

"The times they are a-changin'," sang the Nobel Laureate Bob Dylan. "You better start swimmin' or you'll sink like a stone." In the next two to three years, businesses will need to adapt in order to meet increasing demand for a heightened degree of security and greater transparency when it comes to personal information, how it's handled and how it's stored.

We already see GDPR and other data privacy legislation on the horizon mandating that individuals can request to limit their records processed by 3rd parties and have the right to have their personal data erased from any platform, including backups and archives. In many cases, even anonymized data processing is subject to users' consent.

These trends will gradually create a reality where the data footprint of candidates, employees and alumni will shrink to an extent that it might be insufficient to algorithmically make valuable predictions and drive value through analytics and AI. This will become a structural weakness jeopardizing the labor market incumbents' promise to their constituents, inviting a new crop of startups across the globe to try to conquer and solve this problem and steal the market.

Disruption across the labor market ecosystem is inevitable, but rather than bracing for the change, Velocity offers the industry incumbents an opportunity to be confident to embrace it.

ABANDON THE "DATA HOARDING" MINDSET

The interest to include privacy protection as a key component of business models has been revived by recent events: data leaks; hacks; surveillance scandals and, especially, privacy violations by social media; data-sharing between platforms and top device makers without users' consent. The privacy interests of consumers are now leading in the design for all sorts of products and services, while businesses are driven to explore how to reconcile their ethical and legal obligations toward their customers' privacy with the objectives of their information systems design.

Privacy regulations have practically eliminated businesses' proprietary rights to the personal information they have collected by granting individuals the right to receive a copy of this information, limit its processing and even insist on its erasure. Businesses in the labor market ecosystem that base their strategy on a competitive advantage gained through their data sets of personal employee data will be bound to struggle, as the heightened concerns with data privacy continue.

COMPETE THROUGH INNOVATIVE APPLICATIONS AND FUNCTIONAL USE CASES

In this new reality, competitive advantage can only be achieved through added-value, innovative applications that allow for smart processing of data based on users' consent. Most users are found to be overwhelmingly in favor of providing their data to processors if the data is collected responsibly and benefits them. In return for users' permission to collect data, processors will have to give them more control over how it is used; the key is value to the users.

Coming together as an industry to promote a global, shared utility layer to manage self-sovereign career data, a network that is owned by no one and managed by its members, is the natural evolution to accommodate the new reality and mitigate its threats on the incumbents' business models.

The architecture of the Velocity Network™ separates the utility layer of the blockchain network with its basic elements and token mechanics from the different proprietary applications that interact with the blockchain. It is with these new and innovative proprietary applications that vendors will separately compete for advantage in the marketplace.

CALL TO ACTION

The governing body of this new Internet of Careers, the Velocity Network™ Foundation, was launched with 16 founding members, industry and thought leaders from across HCM system vendors, gig platforms, background and certification processors, education vendors and employers, that came together to define, implement and champion the Velocity Blockchain network: a globally accessible, trustworthy Internet of Careers®. General membership is growing rapidly representing more than 30% of the global HCM market thus far.

The Velocity Network Foundation® is a cooperative, nonprofit organization established to build the rulebook, guide the development of the decentralized protocols, and support research and development of applications and associated services, fostering a community of open-source developers.

This whitepaper outlines our vision and proposed approach to a building the Internet of Careers®. While deeply researched and designed, the rulebook, the protocols, rules of engagement, token usage, and other elements are all works in progress and will continue to be written by the Board of the Velocity Network Foundation®.

We are Velocity. Join us, as we move to change the world of work.