In Innovation We Trust: The Definitions and Drivers of Trust and Innovation in Canada

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Key messages:
- The role of innovation in Canadian society is neither neutral nor fixed
- Innovations need to be adopted to create economic and social impacts, but widespread adoption is contingent on trust in innovators, innovations, and the governance of innovation
- Trust among actors in an innovation network can contribute to success, as can public trust in innovators, though research on the latter of these is limited
- Standardization can enhance trust and thereby support technology adoption
- Further research is needed to understand the potential influence of various interventions in building trust in innovation

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In Innovation We Trust

The definitions and drivers of trust and innovation in Canada

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Introduction

The world's resources are limited, while human wants are limitless. Such is the lesson every economics student learns to motivate why the field of study is concerned with how those scarce resources are allocated to meet the needs and wants of people. Scholars outside economics also explain why so many struggle to meet basic needs, from housing to food and healthcare. In contrast, others seem to have achieved an abundance that was impossible to conceive even just a generation ago.

Quality of life and living standards have dramatically improved worldwide over time. We are living in the world with the lowest level of infant mortality, highest life expectancy, lowest number of people living in poverty in history, and amenities that were considered luxury in the richest of countries just a few decades ago (flatscreen TVs, smartphones) are attainable for many living in the global south (Dattani et al., 2023a; Dattani, et al., 2023b; Roser, 2023).

While much more progress is needed to eradicate economic suffering, we have undoubtedly progressed far. Much of these long-term improvements can be traced to innovation - the ability to do more with existing resources while simultaneously reducing costs and improving quality. The roles of key paradigm-shifting innovation known as "general purpose technology" (GPTs)[1], such as steam engines, electric power, and the internet, have allowed economies to flourish (Bresnahan & Trajtenberg, 1995). Yet, the emergence of these GPTs has also created new sources of instability and anxiety. For example, recent innovations in artificial intelligence (AI) technologies have heightened the concerns around misinformation, privacy of information, and task automation.

As these recent applications and discussions surrounding AI have demonstrated, innovation may not be celebrated or trusted, and its use can bring about harm to society (Maung et al., 2024). This is, in part, motivated by the fact that innovation can either create new value, or reallocate existing value through a "rent-seeking" process, resulting in further concentrating of wealth and power, leading to losses for society writ large (Bessen, 2016; Baumol, 1990; Buckley et al., 2022). In this paper, we are especially interested in how society judges an innovation's usefulness and the interaction between a governance system, innovators, and society to build trust (or conversely foment distrust) and adopt innovations.

As a result, we proceed by first discussing innovation's role in society and then defining the key actors and systems in place to enable innovation. We then discuss how innovation is diffused in an economy to elucidate a trust-based framework for the Canadian innovation ecosystem in creating, diffusing, and absorbing innovations.

[1] innovation that can be applied broadly throughout the economy, not just in a specific narrow setting

Innovation Ecosystems Defined

What is the role of innovation in society?

A historical context of innovation must be understood to contextualize modern innovation's role in society. The answer to this question has shifted throughout human history, including broader concerns beyond economic ones. Ancient Greek philosophers often criticized innovation, as much innovation related to what in modern times is termed social innovation, which they argued could bring about social and political instability, where the chief concern at the time was maintaining stability (Godin & Lucier, 2012).

The more modern view of innovation's role is commonly defined from the onset of the Industrial Revolution. Philosophical inquiry into value formation and wealth disparities emerged within and across different nations. Adam Smith, one of the most well-known thinkers of this era, for example, observed innovation as a consequence of specialization in the production process. Specialization allows one to become a master of their craft and a drive to improve further efficiency and enjoy the fruit of their labour (a process we now term learning by doing) (Smith, 1776; Arrow, 1962). The process, when aggregated across many different people, in turn, creates wealth enjoyed by all.

Recent public and academic discourse on the role of AI development demonstrates that the millennia-long tension between wealth creation and the potential for emerging instability remains relevant. Combining these discussions conveys agreement that innovation is the primary catalyst for changing an economy or society.

Within this framework, however, the incentive of why different actors pursue innovation can be radically different. An entrepreneur may be incentivized to pursue innovation as a means to disrupt an incumbent firm (through developing a better product) and capture profit that resides elsewhere (what we now term creative destruction). A scientist may be incentivized to pursue innovation for the pure curiosity of pursuing knowledge. A government may be incentivized to pursue innovation to increase the living standards their citizens experience or to ensure they remain militarily competitive against adversaries. Employees may be incentivized to pursue innovation in their work to avoid termination.

Similarly, some may want to slow the pace of innovation or stifle it altogether. A monopoly may wish to squash innovators' ability to innovate to maintain market power. A biomedical experiment may be halted for ethical reasons because of the high risk of laboratory escapes. A government may sabotage another nation’s innovation ecosystem to maintain geopolitical dominance.

The role of innovation in Canadian society is neither neutral nor fixed. While this paper’s introduction focused on two impacts of innovation(ensuring economic competitiveness and improving well-being). Innovation's role incorporates the need for new governance systems (such as those under discussion regarding artificial intelligence (AI) technologies) must also be incorporated. The following sections focus on the actors involved in creating innovation and the specific impact innovation has on society and the economy.

Actors and Systems of Innovation

Actors in an innovation ecosystem

Complex ecosystems of ideas, supports, and inventions innately drive the innovation process. Innovation is rarely ever a process undertaken by a single actor. Filion (2023) summarizes the three main archetypes of innovation agents, entrepreneurs, intrapreneurs, and facilitators, and their roles at varying points of the innovation process.

- **Entrepreneurs**, such as researchers and individuals, identify opportunities for innovation to meet society's demands.
- **Facilitators**, such as public institutions, agencies, and investment organizations, provide mentorship, funding, networking and guidance that bridge the gap between innovative ideas and successful inventions for economic and social benefit.
- **Intrapreneurs** are employees within an organization who innovate products, services, or processes by leveraging their employers' resources and capabilities.

Innovators are, by definition, the main drivers of innovation, pushing the boundaries of economic, social and regulatory conventions to create solutions. Governance must cultivate innovators and their ability to take risks through education, resource, and intellectual property development and regulation. These innovators, in turn, interact with the following innovator and non-innovator actors during innovation creation and diffusion processes (Chiesa & Frattini, 2011; Hall & Lerner, 2010):

- **Innovation investors** are individuals or entities that provide external financing and investment for innovators, motivated by incentives different from those of an innovator. Private investors, for example, might be concerned with the direct financial return of investments, while public investors (such as government grants) may be interested in larger societal value from innovation or may invest in innovation due to geopolitical reasons;
- **Adopters** are individuals or firms that evaluate the fitness of a given innovation to solve a problem they face and are the ultimate potential benefactors of innovation. **Early adopters** evaluate the technology before anyone else, providing vital signals as to its effectiveness and trustworthiness;
- **Innovation adoption networks** are innovators in the periphery of a specific innovation who extend its use cases. Video game developers, for example, create new applications for virtual reality or blockchain technologies.

Systems of Innovation Governance

Innovation governance oversees and shapes all facets of its ecosystem, whereas agents of innovation play critical but specific roles in each phase in the process of turning ideas into inventions (Briggs, 2024). The innovation process requires innovators, needs, and solutions to be successful. The process is not linear and faces high risk and uncertainty. Practical governance addresses critical junctures in the process, identifying points of failure and mitigating risks for all agents of innovation, as well as incentivizing societally beneficial innovations. We recognize the fundamental mechanisms governance uses to address these barriers to innovation:

- **Oversight of Innovation Creation:** Specify who, where and what is allowed to perform innovation activities and innovators through patents and competition policy. This mechanism serves as an incentive for innovation actors to create technologies and retain their value in a set jurisdiction, and protect innovation from infringement and unpermitted use. Examples of this are patents, competition acts, and the various intellectual property and trade acts (Tri-Council Policy, 2022; Intellectual Property, 2024).
- **Oversight of Innovation Adoption:** Governance protects society through standard or regulation setting and reforms existing policy and legislation. Continuous evaluation and reform of this mechanism can reduce unethical use and harms of emerging technologies to protect individuals, businesses, and institutions. Data sovereignty, medical licensing, research ethics review, and food inspection processes are created to ensure innovation is responsibly and ethically adopted.
- **Oversight of Coordination of Innovation Resources:** Governance can use direct (investing and procurement) and indirect (levy or exempt taxes and fees) on specific activities, services, and products. Direct mechanisms provide capital, land, or intangible assets for innovation activities. Capital investment can come in direct grants, providing public infrastructure and data, and investment matching programs (Office of the Honourable Senator Colin Deacon, 2024). Public procurement of innovation, such as telecommunications infrastructure, from private providers is another form of direct investment into innovation. Levying taxes and tariffs impose restrictions on foreign innovation and investment, or dissuade activities from health or environmental harms. Environmental cap and trade policy to reduce carbon emissions and fund net-zero innovations, such as electric vehicle innovations, is a dual-purpose innovation mechanism. Tax exemptions and rebates, such as Canada's Scientific Research and Experimental Development Program, encourage businesses to perform innovation activities and claim tax rebates on those operations (Scientific Research, 2023).

Innovation governance can seek to address societal challenges, coalescing multiple innovators, firms, and capital toward sustainability, health, and economic mobility. Governance leverages policy mechanisms to balance growth and societal need (AI Now Institute, 2024).

Innovation Absorption, Governance, and Trust

What enables innovation to be adopted into the economy?

Innovation, by definition, can only impact the economy and society if such innovation is adopted and absorbed into the economy. This conflict and dynamic played out publicly recently with the onset of the COVID-19 pandemic, significantly when “moonshot-style” direct government investment by the US government (dubbed “Operation Warp Speed”) accelerated a 10-year timeline to develop a vaccine to a mere 10 months (D’Souza et al., 2024).

The vaccine was effective and safe. Yet, despite being a life-saving innovation, there were significant challenges to uptake, especially in specific nations and with marginalized communities. While many governments invested in reducing socioeconomic barriers to access (including financial, geographic, and delivery modalities), a historical lack of trust stunted initial COVID-19 vaccine uptake. This lack of trust manifested in many different ways, from doubts about the efficacy of vaccine technologies in general, to a lack of trust in medical professionals, science, and trust in healthcare institutions (Willis et al., 2021; Jennings et al., 2023).

The common theme in the lack of trust we identify is the perceived mismatch between the stated goal or objective of the innovation and the actual goal or objective of those involved in creating the innovation. This scholarly focus on this manifestation of mistrust is relatively new. Traditionally, models of technological acceptance have primarily focused on two key dimensions: “trust in efficacy” and “trust in ease of usage”. These axes of trust have traditionally been called the “Technology Acceptance Model” or TAM (Davis, 1989). This model treated the question of innovation and technology adoption as a first-order cost-benefit analysis of the usefulness of adopting the technology against the cost of using the technology. Others have called this capacity for individuals and society to accept and adopt innovation as the “absorptive capacity” for innovation.

An extension to TAM has identified an essential role for trust in the technology, as well as the creators of such technology, to play a crucial role in mediating adoption (Wu et al., 2011). We are primarily focused on trust here, as efficacy and ease of usage are domains where governments and governance systems have an indirect role in improving.[2] At the same time, governments can play a significant role in building (or eroding) trust in innovation through conventional policy instruments. In the next section, we discuss the role of innovation policy governance and how it interacts with this critical dimension of trust.

[2] We caveat that while this is not always the case, particularly for population and public health interventions that have seen success in knowledge mobilization and intention to treat among both developing and marginalized communities

The Role of Trust

Despite innovation's significance in addressing economic and societal challenges, trust that each innovation contributes to societal advancement is not given. We broadly define trust as the belief in an individual or entity's reliability, credibility, and confidence. Trust is a deeply embedded concept in the relationship between society, government, and its economies (Graeber, 2014). El Ghoul et al. (2023) find that social trust, as proxied by trust amongst a nation's respondents in the World Values Survey, is associated with higher firm innovation performance, investment, and profitability of innovative products and services.

It is critical that trust also plays a significant role in mediating the process through which innovation occurs and broader society absorbs it. For this paper, we specifically focus on three key elements of trusts that govern innovation:

1. Trust in innovators: The level of confidence that firms and individuals hold for innovators and agents who create innovation, including trust among innovators.
2. Trust in innovation: The level of confidence that firms, individuals, and institutions hold for the adoption and investment in innovative activities to improve economic and societal well-being;
3. Trust in governance: The level of trust society and firms hold for fair and responsible technological innovation and adoption regulation.

We now focus on these trust relationships, highlighting evidence of their existence in Canada and the areas where knowledge and research gaps exist.

Trust in Innovators

The first set of trust relationships we explore is trust in innovators. Of the three concepts, this trust is likely the most subtle. It manifests in two ways: trust among innovators (especially in innovation collaboration and the formation of innovation networks) and trust in innovators from the larger public.

Innovations are becoming increasingly complex and interdependent (Broekel & Klarl, 2024). Creating such innovations requires increasing collaboration between experts with different specialized knowledge (Freeman et al., 2014). In both academic and industrial R&D settings, trust and high levels of social capital have also been identified as a key factor in creating successful innovations (Häusler et al., 1994; Li et al., 2013). Often, trust and collaboration among innovators are represented by what is known as an innovation network.

Kolleck and Bormann (2014) use a mixed methods approach to understand the governance mechanism of 'trust' in innovation networks, highlighting a research gap within empirical analysis. An essential attribute of building trust emphasizes the significance of social discourse, communicative power, values, and institutions in enacting and diffusing change. Trust builds in innovation networks through the efficacy of the constellation of regional, political, and business cohesion of such collaborations. It is built over long periods, creating a sense of belonging, openness and expectation of trial and error to generate new ideas and innovations.

The authors find that a lack of ‘connective’ actors among regional innovation networks is associated with lower trust and overall collaboration and knowledge sharing between networks, showing lower innovation activities among more disparately connected innovation networks. Building trust required coordination and cooperation on long-term projects, consistency between deeds and words, and shared beliefs and competencies were closely related to the network analysis results and the post-survey interviews. The innovation network showing the lowest interconnectedness and trust highlighted fears of criticism, humiliation, and plagiarism. A decisive factor of low trust within this network was the lack of public recognition of financial and professional achievement was common among these respondents.

While the study did not link the impact of trust in innovation measures and activities, it highlights that trust in social innovation networks is built and maintained in differing pathways uniquely impacted by regionality, fear, competence, confidence and reliability, mediating actors, and knowledge transfer practices.

Bellini et al (2019) examine the drivers and benefits of university-industry collaborations amongst Italian firms in the information technology and communications (ICT) sector. They find that past collaborative experience improves knowledge sharing and learning, while trust is the primary driver of tangible benefits, such as product and process innovation. Policies that enact trust-building capacity in firms and public institutions can enhance public-private partnership success, particularly for small-to-medium-sized enterprises (SMEs).

Foster et al (2024) find a similar relationship between trust and innovation performance in governance structures. They highlight that trust and the energy to develop trust among private and public entities influence the performance of innovation activities and knowledge transfer from projects to stakeholders.

The second aspect of trust in innovators we explore is the importance of trust that innovation adopters (such as the general public) have in innovators and the impact such trust has on innovation absorption capacity. We start this discussion by acknowledging that this is a severely understudied area. While the epistemological discussion of why this topic has been underexplored is not within the scope of this paper, we believe part of the reason has been that up until recently, scientists have primarily enjoyed an extremely high level of public trust (Edelman Supplemental Report, 2024). Edelman (2025) also shows that historically high level of public trust in scientists and innovators seems to be shifting, and significantly more so for industry-led innovation (such as AI).

Part of the reason may lie in the perception that innovation processes happen behind closed doors and are not sufficiently scrutinized (we return to this theme in the trust in innovation governance system section). Mubarak & Petraite (2020) investigate the relationship between open innovation mechanisms and trust among external stakeholders. They report a positive relationship between stakeholder trust and cooperation and the absorption capacity of innovative products and services among AI, big data, robotics, and cyber-physical systems, commonly called Industry 4.0. The results link open innovation mechanisms and digital trust to the absorptive innovation capacity among Industry 4.0 firms.

Another avenue that early work on this topic has explored includes conceptualizing digital trust as “individuals’ expectation that digital technologies and services - and the organizations providing them will protect all stakeholders’ interests and uphold societal expectations and values” (Dobrygowski, 2022). In this framework, the goal of innovators is to develop innovations in such a way as to reflect the values and expectations of those who interact with innovation and demonstrate such a case (Dobrygowski, 2023).

One area where clearer literature exists that touches upon this dimension (though not in the exact language) is the literature on digital government. Trust that state entities use digital technologies appropriately to serve their citizens has been highlighted as one driving factor in public acceptance of and use of digital government services (Carter & Belanger, 2005).

Regardless, we have yet to see a thorough exploration of the relationship between Canada’s societal trust in innovators and how it influences their innovation absorptive capacity. This indicates a potentially high-impact gap that examines such tension for Indigenous communities in Canada.

Trust in Innovation

The public's trust in innovation is the second trust concept we explore in-depth. As previously denoted, the traditional technology adoption model reduces the decision of whether actors adopt a specific piece of technology through cost-benefit (effectiveness) analysis. Within this framework, an innovation can be adopted if a potential adopter receives information that communicates the technology’s benefits, as well as its adoption costs. However, communication studies scholars have demonstrated this is insufficient (Rogers et al., 2019). In fact, they argue that diffusion of innovation involves not just awareness but also attitude change, decision-making, and the implementation of innovation.

The behavioural change aspect is essential when adopting a new technology or innovation, which implicitly implies a negation of previous innovations that potential adopters are familiar with. The process through which innovation diffuses (a term that is ontologically similar to innovation absorption but is used specifically in communication studies), these scholars argue, begins with “... early adopters, who make up a relatively small segment of the population, [initiate] a new behaviour for it to spread throughout the population” (Rogers et al., 2019).

Early adopters are important in the innovation absorption process, and while mass communication is important in the awareness step, interpersonal relations are vital for trust-building and persuasion. Research done in Canada examining the adoption of agricultural technologies in the Prairies shows that a farmer’s learning orientation (e.g. the frequency with which farmers attend workshops that showcase new technologies) was not correlated with innovation adoption. At the same time, the strength of their social capital was predictive of higher innovation adoption (Micheels & Nolan, 2016).

However, a complexity in the existing literature is the direction of causality of trust. While previous studies we referenced focus on the role existing trust (in interpersonal relationships) plays in increasing a potential adopter’s confidence about the innovation’s usefulness, studies outside of communication studies focused on base perception about the innovation (such as perceived complexity or perceived advantage of a given innovation) impacting trust in a product, which then in turn effects an adopter's intention to adopt (Wang et al., 2024).

This conflict also exists in Canada and likely demonstrates an addressable research gap. A key trend that prevents a robust innovation ecosystem from forming in Canada surrounds the low level of technology adoption in business settings. While the "right level" of technology adoption is difficult to evaluate, Canada lags behind key international comparator jurisdictions (such as the United States and the United Kingdom) in businesses and organizations adopting cutting-edge technologies. Only 4-6% of Canadian firms use AI in a business function (Lockhart, 2023). This is not a new trend, and Canadian businesses have chronically lagged behind others in adopting digital technology and emerging technology more generally (Goldsmith, 2021).

As the private sector in Canada struggles, the public sector similarly lags. The Canadian government ranks 10th amongst OECD countries in its Digital Government Index (OECD Digital Government, 2023). Previous research has identified multiple barriers to improving how governments can adopt and procure technology to enhance innovation absorption capacity. In particular, the lack of a risk-taking culture that encourages the adoption of technology is one of the key barriers to improving the public sector's absorptive capacity (Lamb et al., 2023).

At first glance, the trust in innovation hypothesis shows promise in explaining this low level of technology adoption. The 2024 and 2025 Edelman Trust Barometer shows that Canadians distrust AI significantly more than residents of other countries (Edelman Innovation 2024; Edelman 2025). However, this level of distrust is not shared in other technological realms. For example, Canadians overwhelmingly "embrace" green technology, and have high trust placed in healthcare institutions (Edelman 2025; Lockhart et al., 2024). Canadians are consistently more trusting of scientists and science in general relative to specific technologies (Steinburg, 2024). And in fact, Canada has amongst the highest levels of social support in the world (Helliwell et al., 2024). On the other hand, trust in governments has shown a declining trend, compromising the government's role in its ability to bolster trust in innovation and innovation processes broadly. In many trust and social capital metrics, Canada far exceeds the United States, where technology absorptive capacity seems to be higher.

One potential explanation for the trends we observe in Canada could be the heterogeneity in the prevalence of early adopters of different technologies. Some signals show that while there are fewer early adopters of AI in Canada compared to the United States, there are more who have adopted electric vehicles in Canada compared to the US (Extro, n.d.). However, this motivates the exact unanswered question we raise above, on whether the base level of trust encourages early adoption (and subsequent diffusion) or whether a low early adoption rate leads to lower overall trust (and thus adoption).

Trust in Innovation Governance

In the previous sections, we have primarily examined trust as a mediator in the process through which innovation is created and absorbed through society. In those discussions, we abstracted away from systemic determinants of trust, a topic we especially focus on in this section. Edelman trust barometer, for example, shows that embracing technology increases alongside a belief that appropriate regulation is in place concerning that same technology (Edelman Supplemental, 2024).

Innovation governance can be market-shaping - providing the glue between knowledge generation, product development, and market capitalization. Governance institutions can also fund and subsidize innovation, effectively aligning economic incentives among regional resources, business interests and broader societal goals. Innovation governance must align at all federal, provincial and municipal levels whilst also providing jurisdictionally flexibility for differing regional economic development needs, particularly for non-urban centers (Creutzberg et al., 2024; Kemeny & Storper, 2020).

Governance can also ensure regional technology hubs can navigate industries outside the ecosystem, allowing adoption rates and diffusion into the broader economy. In turn, innovation ecosystems can address regional economic challenges and enhance the competitiveness and productivity of local firms and industries (Creutzberg, 2006).

Effective innovation governance is critical in developing trust in the innovation ecosystem and new technologies. Trust in governance and its ability to foster innovation processes, agents, and solutions has significant implications for the absorption capacity of innovation within an economy and society. Suppose a government is perceived to put appropriate & effective guardrails on the technological development and dissemination processes. In that case, it can assure potential adopters that the technologies and innovations developed are responsibly regulated. Trust in a governance system relates its ability to generate benefits that would not have otherwise been realized without these substantial public investments.

At a formative level, trust is fostered in forming jointly beneficial relationships, improving the outcomes of activities conducted independently. Innovation and its related processes involve discovery, risk, and value wayfinding, which benefits from shared pursuit and collaborative practices. Innovation governance can mediate the extent to which trust can increase the effectiveness of its stakeholders and reduce the friction between technological adoption and consumer uncertainty. An example of governance action, notably through regulations and standards of emerging technologies, provides the linkage between innovators and society in developing certainty around innovation impact and safety.

At the base level, whether governments can direct the path of innovation is an active research area. This literature surrounds the class of policy called “industrial policy,” or targeted investment and public procurement such that a government can “choose” a winner (Kattel et al., 2022) The set of investments the Canadian government has announced over the past years to develop the electric vehicle industry is an example of such policies. Often, industrial policies have included economic and geopolitical considerations in determining the mandate and the goal of such investments.

With a clear picture of the entire innovation process, from ideas to invention, governance can effectively identify and address the barriers to innovation. The linkage of innovation metrics, from publicly funded research, IP, patents, and historical transfer information, is a necessary trove of metrics that can help decision-makers provide transparent and accountable decisions on innovation policy instruments.

A more recent iteration of industrial policy argues that in addition to the economic goal, directed government innovation policies should also incorporate social objectives. These policies, often called “moonshot innovation policies,” collectively ensure that innovation benefits society, not just in a narrow economic sense, with any spillover of such benefits to the social realm accidental (Monitoring and Evaluation, 2024).

We acknowledge here that there is a lack of literature that explores how institutional capacity and institutional trust may impact the success of innovation policies. Most work has only focused on the overall success of policies and trust in government (Keele, 2007). For example, one potentially fruitful inquiry could be how successes and failures of large government innovation policies may impact trust in innovation governance. For example, the Canadian Digital Adoption Program (CDAP), designed to help small businesses adopt innovation, has seen little success. Many believe its failure is due to the complexity of understanding eligibility criteria and the lengthy application process; CDAP was shuttered soon after for being undersubscribed, and subsequent budget cuts, likely impacting the government’s abilities to design similar programs in the future (Hannay, 2024; Zon, 2024).

Another facet that the government can impact innovation absorption is by playing a role in setting and evaluating standards that all products will follow. Viardot (2017) emphasizes the importance of standardization in innovation governance to drive market adoption of new technologies, particularly in the computing and communications industries. Standardization, as a form of innovation through design, networked, or open innovation, allows consumers and external partners to contribute to the commercialization, adoption, and idea-generation process.

Viardot posits that standardization can benefit producers and consumers of innovation through anticipatory, enabling, and responsive standardized mechanisms. The benefits of standardization and its impact on trust can be summarized as:

1. Anticipatory standards assure consumers that risks of early adoption are from an ethical and efficacy lens, ensuring a minimum level of technical safety and reliability as defined by regulatory agencies, similar to that of health and financial regulation processes. Anticipatory standards ensure innovators have designed their products in the consumer's best interests.
2. Enabling standards assure consumers that innovation governance has identified the innovative product or service as trustworthy at scale and set bounds on its quality, information, and measurement. This lends to an innovator's integrity in delivering quality products and services.
3. Responsive standards set the expected quality level from innovation and codify the dominant model of an innovative service or product. This level, or baseline, assures mainstream adopters of innovation that the innovation has aligned with a rigour of products and services,

Finally, governments, through their design and enforcement of appropriate market-based mechanisms and policies (such as intellectual property and competition policy), can not only ensure that innovators trust that the environment will allow them to create the best innovation possible but also for adopters to know that ineffective innovation has a natural disincentive mechanism.

Conclusion

Our paper focuses on trust as a key mediator in innovation creation and absorption, the process through which society governs innovation. Trust ensures that innovation is not created in a vacuum devoid of society. Thus, we conceptualize trust as a key societal force that quickens the pace of sound innovation and slows the pace of harmful innovation.

The current literature often treats trust between individuals, specific innovations, or interpersonally in isolation. Few examined the systemic role of societal trust and how it impacts innovation's direction and vibrancy. While we identified that many disciplines use ontologically similar concepts (from business confidence to credibility), few have examined the broader role trust plays.

In part, this is likely due to the lack of a consistent and coherent framework for researchers to generate hypotheses. For the first time, our literature synthesis attempts to organize existing scholarship on this issue around a consistent theme and begin the conversation about how a formal analytical framework is constructed.

In this process, we specifically identified and distinguished three related but separate types of trust: trust in innovators, trust in innovation, and trust in governance systems that take our understanding of key actors in an innovation system as a base. Further work in this area should extend our work to identify the mechanisms by which these three trusts link and how trust can be measured or observed (at least to distinguish between what a low-trust innovation ecosystem looks like compared to a high-trust one).

Trust mechanisms and drivers for innovation activities are less understood and are often proxied through the perception of connectedness at the societal or organizational level. Governance can set the bounds of trust in innovation practices, enabling innovators to demonstrate their competence and credibility through meeting regulatory standards, ongoing collaborative partnerships with industry and academia, and maintaining long-term and jointly beneficial with external stakeholders and innovation networks. We therefore conclude this paper by suggesting specific avenues for further research:

1. The influence of social sentiment towards firms or industries in relation to the absorption capacity of innovative products and services, using negative and positive media sentiment analysis as a mediating instrument
2. The influence of trust in innovation hubs and networks impacting the success of innovation activities and market adoption

3. The influence of public-private partnerships on innovation adoption and absorption capacity, controlling for industry, firm stage, and region
4. The impact of standard setting and firm uptake and its association with innovative activities and outcomes
5. Investigating the impact of patent disputes, class-action lawsuits, and cybersecurity breaches on innovative firms and industries with respect to innovation activity and market performance
6. The influence of private vs. publicly funded innovation projects and its effect on market adoption by industry, investment size, and incorporation type

Innovation is a force that will continue to shape our society and economy. However, blind embracement of innovation is neither inevitable nor desired. Mechanisms and systems should be in place to ensure that the speed and direction of innovation benefit people.

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