

# Star Trek's formula for sustainable urban innovation

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Credit: AI-generated image ([disclaimer](#))

On the long-running television series [Star Trek](#), the characters were knowledge workers and did not seem to worry about food, lodging or acceptance. Theirs was an inclusive society, one that collaboratively practised sustainable innovation.

Although the crews on various ships were lost in space, Star Trek communities supported one another. Each built environment met its own needs and when they encountered societies on other worlds, those too practised inclusive and sustainable development.

The lesson here is that we need to apply an inclusive approach if we are to meet critical goals. This includes addressing the [Intergovernmental Panel on Climate Change \(IPCC\)](#) 1.5-2°C global warming targets, working towards the [UN sustainable development goals](#) and developing [sustainable cities](#).

## **Challenging traditional markets**

Traditional market functions are being challenged in several ways.

Thanks to affordable digital platforms, sellers can easily service global customers and buyers are not constrained by physical marketplaces. Individuals can take greater control over their health, their wealth and their work (telecommuting and the [gig economy](#)).

Let's also remember that corporations live shorter lives —down from an average of [more than 50 years to as little as 10 years](#), so making large investments to attract large companies could be risky if the payback is long. It could be a political win but a questionable economic benefit.

Markets are either maturing in developed economies, evidenced by trends including the [declining auto sector in China](#), or they are shifting due to technological change, such as the increase in [online shopping](#). There has been a gradual shift in economic power, movements of jobs to new regions and new innovations such as artificial intelligence and robotics.



United Nations Sustainable Development Goals. Credit: [United Nations](https://www.un.org/sustainabledevelopment/)

These changes affect everybody. They are not cyclical problems associated with one sector or in one region. They require new thinking and action.

Cities can help lead a joint agenda for public and private investment in inclusive growth and [innovation](#) to alleviate these impacts or access new opportunities.

## Creating inclusive growth

The Organization for Economic Co-operation and Development (OECD) describes inclusive growth as "[economic growth that is distributed fairly across society and creates opportunities for all.](#)"

Inclusive growth is foundational to the discussions on [income inequality](#),

including the need for a sustainable basic income.

Examples of countries adopting or thinking about basic income include [Kenya](#), [Finland](#) and [Canada](#).

Unfortunately, some trials are not successful—but as management guru Edward [Deming](#) explained, 94 per cent of problems are due to poor systems, not people, and can be fixed.

People have the [right to a good job](#), and in the Star Trek community, everyone makes a contribution somewhere.

In the digital economy, a segment of the population (for example those with lower levels of education, according to an OECD report) will have greater difficulty accessing new jobs and occupations. Clearly there is a need to improve linkages between people and jobs, and to increase our efforts to prepare people for jobs.

## **Livability and sustainability**

Innovation plays an important role in making cities more liveable and sustainable.

Since the responsibility for achieving inclusive growth is shared between individuals, employers and policymakers, cities need to engage these stakeholders into the discussion. Local resources and new innovation can together create local wealth and improve life and the sustainability of cities. Technology can shift patterns of behaviour and provide equity in services. It is disruptive thinking that develops new solutions.

Advancements in artificial intelligence, automation and digital platforms are rewriting our entire economy. These technologies have the potential to positively affect wealth disparity and quality of life.

However, without proper care, they also have the potential to produce the opposite effect, including the [monopolization](#) of our economy and [placing jobs at risk](#).

Employers have a role to play. Those who treat their employees well will not only gain a competitive advantage, but they'll build stronger social currency.

Citizens have a role to play. There are many examples of citizen engagement in solving important issues such as waste reduction, loneliness, mobility, neighbourhood development, health, and more.

However, leaving the responsibility to a single entity, such as the private sector —or even governments —will likely not yield the results we need in time. Inclusive growth mindsets and innovation incubation should happen in all public and private sectors and with all its citizens.

### **Inclusive Innovation Ideas**

Inclusive growth and innovation starts with a digital infrastructure that keeps everyone connected. It includes technologies and ideas that rethink the ways we manage energy, car ownership, education, skills training, waste management, food production. It may include new concepts such as blockchain-based governance systems, health care and banking services.

The circular economy concept is an example —it creates local employment while providing economically, socially, and environmentally sustainable options to the local economy.

For instance, an urban farm in Brussels is based on [aquaponics integrated buildings](#). The project says it wants to see "a change in food production, where technology, sustainable practices and local people

come together to create a food system that works for consumers, producers and the environment." Their model reduces the need for transportation, reuses urban space in sustainable ways, applies green methods of managing operations and provides local jobs.

Another strategic example is the provision of affordable basic energy options. [M-Kopa](#) is a solar energy provider in Nairobi. It offers locally built, low-cost solar kits that demonstrate how innovation in the energy sector can be successfully adopted quickly by consumers thanks to creative financing. Kenyans purchase the solar kits at a very low cost, payable in small instalments. This meets the needs of rural populations while promoting local employment, and has the potential to provide more opportunities as it builds skills and opens avenues to leverage the technology for more innovation.

## **The role of cities**

Cities have a larger role to play today and they are poised to move in this direction—they have resources (people, businesses, infrastructure) that can be used more efficiently and effectively. There are also many examples of strategies that work—some cities have successfully developed innovation labs as collaborative efforts, new partnerships with diverse stakeholders and new working environments that focus on meeting local problems.

Some cities in Europe set aside a [percentage of their budgets](#) to support local entrepreneurs improve services and cost structures. These initiatives are likely to generate greater local benefits and can be repeated and improved upon from one city to the next.

The Star Trek formula is work together and share ideas and resources, look out for the best interest of society and the planet, use technology to benefit and advance, and develop each person as a valuable member of

society. Local solutions to local problems, solved through inclusive innovation.

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