

City Platforms and the Data Economy – another El Dorado?

Carl Piva, VP of Strategic Programs for TM Forum



Carl Piva, VP Strategic Programs, TM Forum

Carl Piva is serving as VP Strategic Programs at TM Forum. Carl is passionate about market and technology disruptions, and about helping TM Forum's members to transform into successful digital service providers in the emerging digital economy.

I Dorado, a mythical lost city of gold, led many explorers on a fruitless trek into the rainforests and mountains of South America. This has some parallels with the way cities are currently approaching their use of data. TM Forum's Carl Piva looks at how to find the real value.

Build it and they will come. This has been the premise of most open data platforms launched in recent years. The assumption has been that if you provide open access to data, you will magically establish a thriving high-tech ecosystem that enables the creation of valuable services for citizens and the community. Surely you'll get an influx of talent to the city too, at the same time as creating a solid foundation for local data economies.

But the reality is that they don't come, and that shouldn't be a huge surprise. What happens instead is that after the initial fanfare, most platforms start collecting dust and fall into oblivion. City platform owners must critically review the progress they have made and perhaps also take a look at what is happening in the private sector too. How come the private sector has been so successful in establishing platform business models? How can these concepts be adapted in a city context?

TM Forum is up for the challenge of collaborating with cities and the wider ecosystem to figure this out. We are working to understand how to make city platforms successful by addressing everything from business models, value use cases, case studies and success criteria, to platform architecture and APIs. We approach this challenge with the attitude that city platforms are not only for large, prosperous cities – they can bring huge value to smaller



ones too. This means that platforms need to be able to interconnect with platforms in neighboring cities to form a regional ecosystem.

The era of the platform economy

Over the last decade, the concept of platform business models has been extremely successful in the private sector. The platform business model differs from the traditional pipeline business (which is still heavily influenced by *Porter's five forces analysis*). A successful platform business connects producers and consumers of services using a common set of business rules. This creates a 'network effect', where every new user makes the platform more valuable to all other users. The 200 biggest platform companies have a market cap of over \$4 trillion and have completely changed the competitive landscape in many industries – companies such as Amazon, Facebook, Airbnb and Uber are leading the charge.

Cities already power the greatest marketplaces on earth, but they don't yet play instrumental roles in the emerging knowledge and data economy. Cities do, however, provide the critical mass of people, know-how and ideas. Leading cities are now coming to terms with the need to create, curate and use data for the benefit of their citizens and businesses. Developments in technology and societal trends mean the time is right for data to become another utility in the city.

City as a platform: Beyond open data

We are moving into the century of the city as a platform. By understanding, adapting and applying the principles of the platform economy, cities can be transformed to become regional or global knowledge hubs and innovation centers. Cities that do this will be able to manage urban challenges and develop citizen-centric services with more insight, precision and transparency. They will attract talent, create jobs and unleash innovation.

Open data is not enough, though. While transparency has undoubtedly been improved by publishing open data,

there is little evidence that it has led to significant new job creation or substantial innovation. To incubate platform business models, clear business rules are required and all participants must have an opportunity to gain value from being part of the ecosystem. This is particularly true for smaller cities that can't offer the same scale advantages as London, New York, Seoul or others. Identifying effective ways for governments and companies to work together in the areas of public and private data sharing (while meeting privacy and security demands) must be a priority.

These platforms need to be curated. All successful platform business models have clear rules of engagement in place and schemes to achieve the network effect required for scale. How this can be achieved and exactly what will be required is exactly what we are looking at in our workstream at TM Forum.

One city is not a marketplace

Most cities are too small to sustain an independent data economy. The logical step is for small and medium-sized cities and businesses to team up with neighboring cities in a federated model. With this in mind, we are also investigating the practical aspects of federating smart city platforms using common principles and assets. We will show how the most commonly adopted digital partnering APIs in the industry (developed within TM Forum) can be used to achieve this, using FIWARE as a reference implementation.

You might not find the pot of gold around the corner, but we strongly believe that a knowledge economy will deliver huge value to cities. City platforms will play an important role in creating this knowledge economy, in making IoT matter really to citizens, and in stitching together the fabric of our digital lives. Join us to co-create this future together.

Carl Piva

VP Strategic Programs, TM Forum | Head of the Smart City Forum

For more information visit:

www.tmforum.org/smart-city-forum | www.tmforum.org