The supranational view: human-centred work in Yerevan, Armenia

Interviewer:	Gareth Byatt – Principal Consultant, Risk Insight Consulting
Interviewees:	Elen Sahradyan, Public Policy and Digital Transformation Lead, National SDG Innovation Lab, UNDP Armenia

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The city of Yerevan, with Mount Ararat in the background
Image credit: Wikipedia

Elen,

Thank you for making the time to talk with me about efforts to strengthen resilience in the City of Yerevan, the capital of Armenia which is home to approx. 1.1 million people. I know that, as one of the world's oldest continuously inhabited cities, the mid-sized urban metropolis of Yerevan is steeped in history and it has demonstrated resilience to survive over many centuries.

It was a pleasure to be a presenter alongside you in November 2022 for an online UNDP Eurasia Urban Talk which focused on how cities can play their part in tackling climate change. Your presentation about UNDP's activities in Yerevan contained some very interesting examples and insights on societal engagement and digital

initiatives, and I'm looking forward to discussing these matters in more detail with you in this interview. I am keen to learn about examples of **what is being done** in Yerevan including seeing what **learnings may be relevant to other places**, to help the global effort to make cities and towns thriving, green and resilient places.

I'd like to base our discussion about Yerevan around an urban system (per the diagram below) which links to the 17 UN Sustainable Development Goals (the SDGs) and the 2030 Agenda. I hope this helps us to cover aspects of governance, the ecological environment, the physical environment and the socio-economic environment in urban decision-making, and also how knowledge can be shared to ensure there is greater awareness and ideas sharing to keep improving urban places around the world.
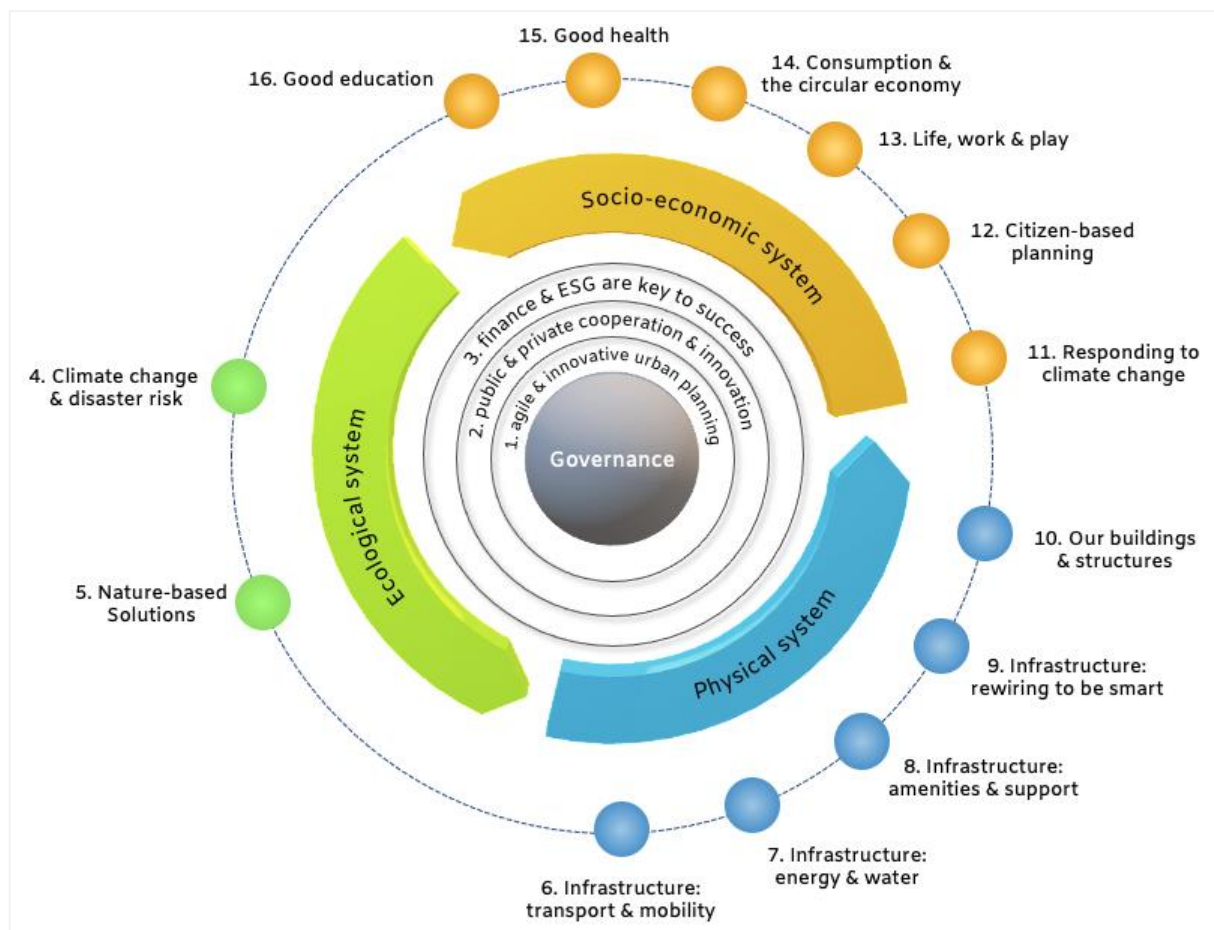
Urban system image by author

Gareth: Geography plays a major part in the context of a city's development and resilience. Just to set some context for our discussion about Yerevan, I know this city is at altitude – being, on average, almost 1,000m above sea level in the central Armenian Highland in the north-eastern part of the Ararat Plain, which makes it amongst the fifty highest cities in the world. The Hrazdan River runs through the city centre, and it is surrounded by mountains to the north, west and east. Given its geography, I can appreciate that Yerevan experiences cold weather in the winter and that it can get hot in the summer.
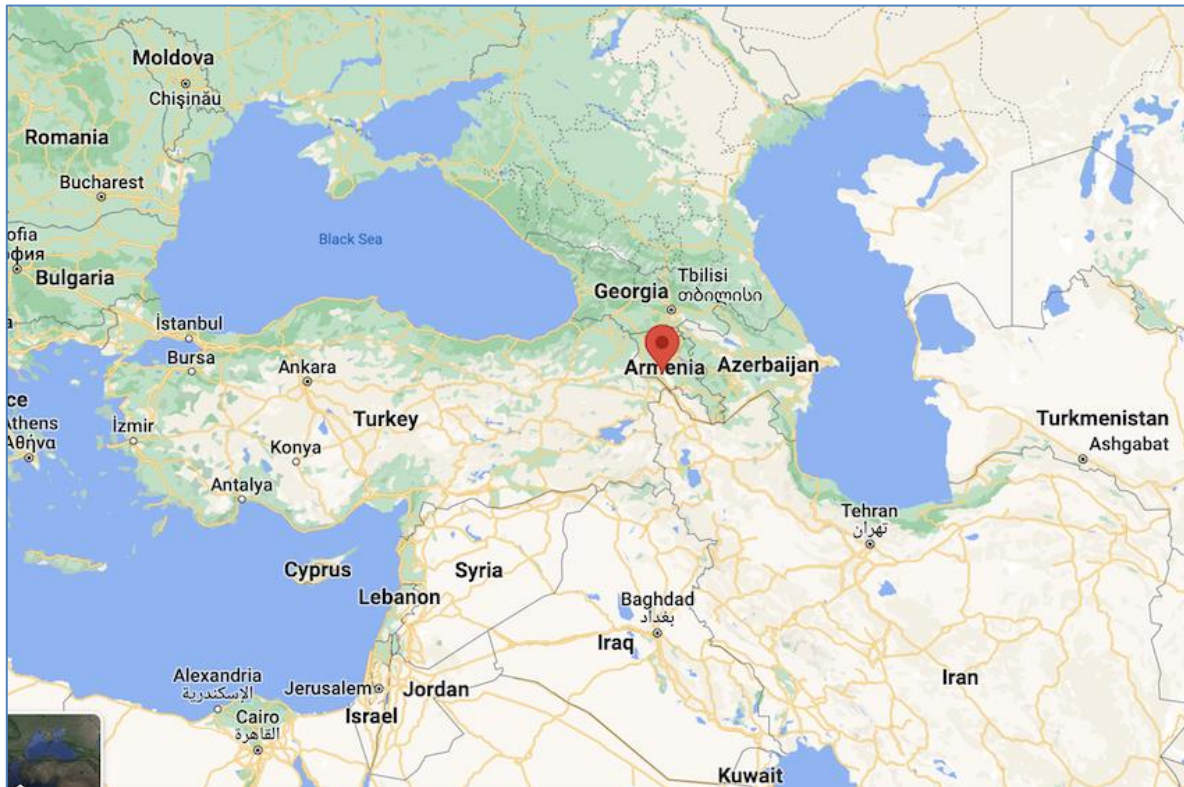
Yerevan on the map
Image credit: Google

Elen – could you outline your use of The Doughnut Economics Model in Yerevan – as an economics model? I know it is a model that has been used in many cities (in various ways) and that it places ecological and social needs as central to economic resilience – the "hole in the doughnut" being the empty area that we want to avoid people being in. Can you explain the objectives you developed for Yerevan which led you to look at using it, and how you adapted it for the city?

Elen: The genesis for applying The Doughnut Model to Yerevan's urban development needs was an objective that we set ourselves to use a development approach that focused on human-centred design to improve urban resilience within a project funded by UNDP's Rapid Financing Facility called "Yerevan 2.0: towards more inclusive and greener recovery".

For some background context, when the COVID-19 pandemic took hold in 2020 it spread rapidly across all parts of the Armenian economy, and in our work to recover from the pandemic's effects we sought system-focused tools and approaches to ensure a consistent and fair recovery across the city's services.
The idea to use The Doughnut Model was in line with the design thinking tools and methodologies applied by UNDP Armenia's SDG Innovation Lab. So, an initiative to adapt and downscale the model for Yerevan was created in partnership with the Doughnut Economics Action Lab (DEAL), which owns The Doughnut Model, and Circle Economy. We have found The Doughnut Model to be an excellent tool to use to drive impactful and tangible results in our Yerevan urban resilience work.

We recognised early in our project inception that there would be constraints and conditions to using The Doughnut Model in the context of the City of Yerevan, whilst we also saw the value it could bring to the city as long as we adapted it in an appropriate manner. Working with DEAL and Circle Economy, we agreed how to adapt and tune it so that it was downscaled for a city of the size and nature of Yerevan and that it suited the context of our socio-economic profile. We reviewed examples of how it has been applied elsewhere, such as [how the model has been used by the City of Amsterdam](#) (noting that it has been successfully piloted in Amsterdam, Portland, Philadelphia and elsewhere). We also looked at how other cities have applied circular economy principles to see what lessons could be applied to our needs.

Hopefully, the way we have applied this model for Yerevan can be applied to, and be of value for other cities in Armenia and in other parts of the world, especially in developing country contexts.

UNDP Armenia has further expanded the scope of innovative tools and methodologies applied for urban transformation, such as the application of human-centred design and portfolio approach for Armenian cities and towns ([published in January 2023](#)).

To draw a link to the knowledge sharing part of the urban system that you described above, we want to share with others how we have downscaled The Doughnut Model. We are making our approach freely available for anyone who is interested. We have produced a detailed report about the way we went about holding interviews to discuss how to best adapt the model to our country context, the questions we asked and the answers that people provided. Some information about our work [is available on the Doughnut Economics website](#).

One outcome and a key lesson learned that I want to highlight from our work using The Doughnut Model in Yerevan is that when local authorities apply a human-centred design process and a citizen-based perspective to develop strategic urban plans and related documents, it is important to capture a 360-degree view from citizens in order to make the change and transformation smooth and effective. I'm not suggesting change to an urban place is easy or simple, but a human-centred design helps drive early engagement by citizens in the processes. A comprehensive citizen perspective is often missing from urban policy and planning, or not considered in enough detail. Perhaps local authority teams feel they do not have the resources to consult their citizens fully, and / or cannot find the time to engage with them given the urgency of political agendas, or that it is too hard to engage effectively with existing methods. Yet it can be done with the right type of approach.

Gareth: Thanks for this context, Elen. The point you raise, about the value of making the time and effort to fully engage citizens in urban design, is something that I have heard from others, and I agree that it adds significant benefit when it is managed well.

Could you describe a few specific examples of how you have adapted The Doughnut Model for Yerevan's needs and context, which incorporate citizen feedback and perhaps business needs also?

Elen: I think it is worth discussing the perspective of local government when we consider how we have adapted the model. When we began our journey to improve aspects of urban resilience for Yerevan, a very good and logical question was asked by local government policymakers: "How can we think of and apply global-level action when we have so many local problems to solve?" As it turns out, we have found that thinking about and incorporating global-level action into our local work can help to verify and, sometimes, reframe local aspirations in a way that the city teams can comprehend about how global and local perspectives are, in fact, intertwined, and that they can synchronise with each other to deliver good outcomes.

*To give you an example, a "**Yerevan City Portrait**" has been created with the support of UNDP Armenia, Doughnut Economics Action Lab and Circle Economy. This portrait has four lenses: (1) local-social, (2) local-ecological, (3) global-social and (4) global-ecological. It is a snapshot of where Yerevan stands now and where it wants to be. Policymakers and other stakeholders involved have seen through the portrait how the Doughnut economics approach links up local-global synergies in the social and ecological lenses to local problems the city is facing. A "Doughnut mindset" aims to curtail future crises and ensure sustainable development for all. We drafted the Yerevan City Portrait through consultations with Yerevan Municipality, based on their 5-year strategic development plan (2019-2023). We recognised through this work that changes in the country and the world – particularly the effect of the COVID-19 pandemic – meant that, mid-way through this 5-year plan, parts of it needed to be rethought because circumstances had changed. The portrait helped to identify a new course of action which includes a focus on learning from citizens. Based on the findings, we co-designed City targets for the Yerevan City Portrait.*
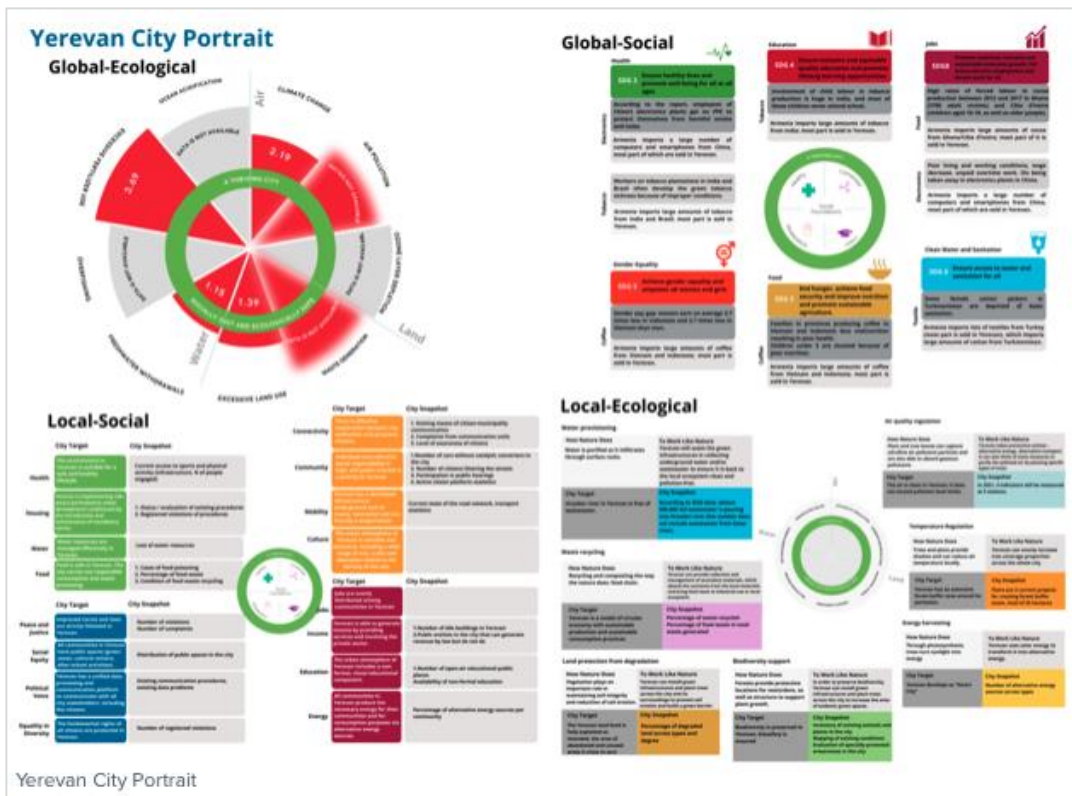
Yerevan City Portrait
Image credit: UNDP Armenia

*A representative sample of citizens from all administrative districts of Yerevan answered the following question: "Where would you like to see Yerevan in 5-10 years?" Answers were used to develop the **Yerevan City Selfie**. The Selfie was created through workshops with city stakeholders from different departments of Yerevan municipality (Healthcare, Education, Culture, Tourism, Nature Protection, Architecture & Urban development, Youth & Sports and others) who shared their knowledge of different policies, data sets and municipality targets. We encountered some challenges in terms of data availability – its relevance, accuracy, validity, consistency – but eventually City targets were set, and the Yerevan City Portrait was finalised.*

Building on the Yerevan City Portrait and Selfie findings, UNDP Armenia has successfully redesigned and digitalised two municipal services using an end-to-end human centric approach, which offers innovative opportunities for systemic recovery from COVID-19 and also other potential future crises by increasing the availability and accessibility of core municipal services.

Yerevan Municipality has become the first local self-government body in Armenia to use evidence collected through a behavioural intervention to develop its communication strategy with citizens and businesses. UNDP Armenia has worked with the Municipality to successfully redesign one sectoral municipal service for Yerevan. Linked to this effort, a new multifunctional public space was built in the Malatia-Sebastia administrative district that has a capacity to serve over 4,000 children. This public space aims to improve pre-school and school education services by turning public parks into outdoor classrooms for natural science, music, history, literature and sports, as well as the public space maintenance service by engaging children and youth in greening and maintenance of shared spaces developing the sense of responsibility towards common good.

Here are some photos of our work (more photos are available on the Yerevan website, [here](#)):

Gareth: Thanks for these examples and the photos, Elen. The Malatia-Sebastia example you have given is a great example of adding urban value for ecology and social integration with a public space.
I can see how making the time to engage citizens following a systematic process improves the overall urban system.

Citizens pay taxes that fund how neighbourhoods function and they can provide important insights on which changes can achieve the best local sustainability and resilience outcomes. It's great to see that adapting The Doughnut Model for Yerevan has been worthwhile.

How many citizens did you include in your review, and did the citizen group span the demographic spread of the city? Did you face any challenges or resistance to taking part, or towards urban change, by some citizens? Also, will the citizen engagement continue on an ongoing basis, and if so what form could it take? For example, I am wondering if an 'urban app' might help to continue to engage with citizens in various ways?

Elen: We asked questions linked to the model to over 400 citizens of various age groups. Our questions included asking where they would like to see Yerevan in 10 years' time. This helped us to develop the Yerevan City Portrait and also the Yerevan Selfie (using Doughnut Model principles). When you look at the City Selfie, some key aspects emerge out as key citizen priorities – for example, city cleanliness, landscaping and recycling efforts were all noted as areas to improve.
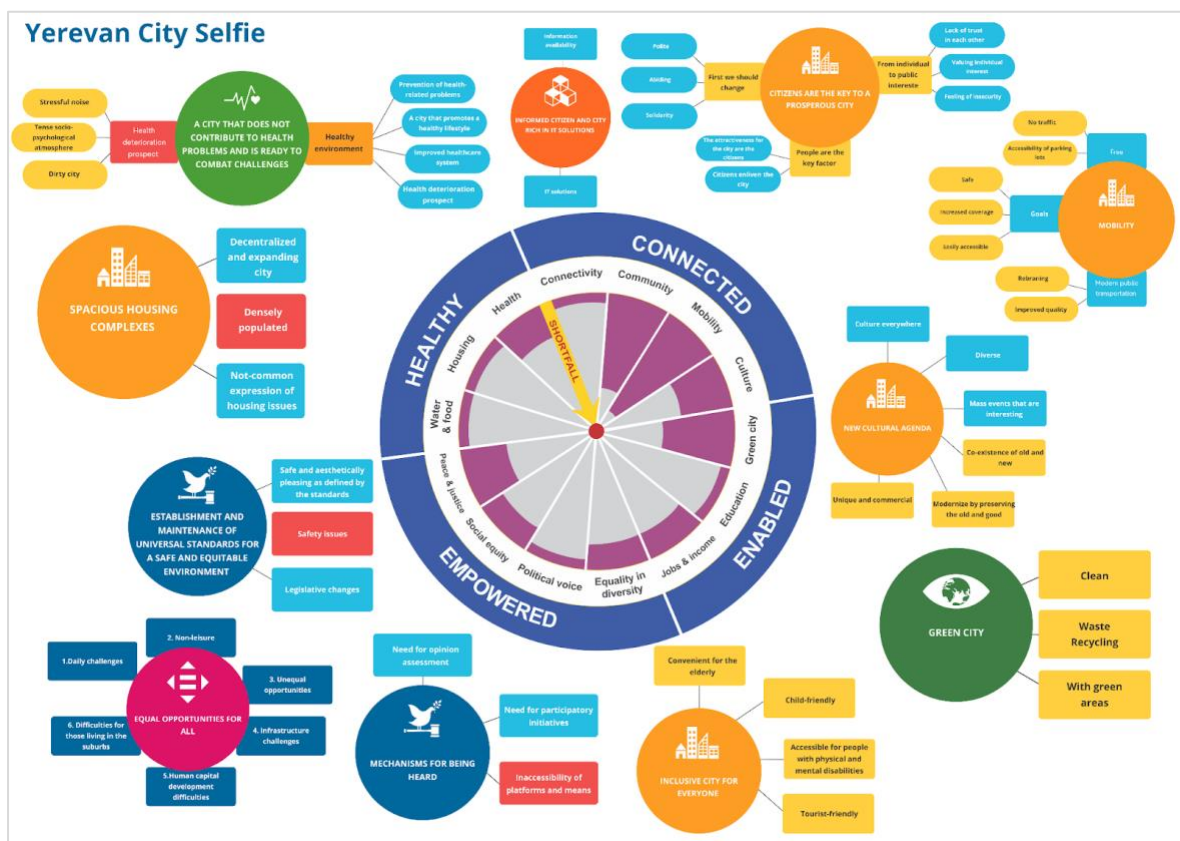
Yerevan City Selfie
Image credit: UNDP Armenia

At a later stage we hope to follow up with citizens to find out if they have noticed an impact from decisions made for the city following their feedback, and whether actions taken to improve sustainability and resilience have improved their lives in meaningful and tangible ways. We want to find out about direct positive impacts, if there have been any negative outcomes, and how to keep improving.

Citizen engagement remains a crucial aspect both for us and the Yerevan municipal authorities, and we continue to explore the most efficient communication channels. Our SDG Innovation Lab is a unique facility in this respect, since it looks at behaviourally informed communication methodologies and toolsets to engage with citizens more efficiently and effectively. We don't currently have an app in place to engage with citizens in Yerevan – perhaps this could be an idea for us to think about.

From 2023 onwards the municipality of Yerevan plans to use The Doughnut Model as an integrated part of developing their city strategies. We hope that this human-centred design approach for urban environments will help to provide a good human-centric view on how to develop the city (along with important governance, ecological and physical placemaking aspects).

Gareth: The City Selfie and City Portrait of Yerevan are great ways to visually show citizen priorities (I recall you displayed them in your UNDP Urban Talk). Thanks for making them available for this interview. You mentioned city cleanliness just now as a key piece of feedback from Yerevan's citizens. I have spent some time in Japan this year, where the cleanliness of their urban environments is, I think, something all of us should aspire to (linked to the construct of how society functions).

Was the idea to create the City Selfie drawn from the DEAL Doughnut Model process / methodology, or was this an idea you came up with? It's a good idea which I could see being useful for other cities. I know that the team at DEAL make their City Portrait guidance available on their website, and I have seen a City Portrait of the City of Amsterdam, as an example of this type of output.

Elen: The idea was indeed drawn from the DEAL Doughnut Model process / methodology. We worked closely with Circle Economy and DEAL to make sure that the process and methodology have been adapted to the local context and that it thoroughly captures the aspirations of citizens and local authorities. Along with other knowledge products developed by the authors of the Doughnut model, we hope our journey can serve as an entry point for developing countries to test the methodology and tools for their cities, and we will be happy to share both our learnings and challenges with them.

Gareth: Considering the local-global approach you mentioned earlier, can The Doughnut Model be used to draw tangible links between specific local requirements that are identified with citizens and the global-level call for action for the world to be more sustainable and tackle climate change? I'm wondering whether it is possible to draw specific links between Doughnut Model citizen feedback and action plans to address key points, and more general aims and targets such as the SDG global indicators. I'm asking this question partly because I am looking at specific urban targets to link to SDG global indicators, as a way to perhaps provide specific ways to link local-level urban actions to the SDGs (which the global indicators don't address, since they were designed to be used at a country level, not a local level).

Elen: When we look at the City Selfie we find that all aspects fall within the scope of the SDG global indicators. The [Global Sustainable Development Report 2019](#) highlights six entry points for SDG achievement:

- *Human wellbeing and capabilities*
- *Sustainable and just economies*
- *Food systems and nutrition patterns*
- *Energy decarbonisation and universal access*
- *Urban and peri-urban development*
- *Global environmental commons*

When we analyse the aspects shown in the City Selfie we see clear links between local-level actions and the SDGs, which, once again, takes us back to the question asked by local authorities when embarking upon this journey: "How can we think of a global action when we have so many local problems to solve?"

The Selfie offers important feedback to address this question: by addressing local challenges and initiating local-level actions, and considering global needs, we can see how we can be part of global action.

Gareth: I know that a linked part of UNDPs activities to support the City of Yerevan has been the digitalisation of city processes, to make them more efficient and effective for citizens and businesses. How did you prioritise what processes to prioritise for digitalisation, and is this work part of a long-term plan and commitment to Smart City initiatives for Yerevan's citizens and businesses?

Elen: I'm glad you have raised the digital transformation work we are doing – it is one of my favourite topics. Our experience in digital transformation for the City of Yerevan has been very positive, and we feel we have a lot of learnings to share. Our work is indeed aligned to the city's smart urban agenda.

We are leveraging the innovative capacity of [UNDP Armenia's SDG Innovation Lab](#) for this work. A key point to bear in mind in the approach UNDP takes to implementing city digitalisation initiatives is that we place equal importance on using a process to select what should be digitalised as we do towards the implementation of agreed digitalisation projects. We do not simply pick a service that we know is important to city and municipal authorities.

We start by assessing the digital readiness of an institution using our own methodology that is built on the digital readiness assessment methodology and toolset developed by UNDP's Chief Digital Office. After identifying key entry points we go thorough service mapping using our own methodology and we filter the services through design thinking tools to understand whether they can be appropriate for digital transformation (which is not always the case - we do not assume that everything can and should be digitalised).

Once we have done our "homework" on this, we validate the selection with key stakeholders and, crucially, the intended beneficiaries of the idea. Once we have a few services agreed to be considered for digital transformation, we move forward with business process analysis and data mapping to carefully map all existing business processes, regulations and data, and we always aim to put forward recommendations on how to optimise the business processes for digitalisation.

In tandem with discussing our recommendations with key approvers, we organise validation meetings to walk intended beneficiaries of the new approach through the redesigned processes and receive their feedback. Once we complete our validation work we review the redesigned business processes again to incorporate all relevant feedback for review and approval, and as long as we have the go ahead to proceed, we move forward to the actual development and design of digital products.

The validation process is crucial to gaining buy-in from our stakeholders and beneficiaries at all levels. Along the way, we engage with public servants who will be providing the digitised services, and we work on activities to support changing the behaviour of those who will use the redesigned and digitised services. It is important to reiterate that we do not simply digitalise products or services because we can: we go through a process to make sure the whole system is ready to operate in a digital environment, and we believe that this is a sustainable approach for having long-term development impact.

Throughout the digitalisation process, the concept of human-centred design remains at the core. In the example I outlined above, we took into consideration the results of the City Selfie, through which the needs of citizens were captured. As well as validating the optimised business processes with all stakeholders, we engage end users in the optimised processes to check that they fit their needs. We conduct user testing and usability testing to ensure as best we can that the new digitalised services add value to citizens, and businesses.

Once we had documented the 'AS IS' processes in detail, our team started to engineer the 'TO BE' processes so that they accurately take into account the whole spectrum of analogue processes, whilst working out how to offer more agility and increase the effectiveness and efficiency of municipal service provision. Looking back, it was a long process of revisions and reiterations within our team and the municipality staff, citizens and businesses, because once again, we could not implement a change without working closely with those impacted by the particular services. Yes, this takes time, but it is vital to make sure everyone is OK with a change and to ensure we understand and address the impact on them. Effective change requires personal ownership to drive it forward, and this means taking people's considerations into account.

During the validation workshops, we discovered various opportunities to improve additional aspects, and some inconsistences and inefficiencies that had to be resolved. Once we had validated and finalised the TO BE business processes and agreed how to make the change, we started the implementation phase. We worked with an external company to develop an online platform, while our team supported the municipal staff to operate in the new digital world. We are pleased to say that the work has been a great success.

A particularly important phase was the live testing of the digitalised services. It generated many learnings for us and led to a number of improvements being made before go live. Through 6 months of live testing, the municipality continued to provide the services offline as well, in parallel to the digital process, to ensure continuity of process delivery to citizens and businesses while we worked on improving the digital platform.

By late 2022, over 700 businesses had been involved in transacting with new digital processes. In January 2023, the Council of Elders of Yerevan Municipality passed a decision making the services digital only, for businesses to manage their licenses online, which makes things more efficient for them and the municipal authority. This is now benefiting over 5,000 businesses that operate in Yerevan and supporting citizens also.

Gareth: Thanks for this explanation of the digitalisation process, Elen. What I have taken from this is that you focus on achieving "effectiveness" by using a thorough process to choose what should be digitalised and why, and then "efficiency" to redesign processes, with stakeholders central to the design process to achieve results.
In the example you gave, just to walk back a few steps, could I ask how you selected which services would be prioritised for digitalisation? You mentioned "digital readiness" earlier.

Elen: We began with a process to look at which services to digitise by conducting what we call a digital readiness assessment, using a methodology provided by [the global UNDP digital office](#) This assessment was used to determine the readiness of the City of Yerevan for digitalisation opportunities.

Our digital readiness assessment has mapped all services that the city provides. It was an opportunity for the City of Yerevan authorities to see all the services they provide in one interconnected view (we mapped 192 of them). We undertook business process analysis and data mapping which included documenting who is responsible for the process through its lifecycle, data that is collected and what it is used for. In our process we review how we can improve the process in a digital environment.

We used our UNDP methodology to work through with the city authorities which services would be the highest value ones to digitalise, and these became our digitalisation priorities after ensuring that budget and cost-benefit was / is in place. Through applying a digital design methodology, we then agreed to start with two city services, and to then work through our priorities over time.

Gareth: I can see some links here to the urban system I described earlier, with "rewiring to be smart" and "citizen-based planning". I can see that going through business process analysis with a city team and seeing opportunities to improve requires the city team that is responsible for the service to think carefully about how they currently undertake their activities and what impacts making a change to these processes would have. Hopefully systems thinking can help with this. How do you incorporate conflicting priorities into digitalisation work and are there cases where people have to get used to new ways of doing things that they might not agree to?

Elen: For sure, changing a city process can be a complex task. During the implementation of our project, we have been mindful that what is written about a process on paper and how business processes are organised and dealt with in real life do not necessarily match. This can be influenced by numerous factors, including two aspects in particular:

1. *If regulations are put in place without live-testing the processes that they regulate, there can be problems. I think of business processes as living organisms that need constant attention and reiteration to adjust them to the changings need of citizens, businesses and public servants.*
2. *Quick and easy, often ad-hoc fixes to problems remain a common approach for most institutions and teams to respond to problems. Whilst this avoids delaying administrative deadlines that have been agreed and can ensure "the case gets closed" promptly, when this way of managing things drives how a team operates in a reactionary way, the actual processes being used not only differ from the regulations, they also vary in how they are applied from unit to unit within the same team / service.*

We need to be mindful of these and other factors. It can be challenging to change a cycle of predictable processes that institutions have built and got used to, and if they are not fully involved in the change they may either actively or passively resist the change even if it helps them to do their job. Here again, we see the advantage of human-centred design and systems thinking being at the core of our interventions. Checking alignment of priorities is one of our entry points: we need to make sure that what the policymakers prioritise reflects the priorities of citizens, and that these are in line with the SDGs and UNDP's country programme document. I think this is where taking a systems approach to seek to understand process interlinkages and consequences to changing one or more processes is vital. This is why the work we do at the SDG Innovation Lab does not simply revolve around digitalisation: we work with people to together transform processes, approaches, and ways of doing things at all levels.

Gareth: I am guessing that you have documented lessons learned from the digitalisation project, for others across UNDP globally to use and benefit from? Also, was the change management approach you used a standard UNDP change management approach?

Elen: We have indeed collected lessons learned that we hope can help us and others to continuously improve our activities. We always welcome the opportunity to collaborate with our other UNDP country teams and other partners and groups to discuss and learn about urban transformation efforts.

Regarding our change management approach, something we feel that UNDP's Innovation Portfolio does differently is to integrate innovation into the conventional change management lifecycle. Aside from mainstreaming design thinking in all our projects and interventions, we incorporate behavioural science which provides valuable insights and tools for change managers to design and implement effective change strategies, overcome resistance to change, and promote benefits.

Gareth: I'd be interested in finding out more about UNDPs behavioural science unit in due course. I'd like to quickly cover digitalisation and data security – which is something I discuss with businesses quite often. I presume that data privacy and data protection are important areas of focus in all digitalisation initiatives, especially those that incorporate the data of citizens and businesses? Unfortunately, cyber attacks and the stealing on a large scale of personal data for illegal use is something that continues to occur around the world.

Elen: For sure, data privacy and data protection are at the core of all digital initiatives. We go through very specific data security measures to ensure that data is collected ethically and stored in a secure environment. This is carried out in close partnership with the institutions we work with because the digital tools that we develop are transferred to and then owned by them.

Gareth: Thank you very much for your thoughts and perspectives about Yerevan, Elen. I can clearly see the passion you have for your work. I am looking forward to hearing about the continued activities of UNDP and others to improve Yerevan's urban fabric.

One of the points I have noted throughout this interview is the strong level of commitment to engaging with different stakeholders, through the application of The Doughnut Model and your digitalisation work. I see some similarities of focus here with the UNDP team in Skopje in North Macedonia, with whom I have also spoken with.

Also, as a runner I have noted that the timing of the Armenia marathon (held in Yerevan) is in October each year – I have added it to my list of marathons to take part in!