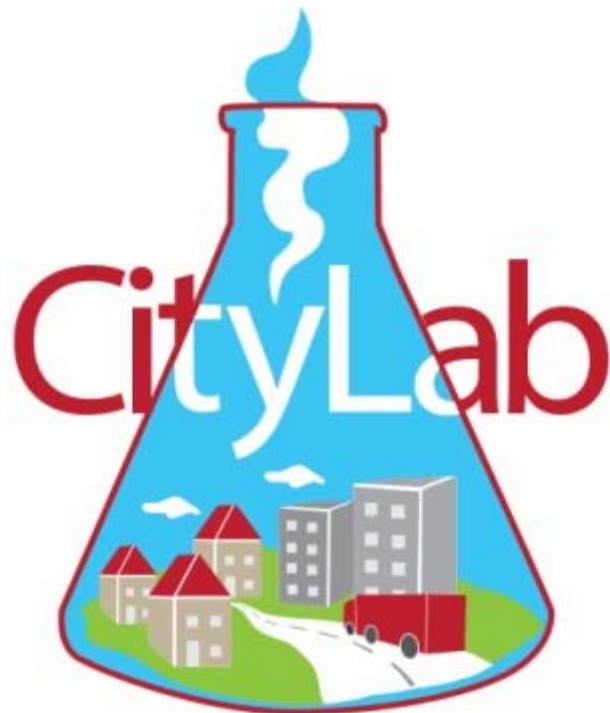


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Business-targeted dissemination



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London	Transport for London	TNT Gnewt Cargo	University of Westminster University of Gothenburg
Oslo	Oslo kommune	Steen & Strøm	TOI
Paris	Mairie de Paris		IFSTTAR DLR
Randstad	Gemeente Rotterdam	PostNL	TNO
Rome	Roma Capitale	Poste Italiane MeWare SRL	Università degli studi Roma Tre
Southampton	Southampton City Council	Meachers Global Logistics	University of Southampton
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POLIS			

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1 Introduction

Using the viewpoint of businesses, we focus on business oriented dissemination in this deliverable. We attempt to summarize clearly what learnings of the Citylab living labs are industry relevant and important for enterprises considering to develop their own business propositions.

We offer simple tools to help these companies in their journey regarding opportunities for sustainable business collaborations in the field of more efficient goods, waste and service trips in urban areas, based on the findings from the living lab cities and their follower cities/regions. The content is derived from the living labs and their analysis and description in the different work packages that deal with knowledge enhancement and implementation, evaluation, and living lab interaction.

In local workshops, we have reviewed the most appropriate dissemination channels and business-targeted dissemination package content and concluded that these should be clear and straightforward in order to find candidates for reapplication of concepts and successful market-uptake. The focus of the tools should be to help businesses to detect and understand opportunities.

While the initial description listed also cost-modelling tools and decision trees as examples of these tools, the individual examples of the living labs have made us realize that both cost-modelling and decision-trees are not realistic and will not help business-targeted dissemination. Even more, these aids could be misleading to interested parties because too much depends on the company and stakeholder context: are there already existing investments, sunk costs, etc... .

Therefore, we have focused on other tools that describe and characterize the different set-ups: properties flowcharts, 7S frameworks and cartoons. This helps to organize the learnings in a way that these can serve as a first introduction and overview for businesses that can then decide to explore specific examples in greater detail.

2 Flowchart for selecting business-relevant cases

For businesses, it can be very helpful to learn from businesses that have explored similar concepts. In this chapter, we offer a simple properties flowchart (Figure 1) that guides these businesses to the living lab descriptions most relevant to them based on the concepts they are considering to use.

Obviously no set-up is identical, so it is also important to understand that none of these are to be seen as “best practice examples” for simple replication. D5.6 has explored the roll-out potential of CITYLAB solutions to other CITYLAB living labs, which provides useful background.

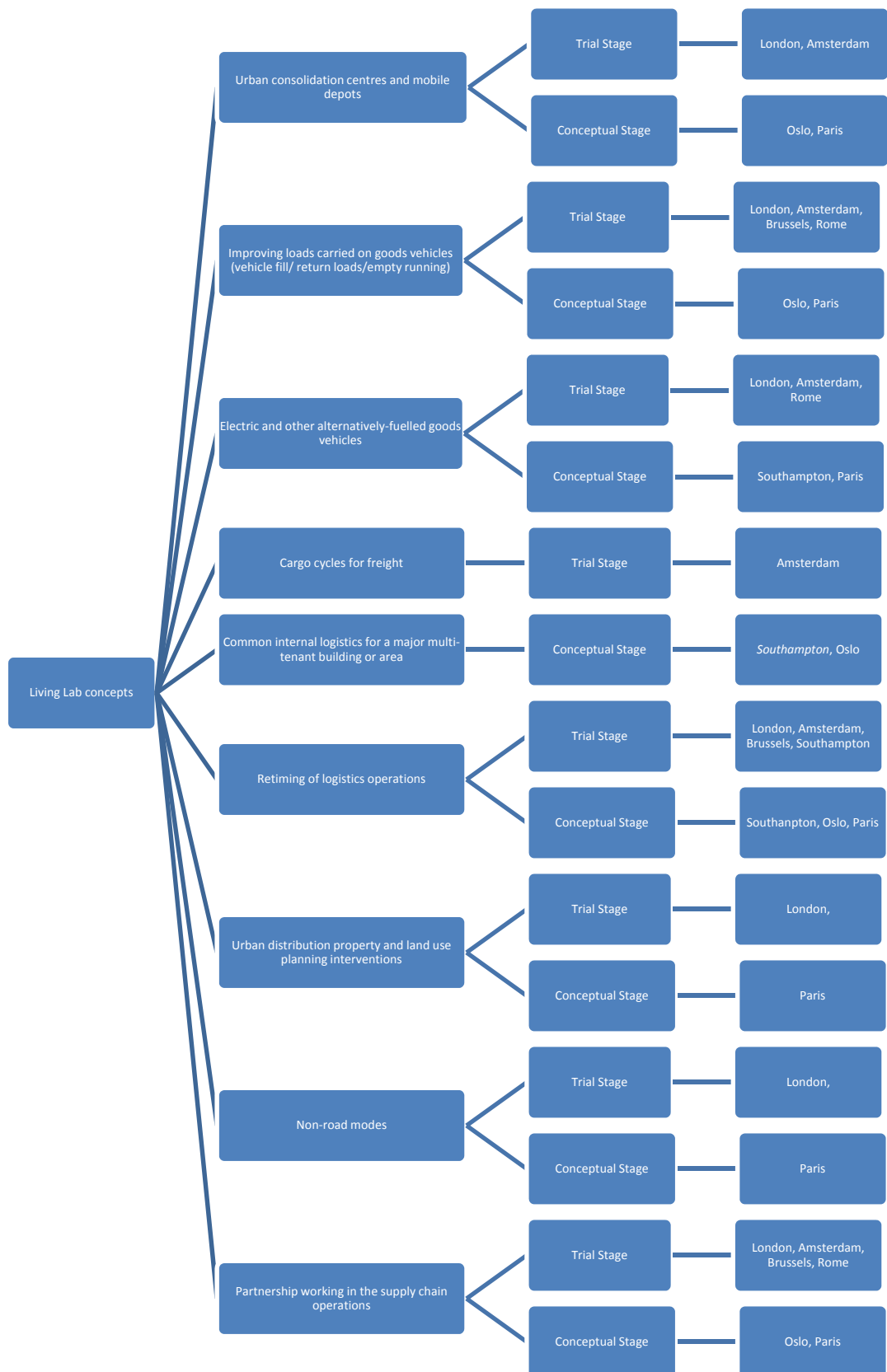
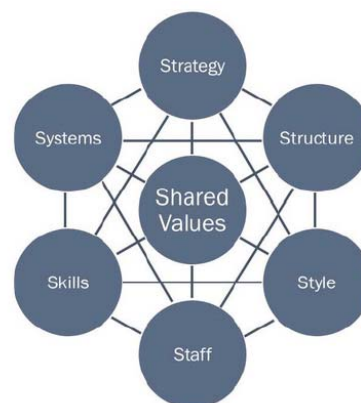


Figure 1. Properties flowchart.

3 Framework used and implementation on the living labs

Multiple methodologies exist to describe business and business model opportunities. In order to trigger interest from enterprises, it is important to provide structured and easy to understand information on the opportunities and the business models that were tested in the different living labs. In D5.4, Business Model Canvas is already used in order to assess the key effects from implementations and upscaling scenarios. These outputs are useful for enterprises looking to collect learnings in their scenario planning.

In this deliverable, we have chosen to complement the output with a simpler format that is also known widely in business and academic environments: the 7S framework (Table 1) developed by McKinsey consultants in the 1980s (sources shown below). It is a strategy planning tool that analyses organizational designs by looking at 7 key elements and how they are interconnected: strategy, structure, systems, shared values, style, staff and skills, in order to identify if they are effectively aligned and allow reaching the objectives.



The tool also focuses on the fact that none of these are “good” or “bad” alone. It is rather the relation between these different elements and their combination that needs to be considered. The tool has been often used for implementing a new strategy and the change it requires. Also in the context of city distribution, it is important to consider the fact that there is an existing situation and an opportunity to bring a novel set-up that will imply change versus what is existing. While the “Hard S” are easier to measure / describe, the authors of the model describe the “Soft S” as the elements that often determine whether a business can attain a sustainable competitive advantage. The different elements in the model have been complemented with clarifying questions that help businesses understand the opportunity the living lab is trying to explore.

A 7S framework is completed for each of the 7 Citylab cities in the sub-sections below.

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Table 1. 7S framework.

Hard S			
Strategy		Structure	Systems
<i>How does the set-up attempt to achieve a competitive advantage?</i>		<i>Who is responsible for what?</i>	<i>What are the systems and processes that need to be implemented?</i>
<i>What was learnt throughout the experiment regarding the strategy?</i>		<i>What are critical success factors?</i>	
<i>What is the long-term vision / mission supporting the strategy?</i>			
Soft S			
Style	Staff	Skills	Shared Values
<i>What management style / culture embodied by the company leaders?</i>	<i>What type and how many employees are required?</i>	<i>What are the capabilities and competences required to be successful?</i>	<i>What are the norms and standards that guide the behaviour?</i>

3.1 City-Centre Micro-Hubs – AMSTERDAM: POSTNL

Hard S		
Strategy	Structure	Systems
<p>How does the set-up attempt to achieve a competitive advantage?</p> <p>Using micro-hubs with e-bikes is more efficient versus van deliveries since it saves on parking costs and achieves lower transport costs and shorter delivery routes.</p> <p>Efficient and shared use of the micro-hubs helps to overcome the hurdle of high square meter cost in the city. In the cases where no micro-hubs are available a floating depot can be a viable alternative (if possible and allowed by local government). It is the clear intent of POSTNL to use the learning to scale to other cities across The Netherlands.</p>	<p>Who is responsible for what?</p> <p>POSTNL is the business party, TNO and the city of Amsterdam were supporting the project.</p> <p>The project started the set-up with 1 micro-hub and a few e-bikes and is expanding to 7 (possibly 8) micro-hubs and 60 e-bikes to deliver to about 1000 stops. 2200 out of 3500 orders are therefore no longer served by van but by bicycles from a micro-hub.</p>	<p>What are the systems and processes that need to be implemented?</p> <p>A critical factor is the need for having bicycle specific routing software.</p> <p>Several e-bikes were tested to determine the best ones suitable.</p> <p>A learning was to not rely on experimental technology for key parts of the solution (transshipment from floating depot). The routing software needed to be integrated with the staffing planning of POSTNL.</p>
<p>What was learnt throughout the experiment regarding the strategy?</p> <p>The overall aim to improve last mile logistics making better use of available infrastructure remained but a shift was made away from canals and navigating floating depots into the city towards shared micro-hubs and the use of e-bikes (started 1 microhub).</p> <p>Reasons for this were both technical (issues of transshipping from floating depot to bikes) and economical (cost of barge operation and push boat/depot proved to be uncompetitive for POSTNL at this stage). The use of canals and the navigating floating depot might work longer term, but was not viable now in Amsterdam.</p>	<p>What are critical success factors?</p> <p>Cost-competitive set-up:</p> <p>PostNL uses early-on cost-evaluation tools to decide on starting a scenario or stopping it after design/concept phase.</p> <p>Efficiency gains:</p> <p>Thanks to routing software and performant bicycles, savings are generated on the average time per order (easier parking / less affected by congestion): (7 minutes/order vs 8 minutes/order for vans).</p>	
<p>What is the long-term vision / mission supporting the strategy?</p> <p>Lower emissions and lower costs for POSTNL create a more sustainable business. This is aligned with the city authorities who are looking at improving the mobility and liveability in the city.</p>		

Soft S			
Style	Staff	Skills	Shared Values
<p>What management style / culture embodied by the company leaders?</p> <p>Focus on long term innovation through fast iterative experimentation in the market but with an assessment of cost/business model feasibility already at the conceptual / design stage.</p>	<p>What type and how many employees are required?</p> <p>To run efficiently, there need to be a sufficient amount of freight bike drivers. These are difficult to find.</p> <p>The experiment estimates 60 freight e-bikes for 1000 deliveries (2500 orders).</p>	<p>What are the capabilities and competences required to be successful?</p> <p>It is important for the business to be able to fully involve stakeholders on reasons why specific set-ups work or do not work and to execute next attempts to reach the objective. Sharing the understanding is critical. For example it was important for the company to be able to demonstrate to city authorities why a certain location for a depot is</p>	<p>What are the norms and standards that guide the behaviour.</p> <p>PostNL has cooperated with the local authorities (via the Amsterdam Smart City) and researchers (TNO, Amsterdam university of applied science HvA and the Vrije Universiteit Amsterdam) to improve the last mile logistics in the city centre using existing infrastructure facilities.</p> <p>In the project it also became clear that it is difficult to have a shared vision and objective for a small company, a large boatbuilding company (Veka) and PostNL</p>

3.2 Growth of consolidation and electric vehicle use – LONDON: GNEWT CARGO and TNT

Hard S		
Strategy	Structure	Systems
<p>How does the set-up attempt to achieve a competitive advantage?</p> <p>Gnewt Cargo positions itself as a consolidator and deliverer for Central London (Congestion Charge Area) making only use of electric vehicles. These vehicles offer benefits for access to the Congestion Charge Area but present challenges in profitability due the lower carrying capacity. Gnewt performs deliveries for courier and home delivery services on behalf of online retailers, SMEs and for retailer client deliveries. Gnewt’s customers are mostly parcel carriers (who use Gnewt for the last mile (e.g. TNT) and retailers. This consolidation set-up succeeds in achieving a lower distance/delivery and higher driver productivity to overcome these limitations.</p> <p>TNT was already using subcontracting for the last mile. Changing to Gnewt did not change the price paid/parcel for the last mile but enabled them to execute more environmentally friendly deliveries. It also enabled them to use a few trucks instead of vans to bring the parcels to the subcontracted party.</p>	<p>Who is responsible for what?</p> <p>TNT and Gnewt cargo are the business parties involved.</p> <p>TNT decided to shift its subcontracted deliveries of small parcels from traditional van deliveries to the Gnewt set-up.</p> <p>The decision to select this implementation action was taken in the London Living Lab, which include partners from Transport for London, Gnewt Cargo, TNT and University of Westminster, acting as decision making body of the CITYLAB project in London. Gnewt uses 4 depots and 100 electric freight vehicles.</p>	<p>What are the systems and processes that need to be implemented?</p> <p>TNT is delivering to the Gnewt Cargo consolidation centre using a Diesel truck. For both parties, the set-up follows their normal systems.</p>
<p>What was learnt throughout the experiment regarding the strategy?</p> <p>For a sustainable model, it is important to respect the existing business models of the different parties. A sustainable “carrier’s carrier” business model like that of Gnewt Cargo needs to offer overall benefits by reducing the total distance per parcel (km/delivery unit) & increasing the driver productivity. The set-up of local consolidation followed by electrical vehicle distribution demonstrated it can do this:</p> <ol style="list-style-type: none"> 1) Reduced distance per delivery: <ol style="list-style-type: none"> a. Due to consolidation at a centrally located facility in the city, coupled with routing, the delivery distance and the empty return is shorter compared to delivery by multiple carriers. 2) Better driver productivity <ol style="list-style-type: none"> a. Fewer trips: TNT is able to replace 4 vans by 1 truck. (theoretical: 7 vans to 1 truck) 	<p>What are critical success factors?</p> <p>A well-located consolidation centre: low capital, appropriate location, sufficient throughput</p> <p>Sufficient load benefits and compatibility: vehicle fill + returns and empties improvement. It did not work for large parcels.</p> <p>Electric and alternative fuelled vehicles and their infrastructure: optimized set-ups for refuelling.</p>	

<p>Off-peak trips: The trips between the suppliers' depots and the Gnewt Cargo depot occur at night and early morning. These trips replace almost entirely the journeys occurring at congested rush hours.</p> <p>Mostly for smaller parcels: larger B2B parcels of TNT were too big to be able to be included for delivery by the electrical vehicles of Gnewt. Therefore, a sorting step was established, to separate bigger parcels that still need to be delivered with traditional vans (other contractor).</p>			
<p>What is the vision, mission and values of supporting the strategy?</p> <p>The overall aim of the living lab is to improve last mile logistics making better use of local consolidation of deliveries from different parties and distribution of these with electrical vehicles in a sustainable way (=profitable for the business). Expansion is</p>			
<p>Soft S</p>			
<p>Style</p>	<p>Staff</p>	<p>Skills</p>	<p>Shared Values</p>
<p>What management style / culture embodied by the company leaders?</p> <p>Focus on long term innovation coupled with a willingness for fast iterative experimentation in the market.</p> <p>Willingness to filter out and focus on what works.</p>	<p>What type and how many employees are required?</p> <p>The set-up resulted in one truck drop to the Gnewt consolidation centre, from which 7-10 van loads of 80-250 parcels are delivered.</p>	<p>What are the capabilities and competences required to be successful?</p> <p>It is important for the business to involve a wide range of stakeholders and to receive sufficient support from senior managers. Solutions based on collaboration are more likely to succeed than those based on regulations or restrictions. Likewise, direction and focus need to be based on consensus.</p>	<p>What are the norms and standards that guide the behaviour.</p> <p>Having common ground between the disparate stakeholders and views is important, as well as good communication and transparency and managing realistic expectations from stakeholders.</p>

3.3 Increasing load factors by utilizing free van capacity: BRUSSELS

Hard S		
Strategy	Structure	Systems
<p>How does the set-up attempt to achieve a competitive advantage?</p> <p>The hypothesis of this living lab is that free capacity on vehicles of service-driven companies can be used for more cost-driven deliveries (e.g. no specific delivery date – except within 3 days). It starts from the observation that often the delivery service requirements are not sufficiently differentiated to enable shippers to choose for lower cost / lower service options that can enable delivery companies to optimize their delivery routing. In the specific execution, service-driven vehicles were: prescription drug distribution and mail distribution, while cost-driven deliveries were online orders for consumer good deliveries to nanostores.</p> <p>Service-driven companies are facing increasing pressure to justify their service-driven operation towards city authorities. If they are also delivering cost-driven cargo and have better loading factors, it can help to reduce vehicle movements of other vehicles in the city (pick-ups and deliveries) and can be a new revenue stream for them.</p>	<p>Who is responsible for what?</p> <p>Febelco, Parcify and BPOST are service-driven companies delivering in Brussels and willing to test delivering cost-driven cargo. PGBS wants to test if PGBS products can be cost-effectively delivered to nanostores in Brussels after online ordering. FASTLANE (a distributor of PGBS products) set up an online ordering solution for nanostores. They partnered with EGRS – an IT company that has experience with B2B ordering for stores. CPM/Kreasales promoted the ordering solution. Brussels Mobility and VUB help with available data on the city & stores.</p>	<p>What are the systems and processes that need to be implemented?</p> <p>A process had to be set up to inject the deliveries into the system of the service-driven companies. The easiest set-up was to drop deliveries to the hub of the service-driven company, where these could wait until there was capacity on a suitable routing. Longer term, a pick up at the sending site was also considered.</p> <p>The set-up was attempted manually (with human to human communication) to avoid investments in coding of API's and other set-ups until moving to a proven solution.</p>
<p>What was learnt throughout the experiment regarding the strategy?</p> <p>Most service-driven companies with free capacity are hesitating to participate, also because they fear the operational complications involved. Companies that participate do this after executive level leaders push it through because they see a long-term fit with their strategy: green image, anticipating on last mile problems. Regarding the business case for small stores ordering products, it was found that online ordering and payment is often still a hurdle; especially if it represents only a relatively small part of the assortment. The sales team observed more hesitation in Brussels stores compared to what they expected. A benchmark trial started in Antwerp, but was stopped early-on by PGBS due to staffing changes.</p>	<p>What are critical success factors?</p> <p>Differentiating service requirements</p> <p>Buy-in and top-down support from service-driven delivery companies.</p> <p>Flexible partners to quickly anticipate on unforeseen issues – helped by efficient meeting tools and team drumbeat.</p> <p>Especially for the business case with small stores: sufficient volume: willingness to do online ordering sales skills to embark users.</p>	
<p>What is the vision, mission and values of supporting the strategy?</p> <p>Differentiation of service requirements is needed to unlock the potential to combine different types of cargo.</p>		

Soft S			
Style	Staff	Skills	Shared Values
<p>What management style / culture embodied by the company leaders? Bold leadership to be willing to test out solutions even if it requires overcoming operational difficulties</p>	<p>What type and how many employees are required? Most effort was required by dedicated staff to set-up and promote the experiment. No dedicated employees were required for the deliveries.</p>	<p>What are the capabilities and competences required to be successful? Next to management willing to focus on the long-term possibilities, it is important to have logistics experts that understand how to set up a trial with sufficient relevance without requiring the full capital investment and implementations that a market scalable solution would require. In this trial this was demonstrated by the experts at Febelco, Fastlane, PGBS, Bpost/Parcify and EGRS. For the retailer customer adoption and relationship management it was clear that a sales team with experience in this channel and ethnic community was required (CPM/Kreasales). Without this skill it would be very hard to nearly impossible to gain the level of trust required to try out the set-up.</p>	<p>What are the norms and standards that guide the behaviour. All parties were aware that the objective was to increase efficiency deliveries to the city by combining cost- and service-driven cargo. The concrete use-case helped to make this tangible and create a sufficient business interest for all parties involved. In the sector of Fast Moving Consumer Goods, it is uncommon to differentiate goods to be delivered as “not time-critical”. The test showed that compared to service-driven goods like prescription drugs, these products are not time-critical. Sufficient customer satisfaction can be achieved with an adjusted service-level, provided this is reflected in appropriate pricing.</p>

3.4 Joint procurement and consolidation: SOUTHAMPTON

Hard S		
Strategy	Structure	Systems
<p>How does the set-up attempt to achieve a competitive advantage?</p> <p>The Southampton Sustainable Distribution Centre (SSDC) is privately operated and focuses on consolidating incoming cargo for private sector companies. This experiment looked at expanding the operation to large municipal organisations (LMO's) (e.g. 2 hospitals and one university) by investigating the scope for consolidating incoming freight for these LMO's in order to both reduce numbers of freight vehicle movements and to use less-polluting vehicles for final deliveries.</p> <p>Another aspect that was investigated was to convert a part of the Southampton's City Council internal fleet of 700 vehicles to fully electric vehicles in the light of a possible introduction of a "Clean Air Zone" in Southampton.</p>	<p>Who is responsible for what?</p> <p>The SSDC is operated commercially and successfully by Meachers Global Logistics from their premises on the outskirts of Southampton.</p> <p>The Living Lab also explored promoting delivery and servicing plans (DSPs) across Southampton organisations to enable them to review and rationalise their procurement processes and mitigate the negative impacts of freight and service vehicle movements.</p>	<p>What are the systems and processes that need to be implemented?</p> <p>This focuses on Southampton General Hospital as this was tested in trial phase. A small-scale temporary storage + transportation of around 12 automated dispensing cabinets (Omnicell), using the SSDC was the "pilot" for the Southampton General Hospital. This is now being expanded for the entire hospital with space booked at the SSDC, including an office and an assembly unit.</p>
<p>What was learnt throughout the experiment regarding the strategy?</p> <p>In some cases, despite a gain in overall efficiency, it is tough to make an attractive business proposition for use of the SSDC because there is no transparent costing across the entire supply chain. In the case of the Isle of Wight NHS Trust, costs charged for the consolidation service could not be offset by reduced delivery costs charged by 3PLs in delivering to the SSDC rather than to the Isle of Wight (which is even a one-hour ferry crossing). This shows that shippers & 3PLs do not always apply activity-linked pricing. For the Southampton General Hospital, it was learnt that incoming freight was heavily underestimated and consolidation opportunities using the SSDC were trialled with this motivation. In the case of the consolidation of deliveries to the university (including deliveries for students), the cost (annual GBP 18 per student) is a barrier. For the small electric vehicles, Total Cost Of Ownership breaks even at 8-10 years. Investing in a unified IT system allowing real time tracking can help to improve how the vehicle routing and scheduling are managed.</p>	<p>What are critical success factors?</p> <p>The willingness of organisations to trial sustainability measures with unclear impact on customer/client experience.</p> <p>The ability and willingness of local authorities to implement policy measures to favour sustainable logistics practice.</p> <p>Proper handling of turnover of staff in both local policy organizations an industry.</p>	
<p>What is the vision, mission and values of supporting the strategy?</p>		

Improvement of air quality is a fundamental policy objective of the City of Southampton, together with reducing HGV movements in the city and enabling economic growth unhindered by congestion.			
Soft S			
Style	Staff	Skills	Shared Values
<p><i>What management style / culture embodied by the company leaders?</i></p> <p>There is a big difference here from case to case. Not surprisingly, not every management is ready / willing to take the risk of testing a set-up that can lead to higher costs for the sake of environmental or social sustainability.</p> <p>For the Southampton City Council however, it is an opportunity to act as a role model by improving the environmental profile of its fleet.</p>	<p><i>What type and how many employees are required?</i></p> <p>Since most of the project effort was focused on creating traction for sustainability project scenarios, calculations were made but not yet verified for each of the possible scenarios.</p>	<p><i>What are the capabilities and competences required to be successful?</i></p> <p>It is important to be able to demonstrate the magnitude of the problem and the potential gain. This can be the starting point of a collaboration.</p>	<p><i>What are the norms and standards that guide the behaviour.</i></p> <p>One of the issues with the implementations at the Isle of Wight and the University are the fact that the purpose is not aligned with the trial: importance of incurred costs vs. environmental improvement.</p>

3.5 Common logistics functions for shopping centres: OSLO

Hard S		
Strategy	Structure	Systems
<p>How does the set-up attempt to achieve a competitive advantage?</p> <p>The internal logistics function which is planned to be established at the Økern shopping centre that opens in 2022 plans to offer receipt of deliveries, temporary storage space and in-house movements of goods and waste. This helps more efficient deliveries by logistics companies delivering to the shopping centre tenants (saving of 10-15 minute / pallet) and less individual transports in the shopping centre (satisfaction of employees and shoppers).</p>	<p>Who is responsible for what?</p> <p>The internal logistics function will be established to act as a receiver and distributor of all deliveries for the 150 tenants in the shopping centre.</p> <p>The owner of the shopping centre will secure the business model by making the use of the internal logistics function compulsory for the tenants.</p>	<p>What are the systems and processes that need to be implemented?</p> <p>The common logistics functions will be implemented as a permanent and full-scale solution in the Økern shopping centre opening in 2022.</p>
<p>What was learnt throughout the experiment regarding the strategy?</p> <p>The replication of the Oslo solution “Common logistics functions for shopping centres” is ongoing in the Malmö Emporia mall in Hyllie.</p> <p>The logistics operator in charge of the common logistics function is paid by the owner of the shopping centre. The acceptance is high.</p>	<p>What are critical success factors?</p> <p>Gaining stakeholder support and overcoming low initial willingness to adapt to the solution.</p> <p>Agreement on financing and organizing the common logistics function is a challenge, because benefits and costs are incurred by different parties. This implies that suitable charging and allocation methods for the costs and benefits are essential for a sustainable set-up. Also essential is obliging receivers to use the internal logistics centre.</p> <p>In the studied success factors, it became clear that obtaining an appropriate location with affordable capital costs is essential.</p>	
<p>What is the vision, mission and values of supporting the strategy?</p> <p>Decoupling internal logistics from deliveries can lead to overall efficiencies and a more efficient internal flow.</p>		

Soft S			
Style	Staff	Skills	Shared Values
<p>What management style / culture embodied by the company leaders?</p> <p>The owner of the shopping centre is focusing on the total efficiency and sustainability of the shopping centre.</p>	<p>What type and how many employees are required?</p> <p>Since the centre is only to open in 2022, it was not possible to explore this in detail.</p>	<p>What are the capabilities and competences required to be successful?</p> <p>Communication and transparency are critical to partnership success Requires enthusiastic support from members to improve efficiency and reduce external impacts</p>	<p>What are the norms and standards that guide the behaviour.</p> <p>One of the main intentions of introducing common logistics functions is to save time on logistics activities of companies delivering to the tenants and for the tenants themselves.</p>

3.6 Integration of direct and reverse logistics: ROME

Hard S		
Strategy	Structure	Systems
<p>How does the set-up attempt to achieve a competitive advantage?</p> <p>This living lab explored the possibility for a postal operator to perform recyclable waste collection (plastic caps) on the same route when delivering mail and parcels with electric vehicles.</p> <p>Plastic caps were chosen as the starting point because of</p> <ol style="list-style-type: none"> 1) it was a recyclable waste material that had fewer regulatory challenges and one of the few that the postal operator was allowed to transport without major interventions. 2) plastic caps are from polyethylene, can be collected separately and are a versatile and easy to recycle material. These caps were already recycled in voluntary initiatives for purposes 	<p>Who is responsible for what?</p> <p>Poste Italiane, the national postal operator, whose core business is delivering mail/parcels, picks up plastic caps during the mail delivery route with electric vehicles.</p> <p>University of Roma Tre (UR3), MeWare (MEW), City of Rome (ROME) and the Mobility Agency of Rome (RSM) were the other parties involved.</p>	<p>What are the systems and processes that need to be implemented?</p> <p>Plastic cap collection containers equipped with automated signalling, alert Poste Italiane (via Concierge Service Company) when the container is full. Poste Italiane employees delivery routes, collect this full container and bring it to a collection point @ Poste Italiane, from where they are transported to a central collection location where they are temporarily stocked until a sufficient amount is gathered to be sold and shipped to RMP Salari S.r.l.</p>
<p>What was learnt throughout the experiment regarding the strategy?</p> <p>In a first phase the experiment was limited to plastic caps in a small part of the city (0.5 square km – 3 university buildings) in order to be able to explore practical considerations and improvement opportunities. While the set-up succeeded in raising the quantity of caps collected compared to the voluntary collection and in reducing transport emissions related to the collection, it also showed that for the quantities of this waste type alone, it is not economically viable without government support.</p> <p>In later phases the plan was to (1) extend the implementation in terms of flows involved, sites and alternative waste recycled; and (2) include it in the actual logistics process for urban waste management of the city of Rome and the waste management company (AMA S.p.A.).</p> <p>The remaining challenges identified are: sufficient revenue generation, locating recycling hubs and regulatory constraints regarding waste.</p>	<p>What are critical success factors?</p> <p>Building a good partnership for the supply chain operations is important. Senior manager support is essential; combined with important political support. Appropriate funding is also required for the trial.</p> <p>The objective to improve vehicle fill and return loads/empty running requires easily combinable cargo in terms of size, type (safety) and packaging. Also operations with balanced flows of product in both directions are needed. Goods that are time-critical are less suitable. Electric vehicles require shippers and receivers to be willing to invest in these for sustainability purposes.</p>	
<p>What is the vision, mission and values of supporting the strategy?</p> <p>Integrating direct and reverse logistic flows can be a method to improve transport efficiency in the city by improving loading factors and avoiding empty returns. Clean waste is a material that could be suiting such a set-</p>		

up. The Strategic Marketing Unit of Poste Italiane is investigating the possibilities to expand to different types of clean waste.			
Soft S			
Style	Staff	Skills	Shared Values
<p>What management style / culture embodied by the company leaders?</p> <p>At Poste Italiane, there is an interest to explore and innovate in areas that can bring new revenue streams and help overall sustainability</p>	<p>What type and how many employees are required?</p> <p>This experiment and set-up focused on using the existing employees for additional tasks</p>	<p>What are the capabilities and competences required to be successful?</p> <p>There is a lot of complexity in the regulatory landscape which needs to be investigated. Also, the business case requires sufficient study to look into possible economic viability. Smart container set-ups can help to make the routing and collection more efficient</p>	<p>What are the norms and standards that guide the behaviour.</p> <p>The belief that there can be efficiency gains from integrating delivery and collection and the fact that stakeholder engagement is important...</p>

3.7 Logistics hotels: PARIS

Hard S		
Strategy	Structure	Systems
<p>How does the set-up attempt to achieve a competitive advantage?</p> <p>Logistics hotels exist in Asia (Tokyo, Seoul, Hong Kong). They are logistics facilities implemented in urban areas and having specific characteristics such as mixed uses and/or several stories.</p> <p>The “logistics hotel” is a key element of the City of Paris’ strategy to reintroduce logistics activity in the dense urban area to fight “logistics sprawl” and its effects.</p> <p>By consolidation and switching to cleaner modes of transport at points of entrance to dense urban areas there can be a substantial reduction of the negative impacts of deliveries - especially emissions (CO₂, PM, NOx), noise and congestion</p>	<p>Who is responsible for what?</p> <p>Chronopost is the sole operator of the Beaugrenelle urban delivery centre. Consolidated shipments arrive all the way to Beaugrenelle (with Chronopost trucks), then contractors take over.</p>	<p>What are the systems and processes that need to be implemented?</p> <p>Beaugrenelle urban distribution space is located in the 15th arrondissement of Paris. It was transformed from an old parking and has been in operation since 2013. It is configured as an urban distribution centre to serve South-West Paris and immediate neighbouring cities. It is composed of a road logistics terminal of 2 565m² operating parcel and express transport with two delivery areas and one customer reception area open from 9h-19h. Another area of 462 m² is dedicated to offices and sanitary/social infrastructure.</p> <p>Current Chronopost/ subcontractors fleet is composed of 28 diesel vans and 2 electric vehicles.</p>
<p>What was learnt throughout the experiment regarding the strategy?</p> <p>Citylab Paris assisted in the evaluation of two different terminals located in Paris: Chapelle logistics hotel and Beaugrenelle urban consolidation centre. Beaugrenelle is already functioning.</p> <p>For Beaugrenelle, operational since 2012, Chronopost was previously running a regular service from a suburban cross dock terminal located 10km from Paris. The location of the depot has made a huge difference in operations because consolidated shipments now arrive all the way to Beaugrenelle (with Chronopost trucks).</p> <p>In the case of Chapelle logistics hotel, which is being built, CITYLAB Paris implementation is focused on assessing regulatory, technical and economic challenges when constructing logistics buildings in cities.</p>	<p>What are critical success factors?</p> <p>For urban consolidation centres/mobile depots it is important to generate revenue from value added services.</p> <p>Making use of existing depot/warehouse space can reduce capital costs</p> <p>Access restrictions and stimulating measures for more environmentally friendly transportation modes can help a lot.</p> <p>Urban distribution property and land use planning interventions to facilitate the establishment of logistics hotels.</p>	
<p>What is the vision, mission and values of supporting the strategy?</p>		

The city of Paris recognizes the importance of air pollution and has an elaborated plan to act upon it.			
Soft S			
Style	Staff	Skills	Shared Values
What management style / culture embodied by the company leaders? In order to deal with “logistics sprawl”, the Paris administration is leading to reintroduce logistics terminals in densely-populated areas.	What type and how many employees are required? In Beaugrenelle the 11 employees and 50 drivers (incl. subcontractors) of Chronopost handle 6 500 parcels per day (distribution and collection) and 3 500 deliveries per day.	What are the capabilities and competences required to be successful? The major complexity requires thorough studying of the regulatory and technical landscape to be able to make progress.	What are the norms and standards that guide the behaviour. A common mission of reducing logistics sprawl.

4 Business-targeted dissemination initiatives / workshops

Each of the Citylab cities organised a workshop with a focus on the implementation actions taking place in each city, as reported in Deliverable D7.2 (Reporting of project symposia, workshops, meetings and other events workshop). For Paris and Rome, this took place within a larger-scale event; workshops in Amsterdam and Brussels took place in March 2018. In local workshops, we discussed and listed possible dissemination channels and ideated on the content for a business-targeted dissemination package. The focus is to help stakeholders to detect and understand opportunities. We concluded that this content should be clear and straightforward in order to stimulate candidates for reapplication of successful concepts in order to stimulate market-uptake. Therefore, we have focused on tools that describe and characterize the different set-ups in a more general and reapplicable way (properties flowcharts, 7S and cartoons) rather than cost calculation and decision support tools (which both need to be very specific or fail to be accurate and transferable). The more general tools help to organize the learnings in a way that these can serve as a first introduction and overview for businesses that can then decide to explore specific examples in greater detail.

In order to disseminate the learnings we have composed a digital flyer using simple versions of the properties flowchart, high level business model summaries and the cartoons produced for Citylab by the WP7 leaders (University of Southampton) available from the project website at: <http://www.citylab-project.eu/cartoons.php>.

We have engaged with the Alliance for Logistics Innovation through Collaboration in Europe (ALICE) and other sector organisations and will continue to use the produced materials in existing conferences, business fora and similar business-relevant channels (websites and blogs, magazines,...).