

Identifying Potential CVC for Projects

Full Description

CVC opportunities should be demand-driven and meet the wider needs of beneficiaries and stakeholders of the project. To identify potential CVC for projects, governments and Project Owners should consider linkages with core-services, mapping beneficiaries and stakeholder needs and analysing project characteristics with innovative thinking. A similar approach can be used to identify projects with high CVC potential for a program-level assessment.

- **Conduct a beneficiary and stakeholder need mapping exercise** to comprehensively identify the needs of users and beneficiaries within the community that create commercially driven demand for integrated solutions. See Table 2.

Table 2: Example of how to identify CVC for an urban transit project based on beneficiary and stakeholder needs mapping exercise

Groups	Description	Needs	Commercial revenue opportunities
Users	Commuters who use the transit system	Improved connectivity, shorter travel time	Fare revenue
		Enhanced travelers' comfort and better user experience	Retail, banking, parking, transportation fee, leisure, entertainment, food and beverages
Beneficiaries	Residents living around the stations	Access to facilities and amenities	Retail, banking, leisure, entertainment, food and beverages, convenience store
	Residents in other areas wishing to move to the station areas with improved connectivity	Housing, office space	Residential, office space
Stakeholders	Corporations who want to reach target customers to advertise their products	Access to high-footfall traffic areas	Advertising, marketing

- **Analyse project characteristics with innovative thinking** to identify the untapped commercial demand of the project. See Table 3.

Table 3: Example of how to analyse project characteristics to identify CVC opportunities (non-exhaustive list)

Project Characteristics	CVC Opportunities	Examples
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Site or location

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| <ul style="list-style-type: none"> • Site or location of the project will impact CVC potential. E.g. the opportunity to include residential development will depend on the project’s proximity to transport, job sources and general amenities. The opportunity for infrastructure sharing will depend on the proximity with other facilities which have demand for services in nearby areas. | <ul style="list-style-type: none"> • High footfall areas near to public transit are perfect locations to promote a product, service, or cause and are effective customer touchpoints for brands. SMRT Corporation Ltd. (SMRT), which is wholly owned by the Singaporean government, operates train, bus, taxi and private hire vehicle services. SMRT established a subsidiary company named Stellar Ace especially for managing advertising and marketing businesses. Stellar Ace leveraged the SMRT transportation network as prime location for advertising and marketing with over 240 million annual passengers which generated almost 5% of SMRT’s total revenue.¹ |
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Traffic/demand assessment

- One of the key advantages of public infrastructure is the volume of traffic (from users, staff, visitors, stakeholders) which offers strong commercial demand.
- Consider the number of users and staff working in the project facilities to assess the market size and commercial demand.
- The Northwestern Memorial Hospital (NHM) in Chicago is situated in a vibrant neighbourhood with nearly 67,000 residents. With high potential for retail businesses, NHM decided to incorporate retail space in its campus area focused on serving its patients, visitors, hospital employees and local neighbourhoods which generated around 5.6% of NHM's total revenue in 2021.²

Competitors

- The level of competition will impact the commercial potential of the project. For example, a TOD concept needs to be done selectively and cannot be realistically considered for all stations.
- Demand and competitor assessment needs to be conducted to realistically assess market potential.
- Traffic at the Amritsar Bus Terminal, which served 1,800 to 2,000 bus arrivals per day, far exceeded the capacity of the available facilities and the existing terminal building was in poor condition. To address this problem, the Department of Transportation (DoT) of the Government of Punjab (GoP) decided to expand the Amritsar terminal using a PPP scheme. The project was awarded to a private operator. RRI's revenue comes from tariffs paid by buses for use of the terminal, commercial leases for shops, advertising, and parking fees. The contracting authority agreed not to develop any similar facilities within a 10-km radius during the concession period, to ensure there would be no competition that might hinder the private operator's effort to achieve the forecasted demand for the terminal. However, the project still faced problems as there is no monitoring or enforcement mechanism to ensure that all buses comply with non-compete clause ³

Technical characteristics or technology

- The demand profile (peak vs. off-peak, seasonality), capacity utilisation, by-product and technological innovation could be a source of commercial opportunity.
- Wembley Stadium is regularly used for English football games, including the FA Cup. However, during the off-season, the space hosts concerts and events of big entertainment acts that draw a high number of visitors from overseas who tend to extend their stay in England resulting in higher tourist spending associated with these events [4](#)

Drive for efficiency and cost saving

- CVC opportunities could arise from the project owner's drive for efficiency and cost saving opportunities, for example, energy efficiency investments, infrastructure sharing.
- In the telecommunication industry, the rapid deployment and changes to technology can quickly render old telecommunication infrastructure obsolete and operators are required to spend a large amount of capital to build new infrastructure. National Telecom (NT) a state-owned company in Thailand can effectively reduce their cost of tower operations by up to 40% and create sustainable revenue streams by sharing their towers, submarine cables and fibre lines with three major mobile operators.[5](#)

Green infrastructure

- The Project Owner's vision to have green infrastructure assets and operations can also lead to CVC opportunities, for example: installation of renewable power for the site, revenue created from recycling or composting that achieves zero-waste and circular economy aspirations.
- EV production costs have been dropping over the past years along with a shift in demand for EV. The Government of India supports the EV industry through the Faster Adoption and Manufacturing of Electric Vehicles (FAME) policies which support the EV manufacturing and charging industry with financial and operational incentives. Tata power has signed an MOU with Ahmedabad Municipal Corporation under FAME to develop 5,000 EV charging point across Maharashtra City powered by renewable energy sources and the state will earn concession fees and lease payments in return.[6](#)

Branding and marketing

- Public infrastructure assets can be an iconic image (e.g., landmark train stations) which can create commercial value, for example, by offering naming rights and opportunities for positive brand association.
- In a similar way that advertising and marketing leverages high footfall areas, naming rights can leverage a city's or location's iconic image to connect with consumers. The Roads and Transport Authority (RTA) of Dubai has sold the naming rights packages of 23 out of 53 metro station which has generated additional revenue to RTA of around USD 545 million.[7](#)

Virtual spaces

- Infrastructure assets can create both physical and virtual spaces. Virtual spaces can be a source of CVC, for example, if the infrastructure assets are operated on a virtual platform. A virtual space can provide opportunities for eCommerce and advertising revenue.

- Changi Airport is a crucial component of Singapore government's strategy to become a regional commercial hub. Changi Airport is operated by Changi Airport Group (CAG) which is wholly-owned by the Singapore government. They have upgraded the existing infrastructure to accommodate non-travel services such as retail and restaurants to expand its base to non-travellers. The opening of Jewel, with its array of shops, restaurants, best-in class attractions and lush verdant landscaping, in April 2019 created a new revenue stream for the Group and was a key driver for the increase in CAG's revenue. When the pandemic hit in early 2020, the business turned its focus to the non-travelling domestic market. Tax and duty-free items such as wines and spirits are now available to non-travellers through iShopChangi, the airport's e-commerce platform, with over 40% off regular prices all year round. This product category has been popular among local consumers [.8](#)

Destination creation

- As the government strives to improve its competitiveness, its vision to create destinations in addition to providing public services can allow various innovative opportunities, for example, innovation districts or themed city developments.

- Value creation in the control of real-estate development rights can be well illustrated by the development of innovation districts in Singapore. Jurong Innovation District (JID) is the first 600-hectare innovation hub that transformed a brownfield area of old industrial and low-productivity warehouse into a lively industrial park aimed at catalysing innovation. In 2020, JID generated around SGD 2.3 billion in rental income from land and buildings which flowed back to the Singaporean government as JID was one of the subsidiaries and wholly owned by the Singaporean state holding company [9](#)

Using available and idle spaces

- Commercial opportunities can arise from making use of available and idle spaces especially in land-scarce urban areas.
- Increasing volume of online purchases and deliveries through e-commerce platforms have led to higher volume of delivery vehicles on the roads to residential areas. Courier hubs (aims to enhance last-mile business-to-consumer delivery operations) and nationwide parcel lockers network are simple ideas for utilizing available and idle spaces such as residential car parks which are usually empty during the day. Additional revenues from renting out these spaces to the logistic service providers demonstrate a low-hanging opportunity for commercial activities that can generate revenue for operations and maintenance of public housing buildings.[10](#)

Land

- The government could create commercial value from land and water, for example, leasing water for floating solar.
- Consider CVC opportunities in unused or deserted land with no competing uses or existing assets with untapped potential.
- Floating solar photovoltaic (FPV) installations offer new opportunities for scaling up solar generating capacity, especially in countries with high population density and competing uses for available land. The Sembcorp Tengeh floating solar farm is a 60MW floating solar installed at Tengeh reservoir, Singapore in 2021 - one of the largest inland floating solar projects. Installing solar PV systems in the reservoir optimizes land use while enabling the Singaporean government to generate funding from leasing out spaces to developers.[11](#)

Network of assets

- The public sector has a large network of small and medium-scale assets and commercial opportunities. These infrastructure assets (e.g. waste sorting sites, public housing units, postal hubs) could be aggregated to achieve economies of scale and increase commercial potential.
- The Economic Development Board of Singapore's SolarNova program demonstrated how to aggregate demand by bringing together various government agencies. Under the program, the private developer won the tender to install more than 170,000 solar panels on the rooftops of more than 1,200 Housing and Development Board (HDB) blocks and 49 government sites. The government effectively aggregated public sector solar demand for private sector solar developers and ensured economies of scale. Solar leasing, in the form of a Power Purchase Agreement, provided a range of contract pricing structures that offered competitive rates, helping the government to save on electricity bills.¹²

- **Check whether CVC opportunities align with core services** and do not dilute or impact them (as discussed in core principles of application of CVC in projects). See [Box 5](#) for example of how CVC opportunities can affect quality of core services.

Box 5: The quality of core services could not be compromised with the introduction of CVC

In some cases, increasing commercial activities also increases the requirements of public services. For example, a parking garage with office space developed above it will need to provide additional parking to address the needs of the tenants of the office space. A bus terminal offering additional commercial services might need to be designed for increased foot traffic, as passengers spend more time in the terminal to benefit from the commercial services and other customers visit the terminal who are not otherwise bus passengers. The Moncloa Transportation Exchanger in Madrid, Spain is an integrated multimodal transportation terminal equipped with commercial and office areas. It was expanded and improved in 2009 to cater for the increasing number of passengers. As a result, it was able to cater for 110,000 passengers in 2011, up from only 44,000 in 1995.¹³

- **Draw inspiration from international case studies** for revenue opportunities that can be incorporated in projects with similar characteristics. [Annexes 1–3](#) in this report provides rich resources of how CVC is applied in real-world projects. The opportunities in the case studies must be analysed in the specific context of the project being considered.

Footnote 1: World Bank, Finding innovative Sources of Revenues for Infrastructure, November 2022.

Footnote 2: See Commercial uses of physical spaces created on the back of public infrastructure: [Retail in Northwestern Hospital, Chicago](#)

Footnote 3: See [Amritsar Intercity Bus Terminal](#), India

Footnote 4: See [Usage of facilities during off-hours or off-seasons: Events in Wembley Stadium, UK](#)

Footnote 5: See [Infrastructure sharing: Telecom infrastructure sharing in Thailand](#).

Footnote 6: See Leveraging Climate Opportunities: [EV charging infrastructure, India](#)

Footnote 7: See Naming Rights in Stations and City Icons: [Naming rights in stations and city icons, Dubai, United Arab Emirates](#)

Footnote 8: See Commercial uses of physical places and virtual spaces created on the back of public infrastructure: [Changi Airport, Singapore](#)

Footnote 9: See Control of real estate development rights to enhance value: [Jurong innovation district, Singapore](#)

Footnote 10: See Commercial uses of physical places and virtual spaces created on the back of public infrastructure: [Pilot Courier Hubs and Lockers in Residential Areas, Singapore](#)

Footnote 11: See Leveraging climate opportunities: [Sembcorp Tengeh floating solar farm, Singapore](#)

Footnote 12: See Leveraging climate opportunities: [SolarNova rooftop solar program, Singapore](#)

Footnote 13: World Bank, Municipal Public-Private Partnership Framework: [Module 17: Capturing Commercial Value, September 2019](#).

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[How innovative revenues for infrastructure can fundamentally reshape infrastructure funding](#)

Additional Resources

[Climate-Smart PPPs](#)

[Finance Structures for PPP](#)

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