

Contacts

Dubai

Karim Abdallah Partner +971-4-436-3000 karim.abdallah @strategyand.ae.pwc.com

Ramy Sfeir Partner +971-4-436-3000 ramy.sfeir @strategyand.ae.pwc.com Charly Nakhoul Principal +971-4-436-3000 charly.nakhoul @strategyand.ae.pwc.com

Fady Halim Manager +971-4-436-3000 fady.halim @strategyand.ae.pwc.com

About the authors

Karim Abdallah is a partner with Strategy& Middle East, part of the PwC network. Based in Dubai, he is a member of the family business, investments, and real estate practice in the Middle East. He leads the real estate platform in the Middle East, focusing on real estate developers and corporations with significant real estate portfolios, offering support in strategy setting, organization design and restructuring, business planning, and feasibility studies for megaprojects.

Ramy Sfeir is a partner with Strategy& Middle East. Based in Dubai, he leads the family business, investments, and real estate practice in the Middle East. He serves most leading regional developers on topics of strategic development and transformation. He has significant experience in leading concept developments of mega-scale across the Middle East and Europe.

Charly Nakhoul is a principal with Strategy& Middle East. Based in Dubai, he is a member of the family business, investments, and real estate practice in the Middle East. He focuses on strategy, operating model development, and portfolio rationalization for real estate developers and investors; and on megaproject feasibility assessment, development, institutional setup, partnership structuring, and implementation.

Fady Halim is a manager with Strategy& Middle East. Based in Dubai, he is a member of the family business, investments, and real estate practice in the Middle East, focused on real estate development. He specializes in institutional setup and operating model design for megaprojects, as well as feasibility studies, strategy development, and transformation programs.

EXECUTIVE SUMMARY

Real estate megaprojects are an effective tool for promoting growth and economic diversification. We estimate that Gulf Cooperation Council (GCC)¹ countries have planned almost one trillion U.S. dollars of investment in megaprojects, as they look to transform economically and socially.

Projects running into the tens of billions of dollars always involve risk. The GCC's real estate megaprojects are no exception. These projects face significant challenges, starting with their inherent complexity. They also have to overcome home-country barriers, from outmoded regulations to inefficient institutions.

A key enabler of any successful megaproject is having the right institutional setup, with clearly defined relationships among all stakeholders (e.g., the project sponsor, market regulators, property developers, asset managers, and city services providers). These stakeholders must cooperate for megaprojects to succeed. Yet in far too many cases, the initial discussions surrounding GCC megaprojects have been about the concept, the development plan, and the funding — leaving the institutional setup as an afterthought. Defining the institutional setup earlier makes a tremendous contribution to project success.

THE \$1 TRILLION CHALLENGE

For years, real estate megaprojects have been part of GCC countries' efforts to diversify their economies away from oil and gas. In the 1970s, Saudi Arabia used megaprojects to transform Yanbu and Jubail into industrial port cities.

There are close to 30 real estate megaprojects in the GCC as of early 2020, representing as much as US\$1 trillion in investment, according to our calculations. As these projects become operational over the next decade, they will help revitalize GCC economies, creating significantly improved tourist attractions, entertainment venues, financial and health centers, and residential areas. The goal of these megaprojects is to find new sources of growth, become more innovative and environmentally sustainable, and provide showcases for culture, heritage, and history.

The GCC's real estate megaprojects take two fundamentally different forms. Some are greenfield projects set on large swaths of vacant land with the goal of creating completely new communities or providing new offerings. Examples include Al Harir City in Kuwait, Lusail City in Qatar, the Red Sea project and NEOM in Saudi Arabia, and the Riyadh City project in Abu Dhabi in the United Arab Emirates (UAE). Others are regeneration projects focused on reviving and restoring existing assets and communities, such as Muharraq in Bahrain, and in Saudi Arabia the downtowns of Jeddah and the capital, Riyadh.

Although these projects vary widely in their scope and vision, they are alike in their soaring ambition and daunting levels of complexity.

Too often, the project sponsors make the cardinal errors of either delaying decisions about the institutional setup until a later stage, or they choose models that are incompatible with the overall purpose of the development. They prefer to focus initially on the master plan, on the development approach, and on the funding. Instead, the project sponsors should think of the institutional setup near the beginning of the megaproject, along with the fundamental concept behind the development.² The institutional process is crucial and takes time to get right.



Too often, the project sponsors make the cardinal errors of either delaying decisions about the institutional setup until a later stage, or they choose models that are incompatible with the overall purpose of the development.

UNDERSTANDING THE MEGAPROJECT INSTITUTIONAL SETUP

To understand the importance of the institutional setup, it is important to lay out the four phases that real estate development projects typically follow. Whether greenfield or regeneration, these are:

- Phase 1: Vision and concept. This includes the initial but essential stages of the master plan
 vision, concept formulation, pre-concept designs, and concept designs. This is also when the
 blueprint for the institutional setup and various project objectives are established, including
 those relating to economics and to the expected environmental and societal benefits.
- Phase 2: Master plan detailed design. In this phase, there are successively a schematic
 design, an illustrative master plan, and then a detailed master plan that includes the
 infrastructure design. As part of the master plan, guidelines and design codes are developed;
 these need to be approved and, eventually, monitored. The institutional setup gets translated
 into clear mandates and interaction models in this phase, and coordination with the broader
 economy begins.

Two processes happen in parallel during this phase: A real estate process that focuses on the physical space, and an economic/environmental/societal process that focuses on the enablers needed to achieve the project's objectives.

- Phase 3: Delivery. Once the detailed design is in hand, construction begins and the entities that were conceived in Phases 1 and 2 start their work. The delivery phase begins with the arrival of the first bulldozer and ends, often a decade or more later, when the project is fully built and every corner of it is occupied or open for business.
- Phase 4: Operations. This phase generally overlaps with the delivery phase because assets
 are typically handed over to the project sponsor at intervals when they are ready. This allows
 for the activation of some assets before others. The operations phase covers everything
 from the rollout of city services (e.g., street cleaning and security) to the management of
 entertainment and real estate assets. By the time this phase has begun, the new institutional
 setup is usually well established.

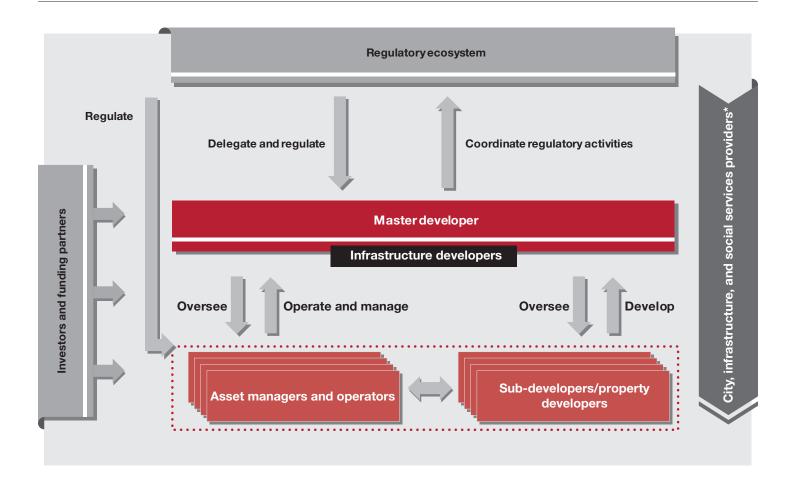
Although the number of distinct stakeholders in a real estate megaproject can be close to 100, there are several core roles and responsibilities common to all megaprojects (see *Exhibit 1*):

- Master developer. This entity defines the project's concept and vision. A master plan incorporates infrastructure requirements, design, and a detailed plan for the superstructure asset mix (the number of residential units, the amount of retail and commercial space, and the number of cultural venues and other buildings). The master developer is also responsible for developing detailed design guidelines and building codes with master planners, engineering firms, and real estate consultants, among others. Master developers own the project master plan.
- Market regulators. These entities (generally part of the government) set policies and regulations and monitor compliance across sectors such as health, safety, and real estate. Many megaprojects need to comply with more than one regulator.
- Infrastructure developers. These entities construct or renovate the infrastructure in a project. This includes utilities like power, water, and sewage, roads, public transport, and any other aspect of infrastructure that is in the public realm.
- Sub-developers. These entities are brought in by the master developer in the largest of
 megaprojects. They take specific areas of the megaproject and develop them, playing the role
 of master developers in these areas. They adhere to the principles, building guidelines, codes,
 and regulations laid out by the master planner and market regulators. Sub-developers only
 exist in very large projects.
- Property developers. These entities are responsible for the development of specific plots
 within the master plan. For the most part, they manage the design and construction of the
 superstructure in these plots. They help ensure that target returns are achieved and that
 agreed-on objectives are met.
- Asset managers. These entities act as owners of the assets whether it is a row of retail stores in a regenerated part of a city or the concessions in a new sports venue. They are responsible for running and maintaining these assets in a way that captures the financial and other objectives specified in the vision.
- City, infrastructure, and social services providers. These entities activate the project and deliver the target quality of life. Their purview is broad, extending to every type of social service including municipality services, utilities, roads, health, education, and civil defense. The city services providers' job includes the issuance of permits, the provisioning of licenses, the enforcement of regulations, and the collection of revenues.
- Investors and funding partners. These entities enter as equity partners or creditors (e.g. banks) in different assets across the life cycle of the project. Partners provide liquidity or land in return for equity and invest with different players, whether the master developer, the infrastructure developer, the sub-developer, or the property developer. Some of these entities also buy off-plan, purchasing unfinished or finished properties as an investment.

The recitation and explication of these basic roles is no mere academic exercise. Such an understanding is vital to any effort to shape the proper role of the megaproject sponsor and to design the right institutional setup in a real estate megaproject. In the case of some projects, certain roles might not exist (e.g., a cultural or heritage regulator), and must be created as part of the design of the institutional setup.

EXHIBIT 1

Key institutional roles in a megaproject



^{*} Includes municipality services, utilities, roads, health, education, and civil defense. Source: Strategy&

RESHAPING THE INSTITUTIONAL SETUP

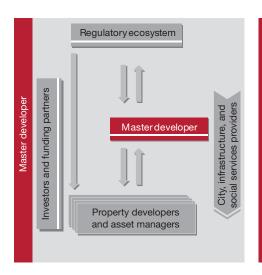
Depending on the ecosystem in which the project operates, different institutional setups can be deployed. These institutional setups vary in the level of involvement and responsibility of the megaproject sponsor and the sponsor's positioning vis-à-vis the other players in the ecosystem. The megaproject sponsor does not need to be limited to one role in the ecosystem; the sponsor can play multiple roles at once. Indeed, there have been many variants of institutional setup in real estate megaprojects in recent decades, along with different roles assumed by the project sponsor (see *Exhibit 2*).

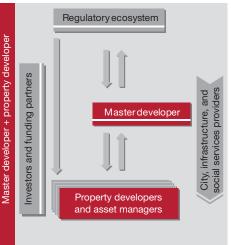
- Master developer: In this most basic of models, the project sponsor plays the role of the
 master developer and that role alone. This model is common, and better suited, to mature
 economies in which government services function efficiently, making any change needlessly
 disruptive. Infrastructure is typically developed or managed by the master developer and
 handed over to corresponding responsible parties. The master developer would then engage
 in leasing or selling plots to property developers.
- Master developer + property developer: This is another basic model, in which the project sponsor plays two roles: that of the master developer and of the property developer. This model is common when an effective regulatory ecosystem and efficient city, infrastructure, and social services providers are already in place. The project sponsor could be private, such as Solidere in Beirut which was tasked to expropriate and rebuild the downtown area. Or it could be public, such as Calgary Municipal Land Corporation in Canada, which was established to improve infrastructure and property development in part of the city, and Modon Properties' Riyadh City in Abu Dhabi, which is tasked to build large greenfield housing projects.
- Master developer + property developer + regulator: This model can make a lot of sense when the licensing or permit processes in the economy are inefficient, or in situations where a megaproject has a particularly aggressive development schedule. In some cases, a regeneration requirement or special regulatory need could lead to some regulatory powers being centralized with, or reassigned to, the project sponsor. A special regulatory requirement could involve the project's proximity to a UNESCO World Heritage Site or special economic zone. Most of the time when this model is used, the project sponsor is a government entity, such as Porto Vivo, Sru,³ in Portugal that is mandated to regenerate and revitalize heritage sites, or a state-owned enterprise, such as TECOM in Dubai that is responsible for the development of several economic zones.
- Master developer + property developer + city, infrastructure, and social services
 providers: This model is typical in large-scale real estate projects where carving out city
 services makes economic sense, or where such a move is crucial because of weaknesses in
 the existing service offerings. Consider, for example, the challenge of trying to get people to
 move to a newly built city in a region where healthcare outcomes are known to be poor or the
 water supply is inadequate.

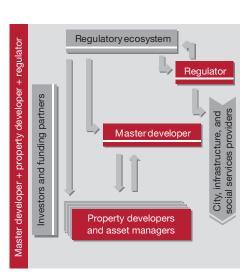
Not all services, under this model, are necessarily centralized with the project sponsor. Nor is the model circumscribed by the nature of the project sponsor. It has been used to support both publicly run projects, such as the Company of Urban Development of the Port Region in Porto Maravilha in Brazil, that delivered many greenfield and brownfield projects around the port, and privately run projects, such as Emaar's large-scale master plans.

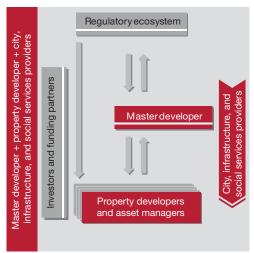
Master developer + property developer + regulator + city, infrastructure, and social services providers: This model is used when a project has all the challenges mentioned in the previous models — above all when it has a specific purpose such as an economic zone and/or it has a time line constraint, such as an upcoming event. Among the well-known projects already using this model are Sentosa in Singapore, Dubai International Financial Center in the UAE, and the London Legacy Development Company in the United Kingdom.

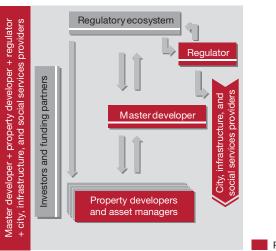
EXHIBIT 2
Main institutional setups in megaprojects











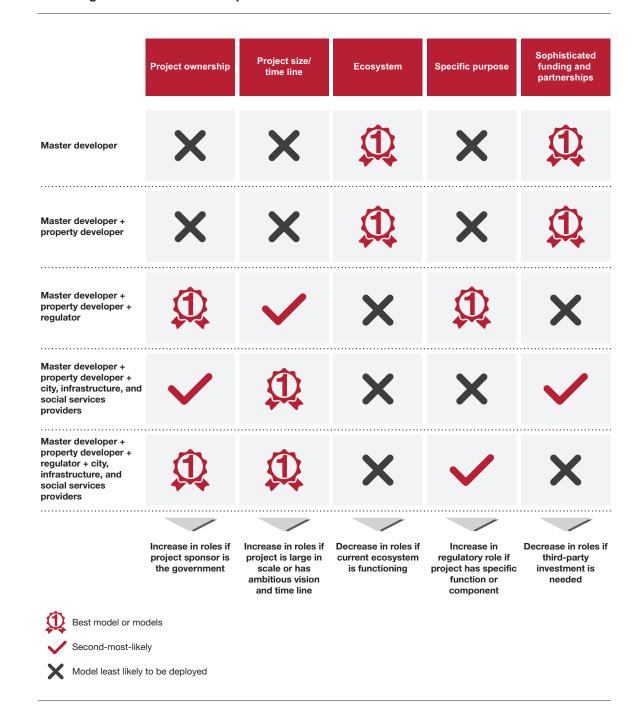
Project sponsor

From analyzing the different institutional models, a number of different design factors can be identified. When considered together, the design factors can help determine the optimal models and sponsor roles for most projects (see *Exhibit 3*).

- Ownership. A project sponsor that is a government entity will be in a much better position to consolidate or acquire roles when necessary. Private project owners cannot do this as easily.
- 2. Project size/time line. As project size increases, more autonomy can allow for expedited execution and streamlined decision making. Large-scale development requires a single entity handling different roles to work on a cohesive integrated plan. In mature economies, a municipality often plays this role, as occurred with New York City's oversight of the Hudson Yards real estate development project. GCC countries typically use government or quasi-government entities to ensure focus and speed of delivery. These entities often move into property development to demonstrate the concept and mitigate or remove risk in the overall project in ways that make the private sector feel comfortable about engaging.
- 3. Current and desired ecosystem quality/availability. The ecosystem factor that is most relevant in the GCC is city services. In cases where the city services are unsatisfactory, the project delivery entity takes over some or all of the responsibilities within the jurisdiction of the project to improve the quality of services rendered. In cases where the existing ecosystem is operating efficiently, the project sponsor would not need to take on as many roles and there would be less disruption.
- **4. Specific purpose.** Some projects have a specific purpose or component (e.g., a financial center or a UNESCO World Heritage site) that might logically result in the project sponsor's assuming, or being assigned, some regulatory powers (such as the ability to issue renovation permits or commercial licenses).
- 5. Funding and partnerships. When a government's role is limited to that of master developer, private-sector funding and private-sector partnerships can be put in place relatively easily. Private funding and partnerships become more complicated if the government is playing the role of both master developer and regulator, because conflicts of interest may arise. In designing the institutional setup, it is therefore imperative to know who will own the project delivery entity and how much funding they will provide. When these two elements are factored in, it is much easier to make the right decision about which model to use.

EXHIBIT 3

Selecting the institutional set-up model



Source: Strategy&

STRUCTURING THE MEGAPROJECT DELIVERY ENTITY FOR SUCCESS

Once the institutional setup is created, the mandate and roles of the project sponsor can be clearly defined and delineated from those of the other stakeholders in the ecosystem. These roles then need to be organized into single or multiple project-delivery and operating entities.

In a single entity structure, one entity is responsible for delivering and operating the project. The entity could be a government body but could carry out some commercial activities. Or it could be a semi-government organization, in which case it would operate as a company.

Where the project sponsor plays multiple roles, the decision about whether to establish a single entity or multiple entities depends on four considerations:

- 1. Delineation of roles. If additional investors will likely be needed as a project advances, there should be a clear dividing line between the developer and the regulator. This is easier if there are multiple entities. Having a different entity responsible for regulation can be reassuring to new third-party investors as a project moves through its life cycle.
- 2. Project scale and complexity. When a project is large or highly specialized, it is often best to proceed with multiple entities. This is because of the operational complexity present in large projects projects that involve substantial capital sums or that cover wide geographic areas. In the case of highly specialized projects, for instance those with an entertainment or tourism focus, the need for specific partnerships or skills is often an argument for multiple entities.
- 3. Funding and return. A single entity can be used on a real estate megaproject if the financial returns are predictable and the risk is relatively low. As the level of risk increases, however, a multi-entity model is usually better, allowing for the creation of real estate investment trusts, customized carve-outs, and special-purpose entities to facilitate capital flow and monetization.

4. Commercial activity and ownership. A government-owned project delivery entity that is not focused on commercial activity, and that relies on subsidies, likewise may be able to succeed as a single entity. This will not make as much sense if the government is hoping for a high level of commercial activity — as many governments are now doing to alleviate the financial burden and improve quality of service. If those are the goals, it makes more sense to pursue a multi-entity model. This could include a commercially viable company delivering the project and a less commercially driven regulator controlling the market. Obviously, in the case of a private-sector megaproject, the regulatory requirement diminishes the possibility of a single-entity model.

It is important to realize that the structure one begins with is not necessarily permanent. As the mandate grows, and the number of entities increases, the optimal structure often changes usually away from single entity toward an entity with multiple parts comprising more than one company. This evolution from single-company to holding-company structures is relatively common in the region, observable in the cases of Solidere in Lebanon, Emaar Economic City in Saudi Arabia, and Emaar Properties in the UAE.



It is important to realize that the structure one begins with is not necessarily permanent. As the mandate grows, and the number of entities increases, the optimal structure often changes.

CONCLUSION

Deciding on the institutional setup and structure of the delivery entity is critical in real estate megaprojects. There are many trade-offs to make in defining the interaction of the different ecosystem players and in operating within the legal-regulatory framework of the jurisdiction where the megaproject is developing. Moreover, the design of the institutional setup and delivery entity structure are tightly connected to the project master plan, development approach, and funding approach.

For all of these reasons, it is best to think about the institutional setup early, and coordinate it with other aspects of the project. It is a change in sequencing that can make all the difference to the success of the project.

ENDNOTES

- 1. The GCC countries are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.
- 2. Karim Abdallah, Ramy Sfeir, and Sami Khawaja, "Large scale developments in the GCC: Defining a winning concept," Strategy& 2020 (forthcoming).
- 3. Sociedade Reabilitação Urbana Da Baixa Portuense, S.A.



Strategy&

Strategy& is a global strategy consulting business uniquely positioned to help deliver your best future: one that is built on differentiation from the inside out and tailored exactly to you. As part of PwC, every day we're building the winning systems that are at the heart of growth. We combine our powerful foresight with this tangible know-how, technology, and scale to help you create a better, more transformative strategy from day one.

As the only at-scale strategy business that's part of a global professional services network, we embed our strategy capabilities with frontline teams across PwC to show you where you need to go, the choices you'll need to make to get there, and how to get it right.

The result is an authentic strategy process powerful enough to capture possibility, while pragmatic enough to ensure effective delivery. It's the strategy that gets an organization through the changes of today and drives results that redefine tomorrow. It's the strategy that turns vision into reality. It's strategy, made real.

www.strategyand.pwc.com/me

Read the latest Ideation Center insights



ideationcenter.com

Connect with Strategy& Middle East



twitter.com/strategyandme



linkedin.com/company/strategyandme



strategyand.pwc.com/me

Connect with Strategy&



twitter.com/strategyand



linkedin.com/company/strategyand



youtube.com/user/strategyand

© 2020 PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details. Mentions of Strategy& refer to the global team of practical strategists that is integrated within the PwC network of firms. For more about Strategy&, see www.strategyand.pwc.com. No reproduction is permitted in whole or part without written permission of PwC. Disclaimer: This content is for general purposes only, and should not be used as a substitute for consultation with professional advisors.