Middle East Capital Projects & Infrastructure Survey
May 2016

Delivering during change

Managing challenge and opportunity in the era of "lower-for-longer" oil prices

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Foreword

I am pleased to report here the results of PwC's 2016 Middle East Capital Projects and Infrastructure (CP&I) Survey, 'Delivering during change'.

Over the past 12 months, the CP&I market has had to deal with the impact of slowdowns and deferrals of Government Spending, as a result of the lower-for-longer oil price. This brings both risks and challenges - as well as opportunities, many of which are highlighted here in our report.

The obvious challenges are evident across all the Middle East markets as many projects have been cancelled or scaled back - and all have had to find additional efficiencies and cost savings. Now is a time where delivery of projects and commitments is more important than ever, and teams have had to adapt quickly and innovatively to changes in scope, timescales and budgets.

In terms of opportunities for the CP&I market, the reduced oil price is increasing the need for GCC countries to step up the pace of diversification and continue to invest in infrastructure to propel their economies forward. Similarly, exploring new delivery models and alternative sources of funding for projects is now on the agenda of all the GCC countries and will bring a new set of opportunities for suppliers to the CP&I market at all levels.

We also expect to see an increase in the number of construction claims and disputes as projects are cancelled or stalled and budgets tighten. As such, I am pleased that PwC has recently announced the acquisition of HLP Consulting, a specialist Construction Claims and Delay Analysis team - to supplement our regional Capital Projects and Forensics teams and help our clients navigate some of these challenges. There is a further profile of the HLP Directors Mike Harding, Simon Lowe, Alastair Gray and Shaun Crawley on page 28 of this report. We welcome them and their team to PwC. On page 26 Simon Lowe shares his top tips for mitigating the risks of claims and disputes - this applies to both owners and contractors and is well worth a read.

Thanks to all of our clients and contacts that have contributed to the survey, for taking the time to share your views from both Government and Supplier perspectives. I hope you enjoy the report.

Chris Scudamore
Partner, Middle East Capital Projects Services Leader

Methodology

We surveyed over 130 industry insiders across the Middle East region from a range of sectors including transport, cities and urban development, social infrastructure, mega events, and energy, utilities and mining. Our respondents included project owners, developers, contractors, external advisors and financiers, all with a key role in delivering the region's mega projects.

We asked the respondents about the challenges they are facing delivering their major projects, their key priorities and their outlook for the year ahead.

We conducted the survey during the fourth quarter of 2015 and the first quarter of 2016.

Table of contents

Executive summary

Here are our key findings for the region

3 in 4

have already been impacted by funding constraints

Oil's slump creates a new set of challenges

Lower government revenue as a result of the drop in the oil prices is making budgets tighter. Respondents to our survey are already starting to experience funding constraints, and are expecting less to be spent on infrastructure over the next year. 75 percent have already been impacted by funding constraints, while more than 60 percent think spending will fall this year.

3 in 5

expect a mix of private sector and government to fund infrastructure projects over the next year

Greater private sector participation

The move towards greater private sector participation requires clients and contractors to become more sophisticated. Dubai passed a PPP law last year, and Saudi Arabia, Qatar, Kuwait and Oman are moving ahead with PPP programmes. If the private sector is to take a greater share in the risk of a project, then scope changes by the client and poor contractor performance, the most common reasons for projects being delayed and over budget, will come under much closer scrutiny.

1 in 3

think that attracting and retaining skilled resources is now one of the top 3 improvement priorities

Importance of retaining talent

After struggling to attract and retain talent in previous years because of a capacity crunch, projects are now having to deliver on their commitments with reduced headcount. Entities and contractors now have to balance the need to downsize and manage costs, whilst maintaining sufficient skills and capabilities to deliver projects effectively.

44%

consider PPPs increase the likelihood of delivering capital projects on budget

PPPs - The way forward?

There are rising expectations that the private sector will step in to fill the funding gap. In some areas this will be the case, and the adoption of Public Private Partnership (PPP) models, long on the agenda, will probably accelerate as a result of tighter government spending. Nine out of ten respondents said private sector funding of capital projects would be of critical or growing importance over the next year. But the weakening fiscal positions of Middle East governments may affect private sector appetite for investing in the region.

This should be viewed as an opportunity though, rather than a time of challenges. After the frantic pace of spending of the past few years, a slowdown in activity will give organisations the space to deal with a backlog of projects, and prioritise and address internal issues. Efficiency will increasingly become an area of focus. More private sector investment and risk sharing will help drive this process and could improve project delivery.

33%

of entities involved in delivering Mega Projects expect spending to be the same or greater in next 12 months

Mega Events seem relatively unaffected

Spending will continue in some key areas. Government commitments to diversify the economies of the region away from oil are taking on greater urgency and spending on projects that achieve this aim will still go ahead. Respondents are also optimistic that spending associated with Mega Events, which have to be delivered by set dates and are of global interest like the Dubai Expo 2020 and the Qatar 2022 World Cup, will still go ahead as those dates are rapidly approaching.

62%

had been involved in a dispute recently or expect to be involved in one in the next year

Shrinking budgets and payment delays mean more disputes

Pressure on budgets will also drive a more holistic view of project cost from a one-off capital expenditure, to evaluating the whole-of-life costs including operational expenditure too. Better planning during the initial phases will be essential.

Before this effect starts to filter through, disputes between developers and contractors will likely rise this year as budgets shrink and payment delays become an issue.

Both sides should start getting prepared by ensuring that their own documentation and site data is up to date and well-organised to avoid protracted resolution proceedings.

"Our survey suggests that disputes have not risen appreciably yet, but we fully expect that this will be a trend this year as the lag effect of lower budgets catches up with project execution."

In Summary

The impact of the drop in the oil price since late 2014 has been inescapable over the past year and its impacts will continue to be felt throughout the next 12 months.

Our survey results for 2016 show a significant contrast from last time. Whereas previously the CP&I sector was struggling to deal with capacity constraints driven by the sheer volume of spending that was underway across the region, this appears to be changing now.

Our results have also shown us that the Regional CP&I market is going through a time of change - and the impacts of these changes are still evolving and likely to continue.

However, we have also seen that where there is change there are also opportunities. Mega Events must continue, economic diversification away from Oil and Gas by investing in infrastructure must continue, improving the lives of citizens by investing in social infrastructure must continue.

If all these projects must continue, then new methods of financing and delivery will be required. All of this presents an opportunity to offset the obvious current impacts that are being experienced.

Reality sinks in

The change in sentiment since the last survey has been dramatic, reflecting the significant drop in the price of oil over the past 18 months and the impact it has had on government finances in the region and liquidity in the banking sector. Our survey results found that 63 percent of respondents expect to spend less on projects than they did last year, almost the complete opposite of the 2014 survey that found three-quarters of respondents were expecting to spend more.

Figure 1 Industry outlook

Q: In your opinion what is the outlook for your industry for the next 12 months?

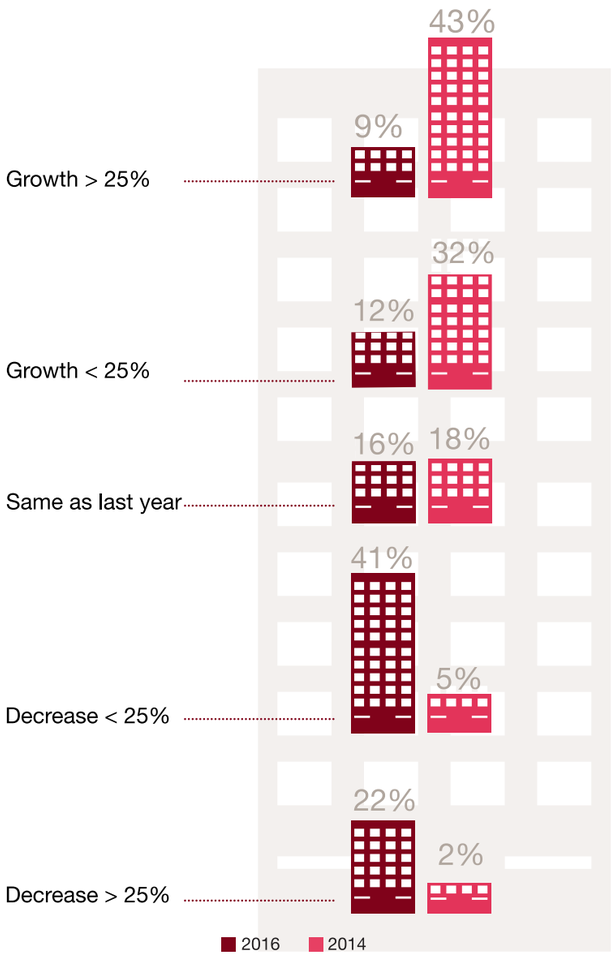
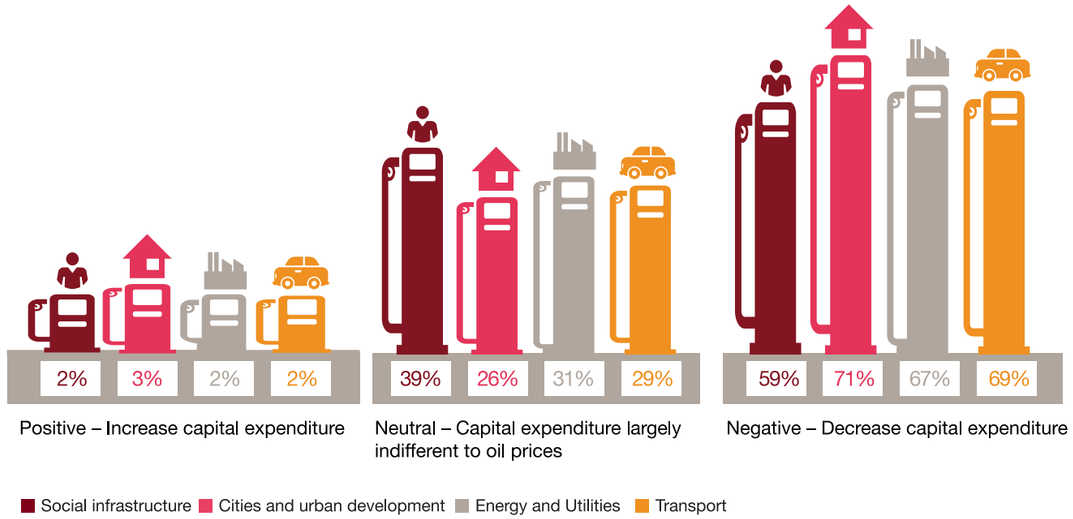


Figure 2 Expenditure

Q: What impact does the declining oil price have on the industry in which your organisation operates?



Spending cuts are already showing in project budgets, with 75 percent of respondents saying that they were impacted by funding constraints over the past 12 months. This is mostly through projects being scaled back while there was only a marginal increase in projects being cancelled or delayed/deferred. This suggests that governments have so far been reluctant to abandon some of their infrastructure ambitions and are instead focusing on getting better value for money and more efficient spending.

Energy, Utilities and Mining

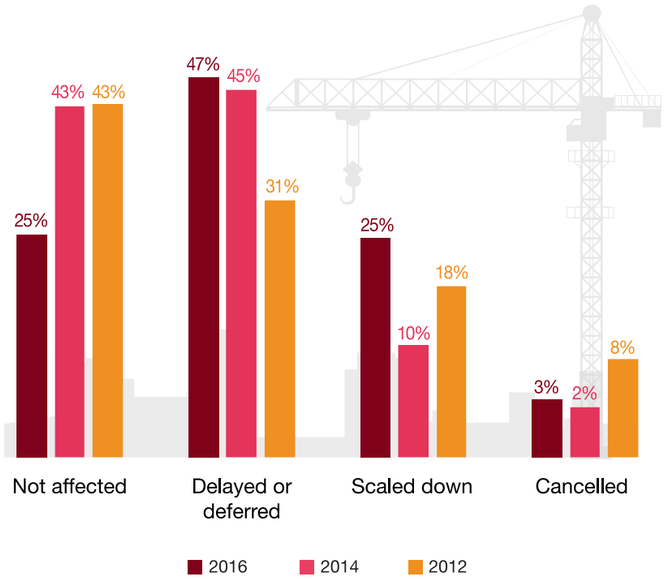
Perspectives on the ground

"Continued investment is essential across the entire energy sector. The current situation will force greater economic transparency and programme delivery discipline to attract the necessary international funding to ensure viable projects get the green light and are prioritised accordingly."

Neil O'Keeffe, Middle East Energy, Utilities & Mining Leader

Figure 3 **Funding constraints**

Q: To what extent have your capital projects been impacted by funding constraints over the past 12 months?



While that is a good sign that few projects are expected to be cancelled outright, spending cuts are expected to be relatively deep and impact most industries. One out of five of respondents said they expected cuts of more than 25 percent, while two out of five said cuts would be between 0 and 25 percent (Figure 1). Social infrastructure, urban development, transport and energy spending are all expected to be impacted by the new environment of funding constraints.

One area that respondents are more optimistic about is Mega Events. Government commitments to host global events like the Dubai Expo 2020 and the Qatar World Cup 2022 also involve significant infrastructure spending which cannot be delayed or cancelled. As a result, our survey found more than one-third of entities involved in delivering Mega Events projects expect spending in the next 12 months to be the same or greater.

Lower-for-longer

Market expectations are that the oil price will remain low throughout much of this year, and although there are some forecasts of a recovery towards the end of 2016 or early 2017, it can not be guaranteed. This is going to result in a sustained period where governments will be reassessing spending commitments and priorities around infrastructure. While in some cases this will present opportunities for investment in infrastructure that promotes economic diversification away from the hydrocarbons sector, the overall theme of the next 12 months will undoubtedly be on achieving previously stated outcomes but with more efficient spending.

Bahrain

Perspectives on the ground

"From a Bahrain perspective, in 2014 hydrocarbons accounted for 24.1% of total GDP. However in the wake of the present oil price the Government has reduced its forecast budget contribution from oil & gas and is taking steps to diversify its economic base. Meanwhile, the capital projects focus remains on essential real estate e.g. affordable housing projects, hospitality, health and the airport expansion project. Other potential developments include a new LNG plant and commercial opportunities associated with the renewal of the Kingdom's sewage network, required by 2020. Long term expansion plans include additional road and rail infrastructure, however without major private investment some of these infrastructure projects may face an uncertain future. Regardless, Bahrain remains very optimistic regarding future capital projects."

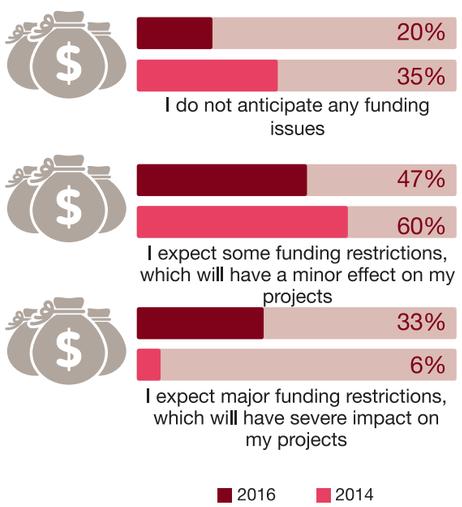
Christopher Harrop, Executive Director, Bahrain

Bridging the gap – governments turn to private finance

Our survey showed that 80 percent of respondents expect to experience funding restrictions. In light of this, and in order to maintain a focus on delivering new projects, governments in the region are increasingly looking at the private sector as a partner to operate and finance infrastructure assets.

Figure 4 Impact of funding availability

Q: To what extent do you expect the availability of funding to impact your capital projects over the next 12 months?

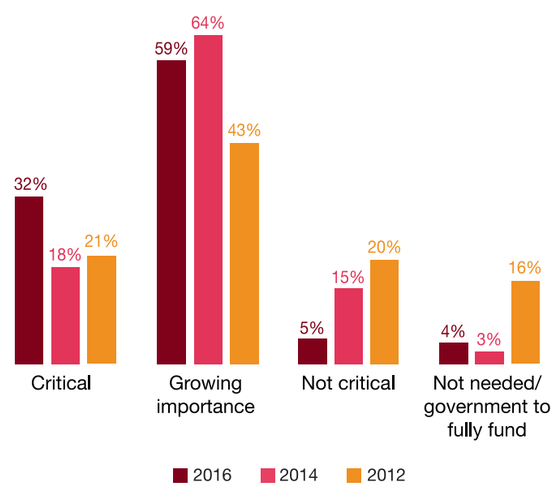


For example, Saudi Arabia is planning to privatise many of its airports, building on the success of the $1.2bn privatisation of Medina Airport, while Dubai has passed a Public Private Partnerships law to formalise cooperation between the government and private investors on new projects.

More than 90 percent of survey respondents thought that private sector funding of capital projects would be of critical or growing importance over the next year.

Figure 5 Importance of private sector financing

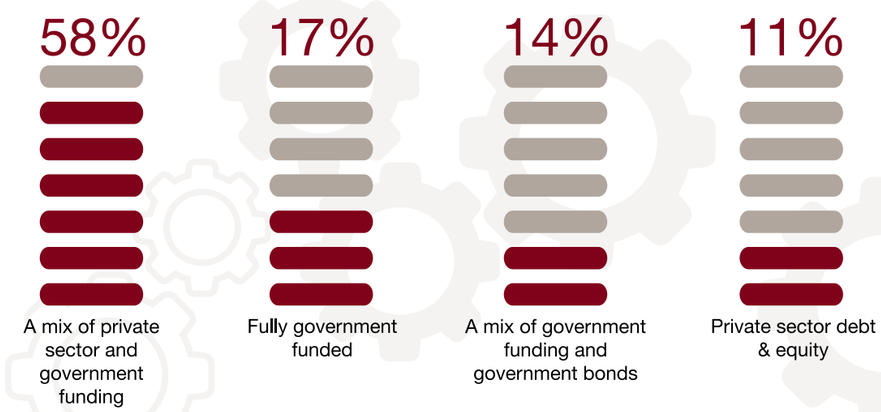
Q: How do you perceive the importance of private sector financing for major projects in the Middle East?



In addition to this, nearly 60 percent of respondents thought that projects would be funded by a mixture of government and private sector capital.

Figure 6 Funding of infrastructure projects

Q: How do you expect infrastructure projects to be funded over the next year?



Public Private Partnerships

Perspectives on the ground

"Governments around the region are taking a fundamental re-look at infrastructure delivery and exploring more sophisticated financing models such as public-private partnerships ("PPP"). Dubai has passed a PPP law and Oman and Qatar are developing PPP frameworks. Saudi Arabia is also undertaking a national assessment of financing strategies for existing and future capital expenditure through green-field privatisations (Build-Own-Operate/Build-Operate-Transfer).

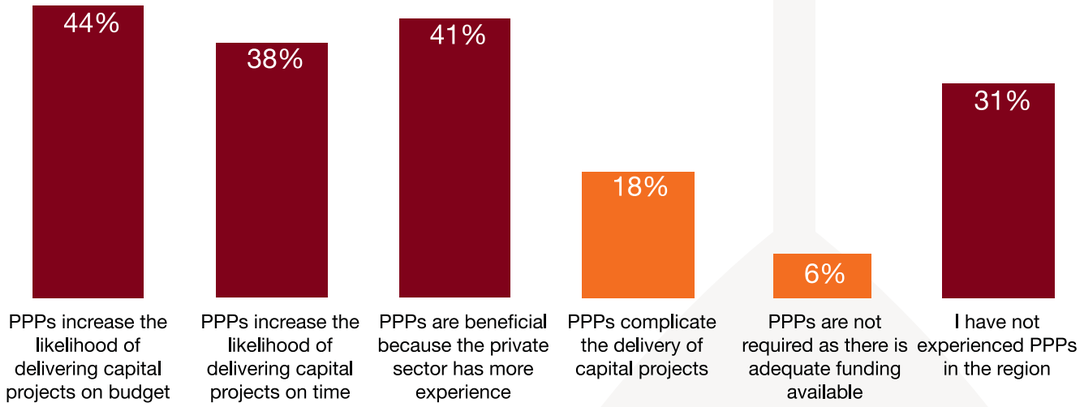
Policy-makers wish to leverage the success of the private finance model in the power and water sectors to social infrastructure including health, education and transport. This period of extreme fiscal stress is acting as a catalyst for change and has given rise to an opportunity to remodel traditional infrastructure delivery and find ways to drive efficiencies and value for money. PPPs and Green-field Privatisations fit the bill and as a bonus bring in private sector expertise and innovation, this allows government agencies to focus on their core obligation of regulation and policy while transferring the responsibility of up front financing, delivery and operations to the private sector."

Maarten Wolfs, Middle East Infrastructure Finance Leader

Respondents are also largely in favour of the increased use of Public Private Partnerships (PPPs) as a delivery method. Nearly 44 percent think that PPPs increase the likelihood of delivering projects on budget, while 38 percent think they increase the chances of delivering a project on time, and 41 percent think that they are beneficial as the private sector has more experience.

Figure 7 **Public Private Partnerships (PPPs)**

Q: Which of the following statements do you consider apply to Public Private Partnerships (PPPs)?



Private sector funding can undoubtedly play a more prominent role in funding infrastructure projects, particularly while government budgets are under pressure. This will also bring other benefits, including better project performance, and increase the incentives for delivering projects on time and on budget.

Behavioral shift

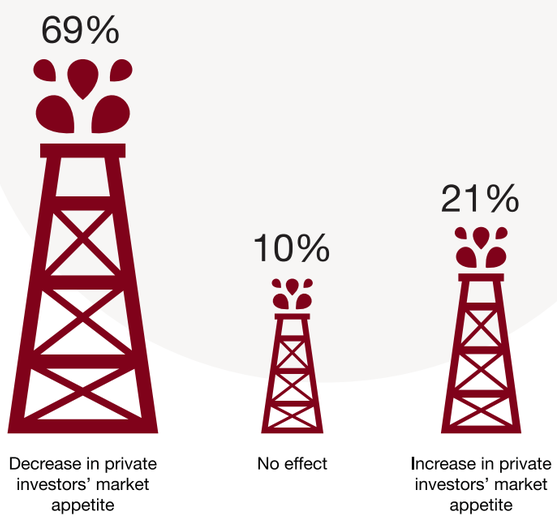
There are several challenges though. Greater use of private finance will require a behavioural shift from both governments and contractors. Governments will no longer be able to change the scope of contracts after the award, meaning more work will have to be done upfront to properly formulate exactly what the contract being offered to the private sector involves and a full set of terms articulated. Contractors will need to get more experienced at how to take on contracts that involve being responsible for the development, operation and managing the risk of a project over a 20 year contract.

This will likely involve much more partnering with international specialists in particular fields, eg. airport, hospital and toll-road operators.

But perhaps the biggest challenge will be in attracting private sector investors during a period of weak government revenues. A total of 69 percent of respondents to our survey said that low oil prices will lead to a drop in appetite from private investors.

Figure 8 **Effect of declining oil prices**

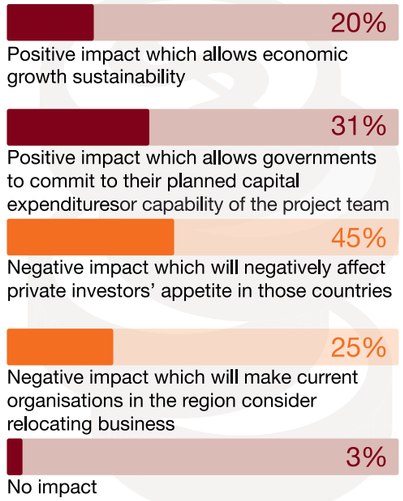
Q: What do you think is the effect of the declining oil prices on the capital expenditures of private investors in the region?



The introduction of VAT could also hit private investor sentiment, with 45 percent of respondents saying it would negatively affect private investor appetite.

Figure 9 **Impact of potential introduction of Value Added Tax (VAT)**

Q: What do you think is the impact of potential introduction of Value Added Tax (VAT) by oil-rich countries in the region as a measure to compensate for the revenue loss from the drop in oil prices?



Oman

Perspectives on the ground

"The low oil price has impacted Oman's ability to maintain the momentum of the last few years in capital projects development. Whilst the Government has announced significant capex future spend, the private sector is keen to see these plans take effect and therefore it is critical to initiate attractive financing options such as offering PPPs.

In the meantime companies will have to address current cashflow challenges due to project delays and late payment of invoices. This is an opportunity for them to review their businesses and address their ability to be more efficient."

Omar Al Sharif, Partner, Oman

Adequate planning is key to good performance

The last few years of rising public spending have caused capacity constraints for those involved in delivering infrastructure projects in the region. Our survey shows that projects have experienced performance challenges with 94 percent of respondents saying they experienced delays of more than one month on their projects. This has risen consistently over the past two surveys we have done. Nearly half of respondents (47 percent) said they had experienced delays of more than 6 months.

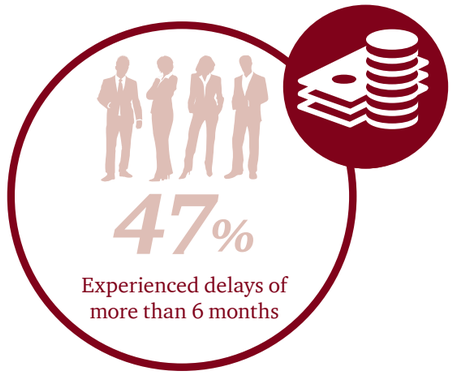
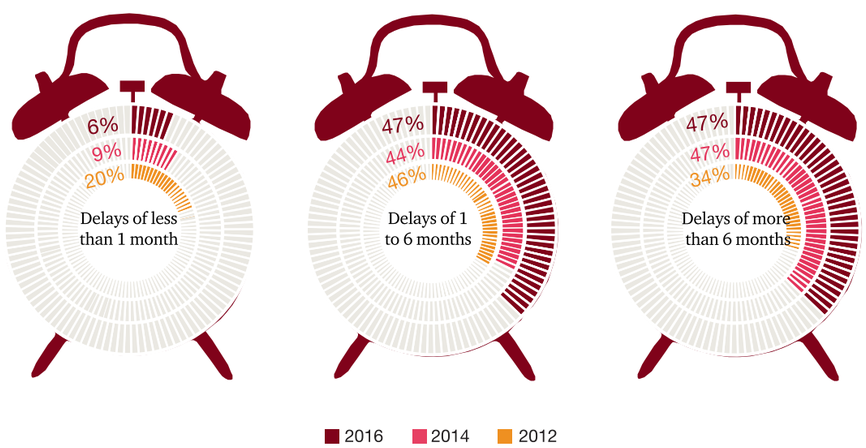
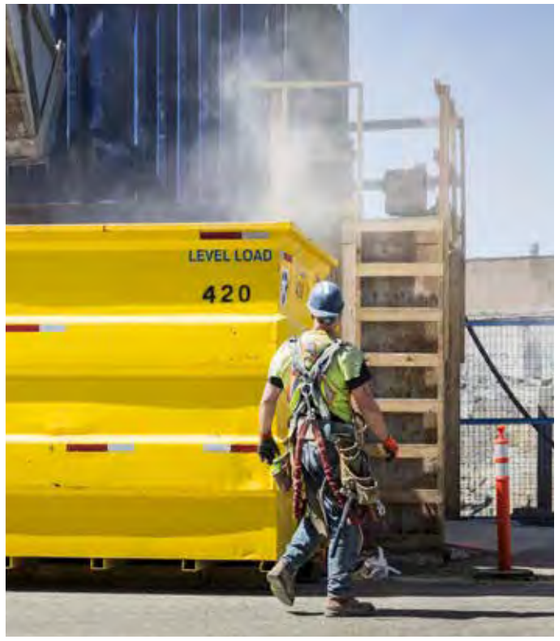


Figure 10 **Portfolio delays**

Q: On average, to what extent have projects in your portfolio experienced delays in the past 12 months?





Improving financial performance

Perspectives on the ground

"There is now more emphasis on project costs, and project owners are addressing this by developing their commercial controls and seeking to recover costs in projects under execution."

Andrew Stead, Capital Projects Director, Dubai

In large part this has been due to the market growing faster than the market capacity to execute them.

We may see this begin to change as spending slows down and some projects are delayed or cancelled by clients, enabling contractors to catch up with the backlog of awarded contracts.

A slowdown may not be enough to improve performance, however. The main reasons for projects going over budget are poorly defined scope or inadequate design (60 percent), and the top reasons for projects being delayed are contractor performance (62 percent) and scope changes (50 percent).

Figure 11 **Primary reasons for delays**

Q: What do you consider to be the primary reasons behind the delays you have experienced?

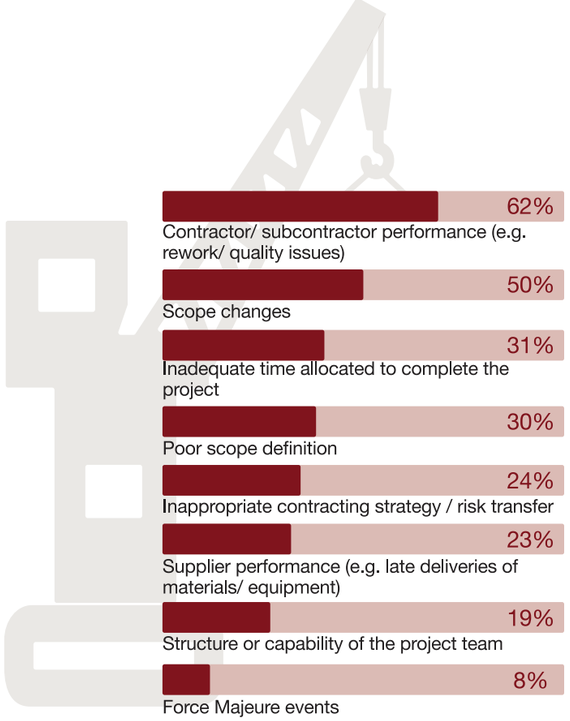


Figure 12 **Cost variances**

Q: On average, to what extent have your projects experienced cost variances in the past 12 months?

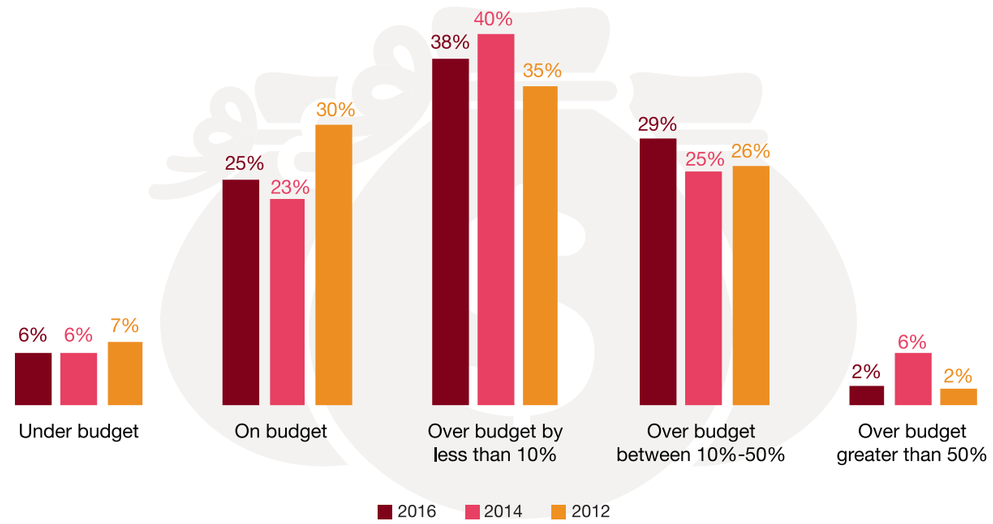
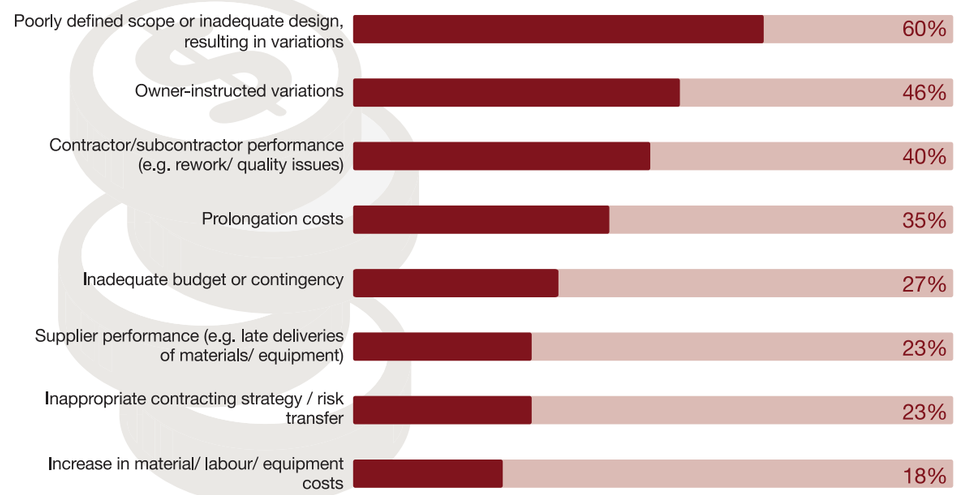
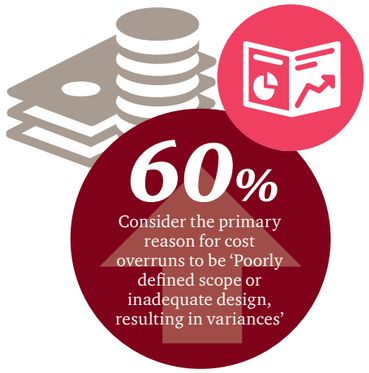


Figure 13 **Primary reasons for cost overruns**

Q: What do you consider to be the primary reasons behind the cost overruns you have experienced?



This suggests that delays and cost overruns are largely the consequence of poor planning and project definition. Even if contractor performance were to improve, it will not make up for deficiencies in the early stages of a project. Developers and contractors both need to put more resources into preparation stages and initial planning in order to improve overall performance in project delivery. As the overall volume of project work looks likely to decline over the next 12 months, now is a good opportunity to develop the internal capabilities to get better outcomes from infrastructure spending.



Some of the key recommendations that contractors and developers should consider adopting to improve performance:

- Our experience suggests that a key weakness in the regional projects and infrastructure sector is in the early stages of planning and internal preparation.One of the reasons for this is likely because no major capital is deployed at these stages. A greater focus on these early stages would go a long way to improving overall project performance.
- Conduct more project readiness assessments, to review if sufficient planning and due diligence has been completed prior to starting a project, and identify any potential issues before work starts.
- Adopt a project stage gate process, where project development is divided into stages and at the end of each stage progress is assessed by a steering committee who decides whether to proceed onto the next stage.
- Regular independent project reviews during the execution stage to assess the overall project status and performance against key metrics such as cost and time, and identify and solve potential red flags.

Managing headcount and human resources

Signs of improvement, but still needs focus as budgets come under pressure

The region still faces difficulties in getting people with the right skills and experience, even as construction activity slows. Our survey showed that attracting and retaining talent is now one of the top 3 improvement priorities. The portion of respondents who cited this as an issue rose to 33 percent from 26 percent in our previous survey.

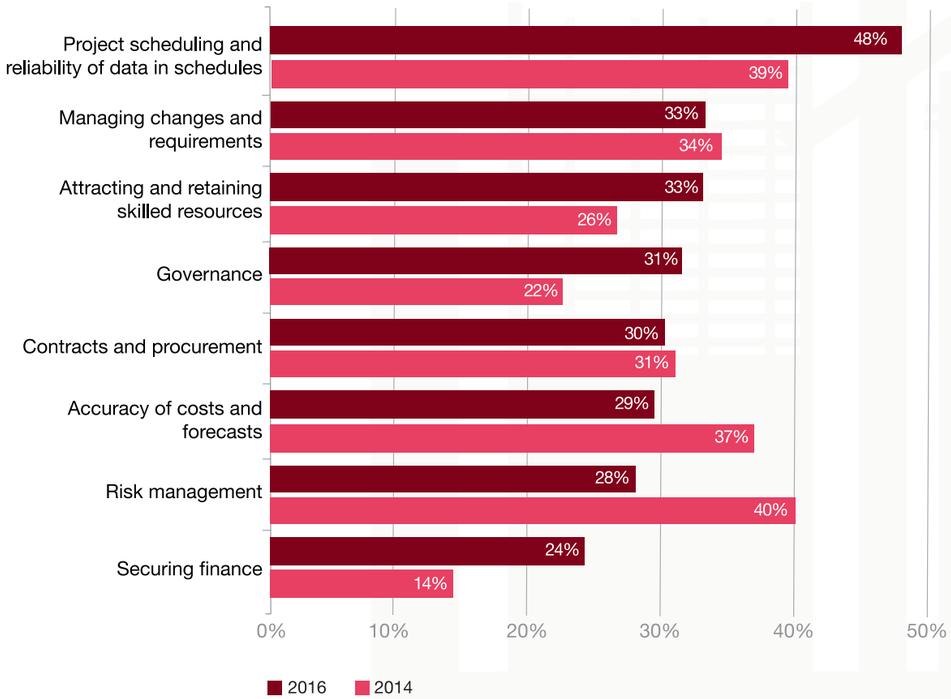
Many clients and contractors are under pressure to reduce headcount and achieve cost savings - thus increasing the importance of the need to retain key staff.

33%

cited 'Attracting and retaining skilled resources' as an improvement priority

Figure 14 **Top 3 improvement priorities**

Q: What are your top 3 improvement priorities in relation to your projects?



For contractors, attracting and retaining talent was the most often cited improvement priority, with 56 percent saying it was one of their top 3 priorities ahead of project scheduling (44 percent) and accuracy of costs and forecasts (33 percent).

There are positive signs that in some areas of the infrastructure sector things are improving. In our last survey one of the biggest challenges facing contractors was there not being enough talent to go around, and this was reflected in contractors saying one of their biggest external challenges was client decision-making. In the latest survey the portion of respondents citing this as a top external challenge fell to 35 percent (from 54 percent).

In an environment where clients will increasingly need to make quick decisions over which projects to commit limited budgets to, execution timelines, and delivery methods, an improvement in client decision-making is welcome.

The slowdown in infrastructure spending as a result of slumping oil prices is already starting to result in cutbacks and layoffs around the region. Anecdotal evidence suggests there has been significant headcount reduction at government clients and at contractors.

The thinking behind this approach can prove to be worryingly short-term. The loss of more experienced staff may save money from the wage bill, but the loss of institutional knowledge carries its own costs. Though difficult to quantify, these can be significant and impact overall performance.

As the region moves to more sophisticated infrastructure projects and delivery models like public-private partnerships, investing in talent will be a key success factor.

Qatar

Perspectives on the ground

"On the ground in Qatar, we have seen specific impacts in the Oil and Gas sector as the National Oil and Gas companies and related entities have looked to scale back new investments and reduce headcount. In the construction market specifically, we have also seen project deferrals and cost saving initiatives on committed projects and contracts. However, Qatar is proceeding at pace now with major projects such as FIFA World Cup Qatar 2022tm, Qatar Rail, Lusail and the New Port Project at peak construction. In fact, according to QNB statistics, 2016 and 2017 will still see $70-80bn per annum of capital spending which is Qatar's highest ever level of annual capital spending. Entities are having to balance the need to downsize and manage costs - whilst maintaining sufficient skills and capabilities to deliver the planned projects effectively - in what is effectively still a peak construction period."

Chris Scudamore, Partner, Middle East Capital Projects Services Leader

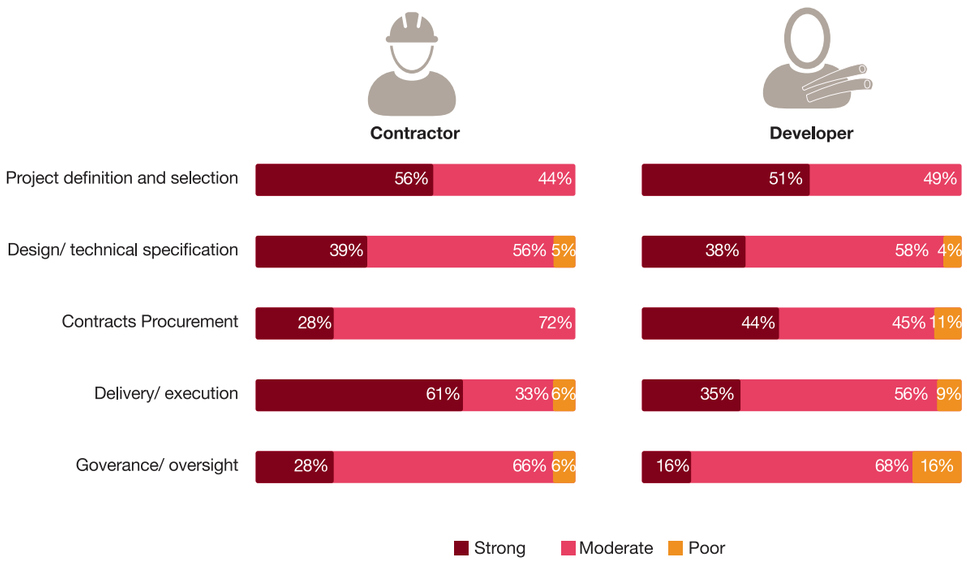
Performance pressure

Both project developers and contractors are under increasing pressure to improve performance given budget constraints and increased focus on efficiency, but the two face very different challenges and have differing views about who is responsible for problems when they emerge.

Developers generally believe they have good capabilities in the project definition, design and planning stages, but 84 percent believe their governance/oversight capabilities are moderate or poor. Developers believe projects are late because of poor contractor performance or scope changes, and are overbudget for similar reasons.

Figure 15 Capability of organisation

Q: How would you rate your organisation's capability in the following areas?



In contrast, contractors view their strongest abilities as delivery and execution of projects, and their weakest as contract procurement and governance/oversight. While contractors tend to agree with developers that projects are overbudget because of poorly defined scope and variation requests, they are much less likely to cite their own performance as an issue. Instead, they cite inadequate budget or prolongation costs. They are also far more inclined to blame project delays on the developer, through poor scope definition, with 50 percent saying they believe it is a reason for project delays.

Both contractors and developers said their biggest internal challenge was keeping to delivery timelines. While contractors said their biggest external challenges were client decision-making and contractual disputes, developers are concerned about getting funds and political instability.

This reflects the broader concerns of project developers, who worry about the impacts of political stability on project viability and the availability of funding from government or the private sector. Contractors are generally more focused on more specific 'site' issues, like client decision-making and disputes, which are arguably the knock-on effects of the concerns voiced by developers.

Figure 16 Top 3 current internal challenges

Q: What are your top 3 current internal challenges in relation to the projects that you are involved in?

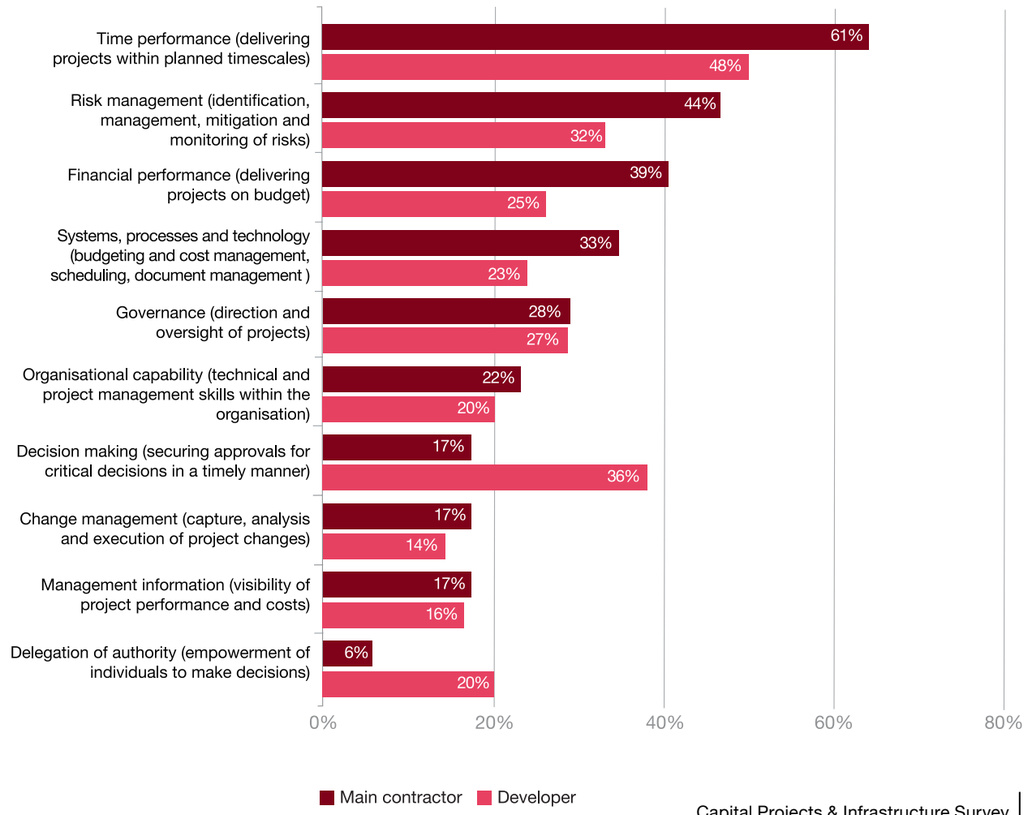
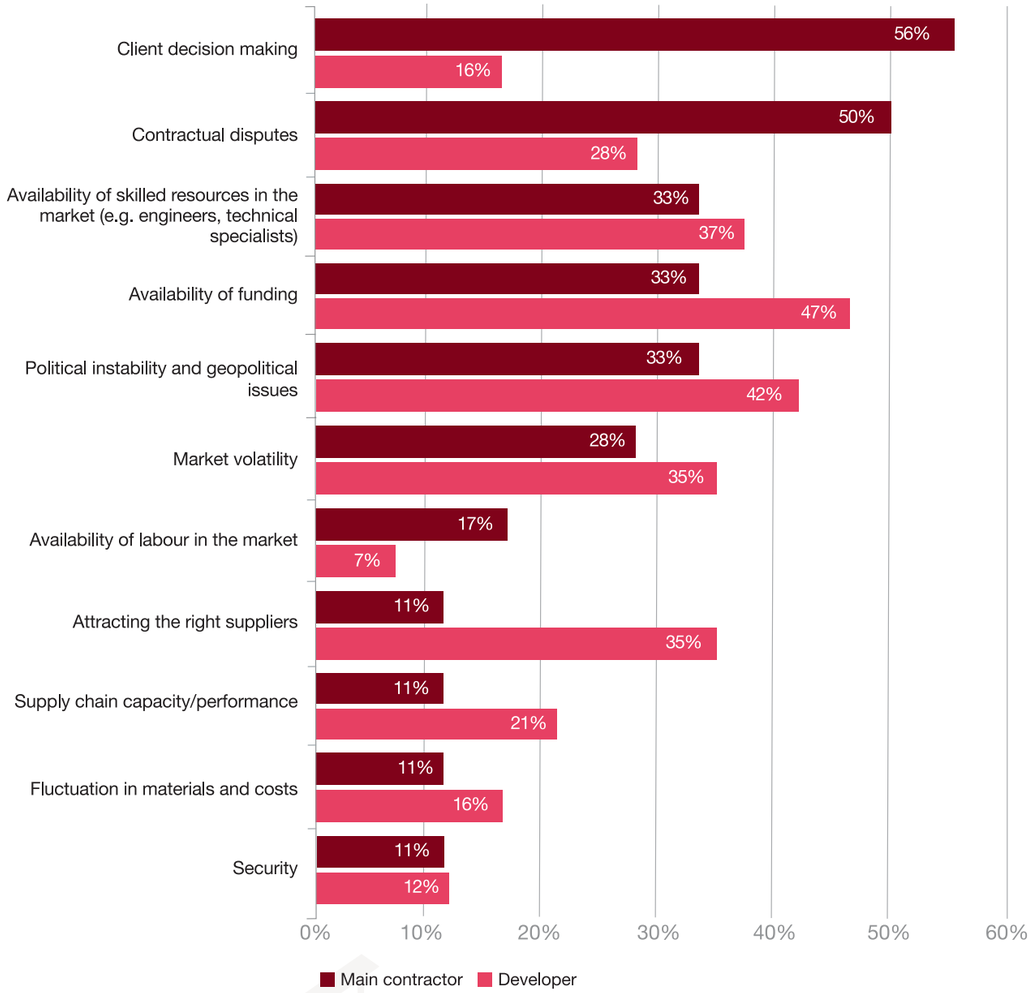


Figure 17 **Top 3 current external challenges**

Q: What are the top 3 current external challenges in relation to the projects that you are involved in?



Saudi Arabia

Perspectives on the ground

"An era of lower crude prices is forcing a change of mind with the announcement of spending cuts and subsidiary reduction. With great economic and demographic challenges, the Kingdom is fetching alternative funding schemes to ensure the implementation of vital major infrastructure and other capital projects to go in hand with those challenges. Such schemes include increasing foreign investment, introducing new sources of revenues including VAT, and privatising some of the government assets. Thus prioritising such capital projects and increasing transparency on budget spending, construction progress and quality control is taking precedence on both developer and contractor front."

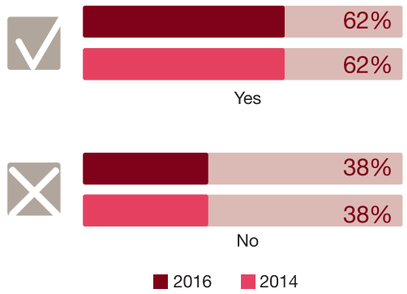
Sari Kalakesh, Capital Projects Director, Riyadh

Get ready, disputes likely to rise

Disputes between contractor and client continue to be a regular occurrence in the Middle East construction and infrastructure sector, with the majority of respondents saying they have either experienced a dispute in the last 12 months or expect to be involved in one over the next 12 months. Our survey showed 62 percent of respondents had been involved in a dispute recently or expected to be involved in one soon.

Figure 18 **Experienced disputes**

Q: Have you experienced any disputes, legal issues or claims in the last 12 months, or do you anticipate any in the next 12 months?



United Arab Emirates

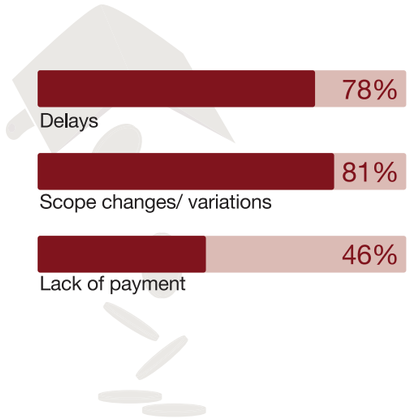
Perspectives on the ground

"We have seen increasing budget constraints resulting in decreased spending on lower priority projects. Clients are also increasing independent monitoring and review of projects due to concerns over delays, additional claims and unplanned costs, and loss of revenues."

Maria Lalousis, Capital Projects Director, Dubai

Figure 19 **Reasons for the disputes**

Q: What are the underlying reasons for the disputes in which you are engaged?



What is perhaps surprising is that this figure is the same as in our last survey, when oil prices were still high driving large capital expenditure programs. This probably indicates that full impact of clients changing the scope of projects due to budget cutbacks, and late payments to contractors has yet to fully work through the system.

We expect that the number of disputes will rise appreciably over the course of the next 12 months as the time lag of late payments increasingly creates problems for contractors, project consultants, and suppliers.

With this expectation in mind it is worth pointing to some of the survey's other findings about how disputes are best resolved. Bilateral negotiations with the other party is overwhelmingly the preferred method, with 81 percent saying it was their top approach and 56 percent saying they handle disputes internally and do not seek any outside support.

"Every single respondent emphasized the importance of having good quality site data in facilitating dispute resolution".

More than half said that better site data would help them get better results from disputes.

Figure 20 **Approach**

Q: What is your approach to resolving project disputes?

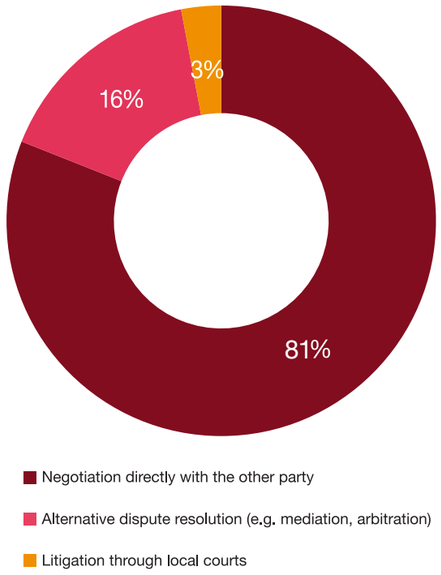
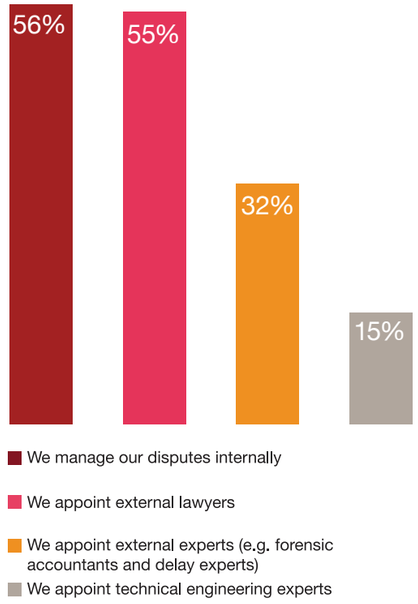


Figure 21 **External support**

Q: To what extent do you seek external support when resolving project disputes?



How do you mitigate your risks?

Simon Lowe, one of our Construction Disputes and Claims specialists shares his advice for how owners and contractors can take steps to mitigate the risks of claims and disputes.

It is of critical importance that the contracting entities enter into agreements that are fair and equitable from both perspectives. Attention should be given to issues such as reasonable payment terms, effective contract administration procedures (including those relating to variations) and quick and efficient dispute resolution mechanisms. In this regard, the Parties' primary focus is to achieve the completion targets prescribed under the contract and to avoid lengthy contractual disputes that may detract from these objectives. With the volume of disputes likely to rise in the short to medium term, Contractors and Developers will need to concentrate on several areas in order to mitigate the risks surrounding these issues and to avoid potential protracted and costly disputes. Some of these areas are:

- The administration of the contract both by the Employer/Developer (or his Engineer/agent) and by the Contractor must be undertaken correctly and in strict accordance with the requirements of the Contract. The incorrect and/or unreasonable administration of contracts can often give rise to uncertainty, which in turn can lead to conflicts and disputes. Therefore a comprehensive contract administration system should be established, which serves to control the flow of information and maintain records in accordance with the contract.

- Any variations to scope must be issued correctly and formally (i.e. in accordance with the Contract) and their monetary and time related effects must be dealt with in a fair and timely manner.

- The importance of records on construction projects cannot be over-emphasised. Records serve to establish what happened and when; they will demonstrate the nexus between cause and effect and very often are the key to unlocking disputes. Both Parties must ensure that an efficient document control system is established from the beginning of the project and that detailed records are maintained on a regular and progressive basis. This should include:

  - **Progress Monitoring Records** (e.g. progress reports, programme updates, daily site records, daywork sheets and the like);
  - **Conformity Records** (e.g. inspections, testing, submittals, etc);
  - **Event Records** (site handover, site instructions, variations, claims, project completion);
  - **Resource Records** (Timesheets, plant returns, labour histograms);
  - **Cost/Accounting Records** (CVRs, progress payments);
  - **Contemporary Records** (Correspondence, photographs, meeting minutes, delivery reports); and
  - **Records of Records** (correspondence registers, drawing registers, variation registers and the like).

- Employers and Developers must acknowledge the necessity for Contractor's to issue notices under the Contract and this should not be seen as confrontational or aggressive, but rather as a conformity with the contractual requirements. Employers and Developers should also acknowledge the Contractor's entitlements to claim additional time and/or cost under the Contract and should deal with any claims in a fair and timely manner. Likewise, Contractors should refrain from submitting spurious and/or over-inflated claims and should focus strictly on their entitlements under the Contract and provide adequate and accurate supporting particulars in order that their claims can be dealt with properly and timeously.

- A two-way conciliatory approach to dealing with any changes and related claims should be adopted. This can involve regular meetings which aim to deal with prevailing issues on a contemporaneous basis. This in turn will facilitate the speedy resolution of disputes and will help the Contractor to receive any related payments in good time.

- In the event that the Parties are unable to resolve disputes amicably, consideration should be given to the use of alternative dispute resolution mechanisms such as Adjudication (DAB under FIDIC 99) or Mediation. The objective of this is to provide a means by which disputes are resolved quickly and cost effectively and without the requirement to refer to more traditional and costly dispute procedures such as arbitration and litigation, which can take years to complete and result in a deterioration in relationships.

These are just some of the measures that the Parties can adopt in order to mitigate the risks surrounding disputes on construction projects.

Egypt

Perspectives on the ground

"There is a slightly different investment story in Egypt with an increase in infrastructure investment due to lack of investments previously and a growing population. During the 2015 Egyptian Economic Development Conference (EEDC) over $60 billion of pledged investments were presented as part of the Vison 2030. Most of the 77 projects in this programme in the energy, transport and housing sector should be developed through the Public Private Partnership approach, in turn attracting the attention of international private investors."

Bernhard Haider, Partner, Levant and North Africa

Capital Projects and Infrastructure Services

PwC Middle East Capital Projects and Infrastructure Services is a team of more than 65 professionals comprising engineers, programme managers, project financiers, disputes experts, quantity surveyors and architects who work as project advisors, supporting the development of a risk resilient project. We typically work with the senior project stakeholders for developers, owners and contractors in an advisory capacity, ensuring they have the right insights to take informed action.

We have considerable experience in the delivery of major capital projects across a range of sectors including infrastructure, real estate, construction, energy and transportation. In a Project Advisor capacity, we adopt a review, design, apply and monitor framework to improve project performance at any stage of the project lifecycle.

With the recent acquisition of HLP Consulting (www.hlpconsult.com) the PwC Capital Projects and Infrastructure business in the Middle East is dramatically expanding its disputes delay analysis and claims management capabilities.

Examples of services we provide and we have deep expertise in:

- PPP's Advisory Services;
- Project Financing Advisory Services;
- Infrastructure Outsourcing Advice;
- Establishment of Programme/Project Management Office (PMO);
- Strategic Project/Programme Management;
- Independent Project/Programme Review and On-going Monitoring;
- Portfolio Strategic Risk Assessment;
- Establishment of Visual Data Analytics Reporting Functions;
- Contract Review/ Cost Recovery Services;
- Dispute Advisory Services; and
- Contract and Commercial Management.

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