

SELLAFIELD: INSIDE THE 100-YEAR PROJECT

How the nuclear reprocessing site is upskilling for the future

WHY LEARNING LEGACIES IMPROVE PROJECTS

The evidence is clear: learning from experience enhances productivity

INTERVIEW: HARRIET HARMAN MP

We talk equality and the gender pay gap with the political veteran

Winter 2016
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PROJECT

the voice of the project management community

APM AWARDS 2016

Find out who triumphed



TOP FLIGHT

**MEET THE AWARD-WINNING TEAM
REVOLUTIONISING THE PASSENGER
EXPERIENCE AT HEATHROW**



Welcome

I'm delighted to be taking over the reins from the capable hands of Jason Hesse as the new editor of *Project*. With so many mega projects continually hitting the headlines, it's certainly an exciting time to be reporting on the latest developments in the project management profession.

Crossrail, HS2, Hinkley Point C, the newly announced but highly controversial third runway at Heathrow... it's hard to ignore the significance of the project management sector right now. Another mega project is the decommissioning of the Sellafield nuclear site. On page 28, we examine the innovative ways in which Sellafield is upskilling to help deliver this highly complex, 100-year programme.

As a journal editor, it strikes me that I am also a project manager of sorts. From gathering ideas, commissioning writers and liaising with our many engaged contributors to managing budgets, deadlines and stakeholders, every issue we produce is a mini project in itself, with the clear goal of informing members and sparking debate within the project management profession.

One of my first engagements was to attend September's lively APM Women in Project Management Conference. Upwards of 350 delegates enjoyed a stimulating mix of keynote speeches, workshops and roundtable debates, and it was inspiring to see so many motivated project professionals getting together to swap ideas and experiences. Not unsurprisingly, equality of pay and opportunities were a big focus, and we are delighted to include an interview on page 38 with Harriet Harman MP, who spoke so eloquently and passionately on the issue.

As this eventful year draws to a close, it's time to celebrate the very best in the project management profession. In our APM Project Management Awards special, we meet the inspiring team that delivered a world-class, integrated baggage-handling facility at Heathrow's Terminal 3. Read more about all the highly deserving winners on page 45.

I hope you enjoy the issue. As always, do please get in touch with your comments and suggestions.

IT'S HARD TO IGNORE THE SIGNIFICANCE OF THE PROJECT MANAGEMENT SECTOR RIGHT NOW



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APM AWARDS / P45

"EXTERNAL RECOGNITION FROM SUCH AN AUTHORITY ON PROJECT MANAGEMENT AS APM IS PHENOMENAL"



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KICK-OFF

Towards our Chartered goal

APM's aim of achieving Chartered status took a significant step forward in October with the news that the Privy Council has now issued an Order of Grant. This decision has triggered a process that will see APM awarded a Royal Charter, which will be printed on vellum and sealed.

This will allow APM to implement the procedural, legal and accounting transition to reconstitute itself as a Chartered body.

The spring 2017 issue of *Project* will provide more information on what Chartered status will mean for APM and its members.



WHY APM WANTS TO BECOME CHARTERED

APM is committed to achieving Chartered status on behalf of the project management profession in order to:

- raise standards through a robustly assessed register of project professionals who are committed to professional development and a code of conduct;
- enhance the status and recognition of project management as a means of delivering effective change that improves our economy and society; and
- facilitate continued collaboration and research with other professions to develop the practice and theory of delivering successful change across sectors and industries.



MARCH OF THE ROBOTS

London's skyline could soon be dominated by buildings built by robots, according to the chairman of FTSE 100 construction company Land Securities. Using robots rather than people would lead to huge productivity gains but mass layoffs, as traditionally labour-intensive construction projects would need to hire fewer staff.

"Five years ago, I'd have smiled wryly if somebody said to me that robots would be able to put up buildings in the City of London," said Alison Carnwath, chairman of Land Securities, at the Institute of Directors' annual conference. "We're not that far off, and that has huge implications."

Robots are ready for action in the United Arab Emirates, where a contract to design and construct the world's first 3D-printed laboratory has been awarded. The contract for the building, to be fully printed on site, has been awarded to contractor Convrngnt Value Engineering by the Dubai Electricity and Water Authority.

Convrngnt's Vibin Paul said: "The building will be printed using a system of robotic arms at the desert location. The risks of working in an unshielded, open environment have to be addressed, and the logistics accurately controlled during the printing operation."



REMEMBERING PROFESSOR GEOFFREY TRIMBLE

Project management has lost a true pioneer with the recent death of Professor Geoffrey Trimble. APM's first president, Professor Trimble was an innovator and influencer as a practitioner and academic.

"He was dedicated to setting up APM and to its future," said his wife, Jean. "He was always thinking about the future of APM and was so proud of the people taking the association forward."

No doubt he would have been delighted that his dream of Chartered status for APM is a step closer to being realised.



Heathrow gets go ahead

After two decades of wrangling by successive governments, Heathrow Airport has been given the green light for a third runway, beating a rival bid from Gatwick Airport.

Announcing the decision, transport secretary Chris Grayling MP said: "I am proud that, after years of discussion and delay, this government is taking decisive action to secure the UK's place in the global aviation market, securing jobs and business opportunities for the next decade and beyond."

However, the decision has already led to controversy, with leading cabinet ministers opposed to the plan and local MP Zac Goldsmith resigning, triggering a by-election. In addition to the political fallout, construction is likely to be considerably delayed by a series of threatened legal challenges by local and environmental groups.

IN NUMBERS / HEATHROW'S THIRD RUNWAY

£17.6bn
reported cost
of the scheme

740,000
number of flights
that could be serviced
annually by a three-
runway Heathrow

40
number of new
destinations a third
runway could open
up to passengers
and exporters

£61bn
value of the
economic boost to
the UK, according to
the government

35,000
number of new
direct jobs that
would be created
at the airport

783
number of homes that
will be demolished
to make way for
construction of the
third runway

2025
earliest date a third
runway could be in
operation according to
Heathrow; ministers
estimate 2029

[SOURCE: THE DAILY
TELEGRAPH]

CONSTRUCTING EXCELLENCE MERGES WITH BRE

Constructing Excellence (CE) and the Building Research Establishment (BRE) are to merge in a move designed to strengthen and grow CE membership. Under the merger, BRE will maintain the distinctive CE brands, develop the network and add critical capacity in digital tools, training and events, and growing the international reach. It will also enable CE to achieve its long-term ambition of establishing a Constructing Excellence Foundation under the BRE Trust, which would see trading profit channelled into research and education for the benefit of members.

"Joining with BRE gives us access to new resources and markets that we require to develop our membership, benchmarking and

training services for the UK and international networks," said CE chief executive Don Ward.

CE formed via the convergence of several related industry initiatives set up to drive improvements in construction in the wake of the 1997 Egan report, *Rethinking Construction*. Its 80 members are drawn from across the industry supply chain, ranging from clients, contractors and consultants to suppliers and manufacturers of building materials.

Members have commented favourably on the merger, including Sean Jeffery, executive director at Kier Group: "This merger [is] a positive move to help rationalise industry improvement initiatives and deliver more value for us as a major contractor."

AROUND THE UK

KBR WINS KEY ROLE AT HINKLEY POINT C

US engineering firm KBR has been awarded a long-term project management services contract by EDF for work on Hinkley Point C. Confirmation of the deal followed the signing of contracts between EDF, the UK government and China General Nuclear Power Group, giving the final go-ahead for construction of the £18bn nuclear power station in Somerset.

KBR's reimbursable rates contract will cover site operations management, contract management and materials tracking. It will provide site operations services and contract management support for the equipment supply chain, involving more than 100 international suppliers and contractors.

Around £3bn-worth of contracts with construction and engineering firms have already been prepared.



BIOMEDICAL RESEARCH CENTRE COMPLETES

Construction work has finished for the £650m Francis Crick Institute, a centre of excellence for biomedical research in central London. Housing more than 1,500 staff, including 1,250 scientists, the institute will be one of Europe's largest centres of biomedical research.

HOK, as lead architect, lab planner, interior designer and landscape architect, worked with PLP Architecture on the design for the 980,000ft² flagship building.

The building is arranged into four 'laboratory neighbourhoods' across three floors connected by two atria and multiple communal breakout spaces to foster interdisciplinary collaboration. Arup provided project management and building services design.

AROUND THE WORLD

HONG KONG LOOKS TO IMPROVE PROJECT MANAGEMENT

The Hong Kong government has launched a Project Cost Management Office (PCMO) to oversee its extensive and increasing capital works portfolio. The latest government budget sets out plans to spend more on infrastructure projects than on health, education or social welfare. Infrastructure spending is targeted at HK\$85.6bn (17.6 per cent of total government expenditure), a level that should be maintained for several years.

Secretary for development Paul Chan stated that the PCMO will "conduct a comprehensive review of the guidelines on public works, reduce unnecessary design and contractual requirements, and closely scrutinise the estimates of major new projects... with a view to controlling project costs. We will also improve our project management, and enhance the skills and knowledge of the works departments in the estimation of project costs."

ATKINS LANDS OMAN'S DUQM CITY CONTRACT

Atkins has won a major consultancy contract for the first phase of Duqm City in Oman. The contract encompasses detailed master-planning, a market and feasibility study, and design and preparation of tender documents. Duqm is a port town in central eastern Oman undergoing significant growth, with a goal to increase its population to 100,000 by 2020 (up from 12,000 in 2010).

The Special Economic Zone Authority of Duqm awarded the contract. It had already completed the initial concept master plan for the city in 2014. Plans allow for development of an area spread over 150km², comprising five districts inclusive of existing and upcoming residential, commercial, mixed-use, logistic and tourism developments. The first phase will be divided into four stages spread over 30 weeks.



Gender inequality in the firing line at WiPM event

Closing the gender pay gap and tackling inequality were key themes at September's APM National Conference for Women in Project Management. Nearly 350 delegates attended the event, sponsored by BAE Systems, at the Park Plaza Hotel in Victoria, London. Maura Launchbury, chair of the APM Women in Project Management (WiPM) Specific Interest Group, commented that "WiPM conferences have grown in strength and numbers."

Welcoming delegates, APM CEO Sara Drake talked about the importance of "the support we can give to a new generation of women in encouraging, mentoring and sharing the lessons we have learnt". However, she also commented that there is still some way to go to address inequality and pay gaps in "a country that still doesn't quite get it, with thousands of expectant and new mothers that have no choice but to leave work".

Citing APM's *Salary and Market Trends Survey 2016*, she noted that only one per cent of women are project directors

or board members, compared with four per cent of men. "Women are behind in progression and promotion because they pay a much higher financial forfeit for taking time off for families," she said. "As a profession, we need to look all of this straight in the face."

In addition to roundtable discussions and workshops, three prominent keynote speakers offered their words of wisdom to delegates. Jo Fairley, founder of Green & Black's, told how, starting from a flat in Portobello, she built her business into a multimillion-pound brand. Peter Cheese, CEO of the Chartered Institute of Personnel and Development, explored the changing world of work, and how the 'gig economy' and artificial intelligence will impact project management. Finally, Harriet Harman MP (pictured above) gave a lively and impassioned speech on gender politics and ways to challenge the pay gap.

● *Read the full interview with Harriet Harman on page 38*

ENGINEERING'S ROLE IN GENDER PAY EQUALITY

Research from Deloitte shows that, while the gender pay gap is closing incrementally, pay parity is not forecasted to arrive until 2069. However, the gap in starting salaries

is smaller between men and women who have studied science, technology, engineering and mathematics subjects, and progress to jobs in those areas, than in

any other subjects studied. In engineering and technology, the gap is zero.

● *Read the Deloitte report, **Women in STEM**, at bit.ly/2fv7zg3*

IPA reports progress on significant projects

Significant progress has been made on crucial projects to improve transport, security and public services across the UK, according to the Infrastructure and Projects Authority's (IPA's) *Annual Report on Major Projects 2015-16*.

According to the report, the Government Major Projects Portfolio (GMPP) contains 143 major projects, representing a £405bn investment over the next 25+ years. At September 2015, under £1bn of this total related to projects rated 'red', meaning "there is much to do to ensure they deliver the promised benefits". More than 78 per cent of projects are rated amber or better.

During the past year, several projects have been successfully completed, including major change programmes, such as Electricity Market Reform, and IT services, such as Spine 2, which provides critical infrastructure for NHS applications.

The report highlights that, in general, delivery confidence is likely to be lower when projects join the GMPP, as there is greater uncertainty about risks, constraints and funding sources. Since last year, 31 projects have joined the portfolio; of those, only three were rated amber/green. However, 52 of the 76 projects that left the portfolio were rated green or amber/green at the point of exit.

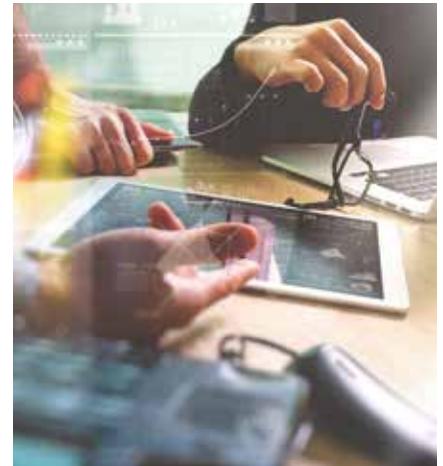
Tony Meggs, CEO at the IPA, said: "This year's report details progress made on the government's largest and most challenging projects and programmes. It provides clear evidence of the beneficial effects of project oversight through the GMPP. Progress remains steady, but there are still too many projects that remain in the low delivery confidence range for too long."

"It is hard for a project or programme to succeed if it has not been set up in the right way. This means having clear and realistic objectives, good stakeholder engagement, adequate resources and good leadership from the start."

● Read the IPA's Annual Report on Major Projects 2015-16 at bit.ly/29QuDUW



"PROGRESS REMAINS STEADY, BUT THERE ARE STILL TOO MANY PROJECTS THAT REMAIN IN THE LOW DELIVERY CONFIDENCE RANGE FOR TOO LONG"



PROJECTS STRUGGLING ON NEW TECHNOLOGY, KPMG FINDS

A survey from KPMG has found that engineering and construction companies and project owners are struggling to exploit the full benefits of technology.

According to KPMG, advanced data and analytics, mobile phone technology and automation could help the sector. However, its report, *Building a Technology Advantage*, found around two-thirds of respondents cited themselves as "behind the curve" on technology.

In the survey of more than 200 senior engineering construction executives, eight per cent were ranked as "cutting-edge technology visionaries", while 64 per cent of contractors and 73 per cent of project owners rank as "industry followers" or "behind the curve" when it comes to technology. As one respondent explained, "If we can see an immediate cost benefit to our clients, we'll implement it, and if not, it will remain on the shelf for someone else to experiment."

However, this traditional conservatism is holding back the industry's ability to tackle the complexity of today's projects, believes Richard Threlfall, UK head of infrastructure, building and construction at KPMG. "Projects around the world are becoming bigger, bolder and more complex, and with complexity comes risk," he said. "Innovations like remote monitoring, automation and visualisation have enormous potential to speed up project delivery, reduce costs and improve safety."

● Download the study at bit.ly/2cetdpX

90 DAYS IN THE LIFE OF

Project meets Claire Beesley, programme manager at the Royal Society for the Protection of Birds



How long have you been in your current job and what do you like most about it?

I've been programme manager for two and a half years. What I love most about it is setting up a successful team; by guiding the team to work at its best, we achieve the programme's outcomes, which is really satisfying.

What were your biggest professional challenges over the past 90 days and why?

We have recently completed an organisation-wide

consultation on a people change project. Introducing change to an organisation is never easy, and when it is something that affects everyone differently, in a potentially very personal way, it is fraught with difficulties.

What is the most important lesson you have learned over the past 90 days?

Organisational change requires buy-in at the top of the organisation and high-quality engagement with the rest of the organisation.

Whatever message you think you have clearly conveyed, people will always interpret it differently. Make sure you have a good plan, keep the engagement going and respond to questions.

We put in place many different channels for staff to get information and give feedback beyond the usual one-to-ones, group briefings and countrywide director roadshows. That investment in time up front to plan and, during the consultation, to engage, means that we conducted a high-quality consultation that elicited some excellent counter-proposals.

What are the biggest challenges facing you in the next 90 days?

We now move to the project's implementation. We're taking what we've learned about what

DIARY DATES

8 December 2016
APM Project Management Conference, Manchester
What does big data mean for project and knowledge managers?, London

13 December 2016
Project controls qualifications, Aberdeen

2 March 2017
APM Programme Management SIG Annual Conference, Derby

See the full list of diary dates and booking information at apm.org.uk/events

staff care about and are making sure it remains at the heart of what we are implementing. Keeping employees engaged and active throughout this process is critical to ensuring that the Royal Society for the Protection of Birds, the new provider and employees are in the best possible place when everything goes live.

If you could spend 90 days with anyone, living or dead, who would it be?

Fred Astaire. I am a dancer and would love to have danced with him.

“ORGANISATIONAL CHANGE REQUIRES BUY-IN AT THE TOP OF THE ORGANISATION AND HIGH-QUALITY ENGAGEMENT WITH THE REST OF THE ORGANISATION”

KEY ROLE FOR NUVIA IN €100m NUCLEAR CONTRACT

A €100m contract for a nuclear fusion-related robotic system has been awarded to a consortium comprising Airbus Safran Launchers, Cegelec CEM and Nuvia. The seven-year contract covers the development, testing and installation of a system for the remote handling of containers of radioactive equipment from ITER, the huge experimental fusion reactor under construction near Marseilles.

UK company Nuvia, part of Vinci Energy, has been appointed as the project management specialist in the consortium. The complex project includes detailed design, procurement, manufacture, factory acceptance testing, installation, on-site commissioning, integration and testing. "Contributing to world-leading science and research projects is central to Nuvia's strategy," said CEO Keith Collett.

DURING THEIR WORKING LIFETIME, THE AVERAGE OFFICE WORKER WILL...

DRINK 24,684 CUPS OF TEA



SEND 400,816 EMAILS

FALL OUT WITH COLLEAGUES 479 TIMES

PRINT 343,504 PAGES



“IT'S STAGGERING HOW MUCH TIME IS LOST – MORE THAN 13 MINUTES EACH DAY – TO SIMPLE THINGS LIKE BEING DISORGANISED AND NOT KNOWING WHERE ESSENTIAL ITEMS LIKE PAPERWORK AND STATIONERY ARE”

FIONA MILLS marketing director, Avery UK

SOURCE: AVERY UK

NETWORK

KEEPING
APM
MEMBERS
CONNECTED

Where science meets project management

In October, more than 170 delegates from 30 organisations descended on Oxfordshire for a special project management conference dubbed 'The Space Between'.

The keynote speakers at the APM-supported event included *Project* columnist Professor Eddie Obeng, who talked about the QUBE approach to project management. He also argued that dealing with fears, failures and problems is the key to success, and that engaging with people on a 'human' level will help reveal useful nuggets of information.

Justin Greenhalgh of the Science and Technologies Facilities Council (STFC) shared details of his personal involvement in the recent groundbreaking international project that led to the detection of gravitational waves. He offered insight into the management of the research and the different contributions made by the US and European teams.

Other speakers included Diamond Light Source's Professor Andy Dent; APM's head of external affairs, Julian Smith; and Sarah Coleman, director at Business Evolution.

This is the fourth year that the conference has been held at Harwell Campus, a world-leading, 700-acre science



The organising committee at the Space Between event at Harwell Campus; *Project* columnist Professor Eddie Obeng (inset) spoke at the conference

and technology hub near Oxford. Harwell is home to more than 200 organisations, many of which are dedicated to research in the fields of space, the life sciences, healthcare innovation, advanced materials, big data, and energy and the environment. Many projects at Harwell and partner sites are both complex and international in nature, requiring detailed and effective project management to reach key milestones and deliverables.

Conference organiser Dr Sharmila Banerjee of the STFC said: "We are thrilled that project managers have responded so well to the event and that we were over-subscribed this year. We

"WE ARE THRILLED THAT PROJECT MANAGERS HAVE RESPONDED SO WELL TO THE EVENT"

are proud that Harwell is fully embracing project management as a core discipline, helping it enable the innovation of new discoveries that will affect us all through improvements to our everyday lives."

The conference was co-hosted by the STFC, Diamond Light Source and Harwell Campus Management, and sponsored by Explosive Learning Solutions.

APM JOBS BOARD OFFERS CAREERS ADVICE

If you are interested in making your next move in project management, visit APM Careers, the new jobs board designed for project professionals that matches their experience with the latest opportunities from leading organisations.

The site allows users to upload their CVs and includes advice to help users assess the skills, qualifications and experience they need to make the next step in their career. APM Careers also provides the latest careers guidance, resources and news, and a link to APM's *Salary and Market Trends Survey 2016*.

The salary survey allows users to see how their current role compares with the wider industry. There is also a job-alert facility that enables users to tailor their preferences according to sector, function and salary band, and help them get to the next rung of the career ladder.

"By offering our members and the wider public access to a standalone, responsive jobs board, we can continue to attract talent to the profession and offer candidates excellent job opportunities," said Sara Drake, CEO at APM.

● Find out more at jobs.apmcareers.com





National recognition for apprenticeship standard

The Apprenticeship Standard for Level 4 (Associate Project Manager) has been placed on the Register of Apprenticeship Assessment Organisations Pathways, further diversifying routes into the project management profession.

Commenting on the announcement, Sara Drake, CEO at APM, said: "All parts of the economy can benefit from using project management, and so it is vital to have a pipeline of talent into the profession.

"Apprenticeships are essential to assist in the growth of the project management profession in the private, public and voluntary sectors. This announcement takes us closer to our goal of hundreds of apprentices being trained each year under this new standard in England."

Employers are increasingly developing new standards to incorporate project management qualifications with international recognition to provide a flexible career pathway for project professionals.

APM first developed the Higher Apprenticeship in Project Management at Level 4 with Skills CFA in 2012. Around 800 apprentices have started on this framework.

Since 2015, APM has been working with a pan-sector group of around 35 employers, led by Sellafield, including major corporates, training companies and higher education institutions. Turn to page 28 to read more about Sellafield's work in boosting project management skills.

Focus on risk in the north west

APM's North West branch welcomed more than 100 delegates to the Alderley Park Conference Centre in Cheshire for a special conference on 10 October. The event, organised in conjunction with APM's Risk Management Specific Interest Group and the Institute for Risk Management, focused on risk, opportunity and issue management competencies, as set out in the revised APM Competence Framework.

Dr Ruth Murray-Webster, director of Associated British Ports, opened the day's presentations with the assertion that all projects constitute a change of some kind, and all carry risks (and perhaps opportunities).

Several parallel streams ran throughout the day, with delegates able to select sessions based on their preferred topics. The day also provided significant networking opportunities, with delegates from a wide range of industries and organisations in attendance.

At the end of the day, delegates were asked to take away one or two key points or techniques from all the discussions and try to implement these in their own projects. Phil Hardy, APM North West branch chair, said: "The true success of the day will be seen when improved performances result from the application of these in many individual situations."



VOX POPS

APM WOMEN IN PROJECT MANAGEMENT CONFERENCE

What are the big challenges facing you or project management in general?

"At Royal Mail, our main challenge is deregulation and maintaining a level of agility in a very large organisation."

Lou McCooey, project manager, operations, Royal Mail

"One of my biggest challenges is learning to understand the different behaviours within the team I manage and developing my skills to bring the best out of everyone and deliver projects effectively."

Christina Vasilogiannaki, project manager, WSP | Parsons Brinckerhoff

"I'm thinking a lot about which direction to go in next. I don't want to narrow down my opportunities too far before I've had a chance to explore where I can make a meaningful difference to society."

Tulsi Patel, delivery manager, Nationwide Building Society

SROI guide launched

APM's Benefits Management Specific Interest Group has published new guidance to help project professionals measure difficult-to-quantify project outputs or outcomes.

Social Return on Investment provides users with a robust structure for forecasting or evaluating services and projects where it is not immediately obvious how to quantify financial or other returns.

Lead author Hugo Minney described it as "a guide for project, programme and portfolio managers to understand how social return on investment (SROI) can be incorporated into successful delivery". He added: "SROI works just as well on for-profit as on social and environmental [projects], and, as a recognised standard approach, it will add credibility to your work."

The paper sets out the six stages of SROI, from establishing scope through to calculating value and reporting on the most useful outcomes. It also includes some of the common misconceptions about the subject, such as that SROI is a tick-box exercise and a soft option.

The paper builds on the *APM Body of Knowledge* definition of benefits management that states: "Benefits can be tangible (eg, money saved, jobs created) or intangible (eg, corporate reputation, capacity for change)." It adds that these factors may not also be quantifiable in cash terms.

● **Find out more by downloading the paper at bit.ly/2dGS0A4**



"THE PAPER BUILDS ON THE APM BODY OF KNOWLEDGE DEFINITION OF BENEFITS"

HELP SHAPE CHANGE

Now in its third year, the APM Enabling Change Specific Interest Group (SIG) continues to work towards its mission of "improving the change capability of APM's corporate organisations, teams and individuals". Its achievements so far include a comprehensive set of reference documents, available at bit.ly/2efxYR2.

The group has also built links with other SIGs, APM branches and external groups to broaden the discussion on change capabilities. It has also established some sector-specific practitioner groups.

The SIG welcomes approaches from APM members who would like to join its committee. Full committee members are expected to take responsibility for one of the group's themes or official committee roles, and attend monthly meetings. There are also a number of support roles for the SIG's themes that can be fulfilled more remotely.

● **Contact SIG chair Martin Taylor at enablingchangesig@apm.org.uk**

Profile of an APM volunteer



Name: **Hollie Woodard**
Job title: **Project manager, Volker Rail**
Volunteer role: **Women in Project Management Specific Interest Group**

Why did you decide to become a volunteer with APM?

I joined the Women in Project Management (WiPM) Specific Interest Group earlier this year, as I am keen to develop my own skills in activities outside my day job, such as organising events and providing input into industry articles. I also want to work with like-minded individuals to help shape the future of women in project management. I have attended a number of APM events over the past few years, and I have always felt inspired by the organisation and commitment of the individuals involved. As I am based in the north, I felt it was important to get involved to increase the breadth of knowledge geographically, as having people based across the UK can assist in widening the scope for events.

What benefits have you gained from being an APM volunteer?

It is early days for me, but, just from talking to other members and watching them in action, I have already gained more confidence in my ability to assist in organising an event. I have met some great people and gained some excellent contacts through the networking opportunities. I work in the rail industry, and it is beneficial to interact with people from other industries. I believe this is a great way of informally sharing knowledge and best practice while increasing your network.

I attended the WiPM Conference in September and, although I was not personally involved in the event's organisation, I was proud to be a part of the team that was.

What would you say to an APM member looking to become a volunteer? Any tips?

My advice to anyone considering volunteering would be to go for it. If you have something you are particularly passionate about, then focus on that. You may have opportunities to get involved in projects that would not normally be part of your day-to-day role. These are great ways of expanding your skill set and network of contacts.

FIND OUT MORE

IF YOU ARE INTERESTED IN FINDING OUT MORE ABOUT VOLUNTEERING, PLEASE CONTACT ANNA.GRABHAM@APM.ORG.UK

Your view



Please send your letters to editor@project-journal.co.uk
Letters may be edited for publication

THE NEED TO RECOGNISE ALL GENDERS

I thought the Autumn issue of *Project* presented a number of exceedingly good articles on the topic of gender balance. I do, however, need to take issue with the box on page 27, entitled 'Gender balance, equality and diversity'. This item made the mistake of suggesting that there are only two genders.

Anyone involved in the topic of diversity must be aware that the two-gender model is outdated; at the very least, there are three genders: male, female and transgender (a male who identifies as female/a woman who identifies as male).

For more information on the topic and a review by the Equality and Human Rights Commission, visit bit.ly/2fah3jP

Michael Woods IEng MICE, Edinburgh



DIFFERENT WORKING CULTURES

Having returned to the UK after 10 years working abroad (predominantly in the Middle East) in client-side project management, I am amazed at the differing attitudes of contractors/consultants in the two markets.

Admittedly vastly different in scale and approach, the Middle East has a very strong drive towards going the extra mile for clients to achieve a successful outcome. It's not uncommon to be 'asked' to work well into the night or at the weekend to complete critical elements of work for clients who demand extremely short programmes, accurate cost plans and immediate recovery against delays.

While I am not advocating such a severe approach in the UK, there appears to be a significant difference in attitude here.

Contractors and consultants alike seem to take an aggressive approach to clients and will do the bare minimum, with little interest in a client's long-term goal.

Recently, we have had two contractors start on site but walk away because of the requirements for adequate health and safety provisions; accurate and achievable programme and cost plans; and meaningful progress in a short space of time.

Clearly, while contractual terms in the Middle East are significantly more onerous, it staggers me that short-sightedness still prevails when boom times are here. Since starting in the industry, I was always taught that, when the client says jump, you ask how high. It seems, in the UK, when the client says jump, most seem to ask why.

Chris Harris, The rpa:group

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NICOLE REILLY

@GrowthKnowledge

PMO is not just about reporting; there's a wide range of customers with differing requirements. Have we done our stakeholder analysis? #pmot

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LINKEDIN

DO WE NEED TO BETTER DEFINE TYPES OF PROGRAMMES AND THE TECHNIQUES AND TOOLS THAT WORK BEST IN EACH CASE?

THE ISSUE

Chris Beach's blog 'Chihuahua or Great Dane, what breed is your programme?' elicited a strong response online. See an edited version of his blog on page 19.

THE REACTION

It's important that those accountable for leading programmes make the decision about what governance or approach is right based on the specifics. One size does not fit all, but a good

framework can, and should ensure the approach is bespoke, without having to be created from scratch.

David Jobling

There is the argument that one size does not fit

all, but it is equally important that we do not create an industry that develops too many different approaches. Some projects sit on the boundary between a number of categories, and programmes may

contain infrastructure, IT and transformation projects within them. A common overall approach, with some identified differences for different projects, may work best.

Terri Harrington

Best of the blogs

IF YOU WANT TO WRITE A BLOG FOR THE APM WEBSITE, CONTACT LAURA TAYLOR - LAURA.TAYLOR@APM.ORG.UK

Project learns what APM's experts have been debating in these excerpts from their blogs. Read the blogs – and many more – in full at apm.org.uk/blog

WHY DO WE NEED A GUIDE TO THE GOVERNANCE OF AGILE PROJECTS AND CHANGE?

Posted by Roger Garrini on 27 September 2016



Agile working has been greeted by some as the latest saviour of projects. At the same time, investors and directors of project work are hearing that they will not be involved in agile projects as all the work will be controlled at the workface. This has caused some alarm in organisations at

a senior level.

As a result, the APM Governance Specific Interest Group has developed a guide to the governance of agile change. *Directing Agile Change* is aimed at debunking myths and providing good practice on how these new-style projects should be controlled.

Agile working is about collaboration and 'letting the dog see the rabbit' via iterative and early deliveries of products to users and customers, with a view to avoiding nugatory work. This allows the products to be made fit for purpose incrementally and, importantly, tailored to the priorities of the investment.

Myths have grown up – inaccurately – hinting that anarchy will break out, with engineers and project staff doing what they want without recourse to documentation, reporting or business cases that form the normal fabric of good project management. These myths are tackled and explained in the guide.

Agile projects are 'different' and need a different governance approach and mindset that recognise and support the degree of empowerment undertaken. New behaviours are required by directors and leaders; insistence on traditional measures may make agile the worst choice, so behaviour and culture are key. To succeed, governance must be supportive, not directive, and the sponsor in particular will have different relationships with the work and the project team.

Checklists are provided for the key governance roles within an agile project environment, and we challenge the reader to think differently. The thinking in *Directing Change* is not about throwing away the popular guidance, but adding to and altering the disciplines of good governance.

TO ORDER A COPY OF *DIRECTING AGILE CHANGE*, VISIT APM.ORG.UK/SHOP/DIRECTING-AGILE-CHANGE. APM MEMBERS RECEIVE A 10% DISCOUNT. FOR A REVIEW OF THE GUIDE, TURN TO PAGE 80



CHIHUAHUA OR GREAT DANE: WHAT BREED IS YOUR PROGRAMME?

Posted by Chris Beach on 4 October 2016

Like dogs, programmes come in many shapes and sizes. Some are lean, agile and fast paced, like a greyhound; some are strong and resilient, like a St Bernard; and some are a mix of breeds, remaining versatile by combining the best of more purist elements, like a Labradoodle.

But while all programmes are different, they all have the same core attributes. Dogs all have four legs, canine teeth, claws, a tail and a strong sense of smell. Programme management always includes governance, planning, controls, assurance and management of change. However, each programme needs to adapt these core attributes to their organisational context.

In my experience, applying a one-size-fits-all programme management model is rarely successful. That said, there is value in ensuring the universal principles of good programme management – as articulated in the *APM Introduction to Programme Management* (second edition) – are applied to all programmes.

This is particularly relevant in terms of the different approaches necessary for success in two very different types

of programme: multi project and repeat project.

Leaders of multi-project programmes need to develop approaches that keep the focus on the benefits and outcomes and embed these at the heart of all programme management activities. This will compel those involved in the programme to undertake the projects that will have the greatest likelihood of delivering the organisation's strategy, and then to manage closely the interdependencies between projects to generate high levels of confidence in the delivery.

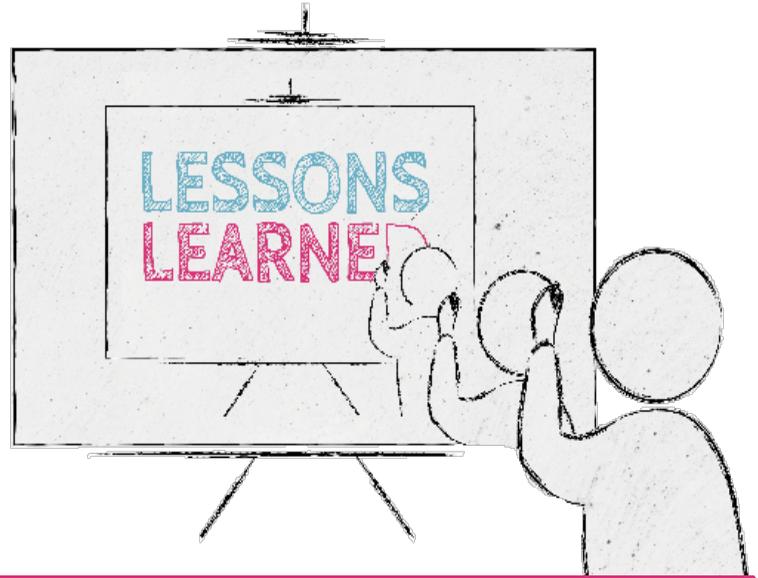
Those delivering repeat-project programmes should develop approaches that focus on maximising the synergies between similar projects through: optimised commercial arrangements across the programme; the minimisation of impacts on existing operations; and the optimisation of project timings to smooth resource peaks and provide a consistent profile of work to maintain optimal production.

We should reflect on the nature and characteristics of our programmes and use our skill and judgement to develop approaches that suit their context.

What breed is your programme?

Point of review

Regular lessons-learned reviews of successes and failures are crucial for improving individual and team performance, argues **MIKE CLAYTON**



'Do we really have to do that? It's a waste of time.' That's a typical response I hear to the recommendation of reviewing lessons learned at the end of a project.

And, on the face of it, it's pretty reasonable. My experience is that most lessons-learned reports get filed in the bottom draw and go unread. Certainly, they aren't scrutinised by the people who constantly repeat yesterday's mistakes. So what is the point?

Is this cynicism fair? Well, no – not entirely. There is one thing I discovered early in my project career about lessons-learned exercises. You can go into the process with high hopes that a report will be well received, and come out disappointed. But that's the wrong attitude. Don't conduct a lessons-learned review for the benefit of the organisation. It won't say 'thank you' and mean it.

There is, however, a very good set of reasons for a project manager to facilitate a meeting for learning lessons. We do it for our team members, because these are the people who can really learn from their project experience. Indeed, research into developing wisdom shows that we move from being smart to being wise when we reflect on our experiences.

So, conduct a lessons-learned review for individual learning. Better yet, if the team is going to work together again, do it for team learning, too. But why wait until the end of your project to learn lessons? If there is a lesson to learn, let's learn it quickly and embed it into our daily practice as soon as possible.

So, for the sake of your team and your project, schedule lessons-learned sessions

into the regular cycle of your project meetings. Not only will they help your team develop but, done well, they can be a big boost to team morale and, therefore, to project performance.

So what do I mean by 'done well'? There's an instructive passage in a book by Kim Cameron and Marc Lavine that more project managers should read: 'Spectacular performance depended on

WHY WAIT UNTIL THE END OF YOUR PROJECT TO LEARN LESSONS? IF THERE IS A LESSON TO LEARN, LET'S LEARN IT QUICKLY AND EMBED IT AS SOON AS POSSIBLE

capitalizing on what worked rather than being effective in addressing what didn't.¹

When you find performance below an acceptable standard, it is vital to find the problems, and address them. But once performance reaches an adequate level, the team will gain little or nothing by focusing on its faults and failings. What it will do is start to lose morale.

To raise performance from OK to excellent, you must focus your lessons-learned reviews on what works. Start by finding examples of success. Then, look for ways to embed such behaviours and actions into more of what people do, and even systematise them into your processes.

This not only raises performance levels incrementally, like a project-oriented *kaizen* approach, it also raises motivation. For the deepest learning, engage your team in a three-step process. First, conduct a detailed analysis of something that went well, to form hypotheses for what constituted the causal actions, approaches, behaviours or events. Second, ask the team to devise an experiment to test their hypotheses. Third, conduct the experiment and review the outcomes, to evaluate which hypothesis (if any) stands up to scrutiny. We all know that good results are sometimes the outcome of a chance series of coincidences.

When you do identify something that really works, modify your project process to take advantage of it. That way, with better processes, more knowledgeable team members and higher levels of motivation, you know what? Your organisation will have benefited. It may be by stealth, and you may not be thanked. But that's not the point. Your job, as a project manager, is to leave the world a little bit better than the way you found it. And guess what? You have. 

¹Kim Cameron and Marc Lavine, *Making the Impossible Possible*, Berrett-Koehler Publishers (2006)



MIKE CLAYTON is a speaker and trainer, the author of several project-management books, and the founder of **OnlinePM Courses.com**

THE PATH TOWARDS BREXIT

Brexit analyst
DR NICK WRIGHT assesses
the challenges in
delivering the 'project
to end all projects'

The UK's vote to leave the EU sent shockwaves across the country and the continent. With the exception of Greenland, no country has left the EU before. There is no template to follow, and even the Treaty of Lisbon's article 50, which outlines the process, contains only limited detail.

In October, prime minister Theresa May announced that the formal Brexit negotiation process will begin by the end of March 2017. This preparation time will be precious. Unless an extension is agreed by a majority of EU states, Britain will cease to be an EU member state two years later, regardless of whether final agreement has been reached on the withdrawal terms. Successfully completing this 'project to end all projects' in such a finite time period will be a daunting and all-encompassing task.

THE POWER OF THREE

The prerequisites for success, as with any major project, are a clear vision of the desired outcome, determined leadership and oversight, and clarity on how to get there. In bringing Boris Johnson, David Davis and Liam Fox into the new government, May made three of the leading 'leave' campaigners responsible for enacting her declaration that "Brexit means Brexit." However, to do so, they must simultaneously manage one of the most significant Whitehall restructurings of recent decades.

The government envisages Brexit as a three-pronged institutional process. Fox, in charge of the new Department for International Trade, is tasked with filling any post-Brexit trade

vacuum by negotiating free-trade agreements with a range of alternative international partners.

Johnson, as foreign secretary, has responsibility for the diplomatic network that will accomplish much of the process. One of his duties is to allay the concerns of the UK's international partners.

However, it is to Davis, as secretary of state for exiting the European Union, that the largest burden has fallen. The Department for Exiting the European Union (DExEU) must work out the details and handle the substantive negotiations, a process involving the coordination of inputs from across Whitehall, as well as the UK's devolved political institutions.

To date, Davis's progress reports, while sanguine, have been short on specifics, reflecting the reality that unpicking the UK's regulatory and economic relationship with the EU is an enormously complex task. Maintaining confidence in the DExEU's effectiveness will, therefore, be a key aspect of his work.

PINCH POINTS

All three men face complications. The first is capacity, particularly human resources. Whitehall has a finite number of officials and, while Brexit is clearly the political priority, the process of simultaneously managing the ongoing business of government cannot be neglected. For example, the DExEU had not reached its full complement of around 300 officials by the end of the summer, despite the urgency in its establishment.

Meanwhile, the Foreign & Commonwealth Office has been operating for more than a decade in an environment of tough budgetary settlements and is likely to require significant additional resources of money and manpower. At the same time, there are pinch points in terms of the capabilities available within Whitehall to accomplish certain Brexit-related tasks, the lack of trade negotiators being the prime example. In the short term, external expertise will need to be brought in at very considerable additional cost.

The second complication, inevitably, is politics. The problem of 'turf wars'

between the triumvirate of Brexit ministers has already emerged, with the prime minister being required to step in to prevent ministers squabbling over resources and responsibilities. Once negotiations begin in earnest, it will take strong leadership to avoid further tension.

A far more serious issue is agreeing on a vision of what Brexit means. There are clear dividing lines between those favouring a 'soft' Brexit, including the retention of single-market access, and those calling for a 'hard' Brexit, involving a more fundamental separation. Consensus on this will be essential before article 50 is triggered, although this could become significantly harder given the recent High Court ruling on article 50.

Rather than being one project, Brexit is actually a portfolio of interlinked projects to be managed simultaneously. Managing the domestic processes to ensure coordination and coherence across government – ie making Whitehall 'work' – is essential, but it is only one part of the equation. Ministers and officials must also ensure that the new structures established to achieve Brexit are nimble enough to cope with the inevitable setbacks and hurdles.

Britain's civil service enjoys an enviable reputation among our European partners for its efficiency, flexibility and the strength of its policy inputs. It will need all of these, plus strong, effective political leadership, if Britain is to achieve the best possible Brexit outcome. **□**

WHILE BREXIT IS THE POLITICAL PRIORITY, THE PROCESS OF MANAGING THE ONGOING BUSINESS OF GOVERNMENT CANNOT BE NEGLECTED



DR NICK WRIGHT is a teaching fellow in EU politics and programme director of the MSc in European public policy at University College London

With Brexit dominating the national agenda in the UK, can a project become too big?

Two project professionals argue the case **for** and **against**



Although accepted theory may disagree, in the real world, external influences can lead to a project becoming unable to deliver the scale of expected benefits

FOR

Projects exist to deliver benefits. As a sweeping generality, a project's size is related to the scale of the benefits, as the business case for doing the project should include a return-on-investment consideration. It is rare that a small benefit justifies a large project.

If the connection between deliverables and benefits is simple, then there is no reason why the project shouldn't simply scale up to match the size of the benefits.

However, in the real world, as benefits get more ambitious, the connection between deliverables and benefits becomes more subject to external influences. The project becomes complex, requiring a different approach to management.

At this stage, I would argue that a project has become too big to be managed as a linear project, ie one with a defined scope, and readily identifiable start and end points, as defined in current bodies of knowledge (BoKs). Those BoK skills and tools are still absolutely necessary to ensure deliverables arrive on time, within budget and to the requisite quality (and in the right order), but they are no longer sufficient. It is now necessary to manage external factors that change the relationship between deliverables and benefits. Some would argue the project is now a programme, others that translation of deliverables into benefits is greater than or above the project.

I argue that, when the relationship between deliverables and benefits gets complex, the project has become too big to be contained within 'iron triangle' BoK delivery methods. A project can become too big – not too big to be delivered at all, but too big to be delivered solely in a conventional way.

SIMON HENLEY is an honorary fellow of APM, and a fellow and deputy chair of the International Centre for Complex Project Management



Size alone is not a factor determining a management challenge – but there are many ifs and buts to be considered too

Against

Literally, of course it can – but, in practice and in theory, size is not a very good criterion for deciding whether a project is too big to be managed effectively.

I have been asked to address this question as an academic. So what literature is there on the issue? How reliable is the data? And is the argument cogent? One of the first things we need to do is define terms.

By 'big', do we mean money, physical size or the number of people involved? All are poor indicators of management difficulty. Pouring huge volumes of concrete is not necessarily a management challenge.

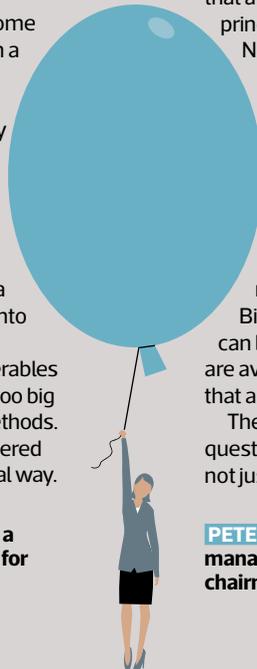
When I did my PhD back in the early 1970s, I concluded that a project's size, speed and complexity were the principal factors determining management attention.

Now, most analysts would argue complexity is a critical factor. Shenhar and Dvir (2007), in one of the most relevant studies in this field, argue that novelty, technology, pace and complexity are the variables most affecting project risk and benefit. Miller and Lessard (2000), in the IMEC study of more than 50 projects worth over \$1bn, identify external variables and suppliers as the biggest factors.

Actually, bigness can be helpful, giving management resources to address issues properly. Big projects can be exemplar projects. But projects can become too big if they need more resources than are available, attract hostile attention and create issues that are devastating.

The literature says beware, but focusing on the question carefully suggests some ifs and buts – typical, not just of academics, but also of project managers!

PETER MORRIS is professor of construction and project management at University College London, and a past chairman of APM





SEE THE FULL PICTURE

Assurance's role in evolving best practice and continuous improvement is engaging professionals across all sectors, as the positive response to APM's recently launched toolkit shows

It may not seem a phrase to set the pulse racing, but 'project assurance' is fast becoming a hot topic. It's certainly not a revolutionary new principle in the world of project management. As Roy Millard, senior audit manager at Transport for London and chair of the APM Audit and Assurance Committee, points out, "Even a smaller organisation may well have project controls and a small risk-management and internal-audit function, although it may not see them as a joined-up picture for assurance over projects."

Rather, increasing financial pressures and greater complexity and scrutiny have brought the importance of clear oversight of projects – and the role that assurance should play – sharply into focus.

"Many projects have an international spin, and there are more stakeholders wanting to know what is going on, and more risks that are outside the project manager's control," continues Millard. Combined with greater complexity, there is less tolerance of failure, and constant pressure on costs.

Sir Amyas Morse, the government's comptroller and auditor general, believes that the public sector is so overstretched and under-resourced that there is the potential for significant delivery failure. This risk will be exacerbated as civil servants are pulled away to Brexit-related activities.

Speaking at a recent Institute of Government conference, Morse stated that a 'can do' attitude from civil servants leads to projects going ahead even when departments don't have the resources to take them on. As things stand, there is a collection ▶

GETTY

of processes that “do not yet amount to the coherent framework for prioritising and managing public sector activity.. Instead, what is needed is a wider, overarching approach based around skills, money and time,” he said. In effect, civil servants need an approach to assurance that will allow them to make better-informed decisions over what can and cannot be done.

With the spotlight on the role of assurance, the APM Assurance Specific Interest Group (SIG) has produced a toolkit to help project professionals (see box, opposite). The group recognised that the lack of a framework and differing approaches were a bar to successful assurance planning, and devised the toolkit to help address the problem. Judging by more than 5,000 downloads already, there is clearly a desire for assistance.

THE APM ASSURANCE SPECIFIC INTEREST GROUP RECOGNISED THAT THE LACK OF A FRAMEWORK AND DIFFERING APPROACHES WERE A BAR TO SUCCESSFUL ASSURANCE PLANNING AND DEvised THE TOOLKIT IN ORDER TO HELP ADDRESS THE PROBLEM

LEARNING LESSONS AT LLOYDS

As it evolves, project assurance can play a key role in continuous improvement and learning for the benefit of the business. That’s certainly been the experience at Lloyds Banking Group, as senior programme manager Mark Palmer explains. “Financial services is a dynamic industry and there is a need to be fast to market and responsive to market changes. We are trying to embed a learning culture in our change community as we recognise that, the more we learn and reflect those learning activities in our change approach, the better we will be.”

Assurance fits squarely into those aims, Palmer continues: “Assurance doesn’t drive strategy or the direction of the business, but it makes sure that when the company’s strategy is executed it is done so efficiently and effectively.”

Palmer explains that, while the bank’s policy had for some time stipulated that significant change programmes must have independent delivery assurance oversight, the assurance output was not incorporated into learning as a group.

In 2014, Palmer was transferred to his current role within the group delivery assurance team, which sits within group change management. He was tasked with providing delivery assurance to the group’s major change programmes, and supporting the existing cultural change towards a learning organisation through the implementation of the change performance framework.

Assurance work at all levels, from peer reviews to delivery assurance reviews of significant projects, is now conducted against the same set of standards to embed consistency and standardisation. This has enabled repeatable and measured assessment that highlights areas where improvements could be made. All review outcomes are loaded onto the change performance framework, which allows the delivery assurance team to analyse the findings and help support future learning and improvements to key change initiatives.

“We have done some good work with requirements management and traceability,” says Palmer. “If you find one project that does not have all requirements stipulated and traced through from initial design to a test model, you note it, put it down to that one project and ensure it’s rectified. But when you get it as a recurring theme, that’s where the beauty of the change performance framework comes to light. We highlight where things would benefit from focus and improvement, and more specialist teams have taken that learning and put improvements in place that will support the rest of the group through the end-to-end management of requirements and traceability.”

REORGANISING THE ENVIRONMENT AGENCY

Meanwhile, at the Environment Agency, it was a major reorganisation of the entire agency that offered an opportunity to restructure the assurance function.

Under the previous model, much of the assurance of projects was done at a regional level, split between 10 regional offices. The offices worked independently of each other, meaning that they were working to different standards and any kind of comparative work was almost impossible. There was also misunderstanding between what was assurance and what was approval, explains Paul Wilman, improvement and assurance manager. “People were confusing assurance with financial approval, thinking that they had to solve every minute detail, which led to assurance slowing down projects,” he says.

In early 2014, the reorganisation stripped out the regional tier, necessitating a redesign of how project assurance operated, and culminating in the National Project Assurance Service (NPAS).

“Early on, we realised that we were operating a service for the business, providing independent assurance projects, so we set it up under continuous improvement techniques in order to improve efficiency,” says Wilman.

Under the new system, it is mandatory for projects over £100,000 to be assured, either by the National Project Assurance Board for higher-risk projects, or, for the lion’s share, by one of 10 virtual groups. Wilman heads up a central team that oversees, supports and monitors assurance work throughout the agency.

The role of assurance is to provide independent advice. Accountability and responsibility for leading, delivering and driving the project remains with the project.

IMPROVING QUALITY

“We point out where the improvement opportunities are and where we see the residual risks. That advice goes back to the project for [the team] to do as it feels appropriate, and the project’s response is then sent back for a final assurance review,” details Wilman. Both reviews are monitored by the central team.

He continues: “I have a dashboard, so I can see what the quality of the business case is like when it comes into assurance,

“PEOPLE SEE THAT ASSURANCE CAN IMPROVE THE DELIVERY COMPETENCE OF THE PROJECT. IT’S LIKE A FREE BIT OF CONSULTANCY – WHY WOULDN’T YOU DO IT?”



THE TOOLS FOR THE JOB

Recognising the need for a more joined-up approach to project assurance, the APM Assurance Specific Interest Group (SIG) has produced a free-to-download toolkit, called *Measures for Assuring Projects*.

Designed to be used by project teams for self-assessment, the toolkit consists of a summary sheet for rating project assurance and examples of evidence that support a good assurance measure score.

By using a definitive framework, project professionals will help minimise the risk of duplication or gaps and increase the comparison of assurance outputs.

As Roy Millard, committee member and former chair of the SIG, says: “If your organisation has 100 projects on the go, using the toolkit will give you the ability to take an assurance picture of all those 100 projects and see where some are being run better than others.

“It gives you a way of benchmarking one project to another. That can then feed into learning for other projects and into continuous improvement.”

■ For more information, visit bit.ly/2dGSOA4

and when it goes out, so I can see which projects aren't taking our advice. Once through assurance, projects must get financial approval. The assurance advice goes through to [that team], and they base their sign-off on that. Hopefully, if they see it comes through as red with a lot of residual issues that we didn't manage to sort through assurance, they will take notice.”

Wilman wants assurance to be seen as a value-adding activity and not a hurdle to jump. “Assurance provides independent advice that hopefully will improve delivery confidence in the project. The latest dashboard showed that we improved the quality of every single business case that came through.”

In addition to improving the quality of the business case, NPAS aims to recycle the learnings from assurance back into the business. Each quarter, the central team analyses every comment that comes through from assurers and classifies it according to a theme – be it finance, environment or risk options.

Information on which areas are receiving the most comments – for example, the flood defence or IT department – is then fed back to the business, highlighting where improvement opportunities lie. Teams of experts will then run an improvement project, which could result in implementing changes such as template tweaks, further guidance or training.

“EARLY ON, WE REALISED THAT WE WERE OPERATING A SERVICE FOR THE BUSINESS PROVIDING INDEPENDENT ASSURANCE PROJECTS, SO WE SET IT UP UNDER CONTINUOUS IMPROVEMENT TECHNIQUES IN ORDER TO IMPROVE EFFICIENCY”

Wilman says: “Although assurance is mandatory, people can now see its benefits. They see that you can do robust assurance efficiently and it doesn't have to slow the process down. We are working on making assurance more efficient and proportionate, and identifying where we have opportunities to improve the service. We are doing more to integrate our assurance with the Department for Environment, Food & Rural Affairs, which is our sponsoring body, for example.

“People also see that it can improve the delivery competence of the project. It's like a free bit of consultancy – why wouldn't you do it?”

THE LINK BETWEEN RISK AND ASSURANCE

For project assurance to play a greater role in leading good practice, there needs to be a cultural shift and better understanding of the benefits that it can bring.

Millard says: “Culturally, people in assurance tend to only think in their own box, so perhaps just about quality when doing a quality audit. They don't necessarily think about their role in the bigger assurance picture – to learn lessons and improve corporate knowledge.”

He believes that internal audit committees have a key role to play. “Our role is to oversee all risk and assurance on behalf of the board's audit committee. Boards and executives often have an arm's-length relationship, but there is a real opportunity for the director of internal audit to be having conversations with the chair of the audit committee, working together to build on continuous improvement in the organisation.”

Emphasising the link between assurance and risk management would help, he continues: “The one thing boards really understand these days is risk, but they don't necessarily understand the link between risk and assurance.

“If there is no risk, there is no benefit in assurance activity. Assurance can generate information that gives organisations a better understanding about how their risks are being managed and make suggestions about how risk can be managed better. If that link is continuously stressed at all levels of the organisation, the right sort of language can then be taken into the board in order to provide better understanding of what assurance is all about.”

Millard states that, when the Assurance SIG was set up in 2007, “we didn't quite appreciate how much guidance was needed about what assurance was, let alone integrated assurance”. The fact that the toolkit has been received so well is a measure of the progress that has been made in this area, and the continuing professionalism of project managers. ■

JO RUSSELL is a business writer and editor

NUCLEAR FAMILY

Brexit may be considered the ultimate project, but in terms of scale, longevity and national security, the Sellafield project is hard to beat. **CHARLES ORTON-JONES** finds out how the site is upskilling for the future

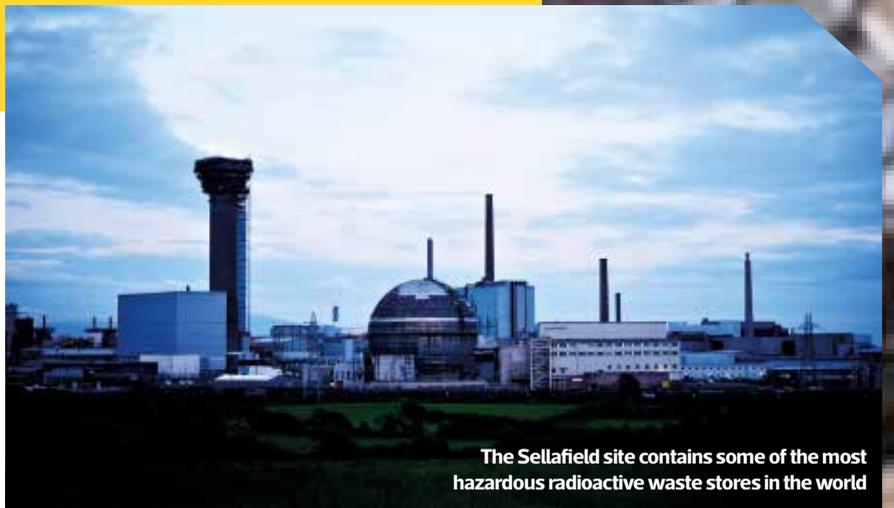
Sellafield is the world's longest-term project.

The nuclear reprocessing site's timeline stretches beyond the now familiar landmark that is London's Olympic Park, and the future completion of rail project HS2, and into the far distance, where only science-fiction writers dare to tread.

Hot on the to-do list is clearing out the Magnox nuclear-waste ponds. This is scheduled for 2025 – practically tomorrow in Sellafield terms. Final demolition of the ponds should happen in 2050. Other work is planned for the 2070s and 2080s, and final decommissioning for 2120. After that, we wait for the radioactive material to decay for 100,000 years. Workers know their great-grandchildren could be finishing the job. It's not an improbable thought – local MP Jamie Reed was a third-generation Sellafield worker.

Day-to-day life at Sellafield is like nowhere else. It's a self-contained world covering two square miles. In its early days, Sellafield developed materials for Britain's nuclear weapons. It generated electricity from 1956 until the 2003 closure of Calder Hall, a nuclear power station incorporated within the Sellafield site. And now, in its third incarnation, it is a leader in handling and making safe nuclear waste from around the world.

Located on the coast of Cumbria, Sellafield has its own postal service, railway station, utilities, catering, laundry, fire service and even a dedicated police ▶



The Sellafield site contains some of the most hazardous radioactive waste stores in the world



force. The layout is a complex melange of 1,300 buildings. There's the golf-ball shaped Windscale reactor, the first of its type, and Thorp (or Thermal Oxide Reprocessing Plant), where the spent fuel from the UK and overseas power plants is reprocessed and sent for long-term storage.

Perhaps most eye-catching is the Pile Fuel Cladding Silo, Sellafield's oldest nuclear-waste storage facility, built in the 1940s. The silo stands 21m tall, with its six waste-containment compartments holding more than 3,400m³ of intermediate waste, stored since 1952. That's the equivalent of 30 double-decker buses of material. For historical reasons, it'll be the last of the four 'legacy' storage ponds and silos to be tackled. Technicians will grab the waste using a telescopic boom and load it into 2,200 cubes, 3m by 3m in size, which will be stored. Decades later it will be transported to a geological disposal facility deep under the ground, where it will stay until the human race is a distant memory.

NO MARGIN FOR ERROR

Standards at Sellafield are sky-high. In a normal job, you can make a mistake, apologise, and get back to work. An error at Sellafield will make the world's press and quite possibly a House of Commons inquiry. The scale of work here is vast; the workforce numbers 13,000. Europe's largest asbestos removal project, which is now completed, was at Calder Hall. In a nutshell, this place is a dream come true for project managers: the biggest challenge of them all.

Tony Carter is one of those lured in by the drama of Sellafield. "I came to Sellafield straight from school," he recalls. "They sponsored me through my apprenticeship and a degree course in mechanical engineering at Manchester University. I worked at the same time, so it took four years rather than three. No fees."

Ten years later, he's a mechanical engineer on the front line of nuclear decommissioning. The work is varied, cutting across Sellafield's many areas of activity. He's currently managing a 20-strong team working to integrate a complex portfolio of projects.

EARLY ADOPTER

Carter is also one of the lucky few to have attended the new Project Academy created by Sellafield Ltd in 2014 in partnership with the University of Cumbria. It's a flagship concept generating a lot of interest in the project management world.



TONY CARTER, MECHANICAL ENGINEER

"I CAME TO SELLAFIELD STRAIGHT FROM SCHOOL. THEY SPONSORED ME THROUGH MY APPRENTICESHIP AND A DEGREE COURSE IN MECHANICAL ENGINEERING AT MANCHESTER UNIVERSITY. I WORKED AT THE SAME TIME, SO IT WAS FOUR YEARS RATHER THAN THREE. NO FEES"

"The course I attended was an APMP Level D. It involves two three-day sessions with a three-hour exam at the end," he explains. "We went through 15 key areas, talking about project portfolios, the project environment, life cycle, governance, structures of organisations and projects, managing key stakeholders, planning, reporting, estimating, value management, scheduling, resourcing, risk management, leadership and team management."

A vital lesson he picked up was to decode the language of project managers. "I've been asking for a 'resource smooth plan', but that means something else in their language. What I actually wanted was a resource levelled plan. It really helps to know the right terms."

You might ask why Sellafield wasn't routinely training engineers and other staff in project management skills years ago. The truth is that project management has made incredible strides in recent years. It's only now that the talents of project managers are being appreciated by colleagues in parallel disciplines. Today, it's clear everyone can benefit from tuition. The Project Academy was set up with this in mind.

There are multiple entry points for all Sellafield employees, running all the way from staff with GCSEs, A-levels and Higher National Diplomas to those with a BSc or PhD. This means all members of the integrated project teams will have shared core knowledge and can cooperate more effectively than ever before to the standards the APM Project Management Qualification (formerly known as APMP).

TRANSFERABLE SKILLS

Academy founder Ian Marr, head of project management at Sellafield, made sure the tuition would be relevant for anyone. "We did not want it to be bespoke to the nuclear industry," explains Marr. "Project management is the same in our industry as any other. The fundamentals are the same worldwide. We had extensive dialogue with people at APM, including Alistair Godbold, who worked in the nuclear industry, and he agrees that there is nothing unique about delivering projects in the nuclear environment."

This rationale means the academy can approach issues from a pure project management perspective. Skills learned will be transferable to other jobs, should staff change roles or move on. And,



schemes for the NHS and the teaching profession. As a result of the university's and Sellafield's ambition, the training is recognised by both the professional governing body and accredited at higher education level.

For Sellafield, the Project Academy means staff across their functions can work closely with project managers, knowing the language, thinking and principles. At the same time, Sellafield is investing in creating a new cadre of specialist project managers through its APM Higher Apprenticeship in Project Management, lasting four years.

Candidates learn on the job across a broad range of project-delivery functional areas, working to gain the full qualification. They are rotated through controls, risk management, construction, commissioning and pre-operations. The apprenticeship is specifically targeted at over-18s looking to get the most thorough grounding in project management they can, while simultaneously learning the nuclear decommissioning trade.

WHEN STAKES ARE HIGH

The stakes are certainly high: the UK depends on Sellafield to excel in everything – especially considering its budget of £1.9bn a year for the next century, making it more expensive than HS2 and Trident submarines. It's also the most difficult work being undertaken on these shores. *New Scientist* magazine describes the spent fuel ponds and silos as among “the world's most dangerous radioactive waste stores”. Sellafield plays a vital role – and it needs staff of all disciplines to know and understand project management. The new academy will ensure they do, this decade, and in all the decades until the doors finally shut on this extraordinary facility. 

CHARLES ORTON-JONES is a business journalist and editor

intriguingly, it opens the door to people from outside Sellafield to attend the courses. “Local residents and employees of other companies are able to study alongside Sellafield workers,” says Marr. “A young person seeking to enter the project management world can enrol. It's a fantastic contribution to the local area.”

A MODEL CITIZEN

As a major employer and buyer of goods and services, Sellafield plays a big role in Cumbria's strong economy, which boasts unemployment of less than two per cent. Sellafield wants to act as a model citizen in

the community, and the Project Academy is a key milestone in that mission.

Sandra Booth, pro-vice chancellor of the University of Cumbria, can see huge benefits from the community-first approach at the Project Academy, which she helped create. “We are serving the needs of Sellafield, but also the wider supply chain, the NHS, local construction companies and national parks. Project managers are required across sectors; it's not nuclear specific.”

The university came to the partnership with a significant reputation in the field, having worked closely on similar

SELLAFIELD IN NUMBERS

Employees:
13,000

Number
of buildings:
1,300

Years for
radioactive
waste to decay:
100,000

Budget:
£1.9bn
a year for the
next century

Amount of
waste contained
in Pile Fuel
Cladding Silo:
3,400m³
(30 double-
decker buses)

Amount of fuel
reprocessed at
Sellafield to date:
**50,000
tonnes**

Date of final
decommissioning:
2120

THE CASE FOR LESSONS LEARNED

Major projects consultant **KAREN ELSON** argues the importance of learning legacies for the UK construction industry and shares the results of a survey she conducted on the topic

According to the *Government Construction Strategy 2016–20*, published earlier this year, construction output in 2014 was £103bn, 6.5 per cent of GDP. The sector comprised 2.1 million jobs, 6.3 per cent of the UK jobs total. The strategy set a target to improve construction productivity, achieving £1.7bn efficiency savings by 2020.

Given these numbers and the importance of the construction industry to UK plc, over the past few years, the government has set out the future long-term direction for the sector. This has resulted in other strategies and plans, such as *Construction 2025* and the *National Infrastructure Delivery Plan 2016–2021*.

The former, published in 2013, also contains efficiency targets, seeking to make the construction industry more competitive on the global market via:

- a 33 per cent reduction in the initial cost of construction and the whole life cost of built assets;
- a 50 per cent reduction in the overall time, from inception to completion, for new-build and refurbished assets;
- a 50 per cent reduction in greenhouse gas emissions in the built environment; and
- a 50 per cent reduction in the trade gap between total exports and total imports for construction products and materials.

These are big ambitions and will require a significant step change. The construction industry is notoriously bad at delivering on time and to budget, an issue that has been addressed by various construction reports.

Despite this, over the past 20 years, productivity in construction has remained flat, while in manufacturing it has nearly doubled, according to McKinsey & Company's online article 'The construction productivity imperative'. This states that 98 per cent of mega projects across the world face cost overruns (80 per cent of the original value on average) or delays (average slippage of 20 months).

We also know from the National Audit Office report to the Public Accounts Committee in January 2016 that a third of major projects in the government's £511bn Major Projects Portfolio due to deliver in the next five years are rated as in doubt or unachievable unless action is taken to improve delivery.



Construction 2025 has identified six key drivers of change required to address these issues:

- 1 Improved image of the industry
- 2 Increased capability in the workforce
- 3 A clear view of future work opportunities
- 4 Improvement in client capability and procurement
- 5 A strong and resilient supply chain
- 6 Effective research and innovation

Surprisingly, neither *Construction 2025* nor the other published construction strategies make any reference to 'learning from experience' (see page 69 for a definition) as part of the efficiency drive. However, *Construction 2025* does actually identify lack of collaboration and knowledge sharing as a weakness: "Learning points from projects are often team based and lost when the team breaks up and the project ends."

THE BUSINESS CASE FOR LEARNING FROM EXPERIENCE

So where is the evidence that learning from experience results in more efficient and productive projects? The Project Management Institute's 2016 *Pulse of the Profession* report found that organisations waste \$122m for every \$1bn invested due to poor project performance. Its corresponding 2015 survey of 2,500 project managers around the world found a 35 per cent improvement in project outcomes by the organisations that were most effective at knowledge transfer. These same organisations were much more likely to capture learning from external organisations.

Research by McKinsey Global Institute in 2013 suggested that governments could boost infrastructure productivity, ▶

IN THEIR OWN WORDS

Survey respondents explain how learning legacies have been applied and the benefits to projects

“Reusing material (eg reporting formats) saves time and effort instead of reinventing the wheel on each new programme. Developing processes and procedures based upon good practice from other programmes helps apply proven solutions to common problems”

“I’ve worked at Crossrail for two years and Mace for two years, and we’ve borrowed heavily from London 2012’s learning legacy. Although I was involved in creating some of the content and know it well, I’ve found it indispensable for bid work at Mace and getting programme controls reporting up and running fast”

“I used the Olympics Learning Legacy case study material to investigate a particular issue regarding data handover to operations. I found this a useful body of information to compare and contrast with my experience gained on another major project: the Thameslink programme”

“Make extensive use of learning legacy material for teaching MSc students and providing project work. Knowledge from learning legacy helps inform research topics”

“Examples of setting strategic values and stakeholder management tactics have been welcomed as we approach national portfolio management in the Middle East. Illustration of integrated design and construction has also helped to illustrate the benefits of collaboration between government agencies”

“We have utilised and recommended actions from sustainability initiatives pioneered during the Olympics on new construction schemes – ranging from concrete to remediation to employment and skills. The learning legacy has provided the evidence to back up assertions about the way things can be done”

lowering spending by 40 per cent for an annual saving of \$1 trillion (see Figure 1). This was based on an estimated global investment of £57 trillion required to fulfil global GDP projections between 2013 and 2030. Although not specifically about learning from experience, the research highlighted the need for infrastructure owners around the world to adopt proven best practice (ie learn from the experience of others) and take the following three steps:

- 1 Improve project selection
- 2 Streamline delivery
- 3 Make the most of existing infrastructure

In 2004, the International Data Corporation, a US-based market intelligence and advisory firm in the IT and telecommunications industries, estimated that \$31.5bn is lost each year by Fortune 500 companies not sharing knowledge (Babcock, 2004).

BP is a good example of an organisation doing lessons learned well, as articulated in Nick Milton’s *The Lessons Learned Handbook*. In the 1990s, the company invested a significant amount of time in learning lessons from other teams at the outset, and estimated this saved it in the region of \$83m.

There is an emerging body of evidence that supports the value of learning from experience. It seems that *Construction 2025* has missed an opportunity here. There should be a seventh driver of change to improve productivity: effective knowledge sharing and learning from experience.

So how can the industry learn to learn from experience and share knowledge effectively? Learning legacies are one approach taken by two mega projects – London 2012 and Crossrail – to collate and share lessons learned, innovation and good practice for the benefit of the industry. But have these learning legacies actually added value?

We know from Google Analytics that the London 2012 Learning Legacy website, launched in October 2011, has received 163,000 visitors from 175 countries who have downloaded more than 500,000 documents. The more recent Crossrail Learning Legacy website is following a similar trend; both sites continue to receive around 200 hits a day. But are these actually ‘raising the bar’ in the industry?

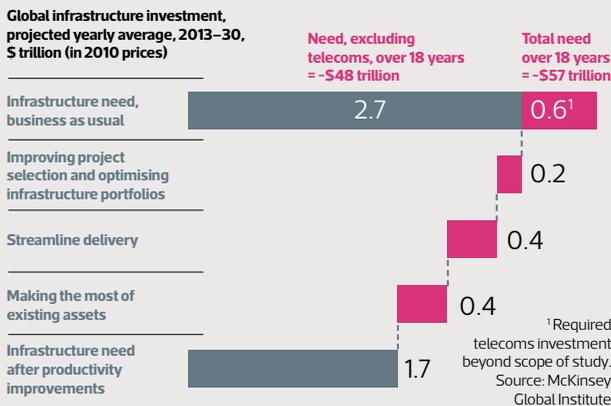
To answer this question, I ran a survey this year that was shared on LinkedIn, through this journal, and on the Major Projects Authority and APM websites (see box, opposite). While the survey does not seek to quantify the value of savings made by projects, it does provide evidence that learning legacies are contributing to real cost and time savings on other projects.

NEXT STEPS

The survey results suggest that learning legacies have a role to play in supporting *Construction 2025* in achieving its ambitions and improving project productivity. Therefore, should this become standard practice for all major projects?

In my view, major projects, particularly those funded by government, should be contributing to a body of knowledge throughout planning and delivery – not just at the end. It is not acceptable to let these valuable knowledge assets drift away as the project closes down. Transition planning and knowledge sharing is also a key part of the circular economy.

Figure 1: Improving infrastructure productivity could save \$1 trillion a year



SURVEY FINDINGS

In total, 230 people responded to the survey; the industry-sector breakdown is shown to the right. These categories are based loosely on those used by the National Audit Office in reviewing the Major Projects Portfolio. Only 50 per cent of respondents were from infrastructure and construction, suggesting that learning legacy is relevant across all sectors. Most respondents were from consultancy and client teams; only 16 per cent were from contractors and the supply chain. Seventy-nine per cent had heard of learning legacy. Of these:

74% had applied learning or resources from learning legacies into projects

67% said it had influenced their approach to project initiation and development

61% said it helped improve delivery

58% said it resulted in time savings

50% said it resulted in cost savings

17% didn't find learning legacy helpful

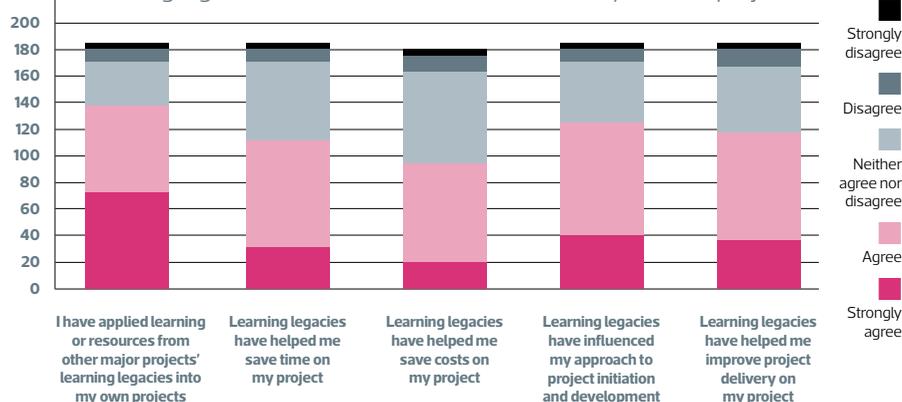
What type of projects do you work on?



What role do you and your organisation generally play in major jobs?



Have you used learning or resources from other major projects' learning legacies, and how these have benefited your own projects?



So, what needs to happen next? I believe the following initiatives are required:

- 1 The Construction Leadership Council, which is responsible for developing the action plan for *Construction 2025*, should take the lead in driving the industry to share knowledge (including failure) as a critical success factor in achieving the *Construction 2025* ambitions. Alternatively, this could be a role for the Infrastructure Client Group.
- 2 The Infrastructure and Projects Authority (IPA) should drive a 'learning legacy' requirement on government-funded projects – learning before, during and after all projects. This could include a requirement for all major projects to have, at the outset, a knowledge management strategy integrating innovation, lessons learned and learning legacy.
- 3 There should be funding for academic research on the business case behind learning legacy, perhaps led by the IPA.
- 4 A knowledge hub for major projects is required to bring together the various learning legacies and experts, and also to provide a portal for project delivery organisations to share knowledge directly.

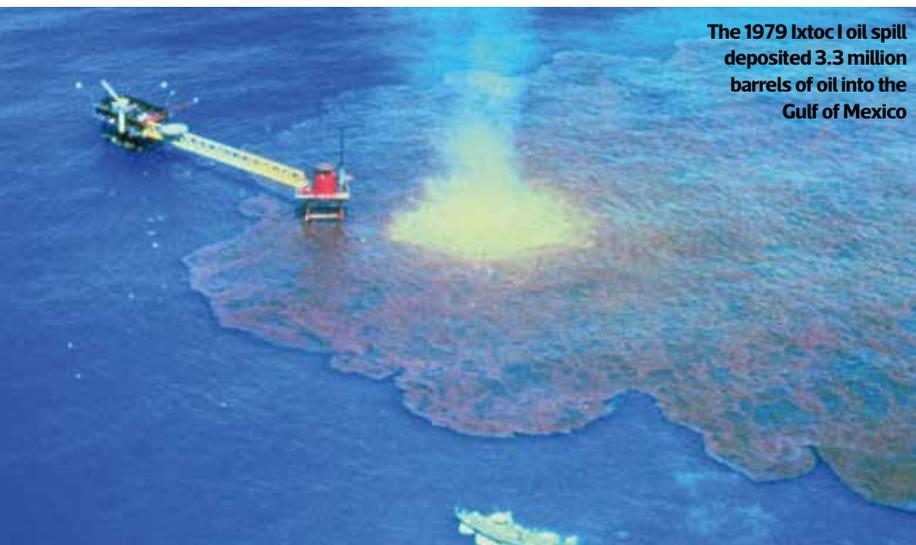
If UK plc truly wishes to increase its share of the global construction market, we need to improve project productivity to make the UK more competitive and showcase our capability at delivering major projects. *Construction 2025* is a good step in the right direction. However, learning from experience and learning legacies are essential drivers for improved project productivity on all major projects. *Construction 2025* has failed to grasp this. 



KAREN ELSON is an independent major projects consultant, chartered engineer and certified knowledge manager with 20 years' experience in the construction industry

TURNING THE TIDE

MATT SCOTT talks to the team behind an engineering project that breathed new life into an ecosystem blighted by an oil spill off the coast of Texas



The 1979 Ixtoc I oil spill deposited 3.3 million barrels of oil into the Gulf of Mexico

It was an environmental disaster on a huge scale affecting a formidable ecosystem. In June 1979, the Ixtoc I exploratory oil well blew out in Bahía de Campeche, 600 miles south of Texas in the Gulf of Mexico. The well was not capped until March 1980, by which time more than 3.3 million barrels of oil had spilled into the ocean. Devastatingly, that oil started heading towards the Texas coastline and the biologically rich Aransas National Wildlife Refuge.

To help protect the region's delicate wetlands and intricate bay systems, the State of Texas decided to close the ephemeral pass at Cedar Bayou, cutting off Mesquite Bay from the Gulf of Mexico and protecting its waters from the approaching oil. Once the beach clean-up operation had been completed, however, the pass remained closed – Cedar Bayou was cut off from the fruitful waters of the gulf.

Where the bayou had been a lively breeding ground for fisheries, blue crab – the primary diet of the endangered whooping crane – and endangered sea turtles, the lack of a flow of water from the

gulf meant that its once thriving marine life began to deteriorate.

The closure hit hard, keeping the eggs and larvae of fish, shrimp and crabs from entering the bayou. Its ecosystem crashed, and with it the area's fishing and tourism industries.

Local groups made several attempts to open the pass, but all ultimately failed, and it was not until 2004 that the first steps were made towards opening the pass and restoring Cedar Bayou to its former glory.

LOOK BACK TO MOVE FORWARDS

The recovery process began when the state government connected the action group of local commercial and recreational fishermen, Save Cedar Bayou Inc, with engineering consultancy Mott MacDonald.

The two organisations started working together to help secure funding for reopening the channel. This effort was continued by Aransas County and led by County Judge Burt Mills, who recognised the importance of the pass to the environmental ecosystem and

local community. His efforts secured construction permits and funding for construction to go ahead.

Hugo Bermudez was appointed as project manager by Mott MacDonald. The team started a coastal engineering and hydraulic analysis to assess what had caused the closing and opening of the pass and how this impacted on the ecosystem.

“We found that, back in the 1950s, there had been a big study of fisheries passing from the Gulf of Mexico into the bay system through Cedar Bayou that described how abundant and lively the system was,” Bermudez says. “We also looked at historical aerial photography back to the 1930s and rectified some of that photography to see different historical openings and closings of the channels. We found some human interventions as early as the 1930s trying to open the pass, and it remained open for quite a while after that, [until the oil spill].”

This analysis helped Bermudez identify how previous dredging attempts failed due to the location where the excavated material was disposed of, and its subsequent impact on water flow, allowing Mott MacDonald to establish a plan for permanently opening the pass.

Bermudez and his team filed for a permit for dredging that would allow the excavated material to be discarded downstream, where it would not limit the flow of water, but regulatory issues made it much more difficult than envisaged to push ahead with the plans for regeneration.

“MOTHER NATURE WAS DEFINITELY BEHIND US – WE HAD A LOT OF RAIN RIGHT AFTER THE PASS OPENED, AND WE HAD BEEN IN A DROUGHT UP UNTIL THAT POINT”



COLLECTION OF DOUG HELTON, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, US DEPARTMENT OF COMMERCE. MAP: JOHN PLUMER

“The agencies received a lot of complaints [after previous dredging attempts] because the material was not disposed of in the proper way and had an impact on the natural resources of the area,” Bermudez says. “So they were very sceptical about anything else being done in that area to help resolve the issue.

“They felt that the two engineering projects previously carried out were enough and they weren’t going to allow a mistake to be made again.”

GOING WITH THE FLOW

The regulators required the regeneration team to perform a study into how their plans would affect the area. After several years of surveys and changes to the plan to reduce the environmental impact of the dredging, a permit was granted in 2013.

This permit required a further phase of monitoring the fisheries, sea grasses and other endangered species. In 2014, the 10-year project finally got under way. It involved removing 540,000 cubic yards of sand using a combination of hydraulic dredging, excavators and off-road trucks, restoring a large volume of flow for the first time in 35 years.

As would be expected in such a project, environmental issues continued to remain at the fore throughout the work, and construction stuck to a tight timescale to avoid impacting on the migration patterns of birds in the region.



Clockwise from top left: The pass at Cedar Bayou is once again open; a map of the area impacted by the oil spill; the endangered whooping crane was one of the species affected; County Judge Burt Mills (far left) with the Mott MacDonald team



“We had to do construction in a very short period of time [to avoid migration seasons],” Bermudez says. “To keep the project under budget, the equipment came through the pass instead of going through the Gulf of Mexico, so we didn’t need ocean vessels. To do that, we had to do surveys of the area and execute the project within a very restricted time frame, while also measuring sea grasses and monitoring migratory birds in the area.

“Mother nature was definitely behind us – we had a lot of rain right after the pass opened, and we had been in a drought up

until that point,” he adds. “It is a difficult process to model, but we did know that one of the driving factors for keeping the bay open was rain.”

Now, two years later, the pass is wide open again.

SPECTACULAR COMEBACK

In 2013, before the reopening of the pass, a scientific study caught just 99 fish and 905 crustaceans. Towards the end of 2014, after the pass had been restored, the same study caught 715 fish and 6,963 crustaceans. That’s a greater than sevenfold increase in all sea-life levels, and blue crab numbers grew from as few as five to more than 175 in little over a year.

Mark Ray, board chairman of the Coastal Conservation Association in Texas, called the reopening “a dream come true – a \$9m gift to the Texas coast”. He added that, “More fish, more crabs and more birds mean more birders, more fishermen, more hunters and more visits by folks who love the coast.”

With fisheries returned to normal levels, Cedar Bayou is once again harbouring the world’s largest flock of endangered whooping cranes, with people travelling from afar to enjoy the bayou’s spectacular comeback – bringing plenty of new trade for local businesses, and plenty for the local fishermen to catch. **■**

MATT SCOTT is a business and data journalist

Frontline politics is a fearsome place, and it requires a certain amount of grit and determination to weather its many storms. Whatever your political hue, it's hard to deny the impact Harriet Harman MP has made in Westminster and on the national policy agenda with her passionate pursuit of issues concerning equality, childcare and domestic violence.

First elected in 1982 when she was seven months pregnant, Harman entered parliament as one of only 10 female Labour MPs. Her career has spanned many Shadow Cabinet and Cabinet posts, and she has also served as deputy leader of the Labour Party and acting leader of the opposition twice, after the resignations of Gordon Brown and Ed Miliband.

PASSIONATE CAMPAIGNER

Those attending September's APM National Conference for Women in Project Management in London had the opportunity to hear at first hand Harman's experiences and insights on moving forward with the equality agenda. She regaled the audience with lively anecdotes of her life in parliament, as well as setting out her blueprint for the future.

Addressing the delegates as 'pioneers', her message to the conference was positive and powerful – a call for women to make their own mark. She admitted there are 'difficult questions' that need to

be addressed – from sexism and lack of female representation at board level to the greater provision of flexible working.

"We are all grappling with what it is to be a woman in the world of work, what it is to be a mother and going out to work, what it is to be a daughter caring for elderly parents and going out to work, what it is to be a woman leading other women and leading other men," she said.

"But the reality is that the future depends on women's work in every region and every sector – and the future needs equality, because that is modernity and meritocracy."

Looking back at her own career in parliament and government, she reflected on getting the right balance when deciding whether to stand her ground about something she believes in: "Too many rows and you find yourself ineffective and out on a limb; not enough rows and you find yourself ineffective, as you just get walked over."

Hindsight has changed her view on the best course of action: "When I was in government, I thought I was having far too many rows. Now I look back and think I wasn't having nearly enough. I had more power and influence than I realised."

Project caught up with Harman after her keynote speech to ask about her achievements, the challenges ahead and the impact of Brexit on equality. ▶

THE EQUALITY AGENDA

For more than 30 years as an MP, Harriet Harman has been an ardent campaigner for equality for women. But, she tells **SARAH NOTTON**, there is still a long way to go



**"THE FUTURE DEPENDS
ON WOMEN'S WORK
IN EVERY REGION AND
EVERY SECTOR – AND
THE FUTURE NEEDS
EQUALITY, BECAUSE
THAT IS MODERNITY
AND MERITOCRACY"**

You've been a leading campaigner for equality for many years. What achievement are you most proud of?

"Something that made a real practical difference was our work to provide more childcare for parents who are working. When I first started as an MP, there was no such thing as childcare – only social-services day nurseries if you were seen as a risk to your child.

"There was no concept of childcare for working parents. In most areas, there weren't even private nurseries, as women simply didn't earn enough to pay. The biggest achievement of which I was a part was saying that the government has a responsibility to help people get childcare – this included the Sure Start centres we launched in every community after we got into government in 1997."

What development needs to happen next in the drive for equality?

"Ultimately, what will make a really big difference in the world of work is for men to take more responsibility at home. But, although government can take some steps towards that, such as paying increased paternity leave and encouraging men to take parental leave, that is a very big cultural change.

"It should be seen as a public policy objective. The government could encourage and incentivise employers to increase the number of men who work part time for family reasons, whether it's looking after children or older relatives. At the moment, it's quite difficult for a man to say 'I want to take parental leave' or 'I want to work part time' – he'd be looked at as quite unusual, so I think you need to make that more the norm."

Recent research by Deloitte said the gender pay gap wouldn't be closed until 2069 unless more women are encouraged into science, technology, engineering and maths (STEM) professions. How would you address this?

"It's very important for more women to be encouraged into STEM subjects. The government could look at increasing bursaries, reducing university fees, all sorts of things.

"However, I don't buy the idea that somehow women have got to do something in order for the pay gap to be narrowed and that it's just about science and engineering. For example, if you look at other sectors, such as financial services, it's just men getting paid more than women.

"Too often it's about 'what should girls be doing?' or 'what should women be



"WHAT WE DON'T WANT TO DO IS TO FIND THAT WE ARE STUCK HERE IN 2016 WHILE EUROPE MOVES AHEAD AND THE UK BECOMES THE PLACE WHERE WOMEN HAVE FEWER RIGHTS"

doing?' What we should be getting is equal pay and equal opportunities. I think that the people telling us to do things differently should be looking at what they're doing and do things differently."

The equality select committee has said that the government is still not taking steps to ensure flexible working is offered to all employees, and that employees should be judged on what they actually do, rather than how many hours they stay in the office. How can we move that on?

"I believe organisations should measure how many men and women are getting flexible work, and publish a consistent set of figures, year by year, so that it is benchmarked. Then you can have the discussion, try something, and, if it doesn't work, try something else. Businesses need to come together so that they can measure between each other and not just within individual organisations, year on year."

Women are often penalised on pay and promotional prospects because they take a career break. Are there any examples of other countries or sectors we can learn from?

"The Swedes are a very good example – but there's a lot of money that goes into that. The government pays enough parental leave to cover the salary, so it's very affordable.

"It's very difficult to offer people the rights they can't afford to take. You have to put your money where your mouth is and that's what's held it back.

"There's actually more demand from men for parental leave than actually happens because they can't afford to take it. So it's not just about encouraging them to take it, it's enabling them to take it. For too many households, it's just not financially viable."

What should be the number-one priority for Theresa May's government in terms of equality?

"If I had one thing to judge her on, it would be what happens to childcare. If she puts big investment behind childcare that would make a huge difference and show that she's got it. Quality, affordable, accessible childcare is not available to so many women and it's such a headache for families."

In the discussions leading up to the referendum on Britain's EU membership, you voiced your support for how the EU helped deliver maternity rights in the UK. What challenges do we face now that we are set to leave the EU?

"It's not good enough to say we will stick with the rights we've got, and that we won't erode the rights we've got from Europe. We need to shadow Europe on those rights so we don't slip behind as Europe goes forward.

"Europe has been leading the way on issues such as parental leave, leave for carers and non-discrimination. It's ironic that bureaucrats in Brussels have delivered so much for women – but the improvement of labour standards has traditionally been alongside the free movement of labour.

"What we don't want to do is to find that we are stuck here in 2016 while Europe moves ahead and the UK becomes the place where women have fewer rights."

In terms of the projects you have undertaken, such as the Equality Bill, what has been your approach and what challenges did you face?

"I have found that, if a project is worth doing, you should stick with it. Sometimes, it just takes a long time. One of the things that I was able to do in government was change how we regarded domestic violence, but it took an awfully long time. I was arguing in 1985 to remove the defence of provocation, but we didn't get rid of that until 2009.

"I just hope no one else's projects take that long! ☑

SARAH NOTTON is the editor of *Project*

On the front line

Shane Cooney's career has taken him to some of the world's most challenging project environments, he tells **CHARLES ORTON-JONES**



It's the first posting of your career. Of course you want to go somewhere exciting and challenging. But Afghanistan? Many of us might have politely asked to hear the alternatives. For Shane Cooney, however, Afghanistan was the perfect opportunity to show what he can do.

"It was the ultimate baptism of fire," recalls the 31-year-old Dubliner. "Yes, it was dangerous. I was nervous. And I don't come from a military background, so it was a totally new experience for me – but the steep learning curve is what motivated me."

Cooney had completed a degree in construction technology at Dublin Institute of Technology (DIT) before moving to Edinburgh to study project management at Heriot-Watt University. "Most of my friends from DIT took the quantity surveying route," he says, "but I'd always been organising stuff for friends, always in the middle of it, so the natural route was into project management."

He landed a job in Leatherhead, Surrey, with KBR, which took a quick look and decided the best place for him was Camp Bastion. "It was all kicking off," he recalls. "One of my projects was to support NATO forces at Kandahar Airport, which at the time was the world's busiest single-runway airport."

Despite being the new kid, Cooney was sent on two-week missions as a commercial manager. "It involved everything from responding to client change requests to handling disputes and contract conflicts," he says. The job also encompassed supplying services to the embassy in Kabul, and to Kandahar Airport: "We were responsible for managing the airport from a hard facilities-management perspective – making sure the runway was in good condition and providing cargo movements."

Another aspect of his role was to provide infrastructure support to NATO – one job was leading a 10-person multiskilled team to conduct a due diligence inspection of more than 150 buildings in Kandahar. Later, the role incorporated the provision of soft services to the British Embassy in Baghdad.

GRACE UNDER PRESSURE

Talking to Cooney, it's easy to see why he made such a success of the posting. He instinctively frames difficulties as opportunities. Although Cooney admits negotiating with the army pushed him, he saw it as a way to hone his talents of persuasion. "I learned a lot working with the military," he says. "It's really important to convey the advantages of the proposals and to develop a solution that meets the client's objectives, while ensuring it is still commercially viable for our business."

His attitude must have helped. He's enthusiastic, energetic and laughs a lot when he speaks. In a war zone these qualities are more than a plus – they are compulsory.

CHARLIE BEST

His upbringing was also a boon. "My father is a builder," he says. "So, from a really young age, I was on construction sites, and I was also fortunate to do work experience one summer with Ferrovia Agroman." Indeed, when tasked with gaining the confidence of army majors concerning issues such as runways, it certainly helps if you feel at home on a construction site.

Fast risers often ensure their career encompasses many different facets of project management, and Cooney is a prime example. After Afghanistan, he worked with the Metropolitan Police on procurement support, developing tender documentation and evaluation. His comrades this time were lawyers and commercial accountants. "I learned that surrounding yourself with specialists is vital when procuring on that scale," he says.

HIGH FLIER

In December 2014, Cooney made the move to engineering giant Arup, and Heathrow Airport. "It was a project management role, encompassing design coordination and working with different disciplines," he explains. "Heathrow is massive. It means lots of different conversations with multiple stakeholders, and considering many layers of details."

Cooney is now an Arup adaptations project manager at the Francis Crick Institute, a £650m world-class biomedical research centre near King's Cross station in London. He works with scientists and construction teams to fine-tune the facility.

To other project managers, Cooney's advice is to keep learning, find great mentors and focus on detail. He also suggests that, when things go wrong, it is important to admit to the errors as soon as possible.

He owns up to one mistake early in his career regarding a proposal, which he underestimated. "I put my hands up, came clean and looked for support to fix it. A lot of people try to cover up mistakes, or push responsibility and fault, but I firmly believe we need to be accountable and responsible for our decisions and actions."

His positive mindset and easy-going chat aren't accidents, either. "A former colleague and mentor called David Chisholm used to say 'Keep smiling.' It sounds basic, but this simple saying is powerful in the sense that we need to enjoy what we do, and if we do then generally we tend to perform better. A smile is infectious."

So what's next for our rising star? "I think it's important to keep finding new challenges," says Cooney. "If something seems tough then it's probably worth doing. That's what I'll be doing, searching for new experiences so I can keep growing and learning." ■

CHARLES ORTON-JONES is a business journalist and editor



SHANE COONEY

Age: 31

Current position: Senior project manager

Current employer: Arup

Years of experience: 7

Qualifications:

- BSc construction project management, Heriot-Watt University
- BSc construction technology, Dublin Institute of Technology
- APMP (now known as the APM Project Management Qualification)
- Construction Skills Certification Scheme card holder
- Full member of APM

“IT’S REALLY IMPORTANT TO CONVEY THE ADVANTAGES OF THE PROPOSALS AND TO DEVELOP A SOLUTION THAT MEETS THE CLIENT’S OBJECTIVES, WHILE ENSURING IT IS STILL COMMERCIALY VIABLE FOR OUR BUSINESS”



The project management profession gathered at the London Hilton on Park Lane for the annual APM Project Management Awards, which was hosted by TV journalist Kate Silverton (right)



APM AWARDS 2016 CELEBRATING EXCELLENCE

Headline sponsor:
Shell



The annual APM Project Management Awards, sponsored by Shell, offers an opportunity for the project management community to come together to celebrate the profession's contribution and achievements.

On 7 November, around 500 people attended the glamorous event, held at the London Hilton on Park Lane and hosted by TV journalist Kate Silverton.

From complex construction and logistical challenges to

socially conscious customer programmes, the skill and commitment of individuals and teams in delivering world-class projects came through loud and clear as the profession celebrated the best of the best.

TURN OVER TO MEET THE WINNING CLASS OF 2016...

PROJECT MANAGEMENT COMPANY OF THE YEAR

WINNER
ROYAL MAIL

RUNNERS-UP

- Gate One
- Mott MacDonald
- Pcubed (Program Planning Professionals Ltd)

As the UK's most trusted delivery company, Royal Mail provides a one-price-goes-anywhere postal service, six days a week. With 139,000 employees working at 1,949 locations, its operations present a complex logistical challenge covering the entire nation.

Any change needs to be implemented in a dynamic, live operational environment, whereby Royal Mail can continue to collect, process, distribute and deliver to highly regulated quality-of-service standards.

At the heart of Royal Mail's ongoing transformation is a portfolio of six programmes covering its operational pipeline. Supporting 102 projects, the portfolio has a headcount of around 270 people and significant financial investment per annum.

A professional project management office was created to centralise all project support. This has now been expanded across Royal Mail. Governance was also redesigned using the *APM Body of Knowledge* as a reference point to define a seven-gate, 17-template model that is frequently reviewed and improved.

In addition, to aid clear visibility of planned change and cross-programme management, a change-loading tool was built that can be accessed by all project-team and frontline colleagues.

Because of these (and many other) initiatives using project management disciplines and methodologies, Royal Mail has delivered significant changes, modernising its operations and improving the experience for the customer.

Richard Moor, head of portfolio at Royal Mail, said: "We have been working very hard over the past few years to build and drive project professionalism, investing heavily in APM qualifications. This award really means everything to us."

"TO BE RECOGNISED BY THE PROJECT MANAGEMENT COMMUNITY MEANS A LOT"



PROJECT OF THE YEAR
(Sponsored by QinetiQ)

QinetiQ

WINNER
DIGITAL INTERVIEWING PROJECT – METROPOLITAN POLICE SERVICE

RUNNERS-UP

- UBS Headquarters, 5 Broadgate – AECOM
- A465 Heads of the Valleys Dualling: Section 3 (Brynmawr to Tredegar) – Arcadis LLP
- Dyson: Phase 1 Expansion Project – Turner & Townsend
- Nottingham Express Transit (NET) Phase Two – Nottingham City Council/Turner & Townsend

For victims of serious crime, reporting the matter to the police can be a harrowing experience, especially for those who have suffered violence. It is important that the environment and technology are fit for purpose, providing a secure and safe area to conduct victim and suspect interviews.

The Metropolitan Police Service's (MPS's) interview facilities required a major modernisation programme. A combination of poor-quality and unreliable interviewing equipment, a lack of soundproofing and unsuitable interview rooms in the wrong locations across London was resulting in poor victim care and a risk to the MPS's reputation.

Originally scoped as a project to replace only the most unreliable victim-interview recording devices, the project grew to improve the IT and building quality of every victim- and suspect-interview suite owned by the MPS.

The project faced severe financial restraints due to the public-sector funding squeeze and had to assertively bid for its £10m capital budget. Despite these challenges, the project team, all of whose members had other roles within the MPS, was able to deliver to the required standard and under budget.

The result was the transformation of 246 suites in 70 buildings to meet modern building standards and offer cutting-edge technology. Since the rollout of the new estate, completed in early 2016, anecdotal evidence indicates a positive impact, as video victim interviews are now reliably secured in a high-quality environment.

Commenting on the award, Neil Cochlin, project manager at the MPS, said: "It's fantastic, because the public sector sometimes gets a raw deal reputationally for not being able to run IT projects. This project was driven, in large part, by the need to improve victim and customer care. To be recognised by the project management community for running something that is of a high standard means a lot to the MPS."



1 All set for the awards to begin in the Hilton's magnificent ballroom; **2** Guests enjoyed dinner and drinks at the most glamorous event on the professional calendar; **3** Programme of the Year winner: Heathrow Airport's Terminal 3 Integrated Baggage system team; **4** Mark Horne, business development manager at RPC UK Ltd (right); **5** Project Management Company of the Year winner: Royal Mail; **6** Overseas Project of the Year winner: the Quest project by Shell, collected by Nick Smallwood; **7** Kate Silverton (centre) met guests and heard stories of the major achievements in project management in 2016



IT PROJECT OF THE YEAR

(Sponsored by T-Systems)



WINNER

GROUP CONDUCT RISK APPETITE METRICS (GRAMS) – LLOYDS BANKING GROUP

RUNNERS-UP

- An Ultrafast Broadband Solution for the UK – BT
- LSTOC Upgrade and Integration – Transport for London
- Terminal 1 IT Safeguarding Project – Atkins/Heathrow

Lloyds Banking Group wanted to avoid any systemic unfair customer outcomes arising from its product design, sales and after-sales processes. In 2013, the bank recognised that it needed to enhance the group- and divisional-level qualitative conduct risk appetite metrics (GRAMs) to enable more effective decision making.

An IT solution was needed to maintain a single definition of GRAMs data across all business areas and enforce the accuracy of data at the point of capture. However, a third-party solution was deemed to have a prohibitive cost, so Lloyds decided to develop an in-house, bespoke solution.

Due to regulatory compliance deadlines, the project was given an eight-month delivery window from definition through to implementation. To meet this tight deadline, the team adopted an agile approach to delivery. This meant significant upskilling for the project team, as agile experience across Lloyds was relatively limited at that point.

The result was a £3.5m saving over five years compared with the third-party solution. The bank now owns the intellectual property of an asset that could be expanded or re-engineered to achieve other business priorities.

Most importantly, the development of the Group CRAM solution enables the business to identify and mitigate mis-selling incidents such as Payment Protection Insurance.

Michael Hinds, head of programmes at Lloyds Banking Group, said: "External recognition from such an authority on project management as APM is a phenomenal achievement and vindication of all the team's hard work."

"RECOGNITION FROM APM IS VINDICATION OF ALL THE TEAM'S HARD WORK"

PROGRAMME OF THE YEAR

(Sponsored by Program Framework)



WINNER

TERMINAL 3 INTEGRATED BAGGAGE – HEATHROW AIRPORT LTD

RUNNERS-UP

- At Sea Demonstration 2015 – QinetiQ
- High Performance Computer Programme – Met Office

The £500m Terminal 3 Integrated Baggage (T3IB) system completed its full rollout this summer as part of Heathrow's ongoing major transformation programme. This vertical facility using an automated system is the first of its kind and has provided huge benefits to passengers and airlines, resulting in significant improvements in bag performance.

Reflecting on winning Programme of the Year, Darren Colderwood, Heathrow's project delivery director, said: "It was a very difficult project, and being recognised by the industry means a lot to me and the team. It's a fantastic achievement for us."

For the full story of T3IB, turn to page 52.



**PROJECT
PROFESSIONAL
OF THE YEAR**
(Sponsored by Atos)



**WINNER
SPENCER HOBBS – NETWORK RAIL**

RUNNERS-UP

- John Beattie – Royal Mail
- Ryan Harris – Centrica Connected Home
- Chris Holt – BAE Systems plc

Network Rail has embarked on a number of multimillion-pound signalling renewal projects along the Great Western rail line that support its ongoing electrification projects that will power new electric trains along the route in the coming years.

As project manager for the Swindon Area Signalling Renewal (SASR) part of this transformation, Spencer Hobbs had to employ multifaceted project management skills to motivate his team, after the project missed its original commissioning milestone, to successfully meet the revised commissioning dates and demanding timescales of the subsequent electrification programme.

The missed milestone also meant a silo working mentality developed, which strained the relationships between client and contractors. Spencer initiated a project

charter to motivate and coordinate the team based on an agreed vision and objectives; co-located the project team (client and contractors) in the same office; introduced a more user-friendly online Microsoft SharePoint site to improve information sharing; and initiated team-building events and behavioural safety workshops.

By adopting lean and agile principles to deliver the SASR, Spencer also focused on embedding a continuous improvement mindset within the team through regular lessons-learned reviews across the project's life cycle.

A key innovation was the 'temporary signalling fringe' commissioning methodology, which separated the revised, consecutive, week-long commissioning proposed for December 2016 into three smaller (52-hour) stages, to be completed over three weekends between November 2015 and February 2016.

This resulted in the revised commissioning for the whole route 10 months earlier than expected by key stakeholders, leading them to suffer less disruption to the rail service.

Spencer commented on his award: "It means absolutely everything to me and is also recognition of the massive collaborative effort between my project team and the contractors, consultants and engineering firms that delivered the SASR."



**YOUNG PROJECT PROFESSIONAL
OF THE YEAR**

**WINNER
JOSHUA MACEY – MOD,
DEFENCE EQUIPMENT
AND SUPPORT ORGANISATION**

RUNNERS-UP

- James Hall – NATS
- Shayley Mann – XPO Logistics
- Lucy Walton – BAE Systems

To support its operations in the Falkland Islands, the Ministry of Defence (MOD) uses two vital helicopter capabilities: search and rescue for year-round emergency cover for civilians and the military; and a support helicopter (SH), which provides essential transportation of personnel and equipment around the islands.

With the Royal Air Force's Sea King helicopters due to be retired at the end of March 2016, and the SH contract due to expire in the same month, there was an opportunity to combine the two capabilities under a single service-based contract. This led to the establishment of the Falkland Islands Search and Rescue and Support Helicopter (FISARSH) service.

As project manager, Joshua Macey was responsible for planning and delivering



8 Guests from XPO Logistics enjoy a glass of champagne; **9** Mike Nichols Award for Inspiration winner: Nottingham City Council's Good To Great Transformation team; **10** Project Professional of the Year winner: Spencer Hobbs, Network Rail; **11** Staff from APM mingled with guests from across the project management profession; **12** Social Project of the Year winner: Nationwide Building Society's Specialist Support Project team; **13** Sir Monty Finniston Award winner: Peder Berg, Norwegian Ministry of Finance; **14** Young Project Professional of the Year winner: Joshua Macey, MOD, Defence Equipment and Support



all aspects of the FISARSH project, which had a through-life budget of £190m.

In the period from January 2015 to March 2016, he led the development phase of the new service. This comprised many elements, including the development and build of two brand-new helicopters; civil aviation approvals; and the recruitment and training of more than 30 personnel.

A robust project management plan, close coordination of MOD stakeholders with the FISARSH contractor, strict governance and team motivational skills were just some of the tools Joshua employed to successfully deliver the service on 31 March 2016, critically in time to allow the planned retirement of the Sea King fleet.

Joshua commented: "I see APM as the standard by which I've developed my project management competence and skills. I see it as one reference point in terms of how I develop those skills that I need to implement day to day."

"TO WIN THIS IS FANTASTIC; IT'S RECOGNITION OF THE GREAT WORK WE'VE BEEN DOING"

THE MIKE NICHOLS AWARD FOR INSPIRATION

(Sponsored by The Nichols Group)



WINNER GOOD TO GREAT TRANSFORMATION – NOTTINGHAM CITY COUNCIL

RUNNERS-UP

- London Underground 4LM – Transport for London
- Catherine Holmes – MTS Health Ltd
- Dr Edward Ramdaloo – KZN Department of Public Works

The Mike Nichols Award for Inspiration celebrates inspirational projects, programmes and organisations that transform the world for the better.

This year's winner is Nottingham City Council (NCC), which has taken an innovative and proactive approach to shape the city's future through its Good to Great Transformation programme.

The focus of its ambition is "to put citizens at the heart of everything we do". This guiding principle informs all of NCC's activities, priorities, behaviours,

decisions and services, and allows every member of the team to think innovatively and deliver better outcomes for the city's citizens.

NCC's corporate leadership team (CLT) leads 40 transformation programmes, each one comprising many projects. Grouped into nine portfolios, Good to Great Transformation's progress is reviewed monthly by the CLT.

This radical way of thinking has produced a wide range of initiatives, including a Growth and Innovation Hub to attract new businesses to Nottingham that has created 3,000 high-quality jobs; the development of lines 2 and 3 of the city's tram network (in an environment of major government reductions in capital funding); and the creation of an energy company, Robin Hood Energy, to compete with the 'big six' providers to cut citizens' energy bills by an average of £80 per year per household.

Upon receiving the award, NCC's Ken Lyon said: "As a council, we've been looking to move forward, improve and get better in the face of a tough environment for local authorities. To win this is fantastic for us; it's recognition of the great work that we've been doing."

SOCIAL PROJECT OF THE YEAR

(Sponsored by Project)

PROJECT

The Award for Social Projects

WINNER**SPECIALIST SUPPORT PROJECT – NATIONWIDE BUILDING SOCIETY****RUNNERS-UP**

- Charity Eye Camp, Benin City, Edo State, Nigeria – Prime Opticals and Eye Clinic
- KUZA – Adam Smith International
- The Rise SEN School – Arcadis LLP

Nationwide Building Society and Macmillan Cancer Support have been working together since 1993 to provide support to people diagnosed with cancer.

Macmillan's *Counting on Your Support* report found that 95 per cent of cancer patients do not contact their bank or building society when faced with financial difficulty.

Faced with a challenging five-month timeline, Nationwide and Macmillan developed the Specialist Support Project, an industry-first bespoke service for Nationwide customers impacted by cancer. It involved the implementation of a Specialist Support Team to provide case-managed assistance, supported by highly trained frontline employees who can refer customers to services and a suite of products and policy exceptions to support individual circumstances.

Project-team members were sourced from all units of the business to ensure input and collaboration across impacted areas. The communications strategy for the pilot included short films featuring customers and specialist-team members; a branch champion network; regular distribution of success stories; and project-team attendance at roadshows.

Following completion of the pilot phase in October 2015, Nationwide rolled out the specialist service across the entire business. More than 1,000 Nationwide customers have so far been supported by the service, and more than 200 customers have been referred back to Macmillan, leading to in excess of £140,000 of additional benefits and grants.

Mandy Griffin, head of customer experience delivery at Nationwide, said: "To get this off the ground, we had to employ the very best project managers and the very best project management techniques, so being recognised by APM shows that really paid off. Thank you to Macmillan as well, which has been a massive part of this."

**OVERSEAS PROJECT OF THE YEAR**

(Sponsored by Ramboll)

RAMBOLL**WINNER****QUEST – SHELL****RUNNERS-UP**

- Roy Hill Project – Roy Hill Holdings and WSP | Parsons Brinckerhoff
- ON TOP from DOWN UNDER – a global project delivered from nowhere to 9GI – BAE Systems
- GSK EBOLA Z CHAD3-004 and 005 Projects – QuintilesIMS

One method to reduce the impact of industrial emissions is carbon capture and storage (CCS), whereby CO₂ is captured and stored safely underground.

In the early to mid 2000s, Shell's oil-mining and processing operations in Alberta, Canada, were under scrutiny for their carbon intensity. The Alberta government identified CCS as a key technology to meet the province's target CO₂ reductions for 2030 and 2050. It established a special task force, in which Shell was a representative.

In response to a C\$2bn fund aimed at encouraging CCS demonstration projects, Shell successfully submitted a funding



application for its solution, Quest, to the Alberta government.

Quest was delivered by Shell's Projects & Technology organisation, which oversees the company's projects through their life cycle, and which ensured Shell's eight principles for good project delivery were adhered to. Shell also has a company-wide project management system that includes a toolkit of value-improving practices, allowing the global workforce to align its tools, systems and processes.

The resulting Quest CCS project in Alberta will reduce CO₂ emissions from Shell's oil sands operations by more than a million tonnes per year for 25 years.

Nick Smallwood, chief project engineer and global discipline head at Shell, said: "[This award] is really great recognition for all the hundreds of men and women who put this project together and delivered it successfully. They have delivered the first industrial-scale carbon-capture and sequestration project on oil sands operations. It's a major step forward."

"[THIS AWARD] IS GREAT RECOGNITION FOR ALL THE HUNDREDS OF MEN AND WOMEN WHO PUT THIS PROJECT TOGETHER"



15 Tom Frost, head of Shell's Project Academy; 16 IT Project of the Year winner: Lloyds Banking Group's Group Conduct Risk Appetite Metrics team; 17 Awards judge Carol Bell (centre) with friends; 18 The team from the Met Office, runner up in the Programme of the Year category; 19 Project of the Year winner: the Metropolitan Police Service's Digital Interviewing Project team; 20 Herbert Walton Award winner: Amgad Badewi, Kent Business School; 21 Lloyds Banking Group team members celebrate their award; 22 Brian Willis Award winner: Andrew Snook: Foreign & Commonwealth Office

THE SIR MONTY FINNISTON AWARD

WINNER
PEDER BERG – NORWEGIAN MINISTRY OF FINANCE

Awarded to those who show an enduring dedication to the project management profession, the Sir Monty Finniston Award is named after the great British industrialist, businessman and one-time APM president.

This year, the award was presented to Peder Berg, deputy director general at the Norwegian Ministry of Finance. An accountant with an in-depth knowledge of and enthusiasm for project management, Peder is responsible for the development and management of the Norwegian Quality Assurance Scheme, a two-step decision-gate system designed to reduce failure rates in major projects.

On receiving the award, Peder talked about his experience of working with APM and the importance of high-quality project management: "I really hope we can go on with the initiatives and collaboration. There are many people out there who are still not fully aware of the potential benefits that good project management can bring for a country's economy."

THE GEOFFREY TRIMBLE AWARD

(Sponsored by BAE Systems)

WINNER
JAMES McCAFFERY – CRANFIELD SCHOOL OF MANAGEMENT

RUNNERS-UP

- Rebecca Harnett – Cranfield University
- Mark Hutton – Edinburgh Napier University
- Mark Sorrell – Henley Business School

Awarded to the best postgraduate dissertation of the past year, the Geoffrey Trimble Award is named after APM's first president. This year's award goes to James McCaffery, battery commander in the Royal Artillery, for *Organisational Learning – A Military Perspective*.

THE HERBERT WALTON AWARD

(Sponsored by BAE Systems)

WINNER
AMGAD BADEWI – KENT BUSINESS SCHOOL

The Herbert Walton Award celebrates an exceptional PhD dissertation at

doctoral level. This year's recipient is Amgad Badewi, a senior lecturer at Kent Business School, for *Investigating Benefits Realisation Process for Enterprise Resource Planning Systems*.

THE BRIAN WILLIS AWARD

(Sponsored by BAE Systems)

WINNER
ANDREW SNOOK – FOREIGN & COMMONWEALTH OFFICE

The Brian Willis Award goes to the candidate who scores highest in the APM Project Management Qualification examination. The winner, Andrew Snook, is deputy director of financial services at the British Embassy in Beijing.

TO READ FULL CASE STUDIES DETAILING THE ACHIEVEMENTS OF ALL AWARD WINNERS, VISIT APM.ORG.UK/AWARDS



TERMINAL VELOCITY

The new integrated baggage-handling facility at Heathrow Terminal 3 has achieved huge benefits for passengers, as well as recognition from APM as its Programme of the Year 2016, writes **SARAH NOTTON**

As one of the world's busiest transport hubs, Heathrow Airport involves some staggering numbers. Every day an average of 205,400 passengers arrive and depart through its terminals – a total of 75 million people in 2015. Serving 185 destinations in 84 countries, Heathrow sees an average of 1,293 air transport movements every day.

Supporting its aim to be the best-rated airport service in the world, Heathrow has invested £11bn over the past 10 years in building and opening Terminal 5 and Terminal 2, with significant upgrades to the other terminals.

Part of this major transformation programme involved the implementation of the Heathrow-wide integrated baggage-handling system, capable of handling 110 million bags a year. With one third of passengers taking connecting flights, the majority of which are between Terminal 5 and Terminal 3, it is critical to ensure that connections are easy and fast, and that everyone's bags can keep pace.

A £500m SOLUTION

The Heathrow team responsible for the Terminal 3 Integrated Baggage (T3IB) system faced a challenge comparable with building the Eiffel Tower in the middle of Piccadilly Circus, according to one team member. A £500m project encompassing construction, technology and major

business change, T3IB has delivered real and tangible results for passengers.

Fully integrated into Terminal 3's operations in July, the unique, state-of-the-art vertical facility uses a mix of proven and cutting-edge technology to manage all the terminal's baggage under one roof. What's more, the integration of facilities between terminals means that a connecting bag from Terminal 3 now only takes 10 minutes to go through the tunnel to Terminal 5.

Project delivery director Darren Colderwood describes T3IB as "the most challenging thing I have ever done, and the most rewarding thing I have ever done".

Having previously been involved in an earlier phase of T3IB, Darren returned to the project as director in 2014, following a reset of the budget and leadership team. The 15-strong core senior team was supported by a supply chain and client team of around 80 people, together with a site presence of up to 400 at the project's peak.

"OUR BAG PERFORMANCE FIGURES ARE UP. WE ARE NOW ACHIEVING OUR LOWEST MISSED-BAG RATE AT THE AIRPORT EVER"

A DIFFERENT PHILOSOPHY

From the start, one of the key aspects for Darren and his team to get right was managing the mindset of multiple global stakeholders – from airlines, baggage handlers and airport security to those responsible for legal, safety and commercial matters.

"This was a huge change programme; we were moving to a new way of working that is different to any other airport," says Darren. "The philosophy behind the way the new system works, and how the operational team interfaces with it, is completely different; it required a comprehensive training programme to be put in place." In fact, this was so fundamental to success that a dedicated T3IB training suite was built.

T3IB came in the form of a robotic, automated system installed at the heart of the new facility to ease the physical burden of loading the containers that store the luggage. "We created an automated warehouse racking system that stores close to 5,000 bags," explains Darren.

Also new was what he describes as a "compressed flight build" – in essence, the process for loading containers: "In a normal system, the baggage-holding facility would be open for three hours for a long-haul flight. We were compressing that time window to one and a half hours.



Above (top to bottom): Heathrow's Simon Newland (senior project manager), Darren Colderwood (project delivery director) and Jenny Clegg (business change manager) in the state-of-the-art T3IB facility

"The bags now sit and wait until you need them. Then, with 90 minutes to go before the flight, the operator puts the bags in the flight storage cans. The bags come when the operator calls them. In a conventional system, you have to stand around and wait for them."

BUILDING UPWARDS

Effective communication and engagement were vital. Change champions, mobile roadshows, regular newsletters and an animated brochure were just some of the tools used to secure stakeholder buy-in.

A team of process integrators made up of subject-matter experts and key contacts for stakeholders helped the airlines and handlers understand the new processes.

"The more we engaged with the baggage-handling teams, the more they engaged with the concept," Darren says. "In fact, the guys had been working in a pretty challenging environment under the old system, so they appreciated that this new facility offers significantly improved conditions."

Vigorous testing and proving of the system laid the groundwork for success. In addition, learning legacies from Heathrow's Terminal 5 led the team to deliver a phased transition for affected airlines and handlers lasting from March 2015 to June 2016.

So, what have been the biggest challenges for the team? "Well, I would certainly think twice about building a baggage system vertically again," explains Darren. "It's a bit like building a car factory. You don't generally build those sorts of structures upwards, as they weigh a lot." But, he explains, "Heathrow is so space constrained that there was only one place it could go: a space surrounded on all four sides by live operations."

Another challenge was that the project was forever breaking new ground in terms of problems and solutions. "When you're building something that doesn't exist anywhere else, you're learning as you go along," Darren reflects.

He cites one particularly "hairly" problem that involved moving a 40m-long, steel-beamed linked bridge in the space of one night to avoid closing the existing baggage facility. "This operation required a huge amount of planning," says Darren. "We had to have the crane in position at close of business, and then we had just five hours to be done and dusted, otherwise



"NORMALLY, THE BAGGAGE-HOLDING FACILITY WOULD BE OPEN FOR THREE HOURS FOR A LONG-HAUL FLIGHT. WE COMPRESSED THAT TO ONE AND A HALF HOURS"

we would have caused serious disruption. You can't just close the terminal when you need to get something done."

As for lessons learned? "At the start, the system should have been designed much more around the operational process," Darren explains. "Initially, the job was set up more like building a car park, where the budget allowances are quite tight. In reality, it was a technology project. We all learned a lot. It's all about getting the requirements crystal clear before starting."

The results speak for themselves: "The system is now operating at a fantastic performance level. Our bag performance figures are up. We are now achieving our lowest missed-bag rate at the airport ever."

Looking back, he is immensely proud of the job: "The project had a tricky start, mainly due to the evolving scope that was borne out of the technical complexity and new processes. But, in 2014, we took a stand, rebuilt the team, replanned the launch and made a joint commitment with the supply chain to go live. We made an absolute promise we would hit the delivery date, and we did."

"It brought energy to the job, but also made it hard. Achieving that deadline was hugely important. The first day we went live was a big deal. It was a real buzz." ■

SARAH NOTTON is the editor of *Project*

Mapping the road ahead

ALAN CREAM argues the case for an effective combination of sound project planning and real-time insight

You know the phrase. Years later, you can still hear your parents saying it as you scrambled to finish your homework the night before it was due: “Fail to plan and you’re planning to fail.” Little did you know back then that the phrase would follow you into adulthood and your career as a project manager.

Although secondary school has (thankfully) long since vanished from the rear-view mirror, today – both in and outside the business of project management – the world is made up of projects. Every new endeavour is a project and the plan is the roadmap. You wouldn’t build a house without a blueprint (nor without a team of professionals who know how to build a house), and you most likely wouldn’t travel somewhere new without opening the Google Maps app on your smartphone.

PLAN FOR SUCCESS

Planning – whether for a road trip in a foreign country, an inherent part of your job or an addition to your house – is vital to success. The experts agree: APM’s *Conditions for Project Success* report¹ found that thorough, well-considered planning is critical to achieving positive outcomes.

LOSING SIGHT OF YOUR INTENDED DESTINATION MISALIGNS YOUR EFFORTS FROM THE BUSINESS OBJECTIVES AT HAND, THEREBY DEFEATING THE PURPOSE OF A PROJECT-DRIVEN ORGANISATION

Using expert opinion from 25 leading project management professionals and academics, APM outlined and validated a framework with input from 862 project practitioners. It identified 12 factors, including project planning and review, that are needed for project success. APM’s framework outlines the importance of thorough preparation, even before work gets underway; regular progress check-ins; realistic schedules; an active approach to monitoring risk; and setting aside time to review all of the details upon completion.

Although 12 steps may seem overkill to some, the key takeaway is the need for a comprehensive plan. But having a plan for your project doesn’t ensure success if you fail to consider all the details. Proper planning accounts for all requirements, risks, potential detours and roadblocks, and how to course-correct as needed. Good planning considers all routes that take you to your destination. When you consider them all, the result is a successful project that comes in on time and on budget. To successfully navigate projects, focus on the following three steps.

1. Create an actionable framework aligned with wider objectives

Good, actionable project plans are enablers. They are broken down into tasks and assigned to the right resources so they do not hinder progress. When navigating to a new destination, if you miss your turning, your arrival is delayed. Although unplanned detours might threaten to derail you, a dynamic map continues moving you towards the desired outcome.

Mapping activity is important on a task-level basis, but it also must align with broader objectives. The goal of a project must support the business. Want to go swimming? Plan a road ▶



trip that takes you to the coast. Losing sight of your intended destination misaligns your efforts from the larger business objectives at hand, thereby defeating the purpose of a project-driven organisation. Although it seems an obvious statement, this is one of the biggest issues that project managers face today.

Changepoint's February 2016 survey of more than 200 of the industry's decision makers found that 80 per cent of senior project managers and executives lack awareness of how projects align with the overall business strategy.² Without an overarching understanding of business goals and strategy, the dynamic process of managing projects is extremely difficult and inefficient.

2. Choose an appropriate weighting or scoring mechanism

During project intake and demand management, projects are weighted against a standardised scoring mechanism, so people know which projects to prioritise, which have dependencies and how important it is to course-correct when detours arise.

The same is true of projects themselves. Project tasks are steps, or directions, that lead you to a final destination, but not all tasks are created equal. Some have to be prioritised, and, by applying a standardised system for categorising them, the project plan becomes a lot clearer. If you miss a turning, you can usually turn around. But if you miss the junction off a motorway, there may not be another one for miles. Within a project, benefits, risk and cost are all key metrics.

3. Remember that planning is only half the story

Planning is essential, but once this stage is complete, it is important to remember that planning is only half the story. Rather than being printed off and filed away, a plan must be treated as a rolling document. Things rarely go exactly to plan, which is why the most successful teams react quickly to unexpected developments. That's why sat nav-style devices and smartphone mapping apps are preferred to traditional printed maps.

Businesses need a live view of activity, paired with the ability to flag a potential issue so action can be taken to prevent lasting damage. Failing to act, or acting too slowly, can be every bit as wasteful as starting a project without a clear end goal. A delicate balance must be struck. However, also remember that speed without accuracy can be even more damaging.

WE TALKED TO MORE THAN 1,250 PROJECT MANAGERS AND THE RESULTS WERE SURPRISING: AN OVERWHELMING MAJORITY – 75 PER CENT – OF PMOs STILL RELY ON MANUAL REPORTING

PLAN FOR THE UNEXPECTED

Despite one's best efforts, even the most thorough planning cannot account for every possible scenario. Unforeseen roadblocks and conflicting priorities are inevitable when you manage a portfolio of projects. Teams must have the information they need to quickly determine the best course of action.

Timely, informed action demands real-time visibility. Armed with the right information, skilled project teams can identify and address issues and conflicting priorities in a timely manner. Although tools to address archaic, manual processes are readily available, many project management offices (PMOs) are bogged down in legacy systems.

In July 2016, Changepoint talked to more than 1,250 project managers and executives whose PMOs still depend on spreadsheets and manual processes.³ The results were surprising. An overwhelming majority – 75 per cent – of PMOs still rely on manual reporting.

For these organisations, this plays out several ways. Project managers may be managing project tasks and information through a patchwork of outdated legacy systems, including multi-tenant software as a service, hosted software, on-premise software, proprietary systems and manual spreadsheets. As a result, these businesses suffer from slow, outdated and often inaccurate reporting, which may result in lost opportunities or misallocated resources.

These effects are further compounded by communication challenges. Almost a third (31 per cent) of respondents told us they don't have effective communication tools in place. These organisations face even greater challenges. Not only are they struggling with ineffective reporting, but their lack of communication channels means it takes a long time to inform team members and stakeholders.

To clearly define the path to success, it is necessary to implement actionable frameworks, appropriate weighting and scoring mechanisms, and a system to manage conflicting priorities. A clear roadmap, supported by real-time visibility, is a proven formula for the most successful projects. 

¹ apm.org.uk/conditions-for-project-success

² bit.ly/2eEZDcd

³ bit.ly/2f3vR3l



ALAN CREAN is senior EMEA consultant at Changepoint

A great way to give back

There aren't many opportunities to give back in our profession, but we have skills and expertise that can change the world, **PETER MARLOW** explains

Having worked in a project management role in the development sector for five years, Kavita Rajah was at a point where she wanted to take a step back and figure out the next move in her career. Becoming a mentee has proved to be a positive step for her, she says: "My mentor worked with me to help me understand the various tiers of management in the development sector and plan what I needed to do to transition to the next stage."

As others who have benefited from in-house schemes will know, mentoring is a great way to share expertise and knowledge. It involves a confidential, one-to-one relationship in which an individual (mentee) uses a more experienced person (mentor) outside of their management chain as a sounding board and for guidance. Based on a non-judgemental relationship, that offers a wide range of learning, experimentation and development, mentoring encourages the mentee to take charge of their own development and increase their professional competence, independence, self-confidence and desire to improve.

The benefits for both sides are clear. For the mentor, there is the satisfaction of giving back experience and expertise to the profession and seeing someone else grow. It develops their interpersonal skills and counts towards CPD hours – both important aspects of building a career.

For a new project manager, being mentored can have huge benefits. It can prevent basic mistakes and any attempts to 'reinvent the wheel'. A mentor is a source of guidance and perspective – a positive role model. Mentoring can enhance a mentee's existing skills, count towards their CPD, act as a catalyst to develop new skills and have a positive effect on their career.

For organisations, mentoring assists with the recruitment, retention and progression of employees, and helps maximise the potential of their workforce.

MENTORING IN INTERNATIONAL DEVELOPMENT

While many organisations with a culture of programme and project management have, for some time, been offering mentoring schemes drawing on the wide experience of their staff, this concept is relatively new within the international development sector, and can even be controversial.

In 2015, the UK government spent £12.2bn of public money on foreign aid and has now committed to a target

of 0.7 per cent of GDP being spent on aid. The EU is the world's largest humanitarian donor, and this is just part of a bigger picture of public and private donations being spent on trying to improve the lives of people in the developing world.

Much of this investment ends up in projects, being managed by international, national or local non-governmental organisations (NGOs) and charities. Such organisations have project managers and project teams, and manage many of the same challenges that you do: delivering on time, on scope and within budget.

The context, however, is very different. Project managers may be managing food distribution in a refugee camp, enabling farmers to access markets, helping populations trapped by conflict, or improving the lives of people living in slums. The communities they serve trust the projects to deliver often life-changing benefits.

In the context of NGOs, two skills are critical: stakeholder management and resource management. It is vital for project managers to be able to reassure and prove to donors that their money has been spent wisely and the benefits delivered. Likewise, development work requires project managers to take on functions such as finance management and supply-chain management, often in difficult circumstances.

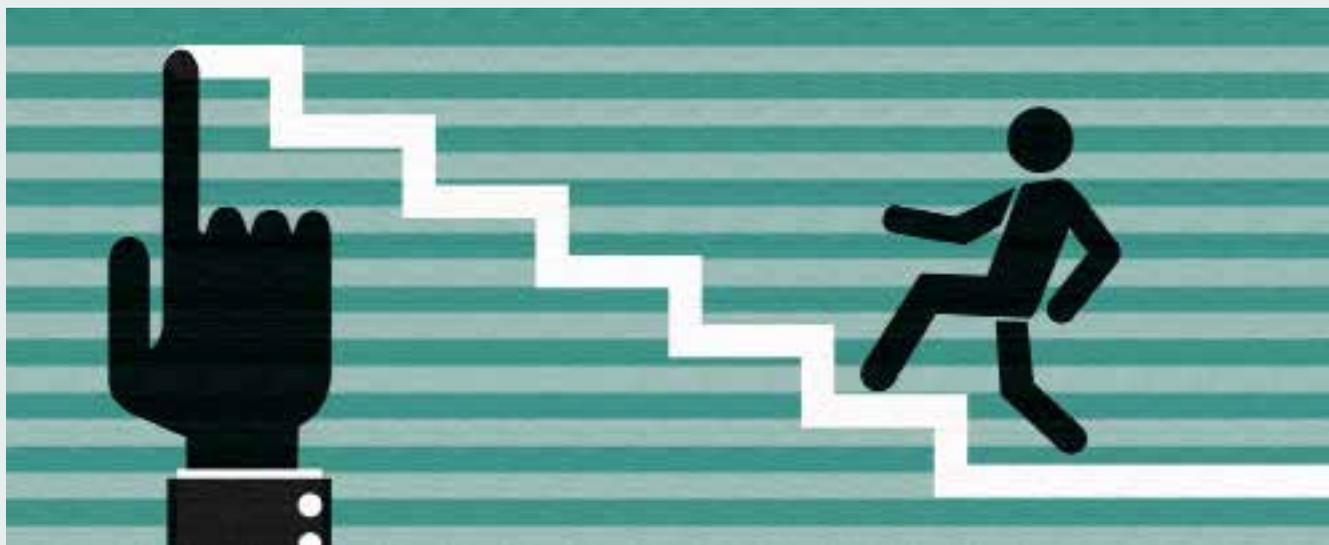
Given these challenges, development organisations tend to focus on the technical areas of their projects and recruit specialists with appropriate in-depth technical knowledge, such as health or water and sanitation. As a consequence, the quality of project management can be variable. There may not be a culture of improvement to embed good practice. Managers can be understandably reluctant to admit mistakes, as this can lead to the loss of donor funding, so learning opportunities are often missed.

DEVELOPING SKILLS

In 2010, Project Management for Development Professionals (PMD Pro) was launched, along with free online learning tools and resources. A new independent NGO – PM4NGOs – was established to own the certification, and APMG-International agreed to administer the exams online. To date, there are more than 13,000 certified PMD Pro professionals.

THE SKILLS GAP

In 2007, recognising this issue, a number of NGOs, including Save the Children, Oxfam, CARE, World Vision, Habitat for Humanity, Catholic Relief Services, Plan International and Mercy Corps, asked LINGOs, a capacity-building organisation that specialises in NGO development, to develop appropriate project management learning materials for the NGO sector.



E-MENTORING SCHEME FROM PMAP

- Project Managers Against Poverty (PMAP) is providing a no-cost e-mentoring platform from MentorNet, initially for 100 users. Prospective mentors and mentees can sign up through the PMAP website.
- Ideally, mentors would be members of a project management professional organisation, such as APM, and have an awareness of Project Management for

Development Professionals (PMD Pro – see box, page 58). There is a short guide on the PMAP website.

- Mentees should be currently involved in development projects, and it is desirable, but not essential, for them to have successfully completed PMD Pro Level 1. The average length of relationship would be three or more months, meeting virtually every one to two weeks.

- Visit projectmanagersagainstopoverty.org or pmapmentoring.org for more information about the mentoring scheme for project managers in international development. For further reading, see *The Good Mentoring Guide* by Zulfi Hussain at bit.ly/1wiPlud
- If you'd like to become a mentor or be mentored, please visit pmapmentoring.org or email peter@pmap.email

LINGOs set up a working group of NGO specialists, and concluded that current ways of working across the sector were inadequate. The group tested ideas and approaches, identified learning objectives and developed an outline curriculum for a new project management course. This would set standards and a common language for project management in the NGO sector around the world. It would build on established methodologies to provide practical guidance for running development projects.

KNOWLEDGE SHARING

LINGOs receive a constant stream of enquiries from project managers in all sectors about how they can help with development projects. So, in 2015, in partnership with LINGOs, Project Managers Against Poverty (PMAP) was set up as a not-for-profit organisation to look at ways of giving back, and in particular to research the idea of setting up a voluntary mentoring programme. It would also benefit project managers working in small organisations without the depth of expertise to call on.

But how could it work? With development projects scattered all over the world, face-to-face meetings would seldom be possible. This has led to the development of a new and effective form of mentoring at a distance, e-mentoring, using software packages such as MentorNet.

POSITIVE FEEDBACK

At PMAP, we started a small pilot scheme to test the idea and were delighted to find that our mentors and mentees come from countries all over the world. For Malcolm Madelon, being a mentor was a great opportunity to pay back those who helped him in his own career.

He says: "It was a good experience sharing with her, and we rapidly found out that NGOs face the same challenges in

the various parts of the world. In the first session, we laid the ground rules, then set up a weekly Skype meeting for learning and sharing sessions. As the sessions continued, we came to the conclusion that she needed to answer the question of whether to stay in an NGO or go to a corporate. We had some interesting sessions, and then she took time to make her decisions.

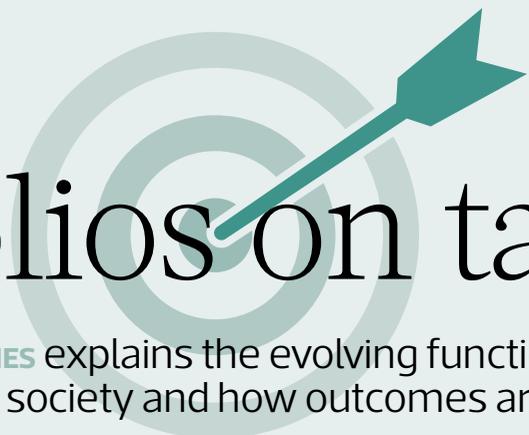
"It was really nice sharing my experience and helping her grow and find her own way. I always remember the words of the song 'Circle of Life' from *The Lion King* – 'you should never take more than you give.' Mentoring is a way for me to keep that balance in the circle of life."

"The mentoring programme at PMAP has been really helpful for me," says Kavita. "Most of the issues that arise when working in international development can be quite complex, and the answers aren't written in a book, so it was fantastic to have a sounding board to talk through possible root causes and solutions with someone who works in a similar field and had been through the same experiences.

"I would highly recommend this mentoring programme to anyone doing management in development. It's a great support system for sharing best practice, lessons learned and, most importantly, perspectives." ■



PETER MARLOW is director at **Project Managers Against Poverty**



Portfolios on target

Nationwide's **DAN JONES** explains the evolving function of portfolio planning at the building society and how outcomes are being improved

The portfolio planning landscape can be complex. Newly emerging demand, rising estimates, disputable business cases and ineffective controls can all conspire to compromise the process of planning an effective portfolio. If you include well-intentioned and influential executives wanting to redesign the process or trying to maximise their share of the budget, it has the potential to be a major headache for the portfolio management team.

The consequences of getting investment allocation wrong may not be immediately evident, but they could seriously damage the organisation. Several circumstances can result in lost competitive advantage: punitive measures because of failure to comply with legislation; customer dissatisfaction with IT failures and reduced service availability; and falling behind with product propositions.

Worse still, there are no quick fixes to these problems, possibly resulting in the tactical use of the budget, which could have been allocated to more deserving priorities. In evolving our approach to planning at Nationwide Building Society, we have made changes and improvements so that our portfolio plan has, at any point in time, a reasonable chance of delivering the desired outcomes.

Our approach has four basic steps:

1. **understanding the target outcomes for our customers, our people and our business;**
2. **collating and validating the demand;**
3. **analysing and shaping the portfolio recommendations; and**
4. **review and approval.**

A key consideration is to agree the planning process and timelines well in advance. This helps to set expectations and limit last-minute interventions and distractions. Most stakeholders will have an opinion on the best way to get this done, and it is unlikely that all these opinions will be the same. Getting that agreement early won't eliminate distractions, but it should serve to limit them. In designing the process, one must always take care to consider the observations and experiences from previous planning rounds.

LIMIT THE ROOM FOR LENGTHY DEBATE

Understanding the outcomes to be achieved by the portfolio is fundamental to its design. At Nationwide, we first split these outcomes into two categories: non-discretionary and discretionary. The former covers regulatory and mandatory compliance, and maintenance of property and IT infrastructure. The latter covers everything else that contributes to the strategic objectives that generate value and the investments about which we have absolute choice. Typically, we also break down the

discretionary category further into complementary investment themes, such as efficiency or product proposition.

THE DEMAND TRACKER

The business unit generates the demand for investment budget in response to the strategy. Although we operate a rolling portfolio of change, there will always be new demand, and we constantly need to re-evaluate the portfolio against any change in priorities.

We start by consolidating this demand into a demand tracker, a repository that contains details of the 'in-flight' projects (including life-cycle stage, financial and other narrative data) and details of the new demand. Additionally, we also capture any risks and assumptions, such as demand not yet confirmed, and any anticipated cost variances based on history. Having just one source of the truth helps to retain control of the process, and tracking data changes serves to keep all stakeholders honest.

Once the demand has been collated, it is reviewed and challenged. Demand flagged as regulatory is tested for a proven link to a regulatory requirement, and for proportionality and timeliness of the response. Where regulations are still being finalised, we use our judgement and experience to determine the risk of starting too early and incurring additional cost. We also test for proportionality. Although it makes sense to deliver discretionary requirements when 'the bonnet is up', if this brings any risk to a regulatory date, we will challenge it.

Demand in maintaining our IT infrastructure is handled slightly differently. All requests are assessed on an impact and probability basis to produce a risk score that determines the priorities and the funding allocation, to ensure that we remain within risk appetite at all times.

Discretionary demand is assessed against three perspectives: strategic contribution; financial benefit; and investment category. The strategic contribution is measured by comparing each demand request to the components of our strategy via a weighted, value-based score. This ensures that we do not exclude

HAVING JUST ONE SOURCE OF THE TRUTH HELPS TO RETAIN CONTROL OF THE PROCESS, AND TRACKING ANY DATA CHANGES SERVES TO KEEP ALL STAKEHOLDERS HONEST

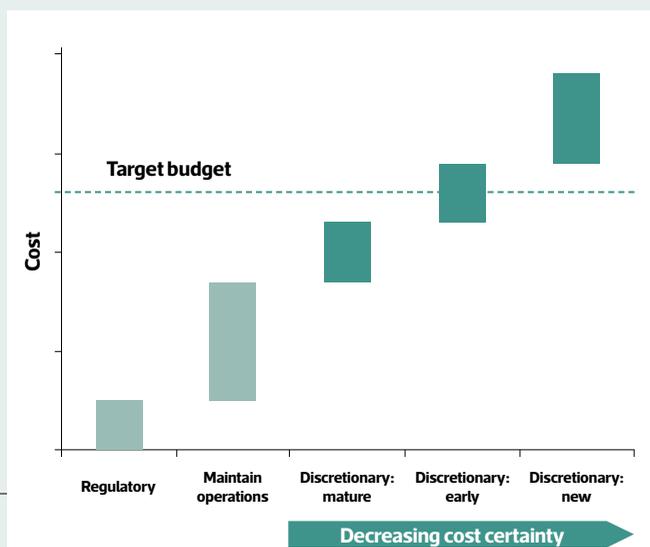


Figure 1: The waterfall In this example, projects need to be stopped if any new demand is to be funded

demand that has a strong non-financial benefits case – for example, customer experience or risk reduction. The scoring is carried out by independent subject-matter experts in the enterprise portfolio management office, because self-scoring can be unreliable and result in overly optimistic scores.

This approach produces two useful views. Firstly, a strategic coverage map shows which projects contribute to each strategic objective and by how much. Secondly, ranking this list by score gives a view of strategic contribution. This is not, in itself, a priority list, because it does not recognise cost of delivery or scheduling – but it does nevertheless provide a useful perspective when making prioritisation decisions.

THE WATERFALL

Once demand has been reviewed and challenged, we employ a tool – affectionately referred to at Nationwide as ‘the waterfall’ – that helps pinpoint where the real choices need to be made (see Figure 1). This diagram is invaluable as a stakeholder briefing tool and is routinely included in portfolio planning presentations to the executive committee.

The waterfall moves from left to right, showing the non-discretionary budget followed by the budget required for mature, in-flight projects. In theory, sunk costs are not relevant to future investment decisions, but unless the organisation is prepared to stop these projects we just allocate the budget and move on to where there are real choices to be made.

Early life-cycle projects are added next. Stopping these projects to make way for more attractive investments is a more achievable ambition, should the need ever arise. Finally, new demand is added to complete the picture. Plotting in the target budget shows the current state of the portfolio plan and highlights where and how effort needs to be directed in future to get the plan within target.

The shaping part of the process is now carried out to create a portfolio that aligns with strategic objectives and fits within the agreed budget. We typically allocate the whole budget, with a small amount of contingency held at portfolio level, but we have found this to be ineffective – particularly when we have a high proportion of ‘new technology’-type projects for which estimates are likely to fluctuate.

PLOTTING IN THE TARGET BUDGET SHOWS THE CURRENT STATE OF THE PORTFOLIO PLAN AND HIGHLIGHTS WHERE AND HOW EFFORT NEEDS TO BE DIRECTED TO GET THE PLAN WITHIN TARGET

Once we have a recommended list of projects, the proposal will iterate through various stakeholder reviews and finally be presented to the board for approval. Good stakeholder management and careful positioning of communications help avoid any late surprises, but there is always far more demand than we can deliver, so we know we will not please everyone.

Once the plan has been signed off, the next task is to stick to it, or at least ensure that the change is effectively managed where priorities change. If the plan isn’t rigorously managed and monitored, there isn’t any point in going through the processes to produce it. New demand can be introduced into the portfolio, but only through change management, using a substitution principle to ensure we keep to the agreed budget.

GOVERNANCE AND MONITORING

At Nationwide, we also reorganised investment governance to ensure that business stakeholders impacted by the consequence of any changes are part of the decision-making process. Care was also taken to ensure continuity, so that each level of governance includes representation from the governance level above and below it. Active monitoring of the portfolio and quarterly review at senior level also drive corrective action where needed.

The results have been encouraging – the nature of debate has moved from being project focused to portfolio focused, with much more emphasis on holding to the plan.

We have yet to find an infallible portfolio planning process but hopefully these steps demonstrate how we have been working to develop a more robust process that can cope with the challenging and changing nature of portfolio planning. Ultimately, the strength of any process will be tested, and it is your ability to demonstrate flexibility, pragmatism and determination to act in an ‘enterprise’ manner that will deliver the right result. Good luck with your investment decision-making challenges, and please get in touch to share your experiences. 



DAN JONES is head of Nationwide’s enterprise portfolio management office

Put sustainability on the agenda

MARC DE GRAAF and GILBERT SILVIUS discuss the drivers for integrating sustainability into projects, and the risks and opportunities involved

The 2015 Paris Agreement of the UN Framework Convention on Climate Change recognises that “Climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries.” The agreement delivers a call to action to civil society, the private sector, financial institutions, cities, subnational authorities, local communities and indigenous people. In short, the message is: act now!

So, fellow project professionals, there’s our permission to go full throttle on sustainability, right? Well, in practice, it’s not so simple. We act in complex project environments with numerous stakeholders and project restraints that require us to continually consider factors such as time, effort, quality, risk and benefits. So how much room does this leave for sustainability?

Considering sustainability and changing our current way of living depends largely on the individual behaviour of the people involved. That includes us. So what factors come into play when project managers consider starting (or staying away from) the discussion about integrating sustainability into projects?

BEHAVIOURAL MODEL

This question can be answered in part by taking a model that explains human behaviour in general and adapting it to a specific context. Social scientist Icek Ajzen developed the theory of planned behaviour, a widely used model and the most influential in its field (Regis, 1990). It can help explain the considerations of a project manager with regard to sustainability. The model consists of three elements that together create the intention to behave in a certain way (Figure 1). The theory states that, when a strong enough intention exists, eventually, given the opportunity, a person will act on intentions (Ajzen, 1991).

The first element is attitude, or what one believes about the favourable or unfavourable evaluations of the behaviour in question. Put differently: what are the risks and benefits of integrating sustainability into the project? Will the outcome of the behaviour be desirable, and will it justify the efforts and risk?

The second concept is the subjective norm. It is driven by the perceived social pressure of significant others (including, for example, project stakeholders) and their (dis)approval of bringing sustainability into the project. Your own values and ethics are part of the subjective norm too.

The third element is perceived behavioural control. This is the control you think you have over displaying a behaviour. This breaks down to internal factors (information, skills, ability, emotions and compulsions) and external factors (opportunity, resources and dependence on others).

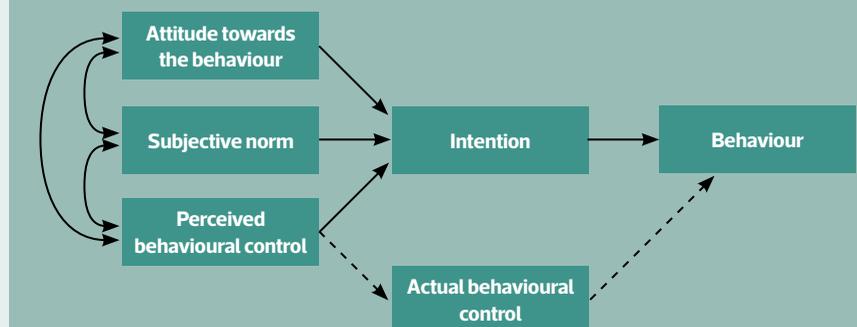
When strong and inclusive enough, the three components lead to the intention to display the desired behaviour. As a general rule, the more favourable the attitude, subjective norm and perceived behavioural control, the stronger a person’s intention to perform the behaviour in question. People will carry out intentions when the opportunity arises, given a sufficient degree of actual control over the behaviour (Ajzen, 1991).

When relating this model to the specific situation of a project manager in a project environment, the questions arise: what specific factors can we attach to these elements of attitude, subjective norm and perceived behavioural control? And is their impact positive or negative?

PROJECT MANAGERS’ ATTITUDES

Project managers, just like project team members or sponsors, have their own personal attitudes towards sustainability that

Figure 1: Model of the theory of planned behaviour





JOIN OUR RESEARCH

We are researching instances when a project manager starts or stays away from a discussion with the project board about the integration of sustainability concepts. You can take part in the survey at bit.ly/2e4kyou

may influence their intention to address these issues in the work environment. Another factor is the influence of non-governmental organisations and environmental groups that are raising public awareness of unsustainable business practices.

A better-informed employee will often be more critical about formal corporate communication on sustainability efforts. In a recent study, environmental website GreenBiz found that a majority (58 per cent) of corporate employees experience a gap between what a company says about social and environmental responsibility and how it actually behaves. This may also influence the intention to address sustainability.

For a project manager, implementing sustainability presents both risks and opportunities in terms of project success, personal reputation, cost impact and scope increases. However, further research is needed to investigate the extent to which this can explain and predict a project manager's behaviour. Personal ethics and values might prove to be a more decisive factor than has been assumed until now.

THE SUBJECTIVE NORM

The social pressure of others, perceived by a project manager, is the subjective norm that influences behaviour. This subjective norm can be perceived as positive, stimulating discussion of sustainability issues, or as negative, hindering such discussion, depending on significant others' opinions of sustainability.

The first significant other a project manager may be influenced by is the project sponsor or executive. An increasing number of corporations include sustainability statements in their corporate communications and business strategies. Linking the project to this strategy is logically the objective and business case of the project.

Other stakeholders – authorities, interest groups and the general public – may influence the subjective norm. A relatively new group in this respect is project management professional associations, such as APM, the International Project Management Association (IPMA) and the Project

Management Institute. Some of the codes of ethics and professional conduct published by these organisations include statements on sustainability.

PERCEIVED BEHAVIOURAL CONTROL

A project manager may not feel in a position to influence the sustainability quality of a project.

Indeed, the project management world has been slow in developing practical tools for assessing and managing sustainability impact. Some impact-analysis, maturity-development and sustainability-management plans are available, but they are not yet integrated into the most popular professional standards. The new IPMA Competence Baseline 4 makes reference to sustainability, and will hopefully boost this development.

However, project managers should realise that they, together with the project executive, have the most influence over the sustainability aspects of a project (Goedknecht and Silvius, 2012). A project manager can proactively open the discussion about sustainability as a deliverable with stakeholders, and he or she is the lead regarding project processes.

SUSTAINABILITY ON THE AGENDA?

I have outlined a framework for what stimulates a project manager's intention to address sustainability in a project, and what is holding it back. The resulting behaviour is an individual decision and cannot be generalised. But how do you experience the risks and opportunities of sustainability in your projects? And to which intended behaviour does this lead?

One of the keys to successful integration of sustainability in a project is to follow the framework in this article. Scan your environment for factors that enable or prevent you from integrating sustainability into your project, and take the pointers described above as a starting point. **□**



MARC DE GRAAF is a project manager at CDS, part of Hewlett Packard
GILBERT SILVIUS is an independent lecturer, researcher and author

Smooth transition

BRENDA JONES argues the case for refurbishing an existing building and looks at how to manage risks to deliver a project while a premises is occupied

“Wouldn’t it be easier to build a new library?” the construction design and management coordinator asked at a design team meeting in 2013. The project was a major refurbishment of the original wing of Lancaster University Library, built in 1967. Today’s students want 24/7 access to libraries, so carrying out a major refurbishment while keeping the library open took some planning.

The answer to the question was: “Yes, it would be ‘easier’ to build a new library.” But after an 18-month comprehensive refurbishment and remodelling contract, the library has a new lease of life, with state-of-the-art facilities, superb interior design and lower energy costs. Meanwhile, student use has increased by 50 per cent. All this was achieved at a much lower cost than a new-build alternative; the library remains at the heart of the campus and was operational throughout.

BETTER TO REFURBISH?

Government programmes such as Building Schools for the Future and investment in hospitals have focused on new builds, leaving refurbishment the poor relation. However, in many cases, refurbishment is a better option than a new build. It is generally cheaper, can be phased to suit funding availability, makes use of the embodied energy in existing buildings and retains the original character of a property.

Lochaber High School in Fort William is one example of how refurbishment can be a cost-effective solution when a new-build option is less affordable. Faced with a school in poor condition and lacking the funds for a new build, The Highland Council decided to refurbish the school instead. In 2006, the council commissioned a master plan to transform the school, and over a seven-year period it was completely refurbished in phases. The PE and dining wings were not economic to refurbish, so were replaced with new ones. Staff, pupils and parents were delighted with the result, delivered years before a new build could be completed.

DISTINCT CHARACTER

Character and sense of place are key reasons to go for refurbishment over a new build. Research by Historic England has found that, where there is an economically viable use, refurbishment of historic buildings provides commercial developers with additional return on investment compared with a new build.

Older buildings are readily adaptable to new uses, and they are often built of more durable materials, such as stone and brick.

Modern interventions, if done with sensitivity, can provide them with a new lease of life. Buildings with a distinct character have particular appeal for some occupiers, as witnessed by the success of the Malmaison hotel chain, which operates hotels housed in a variety of unusual buildings, including a former prison.

Many successful commercial developments involve refurbishment of historic buildings. The award-winning Advocate’s Close by Edinburgh developer Chris Stewart Group

RESEARCH HAS FOUND THAT, WHERE THERE IS AN ECONOMICALLY VIABLE USE, REFURBISHMENT PROVIDES ADDITIONAL RETURN ON INVESTMENT COMPARED WITH A NEW BUILD

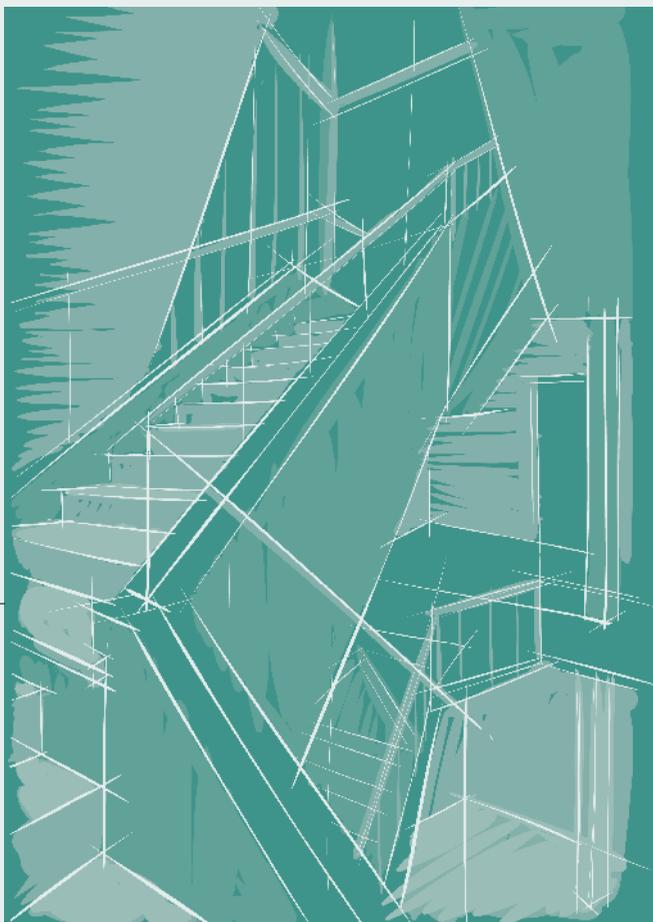
involved conversion and enhancement of nine listed buildings to provide a hotel, serviced apartments, offices, cafés and bars. Meanwhile, Argent’s 67-acre redevelopment of the King’s Cross site retained more than 20 historic buildings and structures, including converting former storage buildings for the University of the Arts London.

RUNNING COSTS

Now that life-cycle analysis is commonly used to determine the whole life cost of a building, it is a simple matter to explore options for improving energy efficiency in a refurbishment to achieve excellent energy performance in the building.

For example, the University of Edinburgh’s Centre for Carbon Innovation was the first refurbishment in the UK to achieve a BREEAM Outstanding rating. Completed in 2013, improvements to this B-listed building comprised wall insulation, slimline double glazing, triple-glazed roof lights and connection to the university’s combined heat and power system.

Malcolm Fraser, whose practice led the design team, commented: “Our design made the best use of the historic features of the building, such as high ceilings to dissipate heat and large windows to provide good daylight. We are extremely proud that the building achieves a 38 per cent reduction in carbon emissions compared with a new build.”



REFURBISHING AN OCCUPIED BUILDING

For some facilities, refurbishment is a necessity to allow them to stay operational during works. Airports, railway stations and hospitals all need frequent alterations. The fast pace of change in technology and user requirements means that retail spaces, offices and manufacturing facilities are also upgraded regularly.

On the Lancaster University Library project, WSP | Parsons Brinckerhoff carried out an options appraisal to determine the best approach to phasing of the works. The chosen solution was to clear the 1960s wing by relocating study spaces and low-use book stock to other buildings. The 1990s wing continued in operation. Enabling works ensured that all essential facilities were available in the 1990s area.

The university employed a fire engineer to advise on fire safety, and an acoustician for noise-reduction measures. Two sets of temporary partitions separated the works from the operational library. Construction sequencing was carefully planned so that noisy activities were scheduled outside busy periods. Construction access was segregated from library users, and the university developed a communications plan to ensure that students and staff were kept informed about the project.

MANAGING REFURBISHING RISKS

In a refurbishment, a project manager's role is to evaluate and manage the risks. With the right advice and investigations early on in the project, it is possible to manage the following risks associated with building refurbishments:

● A building's structure

The structure of a building presents a key risk in refurbishments. Take time to understand the existing structural load paths in the building, and then identify historic alterations that may have diminished them. Finally, check for signs of distress that may compromise the load paths if left unchecked. Only once this

THROUGH DETAILED INVESTIGATION AND DESIGN COORDINATION, THE AIM SHOULD BE TO IDENTIFY AND REMOVE AS MUCH RISK AS POSSIBLE BEFORE CONSTRUCTION STARTS

has been done can you start to think about how the proposed alterations will affect the existing building.

● Appropriate surveys

A range of surveys will be required, depending on the nature of the building. Checking for harmful materials, such as asbestos and high alumina cement, is essential; specialist advice will be required if they are present. Where phased works are planned, understanding the layout of building services early on is critical so that diversions and temporary works can be planned.

● Statutory compliance

This is a key risk area. It may be difficult for refurbishments to comply fully with current building standards. Energy performance, fire safety, disabled access and acoustic performance will all require careful consideration. Early dialogue with Building Control is critical, as is advice from a conservation specialist when dealing with listed buildings.

● Contract strategy for refurbishments

The correct contract strategy is critical to ensure an appropriate allocation of risk. Through detailed investigation and design coordination, the aim should be to identify and remove as much risk as possible before construction starts. The contract must then set out a fair method of pricing the inevitable items of additional work. In addition, the project budget and programme must include sufficient allowances to cover them.

While refurbishment brings challenges, they are by no means insurmountable, and the rewards are substantial. Managing the risks requires early, thorough appraisal of the existing building and a plan to overcome constraints. An experienced, committed and proactive team working closely with building users will be well placed to deliver successful refurbishment projects. 



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Set up for failure?

MICHAEL MALLABY assesses the perennial issues of 'optimism bias' and 'strategic misrepresentation' blighting large-scale projects

All projects should feature appropriate scope definition and relevant information at business-case preparation and investment appraisal stages. Otherwise, a project will likely carry inherent, and often substantial, technical and commercial risk.

Indeed, investigations into failing large-scale strategic projects have identified two common factors relating to strategy and internal politics: 'strategic misrepresentation' and 'optimism bias'. These behaviours are defined, respectively, as follows:

- "The planned, systematic, deliberate misstatement of costs and benefits to get the project approved" (Flyvbjerg et al).
- "Delusional optimism: we overemphasise projects' potential benefits and underestimate likely costs, spinning success scenarios while ignoring the possibility of mistakes" (Lovallo and Kahneman).

Take the oil and gas sector. Previously, in a buoyant market, where high oil prices almost guaranteed investment returns, a lack of scope definition or risk mitigation planning, and poor risk identification, combined with strategic influences and physiological desires.

In the recent market – \$30 per barrel, down from \$140 – the pain of inaccuracies, misplaced assumptions, poor scope definition and blind optimism in the business case has been severe. Influenced by strategic misrepresentation and optimism bias, a poor definition or understanding of real scope, alongside investment decisions, has resulted in major scope growth and cost increase during fabrication and construction phases.

Such cost and schedule increases have a negative impact on a host of indicators: corporate value, intended benefits, share price, partner and investor relations, and forecast profitability. Typically, where a project's sanction to execution can be measured in years, projects in the execute phase, with a market price at \$30 per barrel, were likely conceived and approved with a price at circa \$100+ per barrel. In simple terms, a 70 per cent reduction of income streams, set against substantial capital cost increases, brings into question the validity and credibility of the proposals within the business case.

Research has identified that, at executive and board level, there is a fundamental need to ensure robust, detailed and verified data is used in any major strategic investment decision. This approach is supported by APM and the recognised obligations of the executive at a corporate and project governance level.¹

DATA IS KING

Information is of high value; the quality and quantity of information at the earliest stages of large-scale strategic investments have a defining influence over the core principles and assumptions in the business case. An evolving scope is open to growth, cost increase and schedule delay. This is by no means unique, but specific examples in the oil and gas sector show that a lack of due diligence and governance in the creation of the endeavour can set the scene for failure.

There is often an implied acceptance of poor performance in large-scale, high-value projects, as many clients/operators commission specific benchmarking comparisons for their projects.

A recent study by the Independent Project Analysis (IPA) group led to an investigation into fabrication costs: "A major petroleum exploration and production company sought market intelligence on the fabrication costs for large offshore processing facilities... We looked at fabrication-yard cost trends in terms of cost and capability for six different regions. This study not only helped our client gauge whether they were getting competitive bids from fabrication yards, but also improved the company's

understanding of IPA benchmarks."

While such investigation is of undoubted value, the decisions that frame the costs at the fabrication or construction yard are set at the earliest investment sanction stages. Variations in fabrication-yard costs do not drive final cost increases that can be directly linked back to poor scope definition in the business case.

INFLUENCING DECISIONS

Strategic misrepresentation and optimism bias are far more influential in the preparation of scope definition, estimates and schedules. While strategic benefits may ultimately be realised, the premise of the business case at investment approval is often fundamentally flawed.

Extensive statistical work was conducted by Flyvbjerg et al² on the issues of cost growth in large-scale, public-works transportation infrastructure projects. The work made allowance for four types of underestimation in cost estimates: technical, economic, psychological and political. This supports the position

"THE PLANNED,
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OF COSTS AND
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PROJECT APPROVED"
FLYVBJERG ET AL



"DELUSIONAL OPTIMISM: WE OVEREMPHASISE PROJECTS' POTENTIAL BENEFITS AND UNDERESTIMATE LIKELY COSTS, SPINNING SUCCESS SCENARIOS WHILE IGNORING THE POSSIBILITY OF MISTAKES"
LOVALLO & KAHNEMAN

that poor cost estimation cannot be explained by error, but is best explained by strategic misrepresentation. As such, cost estimates for strategic projects prepared by project promoters and their analysts should not be trusted.

Many questions arise where external stakeholders, shareholders, investors and partners have commercial interests based on funding decisions grounded in flawed information provided by those promoting the venture. Flyvbjerg et al's analysis supports the premise that strategic misrepresentation and 'appraisal optimism' both play a key role in the preparation of large-scale, strategic projects. Their work provides a basis for a number of conclusions:

- 1 If cost estimating is prone to error, as a random or arbitrary event, overestimates and underestimates should follow a relatively equal spread, ie there should be as many underestimates as overestimates, thereby delivering as many projects under budget as over budget.
- 2 If the preparation of estimates factors in lessons learned, then the accuracy of the initial estimates should improve over time.
- 3 For the period analysed, given the fairly recent capability to process huge data sets, probabilistic estimates should converge with final out-turn estimates, improving the accuracy of the business-case proposal.

Flyvbjerg et al identified a fundamental flaw in how major projects are presented and approved. Historic data is available that covers cost increase and schedule delay. The period of statistical data analysed predates the IT revolution and sophisticated cost-estimating and planning software. Trending this data clearly shows little or no improvement in the ability of large-scale strategic projects to more accurately estimate and predict the final cost and schedule outcomes. While scope increase and variations are core elements of project delivery, the gap between initial cost-estimate predictions – as submitted for investment decision – and final out-turn costs are not improving.

RANGE AND FREQUENCY OF COST ESTIMATES

It appears that industry is either not learning lessons or is incapable of using computing power and software to improve estimating and planning forecasts. A more realistic conclusion is that there are other influences at work.

There are also questions around moral obligations and corporate due diligence associated with the political approach of strategic misrepresentation and appraisal optimism. Robust governance is required. The presence of strategic misrepresentation and appraisal optimism not only influences the business – the outcome also has a potentially significant impact on investors, partners, shareholders and stakeholders.

If such approaches were established to be intentionally misleading, the corporate function may be open to unethical practices, poor governance and potential negligence.

The overarching recommendation must focus on appropriate funding, resource allocation and early research and concept development to define a robust, valid business case. Stage-gate review and assurance processes are well developed. Those involved in strategic planning must be capable of delivering bad news and highlighting technical or project execution issues. Seeking personal praise for achieving sanction and turning a blind eye to obvious concerns may help achieve investment approval, but moving these issues into the next, more expensive, project stages, is at odds with corporate responsibility, and individual accountability and integrity.

If issues are highlighted in the creation and definition of large-scale strategic projects, make sure you 'don't shoot the messenger'. These issues and concerns are raised to protect the business, and ensure that the business case and investment appraisal are robust and deliver the intended values and benefits.

Finally, while accurate information at the onset of an endeavour is fundamental, work by Berends et al³ offers that radical uncertainty is present "when organisations aiming at [new business development] lack knowledge about what they need to know".

While good project management can contribute to project success, it cannot prevent project failure, and those responsible for delivering the project cannot rectify the flaws that are embedded into the very fabric of the endeavour. Piecing these elements together, it can be argued that decision makers who do not know what they need to know do apply strategic misrepresentation and optimism bias before approving scopes, schedules and budgets.

Failure is probably inevitable. 



¹ apm.org.uk/directingchange

² Flyvbjerg et al, 'Cost underestimation in public works projects: error or lie?', *Journal of the American Planning Association*, vol 68, no 3 (2002), pp279–295

³ Berends et al, 'Knowledge management challenges in new business development: case study observations', *Journal of Engineering and Technology Management*, vol 24, no7 (2007), pp314–328

MICHAEL MALLABY is managing director at 2m-pmc management consultants

“ My sponsor is far too busy with her day job to be actively engaged on the project. When she does give direction, she often changes her mind afterwards, which is disruptive. What can I do? ”

You are right to worry about your sponsor's lack of engagement, as several studies confirm that having an actively engaged sponsor is a top driver for project success. Unfortunately, research also shows that fewer than two in three projects have sponsors who are actively engaged – so you are not alone.

DEFINE THE SPONSOR'S ROLE

The first question is whether your sponsor is aware of what her role actually is. As a project manager, you are likely to be much more in tune with the kind of governance that the project needs. Your sponsor is primarily focused on her day job and may never have been the ultimate decision maker on a project before.

I suggest that you sit down with her and have an honest conversation about how you understand her role and compare it with how she understands it. Be careful not to come across as judgmental or accusatory, as that will likely make her defensive. You are seeking a candid and open conversation about what you feel the project needs at an executive level and whether she is able to provide that.

IDENTIFY AREAS OF ENGAGEMENT

Be specific about the type of sponsor engagement that you feel the project is lacking. Is this about chairing the monthly steering-committee meetings, attending project-definition workshops and championing the business case? Or is it about being more available as a sounding board for ad hoc queries and issues? It would also be helpful to talk about the benefits that her greater involvement would bring. She needs to realise that her role carries real significance. And don't forget to highlight times when you feel she gave the team effective,



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clear direction. That will help her understand what good sponsorship looks like.

During your conversation, show empathy and ask questions that help you appreciate your sponsor's situation. It's easy to judge someone else, but in reality your project sponsor may have myriad other things to attend to and may perceive the situation differently. Her view may be that you escalate too much and need to be more self-directed.

EXAMINE YOUR OWN APPROACH

Respect your sponsor's time and don't escalate and lean on her more than necessary. Consider how you can make it easier for her to provide input given her time constraints. Maybe you can do a better job at distilling information for her or summarising options, impacts and recommendations. But the best approach would be simply to ask her how she would like you to escalate to her and to talk openly about where your line of responsibility ends and hers begins.

It's human nature to avoid sensitive conversations, but only a thoughtful and honest discussion can get the relationship back on track. Don't talk yourself out of it, even if there is a little voice in your head telling you the sponsor is more senior than you, and you aren't entitled to raise this with her.

Stand firm on the project's needs and find a way to articulate what good sponsorship looks like and why it's required. But, of course, you also need to appreciate your sponsor's situation and make it as easy as possible for her to contribute given her other commitments. If your conversation is fruitful, it will bring any underlying issues to the surface and result in her engagement and decision making being more consistent. **E**



IT'S HUMAN NATURE TO AVOID SENSITIVE CONVERSATIONS, BUT ONLY A THOUGHTFUL AND HONEST DISCUSSION CAN GET THE RELATIONSHIP BACK ON TRACK

DO YOU HAVE A QUESTION FOR SUSANNE TO ANSWER? PLEASE EMAIL HER AT MAIL@SUSANNEMADSEN.COM

Jargon buster

Learning from experience (LfE) is a key approach in helping drive changes to targets, as **BRIAN WERNHAM** explains

The ideal that we all strive for in a good business-change project is to balance economies of scale against risks of a 'big bang', while also recognising the need for feedback from real-life implementation to drive changes to targets. Such thinking is often termed learning from experience (LfE) – an approach to complex business-change projects that arose out of continual improvement of quality in manufacturing processes based on data. LfE can be summarised as a four-step cycle (see Figure 1).

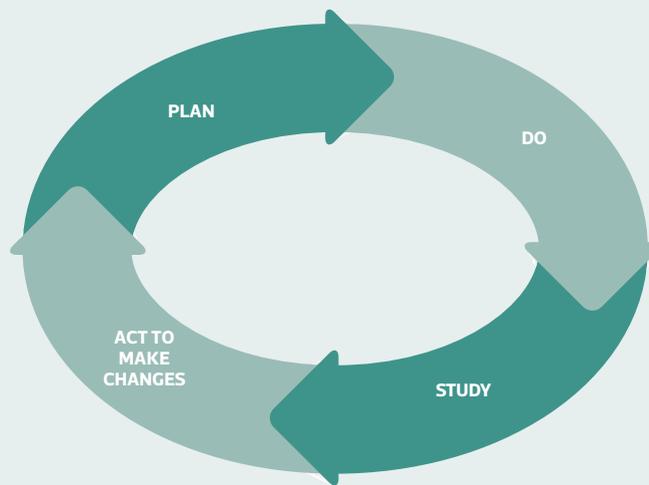


Figure 1: The four-step LfE cycle

LfE IN THE APM BODY OF KNOWLEDGE

The *APM Body of Knowledge 6th edition*, stresses the need for professional knowledge management. This is not just a database of lessons learned, but

PROGRAMME MANAGERS NEED TO ENSURE THAT SUB-PROJECTS ARE SET UP TO ENSURE 'EARLY LfE'

also means identifying the processes and procedures that are essential to sourcing and disseminating the lessons at three levels: portfolio, programme and project. I would also argue that a fourth

level needs to be considered: the team.

PORTFOLIO LfE

This ensures that practical experience from one project or programme is fed back into other projects and programmes quickly to take advantage of feedback. This requires a corporate 'portfolio knowledge management' function that should be run by the enterprise portfolio office.

PROGRAMME LfE

The programme manager needs to ensure that sub-projects are set up to ensure 'early LfE' or 'eLfE'. The technique of benefits management that sits at the core of programme management should identify 'quick wins': small but

significant changes that the programme can implement early on that create high-profile opportunities to engage with and get practical feedback from stakeholders. This also reduces any risk that further projects are based on unworkable assumptions or technology that is not suitable.

PROJECT LfE

At the end of every project, a 'lessons learned' report should be compiled that not only lists errors and problems that were encountered in a project, but also makes recommendations for other future projects to implement. These lessons fall into two main categories: unexpected issues encountered during the implementation of project deliverables; and internal issues encountered

in the administration of the project. The project-office manager will be a key source of wisdom on how to improve the efficiency of project management processes.

TEAM LfE

But why wait until the end of the project to compile a lengthy LfE report? Agile teams hold 'retrospectives' at the end of every iteration of their work. Typically every fortnight, the team will get together just after they have finished a 'sprint' of work, and have an open discussion on what could have gone better. They decide there and then on improvements to their working methods, and so they 'self-organise' to become more efficient. **□**

Further reading: Esther Derby explains more about 'agile retrospectives' in her book Agile Retrospectives: Making Good Teams Great (Pragmatic Bookshelf, 2006)



BRIAN WERNHAM is a main APM board member and 'hands on' programme management consultant. His book, *Agile Project Management for Government*, is published by Maitland & Strong

Innovation through ownership and culture

MAURA KELLY explores how the project management office can use technology and agile practices to drive through a major business transformation

The speed of advancing technology and the shift in how customers access information, products and services are transforming the landscape for all service providers.

The insurance industry is no exception. Connected cars, smart homes, sharing economies and telematics-based services are among the rapid industry disruptions we are seeing. To remain competitive in a digital world, companies in all industries need to leverage technology, transform their business model, and, most importantly, bring innovative products and services to their customers with the speed and quality they expect.

For the team at Allstate, technology is changing faster than ever before. By using innovative tools and processes, we will be able to deliver new technology capabilities significantly faster and with higher quality.

To meet these challenges, Allstate has been going through a global transformation in terms of both the business and technology. We have moved towards a culture of innovation by having a product mindset and a customer focus.

The role of the PMO

Our project management office (PMO) is central to the transformation. The product-meets-project mindset and the introduction of multi-methodology projects have brought both challenges and opportunities for the PMO.

At Allstate Northern Ireland, our PMO community has a headcount of more than 120, covering a number of key project management roles and supporting a global Allstate PMO community of 400. In partnership with our technology teams, the PMO is leading transformation across the enterprise, enabling and driving both innovation and cultural change.

The PMO is working through:

- adopting new agile practices;
- moving to a product mindset;

- core system integration with new tools;
- educating the PMO community and technology teams;
- implementing a seamless experience across integration points; and
- scaling agile across the organisation.

The PMO is also working on integrating tools, systems and ways of working to remove complexity and non value-add processes. These will continue to provide transparency to technology and business leaders, and an independent view of portfolio health and spending.

A big focus for us has been shifting the culture to create an environment that empowers our people, encourages experimentation, and enables staff to fail fast and share their learning.

A centralised function

We embarked on a major transformation programme to establish 'One PMO', a centralised function to support 1,500 projects being delivered annually.

The transformation focused on key objectives to deliver a single independent view of project health.

Looking outwards to our industry and beyond, we started redefining roles and team structure, and ultimately designed our new operating model. Giving ownership to our people, we have shifted from being mere 'project journalists', recording events, to entrepreneurs, influencing outcomes.

With a need to streamline processes in product management and development, and increase speed and quality, a significant standardisation effort began. We focused on having the right people, sourcing the right work and ensuring we have the right skills.

Education

Training and education are paramount to the success of the transformation, and the PMO is developing training to ensure the learning spans leadership, practitioners and delivery teams in both the business and technology areas.

The PMO has taken the lead on embedding innovative practices. We have developed and implemented a scrum framework and have transformed some skilled entrepreneurial project managers into 'scrum masters'. Programme managers have also transformed into key negotiators, communicators and integrators between the waterfall, scrum and extreme programming (XP) work efforts.

Another initiative was to create a 'PMO boot camp', through which we have successfully trained 440 PMO employees, 70 vendors and 200 delivery partners. The boot camp provides the PMO community and others with the tools needed to operate efficiently and effectively within Allstate, and helps create champions of quality, consistency and security in the delivery of projects and products.

Among the many topics covered are: stakeholder management; estimating; work breakdown structures; Microsoft

▶▶
A big focus for us has been shifting the culture to create an environment that empowers our people, encourages experimentation, and enables staff to fail fast and share their learning



Now we can react fast in a digitally dynamic world. Our tools and infrastructure are ensuring our people innovate and deliver user-driven, high-quality digital solutions. Our agile development labs, CompoZed, are empowering our in-house innovators to deliver quality products by following lean practices. CompoZed, with its innovation-driven mindset, also provides the ability to incubate and create a product start-up, and deliver core, sequential systems focused on stability.

In addition, agile methodologies, including scrum and XP, are driving ownership and innovation within Allstate.

New ways of thinking

The PMO leadership has encouraged the community to 'lead and live in the grey': to take action and drive successful change in times of disruption and enterprise transformation. We've advocated the 'do it and ask for forgiveness later' attitude to give ownership to our people. As a result, we have seen a growing culture of courage and ownership, helping eliminate the blame culture that can inhibit innovation.

Looking beyond hierarchy and giving people and teams ownership of their work have been central to our transformation, helping us find more efficient, effective and innovative processes and ways of working.

Allowing our people to take risks and question the 'what' and 'why' of their product or project has helped improve output quality. It has also been great for producing collective innovation among teams. We found giving formal and informal avenues for abstract ideas and improvements, and then celebrating the success, has helped cement a culture of continuous improvement.

Not all ideas are going to be revolutionary; a lot will fail, but it's crucial to fail fast and move on. For us, when our teams prioritise customers and users and understand their needs, that's when innovation breakthroughs can happen. Innovation and wins come from taking the pulse of the marketplace or landscape and reacting to it.

In setting about enterprise-wide transformation, we are establishing goals to stretch us by aggressively rethinking the business model, team structure, processes and inherent culture. That's the challenge for companies such as ours as we continue towards an innovative, technology-enabled enterprise. 

MAURA KELLY is a senior manager at Allstate's project management office

Project to manage project schedules; managing risk, issues and change controls for a project; reporting project status; and some of the soft skills required to deliver projects.

The boot camp is continuously updated and has recently been redeveloped into a two-day process for more experienced project practitioners.

Our agile transformation journey

We have developed a number of other training programmes that explore the theory, roles, process, events and deliverables of agile working.

The PMO created a single-user interface and dashboard. This has helped ensure teams are using the same tools and have access to online learning, giving them consistent information that's easily accessible.

During an enterprise transformation process, it is common for the PMO to be seen as a 'blocker' due to process and documentation requirements, so our team is working hard to establish itself as an integrator and collaborator.

Working with industry leaders to learn more about agile transformation has been key to making the right changes. Partnering with agile development consultant Pivotal and technology educator Galvanize, we are ensuring the changes we are making are in line with industry-leading practices.

Looking beyond hierarchy and giving people and teams ownership of their work have been central to our transformation, helping us find more efficient, effective and innovative processes and ways of working

Technology strategy

In 2015, Allstate launched a major digital transformation technology strategy to secure competitive differentiation in US markets. The key outcome was a radical new way of thinking, acting and delivering software that is essential for sustainable growth and significant competitive differentiation. Named CompoZed, it is both a global network of empowered agile teams and a mindset.

We are transforming our application developer community through the use of modern tools. This is revolutionising how Allstate codes, builds, tests and delivers our business solutions.

YOUR SUCCESS IS IN YOUR HANDS

JANE NICHOLS recommends using lessons from project management to ensure that your career plans keep on track and work for you

The desire to become a professional practitioner by developing skills and experience is ingrained in all of us, whether we are new to the profession or well-seasoned performers. But having a successful career and becoming a true professional doesn't happen by accident. It takes time, effort and planning – with the planning, of course, being critical. After all, as a project manager, you wouldn't consider managing a project or programme without thought and planning – and managing your own development should be no different.

What to include and focus on when planning a project is easy – but what about when planning your own career? Perhaps the best starting point should be the long-term goal for your development or career. Ask yourself, do you want to:

- Run more complex and more challenging projects and programmes?
- Build a career in professional project and programme management (PPM)?
- Become a specialist and enhance your capability in a particular area?
- Or do something else?

Making this decision early simplifies the immediate and medium-term planning, and your development is more likely to be in line with, and focused on, your goals.

Sounds familiar – but is it that easy in practice? If you are part of an organisation that has invested in a role-based competence model, development framework or career pathway for its

REFLECT ON YOUR RECENT EXPERIENCES, ESPECIALLY SUCCESSES. WHAT DID YOU FIND THE MOST REWARDING OR EASIEST TO ACHIEVE?

PPM community, then you have a great starting point. The core planning and ongoing development options are already in place, but you still need to agree, and subsequently drive, your own development.

However, if you are not working in that type of environment, you should find the revised *APM Competence Framework* useful and easily accessible. It lets you establish an initial profile against a set of generic benchmark role profiles and levels. You can use this to identify any gaps in your knowledge or skill set for your current role – and for any desired role.

Both APM's and company-based frameworks help you understand the needs of your target role, and any shortfalls in knowledge, experience or competence in your profile. They also provide focus for your development effort.

But first, a word of advice: before you start planning, ask your manager or a colleague who knows you well for their view of your choices. External insight always provides a useful sense check.

NEXT STEPS

Once you are clear about your aims or desired role, and your current capability, work through the following steps:

- Consider your personal strengths and weaknesses. Ask yourself: what has worked well for me in the past? Did I feel comfortable with delivering my latest project, or were there moments when I felt out of my depth?
- Reflect on your recent experiences, especially successes. What did you find the most rewarding or easiest to achieve?
- Consider the gaps you have identified. What must you know and do to match the knowledge, skills, attributes, qualifications and experience you will need to achieve your goals?
- Structure your development plan, ensuring that you include:

MAKING A SUCCESS OF YOUR DEVELOPMENT IS IN YOUR HANDS, BUT DON'T JUST DELIVER IT SIMPLY IN TERMS OF TIME, COST AND QUALITY

- the qualifications you may need for your desired role or career level; and
- the opportunities to learn from others and through experiences ('experiential learning'), including seminars, networking, 'lunch and learns', coaching and mentoring. But remember: too many opportunities can become distractions. Repetitive or the wrong type of experiences are often unhelpful. Moreover, experiences occurring in the wrong sequence can be damaging. Make sure that you select the right ones.
- Check back that your draft plan aligns with, and will support, the achievement of your short-, medium- and long-term goals. Does it enable you to progress towards your aim? Is it both measurable and achievable? And, most importantly, can you track all of your development activities (both formal and experiential/work based) back to your goals? Don't forget that unfocused development (ie not in your plan) may be interesting and even valuable, but, for a real return on your personal investment, focused development wins every time.

COMMUNICATION IS KEY

Once you are happy with your draft plan, share it with a colleague or your line manager for their advice and support. Discussing your plans with others often influences decision making positively.

Making a success of your development is in your hands, but don't just deliver it

HOW TO KEEP TABS ON YOUR GOALS

To achieve your goals, keep your plan as up to date as possible so it can support your decisions for your development and career. Therefore, on a regular basis, check to see if:

- your goals have changed;
- your plan still allows you to achieve those goals;
- your development is on track (have you added to your capability, knowledge, skills and experiences in the way you expected, anticipated or needed?);
- your plan needs adjustment; and
- you've recorded all learning and development events in your development folder, which is vital for providing evidence of achieving a qualification or meeting the criteria for the next step in your career

simply in terms of time, cost and quality. As with any project, it's the critical success factors and ultimate outcome (your goals) that are important – these should be your focus.

Look for opportunities to learn and develop that align with your plan. Experiential learning is often opportunistic, so don't miss out. And don't overlook potential learning in your work. It's easy to attend a networking event or lessons-learned meeting, or simply chat to colleagues over a coffee and hear something new, but overlook its potential. If it's new to you, it could well be of value to your development.

Finally, always perform these tasks:

- **Actively reflect after learning something new.** Is the lesson of value to your current work? Would discovering more and/or applying the technique align with your development plans and increase the potential for success of your project?
- Find ways to share and discuss your experiences, learning and activities.
- Continually look for relevant experiences to reinforce and extend your competence.
- Encourage feedback and seek advice by sharing with others. Feedback is a gift, even (or perhaps especially) when it challenges your assumptions.
- Ensure that, as with all good project plans, you don't agree your plan and then forget about it.

Your development is in your hands; it's up to you to make the most of it. The best way to do that is to keep focused on what's important. 



JANE NICHOLS
is chief operating
officer at CITI

USEFUL TERMS EXPLAINED

COMPETENCE FRAMEWORK

This identifies what 'good' looks like, stating for each role (and level) the knowledge, skills and experience that are required.

formal learning (usually only about 10 per cent) and experiential 'on the job' opportunities.

DEVELOPMENT FRAMEWORK

This details all of the available development activities (including qualifications) that enable someone to gain the competence required. The activities are a combination of

CAREER PATHWAYS

These provide the organisation and the individual with a mechanism to understand what is required at each level in the company, the options and criteria for moving between levels and role families, and the evidence required to prove readiness.



BE THE ARCHITECT OF YOUR CAREER

DRIAN CLARKSON explains that there are now more ways than ever for people to build a career in project management

It is 1990 and Elton John's 'Sacrifice'/'Healing Hands' double A-side single gives him his first solo number one. He spends five weeks at the top, being succeeded by Partners in Kryme (who?) with 'Turtle Power', and, later that year, by Vanilla Ice's 'Ice Ice Baby'. Apart from being a 'classic' year for music, it was also the year I did my first careers questionnaire at school.

I was 16 and wanted to be an architect. I remember answering the questions so that my perfect job was suggested. Of course, the fact I am writing this article means I never made it as an architect. But how many of you reading this filled out a careers questionnaire at school and came out as a project manager? Was project manager even an option at the time?

Recently, I had to renew my two children's passports. Knowing a lot of project managers as friends, I thought I would ask one of them to countersign the photos – but, alas, project manager is not a 'recognised profession' listed on the government's website.

So, why isn't project management seen as a bona fide profession? Why wasn't it an option for me as a teenager? In my career as a professional project management trainer and learning consultant, I have taught thousands of people and engaged with many organisations about their project management needs. Based on this experience, I find that project management is often regarded as something that many people undertake on top of their day jobs.

DIFFERENT ROUTES IN

The good news is that, now more than ever, there are options to progress and excel in project management – from apprenticeships through to the APM Registered Project Professional standard. Since 2012, there has been a higher apprenticeship framework in project

management at Qualifications and Credit Framework (QCF) Level 4.

A highly innovative group, led by Sellafeld, has now developed an associate project manager Level 4 standard, which provides a professional career option for school leavers. Development is underway for degree trailblazers in project, programme and portfolio management (QCF Levels 6 and 7 – bachelor's and master's levels, respectively) that will offer further career progression.

STEPS TO SUCCESS

Projects are all around us – professionally and personally. Whether upgrading to a new Windows operating system, creating new organisational processes or building an extension to your house, you are dealing with a project, and all of them require some form of management.

Projects are here to stay. Because industries and organisations are constantly required to adapt – whether to market and competitive forces, new legislation, changing economic conditions or the post-Brexit environment – the need for competent and professional project managers is only likely to increase.

There is a clear business need to encourage more people into the sector – but how should this happen? My own route in was unconventional: I was working as an engineer for an automotive company and someone came up to me and said, "There's a job going as a project manager. Are you interested?" Not really knowing what a project manager was, I found that my sole criterion was whether the pay was higher.

Now, I am not the first person to accept a new position based on the sole principle that it pays better. But, as demand for and recognition of project managers' skills grow, there are many more factors to consider. Here, I present tips for those entering the profession or moving between project management positions.

UNDERSTAND WHAT A PROJECT IS

A project introduces change to an organisation. Therefore, a project manager needs to bring together all of the facets that can influence this change. Be clear on what you are pursuing.

UNDERSTAND WHAT A PROJECT IS NOT

A project is not everyday operations (termed 'business as usual'). It is finite and often transformational, as opposed to ongoing and repetitive. Are you clear on the difference? If not, your expectation may be misconceived from the outset.

REFLECT ON THE SKILL SET REQUIRED

Through a series of presentations and seminars, I support the Officers' Association, a charity that helps officers find employment when they leave the military. Something that I encourage them to do is to think about their skills from the military and reflect on how these map to those of a project manager. Planning, organisational skills, leadership, negotiation, problem solving, risk management, communication and stakeholder engagement, for example, are all key attributes of both military officers and project managers.



SET A GOAL

Set a goal of becoming a project manager and work towards it. For example: 'I want to have full responsibility for a project within the next two years.' Have a focus, and be realistic. Over-optimistic goals will be harder to achieve, and may well demotivate you if progress is slower than you would like. Build this into your personal development plan so that you can track progress towards your goal.

GAIN EXPERIENCE

Don't expect to be thrust into a project management role from day one. Gain experience of operating as part of a project team to see how projects are run, and learn from more experienced colleagues. Would you expect to be the first violinist in the orchestra straight away? Get plenty of variety on different types of projects. All experiences are opportunities to learn.

FIND A GOOD MENTOR

Find someone who can mentor you. This is important, because you will need answers, advice and guidance as you learn your trade. A good mentor can inspire, whereas a poor mentor can discourage.

BUILD YOUR COMPETENCE

Identify the skills you need to perform as a project manager. Not just skills for

project management (eg planning and processes) but also software tools, commercial acumen, strategic insight, communication, leadership and collaborative skills, for example. Training is the obvious route, but don't neglect traditional literature, the web and social media – they are all content-rich sources of knowledge.

KEEP YOUR COMPETENCE LEVELS CURRENT

Project management constantly evolves, and so should you. Continuing professional development (CPD) is a must for any competent project manager. If you are not yet enrolled in a CPD scheme, visit apm.org.uk/CPD.

TREAT BEING A PROJECT MANAGER AS A VOCATION

As discussed, the world is changing. From being seen as an add-on to the day job, project management is now seen as a vocation or career choice in its own right. If you want to be a project manager, be serious about it as a vocation.

DON'T GIVE UP

If opportunity doesn't knock straight away, don't be disheartened. If you apply for a position as a project manager and don't get it this time, don't give up.

NOT REALLY KNOWING WHAT A PROJECT MANAGER WAS, I FOUND THAT MY SOLE CRITERION WAS WHETHER THE PAY WAS HIGHER

So, if in 1990 I knew what I know now about project management, would I have skewed my school careers questionnaire to result in it recommending project management? Definitely.

The pace of change will not slow down, and the need for competent project managers will only increase as a result. It is a great time to get into, or further your career in, project management. There's never been more recognition that project management is a profession in its own right, and I'm optimistic that 'project manager' will soon appear on careers questionnaires and as a recognised profession (for more than passport applications). Who knows, I may even see you on one of my courses. 



DR IAN CLARKSON is head of project and programme management at QA, and an experienced lecturer, author, speaker and consultant

FROM THE BOTTOM UP

A fast-paced, ever-changing work environment underpinned by a mantra of low bureaucracy is what drives Gatwick Airport's **JULIAN RAISON**



JULIAN RAISON is head of operations PMO at Gatwick Airport Ltd

I started out in the water industry on the United Utilities graduate programme before moving to Mid Kent Water and then Southern Water via a couple of engineering consultancies. I've always been involved in asset management and developing and managing the delivery of capital programmes and projects.

At Southern Water, I was part of a team that rebuilt capital-delivery capability and processes from almost nothing. That gave me the opportunity to design new, efficient processes from a clean slate.

My career highlight, however, has been working at Gatwick Airport in an energetic and diverse environment that changes daily. The breadth of projects is enormous. From reconstructing taxiways to toilet refurbishments, there are always complex projects with many stakeholders, all being delivered in a live operational environment at the world's busiest single-runway airport.

I lead the operations project management office, a 30-strong team dedicated to safe, low-bureaucracy, fast-paced project delivery to meet the needs of our sponsors. That involves approximately £50-60m of capital investment annually, made up of lower-value, short-cycle projects, typically less than £10m in value.

TO UP-AND-COMING PROJECT PROFESSIONALS, I'D SAY, 'BROADEN YOUR EXPERIENCE AND TRY NEW THINGS'

In addition, my team delivers a portfolio of business-improvement projects focused on the next generation of technology that will allow passengers to do even more for themselves at the airport, in addition to the self-service bag drop.

I enjoy the pace of the business at Gatwick. Delivering projects with a mantra of low bureaucracy creates an environment in which barriers to progress are quickly removed and everything is up

for challenge. We have a foundation of safe delivery that is essential when working in such a busy environment, but the willingness and drive to get things done is refreshing and creates a real buzz.

WHAT I'VE LEARNED

I've been fortunate to work with some very experienced people who have guided me; in particular, a colleague at Southern Water who shared a huge amount of knowledge and experience, not just in project delivery, but also in taking a more strategic view of the business. That has definitely helped me progress into more senior roles.

I've also learned a lot of lessons along the way, such as seeing the bigger picture. Projects always contribute in some way to the business objectives of the organisation. To achieve project success, it is critically important to be clear on what that link is. You must be able to understand why the project is important to the sponsor – which may have little to do with its technical content. Being able to see the strategic view is always important and acts as a counterbalance to being drawn into the detail of project delivery.

Creating a positive working environment has really helped me. My colleagues enjoy working with me – and I'm often surprised how much this seems to drive them to go the extra mile on my behalf!

I also enjoy seeing how asset-intensive businesses work and how projects contribute to that success. Seeing a project as a series of engineering or construction tasks is never the point. I need to know how the project delivers improvement for the operation of the business.

CAREER ADVICE

To up-and-coming project professionals, I'd say, 'Broaden your experience and try new things.' No two projects are the same, and the more you have been exposed to different situations and problems, and

stakeholders with varying needs, the more you will be able to act with greater understanding.

Project management gives you great insight into how businesses work, and is therefore a great opportunity to move into other areas. Most business changes can be 'projectised' in some way, so the basic project management skills will always apply.

Ultimately, the challenge of solving problems and helping my team solve problems gets me out of bed in the morning. Despite the best planning, there can be changes that have to be dealt with or new requirements that have to be accommodated. Nothing stays still for too long at an airport. **✎**



Do you have an interesting career story that you would like to share with readers of *Project*? Email editor@project-journal.co.uk

CAREER CLINIC

The benefit of communicating face-to-face was the one piece of advice offered unanimously by the finalists at this year's APM Awards

Wouldn't it be great if you could spend 45 minutes talking to four of the best project professionals in the UK every year? What is their secret to success? How do they handle stakeholders, risks, issues, planning and everything else? Can we bottle their achievements?

As one of the APM Awards judges, I get to do just this by quizzing our industry's brightest stars. After the initial round, the four finalists are invited to present, enabling the judges to gain much greater insight into their achievements.

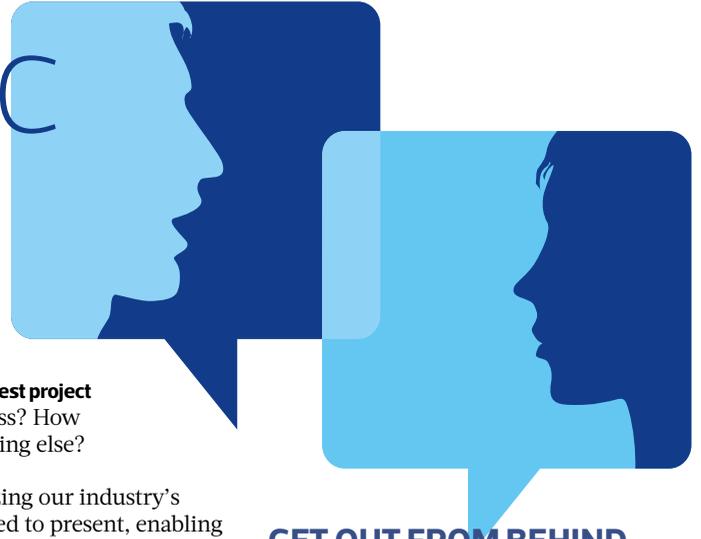
All of the finalists mentioned the same recommendation when asked about their secrets of success. They weren't prompted and they were not in the room at the same time, but they all listed the same thing as part of their answer.

So what was it that all of the finalists cited as a key driver to their project successes? This is a tech-savvy group, and the answer may not be what you expect. They all pointed to the need for face-to-face contact. Get out from behind your desk. Stop emailing. Go and talk to stakeholders directly.

There is a practical consideration here and, of course, all of the finalists make use of tools such as Skype for Business, but they all emphasised the importance of meeting face-to-face in order to build and maintain good working relationships.

So, have a think. Who is your most difficult team member, customer or supplier? Get out from behind your laptop and go and meet them. Go on. I dare you. 

● [Read more about this year's APM Awards and winners on page 45](#)



GET OUT FROM BEHIND YOUR DESK. STOP EMAILING. GO AND TALK TO STAKEHOLDERS DIRECTLY



VINCE HINES is managing director of Wellington Project Management, working with APM to offer career advice

Appointments

New project manager for M1 upgrade



Construction firm McCann has appointed Andy Cunnington as project manager to work on the M1 'smart' motorway upgrade. Cunnington joins Nottingham-based McCann from Balfour Beatty, where he worked for two years as operations manager. Prior to that, he spent five years at Bouygues Energies & Services, where he took a

lead role in project managing the M25 and M4/M5 smart motorways, where the hard shoulder is used by vehicles as a running lane and the flow of traffic is controlled by variable speed limits. Cunnington will be project managing the new M1 ALR (all lane running) smart-motorway section between junctions 16 and 19.

Queensberry recruits a new project manager



The Mayfair-based urban-regeneration specialist Queensberry Real Estate has appointed James Coulosey as its project manager. He joins from McLaren Construction Group and will be overseeing a range of projects, including Angel Central Shopping Centre in Islington, London, and Queensberry's activities in Barnsley, South

Yorkshire. He will be applying his extensive experience and knowledge in running complex projects in different sectors, including high-end residential property and commercial offices.

HS2 joint venture gets new project director



Mike Robins has been appointed as the new project director for the HS2 joint venture between Morgan Sindall, BAM Nuttall and Ferrovial. He joins the Fusion team, having worked overseas for the past five years. Most recently, he helped to deliver the Hong Kong Mass Transit Railway Corporation's Express Rail Link to China. He has also worked on

Queensland Curtis Liquefied Natural Gas for QGC in Australia. Robins has previously been employed by all three companies involved in the joint venture, working with Ferrovial on Heathrow's Terminal 2A, with Morgan Sindall on Heathrow's Terminal 5 and with BAM Nuttall on QGC's Ichthys offshore gas project.

Expansion of Leeds office for property consultant

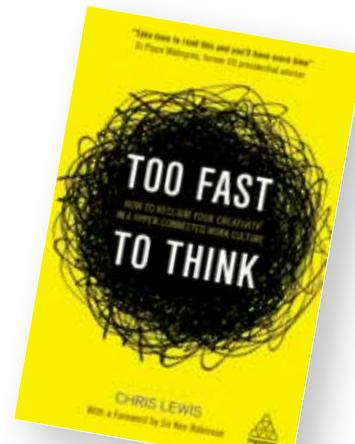


The project management and cost consultant Projex has expanded its Leeds office with the launch of a new division specialising in construction health and safety. Chris Thomson has been appointed associate director and head of the new division, which has been launched in response to the construction industry's growing focus on mitigating health and

safety risks following recent legislation. Thomson was formerly with AA Projects, where he led the health and safety team, providing services to local, national and framework clients.

Bookshelf

Which books should be top of your reading list this winter? *Project* readers find out



MEET THE PANEL



İpek Sahra Özgüler is a project manager with more than 10 years' experience



Bonnie Manchee is a project manager at Gleeds Management Services



Susannah Lawson is a stress expert and co-author of *The Stress Cure*, published by Piatkus



Premanand Doraiswamy is an agile transformation consultant



Martin Samphire is managing director at 3pmxl Ltd

TOO FAST TO THINK

Author: Chris Lewis
ISBN: 978-0749478865
Price: £14.99
Publisher: Kogan Page
 ★★★★★

“ESSENTIAL READING IF YOU WANT TO IMPROVE YOUR CREATIVE PROCESS”

In his foreword to *Too Fast to Think*, Sir Ken Robinson defines this book as “part memoir; part meditation on why creativity matters in life and work, and why it’s at risk; and part manual on what leaders in every sort of organisation can do to help it flourish”.

The speed and noise of modern life make it hard for us to be quieter, think deeply and be creative. This book aims to allow everyone to do these things by changing their attitudes.

Creative ideas flourish when we are in quiet, familiar and comfortable spaces. Unfortunately, technological developments have led to people having far less free time, changed our behaviour and created stress. Everyone moves too fast. There is more communication, but less conversation; more information, but less learning; more speed, but less progress. Information has increased in quantity, but decreased in quality. Productivity has increased, but wellbeing and creativity have decreased.

Too Fast to Think is essential reading if you want to improve your creative process and reach insights more easily. It explains the challenges of the modern world and explains how to overcome them through creativity. It could be used to inspire project managers to use creative thinking to find permanent solutions.

With the advice in this book, project managers could improve their work and communication methods, and increase their projects’ productivity and creativity.

Reviewed by İpek Sahra Özgüler

INTRODUCTION TO CONSTRUCTION CONTRACT MANAGEMENT

Author: Brian Greenhalgh
ISBN: 978-1138844179
Price: £34.99
Publisher: Routledge
 ★★★★★

“REFRESHINGLY UP TO DATE AND PRACTICAL”

Introduction to Construction Contract Management (ICCM) takes a chronological journey through the entire contract period – everything from contractor procurement to defects rectification and resolution of disputes. It is relevant for an audience across the contract administration/project management/development management spheres.

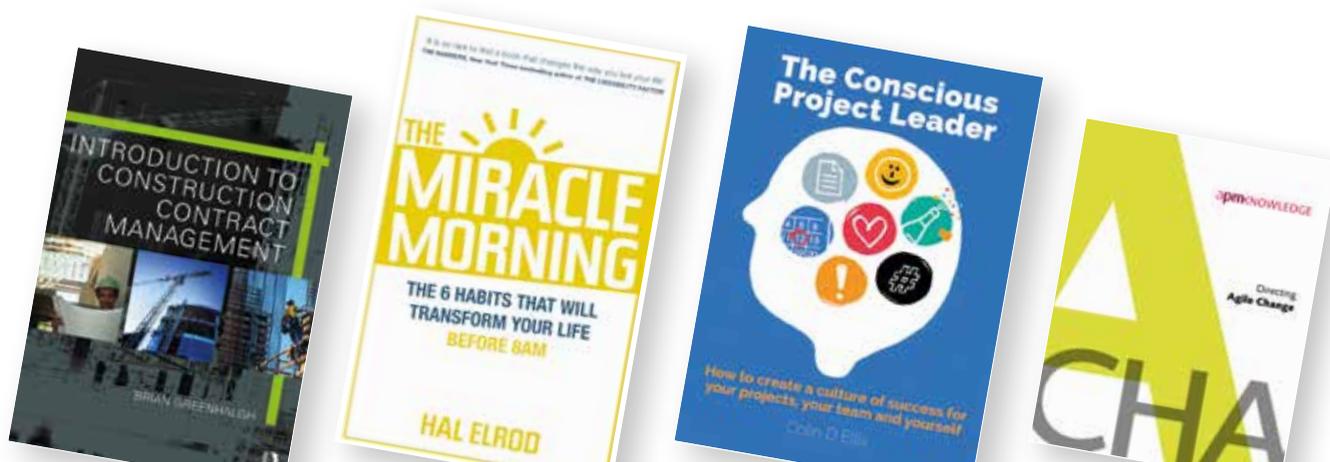
Unlike many other books on the topic, ICCM is refreshingly up to date, relevant and practical, covering buzz topics such as building information modelling that are missing from older texts. The structure of the book is logical, and each chapter concludes with a summary and tutorial questions.

While author Brian Greenhalgh has purposely taken a ‘universal’ approach, it sometimes feels a bit too high level, leaving the reader hoping for more specific information or case studies. However, this is what sets it apart from other project management books, which can become irrelevant outside their target market.

This book is full of tips that I have learnt in my time as a project manager – information that would have been great to know straight out of university. While it is definitely geared towards new graduates, the book offered me more than one or two useful pieces of advice.

Overall, ICCM is a great reference tool for entry-level contract administrators.

Reviewed by Bonnie Manchee



THE MIRACLE MORNING

Author: Hal Elrod

ISBN: 978-1473632158

Price: £9.99

Publisher: John Murray Learning



“A STRONG CASE FOR WHY YOU DON'T NEED TO SETTLE FOR MEDIOCRITY”

The *Miracle Morning*'s tagline is 'The six habits that will transform your life before 8am'. Its premise is that, by getting up an hour earlier each day to focus on a personal development routine, you will create the space and focus you need to develop the life you really want.

Author Hal Elrod makes a strong case for why you don't need to settle for mediocrity and how taking positive action is the key to success. He suggests a 60-minute morning routine incorporating six different activities or 'life SAVERS': silence, affirmations, visualisation, exercise, reading and scribing. Elrod believes that, practised daily, these habits lead to success, happiness and fulfilment.

The book is inspiring and easy to read, with a step-by-step formula for self-improvement. Elrod also provides tips for customising the 'miracle morning', as well as strategies to overcome challenges.

The style is rather evangelical in places and assumes that we all want to be extraordinary at everything – which may not 'land' so well with a British audience. The content is also a bit light on how to define what you actually want in your life.

While not specifically career oriented, the book does prescribe a formula to help you become more efficient, effective and focused, so could benefit anyone.

Elrod is living proof his formula works, lending the book more credibility. He also offers online resources and even suggests a whole 'miracle morning' community for further support and encouragement.

Reviewed by Susannah Lawson

THE CONSCIOUS PROJECT LEADER

Author: Colin D Ellis

ISBN: 978-0994537607

Price: £18.50

Publisher: Colin D Ellis



“FOR ALL BUDDING PROJECT MANAGERS”

Colin D Ellis states in the preface to *The Conscious Project Leader* that he intended this book to be easy to digest and practical while diminishing the complexity of the subject matter. He succeeds in that ambition. The book is broken down into three sections: leadership, culture and methods. Most chapters are fewer than five pages and easy to read.

The Conscious Project Leader is aimed primarily at project managers and their leadership role, in both waterfall and agile environments. However, some of the content is also applicable to programme managers. Ellis uses short stories of his experience to demonstrate points well. I'm sure that most readers would be able to associate with the examples he uses.

He starts by clearly delineating projects from project management. His enduring theme is that project managers need to remain conscious and challenging throughout the project life cycle. It is all too easy to "go with the flow", he writes.

Values and behaviour are Ellis's main focus. He amply demonstrates that good project leadership is about people and culture, and less about processes and tools. He emphasises that project managers need to understand and work with cultural issues, behave courageously and recognise that their behaviour is symbolic of what they stand for.

I would recommend this book to all budding project managers, but also to more experienced ones who might benefit from a refresh.

Reviewed by Martin Samphire

DIRECTING AGILE CHANGE

Author: APM Governance

Specific Interest Group

ISBN: 978-1903494608

Price: £15.00

Publisher: APM



“WRITTEN AT A VERY HIGH LEVEL”

Directing Agile Change is a 'how-to' guide targeted at professionals at senior management level who are new to agile ways of working and project delivery, but are accountable for their success. Divided into five main sections, the book introduces agile concepts, principles and myths in straightforward language and without complex jargon. It also provides easy-to-follow governance checklists applicable to relevant roles.

The latest offering to be published by the APM Governance Specific Interest Group (SIG), *Directing Agile Change* was compiled by SIG members Brian Wernham, Adrian Pyne, Roger Garrini and Martin Samphire. It written at a very high level and introduces concepts only very briefly to the audience. However, this approach is highly appropriate for people who engage at a higher level.

This book will benefit those who operate at board or steering-committee level, rather than project managers, who should be working at a much more detailed level.

Reviewed by Premanand Doraiswamy

DO YOU WANT TO BE A CONTRIBUTOR TO BOOKSHELF?

We are always looking for potential book reviewers and suggestions of books to review for *Project*. Please get in touch with editor Sarah Notton at editor@project-journal.co.uk

When failure is not an option

EDDIE OBENG assesses the unique qualities of the huge transformation project facing the government as it begins its work towards delivering Brexit



PROFESSOR EDDIE OBENG is an educator, TED speaker and author of nine books including *Perfect Projects*, published by Pentacle Works, and *All Change! The Project Leader's Secret Handbook*, published by the *Financial Times*. Reach Eddie on Twitter @EddieObeng or read his blog: ImagineAFish.com



The citizens of the UK have voted in a non-binding referendum to leave the EU. A legislative, economic and social framework that has been in place for decades is set to be significantly altered. The UK government has, it seems, decided to take on the challenge. But this is no ordinary change project; it is a transformation project. There is no going back.

The immediate priority for the government officials charged with leading on Brexit is to negotiate with colleagues. There is also an urgent need to explore new business and economic opportunities – and then there's the issue of border control, which some believe will improve citizens' careers and life chances.

But it is not until after the negotiations that the real work will happen. New institutions for everything, from the standard of lighting in offices to the testing of flammable materials, will need to be created.

The chances of amicable divorce between a couple, however, are about 20 per cent; emotions tend to outweigh logic. And the chances of successfully setting up a long-term business venture in a new overseas territory is pretty low, especially in sectors such as retail – think Tesco and Marks & Spencer.

But, in the case of Brexit, failure is not an option. This is a transformation programme without an objective, deliverables, budget or accountable sponsor. It's also what I would describe as a 'foggy project', one whose goals and methods are extremely unclear. Progress has no obvious metrics and will be difficult to measure, except by some artefacts, such as the new British passport.

In such projects, morale and momentum would normally be hard to maintain. However, in this case, because there are so many stakeholders, all of which have significantly different success criteria, it will always be easy to find a stakeholder that is satisfied with 'progress'. And since it is impossible to track what would have happened otherwise, everything can be declared a success!

So, imagine you're in the government's position. What should you be aware of in order to give yourself a smoother ride? Here are my five drivers of change success:

**BREXIT
MEANS
BREXIT**

1. Leadership and teams

From a leadership perspective, do not set yourself any targets or timelines. At the same time, you must lead through this 'foggy' change like a swan – serene on the surface but paddling furiously below. Appear calmly confident, not overconfident, with no bravado. As the leader, delegate the uncertainty to your team, but insist on regular updates to give a sense of coordination and progress.

2. Change type and purpose

'Change' is refurbishing your front bedroom. 'Transformation' is converting your house and garden into a bowling alley; it requires scaffolding or interim structures. Foggy transformation can only be delivered 'one step at a time' in 'chunks'. A chunk of change delivers an outcome and can be celebrated. To reduce the chance of failure, break up the challenge into labelled chunks and set up as many interim structures, guidance groups and temporary governance bodies as you can.

3. Planning, coordination and risk

There is no budget or benefits-return objective, so all risk can be removed through mitigation by spending more money. Because of the long-term nature of the challenge, borrowing against future returns will make it easy to fund the work that needs to be done.

4. Stakeholders

There is no shared objective, so focus on maintaining leadership by minimising any tensions between you and individual stakeholder groups, while at the same time exacerbating the tensions between stakeholder groups. This will allow you to 'call' success on each chunk of the transformation.

5. Learning and review

You are not really under pressure. The first major project review, a general election, is not due until 2020.

So, lean back and relax, secure in the knowledge that, when failure is not an option, you are bound to succeed. ☑