

1. Project Objective

Our project objective for the CITB grant funding for the Offsite Management School(OSM) in 2015 was to further develop the OSM portal as an on-line learning platform that will help onsite trades understand the implications for them of a move towards offsite construction techniques.

Our bid set out that we would deliver this objective by:

- ✓ Running four innovation days engaging 400 managers and leaders
- ✓ Staging 10 training workshops and provide training to 200 delegates
- ✓ Piloting a skills diagnostic
- ✓ Piloting and further developing 7 e-learning modules
- ✓ Disseminating key learnings to the wider industry via: report, four case studies (published to web), dissemination meeting

In terms of delivery all of the above have been met or are in progress as this report will illustrate.

2. Innovation days

There have been four Employer led Innovation days run since the launch of the School. The table below illustrates where these took place. 96% of the audience has rated the event content as good or excellent:

Date	Hosted by	Venue	Numbers in attendance	Numbers registered
19 th June	Laing O'Rourke	Explore Industrial Park	30	47
8 th July	Skanska	BRE Offices, Watford	92	136
20 th October	United Utilities	Langtree Park Stadium, Warrington	61	145
18 th November	Costain	The Welcome Centre, Coventry	116	207

The key aims for the Innovation days was to introduce and engage the supply chain employers with the Offsite Management School. Each event took a slightly different focus based on the employers objectives for the day, e.g. it was important for the Laing O'Rourke hosted day to engage with a small group of their strategic supply chain to get across the key motivations for using offsite construction, how the Explore Manufacturing Plant works and how this effects every part of their supply chain. The Skanska innovation day had a cross cutting theme on collaboration and collaborative working. The attendees were encouraged to sign up to a Collaborative Working workshop the following month.

The primary target audience for these innovation days was senior managers and leaders from the strategic supply chain to the employer partners to the project. To encourage further engagement throughout the day, the innovation days on 20th October and 18th November contained 'Innovation Bootcamps'. These 'bootcamps' encouraged the organisations to work with each other in small groups,

focusing on different work packages (e.g. civils M&E etc) related to a fictional build project to explore the challenges or ‘blockers’ and solutions that using Offsite Construction can offer.

A key theme which came out of these workshops was an agreement that there is a need for early engagement amongst the designers, client and key suppliers, not just the main contractor. This will allow for buildings to be constructed with the whole life value considered and innovative solutions offered throughout the early stages. There is also a recognition across the supply chain that working collaboratively allows for a far more efficient build process.

To further the engagement and impact on the audience and to keep the enthusiasm and momentum going, a follow up workshop was arranged on 1st December 2015 for the senior managers who attended the 20th October to further discussion.

Another outcome from the innovation days is that they drive membership of the School as illustrated in the table below. The table demonstrates how many new members joined the School each month. There is a direct correlation to when Innovation days are marketed.

Item	Current Total	Nov	Oct	Sept	Aug	July	June	May	Apr	Mar
No. Of members (individuals)	845	191	244	15	7	52	126	37	28	59
No. Of unique organisations	530	167	192	14	7	44	109	34	24	45
No. Of skills diagnostics (unique companies)	100	18	11	10	--	28	33	--	--	--

3. Training workshops

A programme of training workshops have been taking place since March with the aim of upskilling Senior Managers in various key management issues. The workshops provide face to face practical training and are usually hosted by employers.

The workshop programme was initially developed following the launch of the Offsite Management School. The audience was asked which topics they would like to have more information and practical advice on. The top rated topics were Change Management, Leadership & Culture and Collaborative Working.

It was also important to run practical workshops on how the School can help the employers to address the skills gaps they face as an organisation. These sessions included explaining the concept of Industrialisation and relate this to the eight management competencies and five construction processes that the School is designed around.

One of the most successful workshops was the workshop on 'Working on Midlands Metropolitan Hospital - Becoming BIM ready'. The workshop aimed to have 20 Managers attend however there were 104 registrations with 61 attending on the day. The workshop targeted the supply chain who are, or want to be, involved with the Carillion & NG Bailey Midlands Metropolitan Hospital project. The topic around BIM is also crucial at present as many suppliers do not understand what this means for them and how they go about getting BIM ready.

This workshop was collaboratively delivered by Action Sustainability, Carillion and Virtechs who run the BIM Ability programme.

Date	Topic	Delivery	Location	No. Of Attendees
19.6.2015	Making the School work for your business	Action Sustainability	Workshop	14
24.6.2015	Leadership & Culture	Exelin	London	6
2.7.2015	Design for manufacture and assembly (DFMA)	PMI	Maple Cross	13
30.7.2015	Change Management	Exelin	London	14
4.8.2015	Collaborative Working	Institute of Collaborative Working	Maple Cross	17
20.10.2015	Innovation Boot Camp	Total Flow	Langtree Park Stadium	25
18.11.2015	Innovation Boot Camp 1	Action Sustainability	Coventry	29
18.11.2015	Innovation Boot Camp 2	Total Flow	Coventry	34
23.11.2015	Working on Midlands Metropolitan Hospital - Becoming BIM ready	BIMability	Birmingham	61
1.12.2015	Innovation Boot Camp part 2	Total Flow	Stockport	9

To ensure the Members remain engaged with the School, feedback at events is gauged on topics to ensure demand is met and the School is responding to industry. The key topics of interest within the School remain with Collaborative Working, Leadership & Culture and Change Management. Below shows the areas of the School in current order of interest:

1. Collaborative Working
2. Leadership & Culture

3. Change Management
4. Design: Product and Process
5. Supply Chain Management
6. Offsite Process
7. Marketing & Business Development
8. Innovation
9. Logistics
10. Project Management
11. Onsite Process
12. Best in Class Maintenance
13. Quality Management

4. Skills Diagnostic

The skills diagnostic was developed over several sessions where employer representatives from Skanska, Laing O'Rourke, Carillion, Costain and Siemens built a series of questions which interrogate the user on the thirteen areas (split into eight management competencies and five construction processes). Knowledge Provider organisations were also part of this process such as Build Offsite, BRE and training partners Total Flow and Exelin.

These questions were then tested by several suppliers who were not involved in the School development to gauge whether the questions set in the diagnostic was complete enough and engaged at the right level. All feedback received was positive with no changes recommended.

Below is a table which details which organisations provided feedback on the Diagnostic:

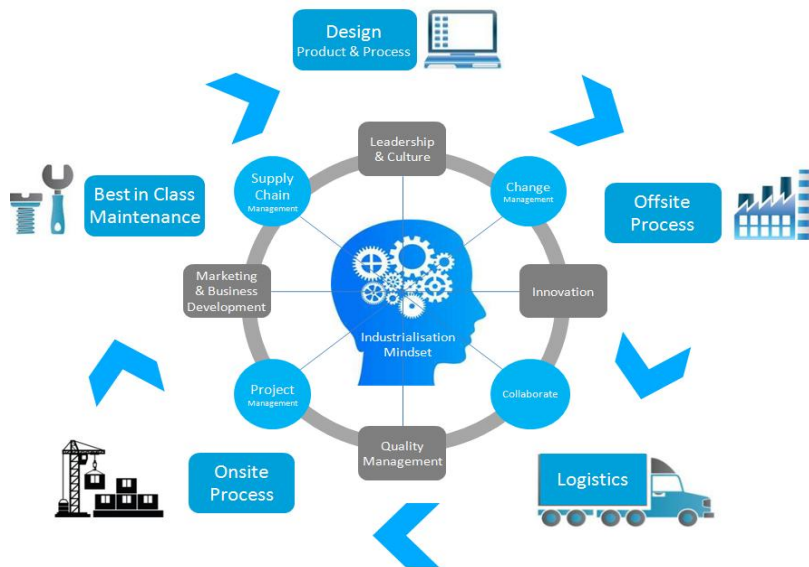
Contact Name	Organisation
Richard Newland	ISG
Paul Lang	Elements Europe
David Coward/ Kevin Jones	Yorkon/Portakabin
Richard Darler	KFC
Jamie Streathen	John Lewis
Graham Cleland	NG Bailey
Helen Town	Cherwell District Council
David Owen	Lintott
Mark Baldock	NG Bailey
Chris Catterick	Shepherd Engineering Services
Andy Cooper	FP McCann
Martin Pratt	Buchan Concrete
Steve Thompson	TaTaSteel
Alan Baikie	BIMObjectUK
Martin Sayers	Rollalong Modular

Contact Name	Organisation
Gary Mayatt	ENE
David Wallach	Eurobond
Peter Foster	Waco UK Ltd
Matt Crunden	Legrand
Peter Riding	Knauf Drywall
Martyn Fennel	Leaderflush Shapland Laidlaw

The same group of contractors and organisations arrived at a consensus that the process of Construction Industrialisation is arrived at through a five stage process; namely Digital design; offsite manufacturing, logistics; onsite assembly and best in class maintenance. These processes are supported by eight enabling competencies to help organisations build skills in these areas. The management competencies are: Innovation, Leadership & Culture, Change Management, Marketing & Business Development, Quality Management, Supply Chain Management, Project Management and Collaborative Working.

The below image illustrates the process of Industrialisation. This image is used to reinforce the same message to the employers who attend the various activities and also on the website.

Industrialisation Process



To date we have piloted this skills diagnostic with 100 managers.

There is currently a supporting marketing and communications strategy which is encouraging the Members of the School to complete self-assessments to start a structured learning journey.

5. Pilot and develop e-learning

Similar to the development of the diagnostic, the e-learning modules went through a robust procedure to test and develop the e-learning modules. The seven e-learning modules that were developed were:

- ✓ On-site processes (8th top resource viewed)
- ✓ Design: Product, process and multi-discipline collaboration (top resource viewed)
- ✓ Change management (5th top resource viewed)
- ✓ Collaborative working (3rd top resource viewed)
- ✓ Supply chain management
- ✓ Quality management (9th top resource viewed)
- ✓ Business development (7th top resource viewed)

The learning modules remain the top type of resource viewed by members. The process to develop and pilot the e-learning modules followed the below process:

Item	Process	Reasoning
1.	Identify knowledge provider and gain credentials. Knowledge provider provided with brief and template materials.	Ensure that the content of the e-learning module is correct and up to date.
2.	Peer reviewer allocated amongst group for particular topic	To ensure that knowledge gained meets industry requirements. Content does not become too technical but addresses the needs of the supply chain
3.	Knowledge provider to supply outline of e-learning module which is reviewed and agreed by Peer reviewer	Support the development of the module that all relevant information is addressed. It was important to keep the e-learning as a 'Beginners guide to'.
4.	Knowledge provider to write script and power point based on outline which is reviewed by the Peer Reviewer throughout its development	Ensure the e-learning is kept focused and includes key topics. E-learning gains an industry flavour not just academic.
5.	Action Sustainability review script to ensure consistency of language and flow.	All e-learning follow a format and the learner will gain the following outcomes: a) Have an understanding of WHAT the subject is b) Be able to articulate WHY the subject is important to their business c) Understand how to start implementing xxx in their business d) Will successfully passed the module test. e) Will understand what best practice looks like
6.	E-learning is produced and reviewed by Action Sustainability	To ensure the flow and technical elements of the e-learning module work.
7.	E-learning module reviewed by Peer Reviewer	To ensure that all key messages and examples are correct and are delivered. Any changes made.
8.	E-learning reviewed by a cold focus group	To ensure that key messages and examples are delivered. Any changes made.
9.	E-learning module is published to site.	

The below tables illustrates which industry Partner was responsible for reviewing which elearning module:

Topic	Knowledge Provider	Peer Reviewer
Quality Management	Total Flow	Costain
Design: Product & Process	Total Flow	Carillion
Supply Chain Management	Cathy Berry	Skanska
Change Management	Lorensburg	Siemens
Collaborative Planning	David Hawkins, Institute of Collaborative Working	Costain
Marketing & Business Development	Human Horizons	Unipart
Onsite Processes	Total Flow	Skanska

6. Case Studies

Four case studies have been produced and published to the website. Please visit <http://www.offsiteschool.com/members-partners/case-studies.aspx> where they can be viewed.

The case studies were developed by asking a question set via telephone, one to one meetings and email. The aim of the case study was to understand how the School was enabling the skills gaps to be addressed; what benefits the School will bring to the organisation and what impact the School has had for those organisations to date.

Opinions were gained from a client, two main contractors and a manufacturer. Below summarises the key responses from the case studies:

- ✓ The School enables the clients and main contractors to convey a clear and common approach to upskilling the supply chain.
- ✓ A collaborative approach to developing the supply chain to meet clients requirements is achieved by providing a clear message from the Partners to the School.
- ✓ A face to face platform to engage with experts, peers, main contractors and clients which allows for knowledge to be shared with a 360 approach via the Innovation days.
- ✓ The School provides an accessible addition to internal training plans; allowing for further education where pockets of expertise already lie.
- ✓ Best practice can be shared easily and consistently allowing the supply chain to understand what their clients' needs are and address this in a consistent way.
- ✓ Knowledge can be benchmarked easily against the rest of the industry.
- ✓ The Offsite Management School allows through its activities such as the workshops and supplier days to give them the chance to understand whether they can be involved or indeed should be involved in various projects as it provides a platform for the clients to convey what they want to achieve and what skills they require their suppliers to have.
- ✓ The ability to understand, by using the tools of the School, what the organisation needs to do to improve their business and ultimately sell more product.

A dissemination meeting will take place on Monday 18th January 2016.