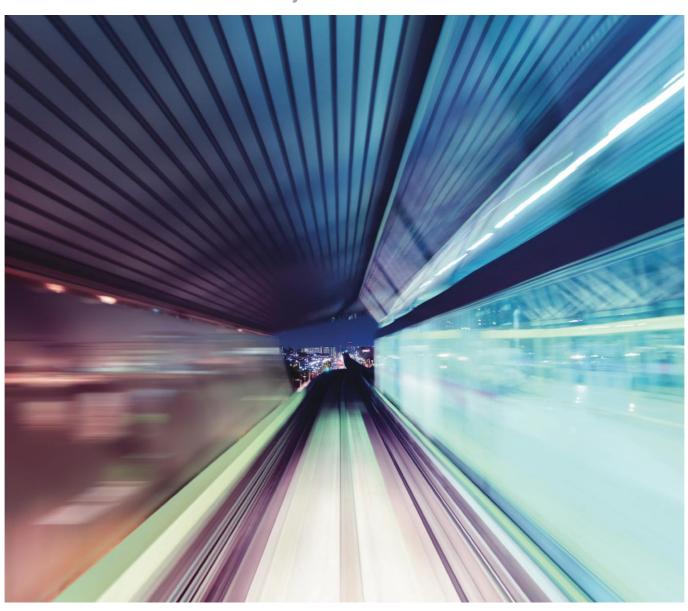


Industry Utilities

Recommendations for Increasing the Success of Utilities Projects



Disclaimer

The AFME "Industry Utilities: Recommendations for Increasing the Success of Utilities Projects" (the "Paper") is intended for general information only and is not intended to be and should not be relied upon as being legal, financial, investment, tax, regulatory business or other professional advice. AFME doesn't represent or warrant that the Paper is accurate, suitable or complete and none of AFME, or its respective employees shall have any liability arising from, or relating to, the use of this Paper or its contents.

Your receipt of this document is subject to paragraphs 3, 4, 5, 9, 10, 11 and 13 of the Terms of Use which are applicable to AFME's website (available at www.afme.eu/en/about-us/terms-conditions) and, for the purposes of such Terms of Use, this document shall be considered a "Material" (regardless of whether you have received or accessed it via AFME's website or otherwise).

June 2019

1. Executive Summary

Executive Summary

- In 2018 the AFME Industry Utilities Working Group published their first paper, <u>Industry Utilities: A Perspective for Capital Markets</u>, discussing the potential future opportunities for utilities and examining the challenges which prevent utilities coming to market.
- This second paper has been developed by the Working Group to provide sixteen recommendations to support financial institutions and platform providers who are actively considering, or in the process of, developing an industry utility.
- The recommendations address many of the complexities identified in the first paper. They are intended to be applicable to all of the stakeholders involved in utilities projects, and cover the various solutions, and common utility operating models, being developed.
- In summary, the recommendations highlight the importance of:
 - Ensuring that a utility is the right solution to meet existing needs and that upfront and active commitment from sponsors is secured for the duration of the project;
 - Prioritising requirements for the interoperability of the proposed utility solution and placing importance on the use, or creation, of industry minimum standards;
 - Defining and implementing a consistent governance model for the project that can be used and adapted once the utility is operational;
 - Delivering timely 'minimal viable outcomes' that can quickly demonstrate and build confidence in the project and long-term utility solution; and
 - Dedicating sufficient project investment, time and resources, to integration and the cultural change activities that will be required.
- Whilst not exhaustive, the recommendations intend to test assumptions, build awareness and increase the success of utilities projects in capital markets.
- AFME looks forward to discussing the recommendations with all industry participants who are engaged in, or planning, a utilities project.

2. Contributors to this Paper

We are grateful to our member firms and the individuals who contributed their time and thoughts in producing this paper.

Members of the Technology and Operations Industry Utilities Working Group include:

Bank of America Merrill Lynch, Barclays, BBVA, BNY Mellon, Citi, Credit Suisse, Deutsche Bank, HSBC, ING, JP Morgan, Lloyds Banking Group, Morgan Stanley, NatWest Markets, Nomura, Société Générale, Standard Chartered, UBS, UniCredit.

AFME Technology and Operations Division Members:































Morgan Stanley













3. Background

In March 2018, AFME published a paper, *Industry Utilities: A Perspective for Capital Markets*, which provided a capital markets perspective on the characteristics, challenges and opportunities for utilities in the industry.

We highlighted that while the capital markets industry has considerable experience in the use of utilities and there have been notable successes, widespread adoption across the industry remains limited. Developing and operating utilities is complex and there are multiple barriers which can prevent them coming to market. We identified that greater standardisation and collaboration across the industry is key for the future adoption of utilities at scale.

In this second paper, the AFME Industry Utilities Working Group, based on their collective industry experiences, has focused on identifying recommendations for increasing the success of utilities projects. It is the intention that these recommendations will help to increase the awareness and capabilities of industry participants involved in utilities projects, and the success of new offerings coming to market within the European and global markets.

The recommendations are intended to be applicable to all types of utility operating models and project delivery approaches. Our definition of an industry utility and the five most common utility operating model types, as developed in the March 2018 paper, are provided in Annex I, and a high level and typical delivery approach for a utilities project is provided in Annex II.

Utilities are, and will continue to be, an essential part of the long-term capital markets industry infrastructure. The industry is increasingly subscribing to managed or utility services, including collaboration with FinTech and BigTech providers who are developing innovative solutions to long-term industry problems.

This remains an opportunistic time for developing utilities, as the industry continues to consider new regulatory frameworks (such as CSDR - Central Securities Depositories Regulation, and SRDII - Shareholders Rights Directive II), new business models and rapid changes in technology.

If successful, utilities continue to offer benefits of reduced costs, and increased efficiency, and can help firms and the wider industry keep pace with changes in technology, regulation and market structure.

4. Recommendations

Sixteen Recommendations for Increasing the Success of Utilities Projects

1. Rationale: Be objective and critical upfront to determine if a utility is the right solution.

- Firms that are considering establishing or participating in a utilities project should first clearly identify and define the issue they are attempting to solve or improve. This is essential for determining if a utility is the most effective solution, or if other options may be more suitable. A key consideration must be whether the proposed solution would realise the core characteristics of a utility, such as whether it could be easily scaled and standardised.
- Developing a robust set of assessment criteria at this stage (focused on areas such as complexity, competition, standardisation, firm and industry need) will provide an initial objective, and quantifiable view, of the suitability of a utility as an appropriate course of action.

2. Scope: Identify, and clearly define, an achievable first use case for the utility.

- A utilities project should not instantly attempt to solve too many issues or deliver an extensive range of services. The project should consider starting with a specific use case that is sufficiently challenging yet achievable and can later be scaled, and potentially expanded, if successful.
- This approach will help to secure buy-in from project sponsors, stakeholders, and the wider industry, by aiming to reduce the timescale for the delivery of a first demonstrable outcome. This will in turn help to build confidence and commitment that will be required to achieve the long-term solution.

3. Investment: Ringfence investment in the project that is independent of any expected returns.

- A lack of dedicated investment at the early stage of a utilities project can lead to the underperformance of planning
 activities or the inability to objectively assess the project's long-term viability. This is because the investment is
 often tied to the expected return on investment from the utility and creates budget and time pressure at an early
 stage.
- Ringfenced investment at the assessment phase will help to ensure that an appropriate level of focus is given to the initial planning activities that are required, and that sufficient input and objective feedback is gathered from the relevant business and technical resources of all project participants.

4. Feasibility: Complete detailed assessments to evaluate all potential solutions and operating models.

- Whilst a broad assessment of the available options is required for most, if not all, technology and operations projects, there are specific considerations for utilities which add complexity (for example, the operating or commercial model). Both external factors (for example, the availability of existing platforms or providers) and internal factors (for example, the impact on participants' existing resourcing) must be considered against each option. This can help to identify and begin to address common challenges which are likely to emerge over time (for example, insufficient time and investment allocated by participants to integration, onboarding, and peoplerelated activities).
- An assessment of the available options for a utilities project must also focus on the regulatory landscape for the proposed solution. There are several due diligence requirements which are specific or particularly complex for

¹AFME defines the core characteristics of a utility as: 1. The creation and provision of a network; 2. The application of a standardised approach; and 3. Demonstrate economies of scale in the provision of a commoditised service.

- utilities projects, such as European antitrust law. In addition, the assessment must not only consider the current regulatory landscape, but how the landscape might change in the near future.
- An assessment of the available options, and ultimately finalising an overall business case, should be supported and approved by all participants to ensure interests are aligned and participants are fully invested. The chosen option for the project, and the business case, should be regularly revisited; especially when considering or requiring any changes to the delivery timeline, investment or impact on resource.

5. Remediation: Acknowledge the time and cost that will be required for remediating existing platforms or processes.

- Significant remediation of participants' existing platforms or services may be required before they are suitable for transfer to a utility, and this can create additional costs for the project and increase the delivery timeline. This is often because a participating firm's internal platforms, processes or data may be highly customised and lack standardisation for easily migrating to a utility. This also becomes increasingly challenging for a utilities project when multiple participants involved each have bespoke platforms, processes or data sets.
- Whilst remediation activities will most likely be a feature of most utilities projects, it is essential that the level of investment and change required is adequately understood, and factored into, the overall project timeline and cost.

6. Timeline: Develop and communicate a realistic timeline for delivery of the project.

- It can take a significant amount of time to progress a utilities project from an initial concept to implementation (typically anything from 5-18 months, however it can be two years or more for complex projects).
- Utilities projects which are too optimistic in either their delivery timeframe, or objectives, can increase the risk of participant fatigue, in which participants may become unable to continue investing in the project when timelines are extended. This can impact the necessary level of long-term investment, input and commitment required from all participants.
- It is important to ensure that utilities projects have a realistic long-term roadmap and timeframe for delivery of the intended solution. As a minimum, the high-level roadmap should provide a view of what the utility aims to achieve over a two to three-year horizon.

7. Cooperation: Build meaningful trust early with all potential participants.

- Certain factors unique to utilities projects, such as competition between participants and IP ownership, make building trust between participants crucial for the project's long-term success. Participants may try to use their economic influence to leverage their role or influence in the project, which erodes trust and makes it more difficult to work towards a common goal.
- Increased transparency and cooperation at an early stage will help to build long-term trust and alignment between participants on the overall objectives and outcomes of the project. One approach to make a utility project economically viable, but non-competitive, is to provide founding participants with an equity stake in the project.
- Another approach is to use a third-party to run the project and operate the utility (for example, if the utility will require participants to submit commercially sensitive data as part of the solution).
- Formal Memorandums of Understanding (MoU) and Non-Disclosure Agreements (NDAs) are also important tools to support early and ongoing transparency and cooperation within the project.

8. Sponsorship: Secure project sponsorship and commitment across all participants.

- Sponsorship is required to recognise, support and communicate the long-term investment and delivery timeframe that will be required for the likely success of the utilities project.
- Sponsorship for the project is needed at a senior level (for example, Executive sponsorship) and through all functions of the participating firms where the utility will interact (for example, Operations, Procurement, Audit).
- This extensive level of sponsorship throughout participating firms will ensure sufficient understanding and challenge is considered into the overall utility project objectives, viability, and impact.

9. Governance: Establish a collaborative governance model that is formalised, fair, and adaptable over time.

- Often the high number of participants involved in a utilities project makes governance one of the most difficult aspects compared to other technology and operations change projects. It is also often one of the biggest challenges when building a utility to ensure that all participants input is considered appropriately and fairly.
- It is important that the governance model is able to adapt and change over time, and that a broader industry view is represented so that the utility can be interoperable and scalable long-term.
- For example, the governance model must ensure that any required regulatory changes can be implemented as necessary during the project and once the utility is operational, and that the technology used remains secure and does not become obsolete.
- The governance model for a utilities project, and its long-term operation, should set out clear roles and responsibilities for all participants. For example, the governance model will need to confirm which individuals or participating firms will lead the project, or whether a Board of representatives from each participating firm is more appropriate.
- In many cases, the governance model will be most effective where it operates almost independently of the participating firms and acts as a vehicle specifically for the success of the project (and ultimately the utility once operational). Using a third-party as an intermediary to manage the utilities project, rather than one or more of the future participants, can help create a greater sense of independence.
- The governance model should also provide timely communications to all participants to ensure a continuous focus on progress and the intended outcomes. As most typical utilities projects are multi-year, these communication channels are often more critical compared to other technology and operations changes.

10. Delivery: Deliver minimum viable outputs to quickly build confidence in the project and longterm solution.

- Utilities projects are typically complex, and the first outputs are often indemonstrable in the short-term. A utilities project should therefore aim to deliver timely outputs that can quickly demonstrate and build confidence in the project and the intended long-term solution. These early 'minimum viable outputs' should be a subset of key requirements or features of the utility that are applicable to the widest number of participants and other stakeholders involved.
- Prioritising requirements, and applying agile delivery techniques, can help to demonstrate value early and address any conflicting requirements that may emerge during the design and build phase of the project.
- Focusing on minimal viable outputs can also help preserve the intent of delivering a standardised offering, and future-proof the utility by remaining flexible to the adoption of new technologies or requirements (for example, regulatory requirements).

11. Standards: Deliver minimum standards that can promote a highly interoperable utility for the industry.

- A utilities project must consider the need to introduce, or adopt, minimum standards to support the long-term interoperability of the solution.
- Interoperability (the ability for participants to onboard to the utility, and for the utility to interface and operate alongside other solutions) is a key challenge for a utilities project due to the different requirements and existing processes and platforms of each participant.
- A focus on minimum standards, specifically for supporting interoperability, will help to identify areas of difference between participants which can then be worked through one by one as part of the project. Once these differences have been resolved, a minimum set of standards can start to be agreed.
- When looking to create a set of minimum standards, it is important to seek wider industry input (for example, utilising pre-existing industry standards and common taxonomies). This is particularly important when the utility being developed initially has a limited number of participants. The utility may introduce a new, or additional, minimum set of standards for a specific product or service which may not be compatible with existing or future potential participants.
- The use of questionnaires as part of a project is a common method for gathering and reconciling participants views to help form a minimum standard. Even though it is likely each participant will have a range of different standards

and minimum requirements, the information can be assessed to identify upfront the areas of greatest variation, or convergence, towards a minimum standard.

12. Expertise: Allocate sufficient time and investment for internal subject matter expertise input to the project.

- A utilities project will require increasing levels of internal subject matter expertise (SME) from each participating firm as the solution is progressed (for example, Legal, Operations, Finance, Compliance and HR functions). For example, technology specialists will be required to ensure new IT systems adhere to reporting standards and have the appropriate security controls in place, and business SMEs will be necessary for making sure business requirements such as user functionality and documentation are fulfilled.
- As a result, sufficient project investment should be allocated to allow participants' existing resources to be backfilled, if required, and that external resources can be onboarded and trained during this time (for examples, SMEs involved in a utilities project can often be required for up to, or more than, a one year period at a time).
- SME investment should also be considered if the utility, once live, will rely on a third-party to operate the solution. This is because a third-party service provider may be unlikely to have all the sufficient knowledge or expertise to operate the utility at go-live.

13. Engagement: Ensure that good governance and active sponsorship remains at the centre of the project over time.

- Maintaining active governance and sponsorship is crucial as a utilities project progresses to implementation and
 the onboarding of participants. This is due to the potential divergence of participant needs as new requirements
 or issues with the utility are typically identified (for example, participants may face new challenges with how the
 proposed utility will change existing operational processes or reporting). The focus of participants on risk
 management, controls and regulatory obligations will also become more important as the utility progress into
 implementation.
- At this stage, the governance model must be able to account for how any requests for changes to the solution are
 notified and managed across participants. An ongoing governance Board or Steering Committee for the utility is
 one approach to ensure all participants can input into the long-term strategy. Regular utility client forum
 meetings, to include all participants, can also help to ensure all participants are informed and can input to
 discussions.
- Maintaining engagement can also be achieved by ensuring benefits from the utility are received shortly after the first participants are onboarded. The utility should strive to deliver benefits such as lower investments or cost savings to initial participants as quickly as possible after onboarding. This will help to secure sponsorship throughout the project and incentivise the first round of participants.

14. Integration: Expect, and make allowances, for significant project integration and onboarding challenges.

- Integration is problematic for most technology and operations change projects; however, it is particularly challenging for utilities if built by a consortium of participants or if it is introducing new processes or data standards. This is due to the wider ramifications, and impact, of a utility for each participant and their varying management interests.
- For instance, multiple participants may have legacy platforms or processes which require specific integration requirements to be considered for onboarding or operating the utility. The cost of adopting new bank architecture, such as costs for data migration and costs in decommissioning or transforming old platforms, is often significant for utilities projects. Another issue may be in embedding the utility across all impacted functions of each participating firm, or in securing the SME resources required to complete specific integration activities.
- To prepare for integration challenges, utilities projects and their participants must protect the minimum standards developed to ensure zero, or minimal, divergence from the intended design. Integration challenges will likely put pressure on the minimum standards of the solution as the project attempts to manage multiple needs. However, preserving the minimum standards is essential for delivering the intended utility, and interoperability, that will allow future participants to consider onboarding over time.

• To help mitigate this challenge, a utilities project must allocate sufficient time for integration and onboarding activities under the assumption that issues will be faced. Adopting a phased approach to integration and onboarding to the utility, rather than a big bang approach, can help with timely delivery and the realisation of the intended outcomes over time.

15. People: Make people and culture a key workstream and focus during implementation.

- The people and cultural change required for a utilities project to be successful is significant and should be as important, and considered equal, to the technology and process changes that are also required. A dedicated workstream should focus on people and culture activities, and the impacts, throughout the project (however this is especially important at the point of implementation and onboarding).
- During the implementation phase participating firms are likely to be required to transition existing platforms or services (for example, client operations) to the new utility solution, including the transfer of knowledge and resources. Many of the new service aspects of the utility may be significantly different to participating firm's existing business as usual processes and functions.
- The new utility may require a different, or unique, internal operating model and roles for the management of the utility (for example, the creation of Vendor Supplier Managers, or Service Managers, instead of existing Operations Managers). These new roles will focus on the design and management of the utility and its external partners, rather than operating the existing service. Many of the new roles required (for example, Vendor Supplier Managers) may also be handed over to the new utility once it is fully integrated.

16. Exit: Be prepared, and willing, to exit the utility project if necessary, with minimal disruption.

- Realising some level of profitability is often a dependency for the success of a utilities project (and once the project is complete and the utility is operational). This is often built into the business case for many of the participants, in which the utilities project must be commercially sustainable; usually achieved through increased scale as new participants are onboarded to the solution.
- Participants to a utilities project should ensure they have viable and well-developed exit strategies in place in the
 event that commercial outcomes, or the intended solution, do not materialise as intended. The exit plans should
 consider the requirements of all participants in order to limit any impact on the ongoing project or intended longterm solution.

5. Conclusion

Industry utilities remain important in the context of the changing landscape of financial services market infrastructure and the increasing pressure on banks to improve operating margins. Whilst the industry is seeing increased partnerships with technology providers (such as Fintech and BigTech firms), these bilateral relationships may not always be the most effective or economic solution to existing industry-wide requirements.

Further, changing regulatory requirements (such as CSDR and SRDII) are necessitating further technology and operations changes, and regulatory authorities such as the ECB and ESAs2, continue to encourage the industry to adopt standards (such as ISO 20022 for a common platform for financial services messages). These factors are providing further opportunities for the industry to consider utilities to achieve costs reductions and fulfil regulatory obligations. Overall, it remains vital that the industry continues to work together and collaborates on utility solutions that can adapt to the changing regulatory and market landscape.

The recommendations provided in the paper intend to provide guidance and support for all stakeholders involved in utilities projects. We encourage all industry stakeholders to continue actively identifying and pursuing opportunities where building a utility can provide significant value to the capital markets industry.

AFME Technology and Operations

AFME's Technology and Operations Division brings together senior technology and operations leaders to influence and respond to current pan-European market drivers and policy.

The Industry Utilities: Recommendations for Successful Utilities Projects paper was led by the AFME Industry Utilities Working Group as an initiative within the broader Technology and Operations Division.

²The ESAs (European Supervisory Authorities) are the European Banking Authority (EBA), European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA).

Annex 1: Utility Definition and Operating Models

AFME defines an industry 'utility' as an offering that has at least one of the following core characteristics: creation and provision of a network; application of a standard approach; and ability to demonstrate economies of scale in the provision of a commoditised service.

The table below outlines the five most typical operating models for a utility. We recognise that some models may carry more complexity than others, and the recommendations provided in this paper may vary in their appropriateness or applicability on a project case-by-case basis.

Utility Operating Models		
i.	Single Financial Institution	A single financial institution acts as a utility provider for multiple participants
ii.	Multi-Financial Institution (Open Shareholding)	Multiple financial institutions are shareholders in a utility that is available to other participants
iii.	Multi- Financial Institution (Closed Shareholding)	Multiple financial institutions are shareholders in a utility that is closed to other participants
iv.	Third-Party Provided	One or more third-parties act as a utility provider to two or more participants (open or closed)
v.	Third-Party and Financial Institution Joint Venture	One or more third parties and multiple financial institutions form a joint venture utility that is made available to other participants (open or closed)

Annex 2: Utilities projects Delivery Approach

The delivery approach below provides an outline of the typical phases for delivering a utilities project. The three phases shown are considered as a linear set of activities from strategy to implementation and review.



However, utilities projects are often more complex compared to other financial institution business or technology change. For example, utilities projects typically include multiple participants developing a single solution, with additional governance, financial and legal and competition requirements. Many activities required for developing utilities are therefore often iterative, or agile, and do not always follow a linear approach.

Contacts



Andrew Harvey
Managing Director, Global FX Division, Europe
Managing Director, Technology and Operations
Division
aharvey@gfma.org
+44 (0) 20 3828 2694



David Ostojitsch Director, Technology and Operations Division david.ostojitsch@afme.eu +44 (0) 20 3828 2761



Madeline Taylor
Associate, Technology and Operations Division
madeline.taylor@afme.eu
+44 (0) 20 3828 2688

/ About AFME

The Association for Financial Markets in Europe (AFME) is the voice of all Europe's wholesale financial markets, providing expertise across a broad range of regulatory and capital markets issues.

 $We represent the leading global and {\tt European} \, banks \, and \, other significant$ capital market players.

We advocate for deep and integrated European capital markets which serve the needs of companies and investors, supporting economic growth and benefiting society.

We aim to act as a bridge between market participants and policy makers across Europe, drawing on our strong and long-standing relationships, our technical knowledge and fact-basedwork.

Focus

on a wide range of market, business and prudential issues

Expertise

deep policy and technical skills

Strong relationships with European and global policy makers

Breadth

broad global and European membership

Pan-European

organisation and perspective

Global reach

via the Global Financial Markets Association (GFMA)



London Office

39th Floor 25 Canada Square London, E14 5LQ United Kingdom +44 (0)20 3828 2700

Press enquiries

Rebecca Hansford Head of Media Relations rebecca.hansford@afme.eu +44 (0)20 3828 2693

Brussels Office

Rue de la Loi, 82 1040 Brussels Belgium +32 (0)2 788 3971

Membership

Elena Travaglini Head of Membership elena.travaglini@afme.eu +44 (0)20 3828 2733

Frankfurt Office

Skyper Villa Taunusanlage 1 60329 Frankfurt am Main Germany +49 (0)69 5050 60590

Follow AFME on Twitter

@AFME EU