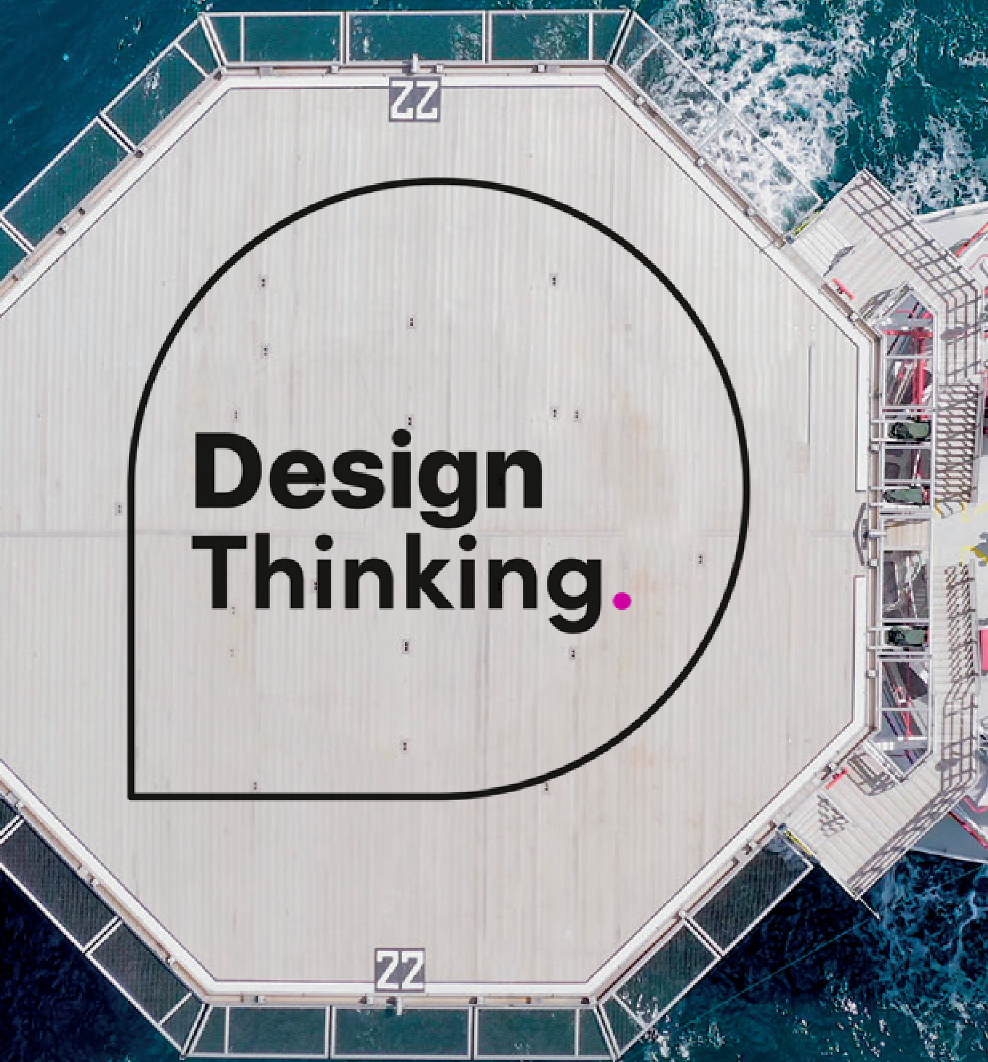
James Fisher
Asset Information Services

Design Thinking

Innovation for real world challenges



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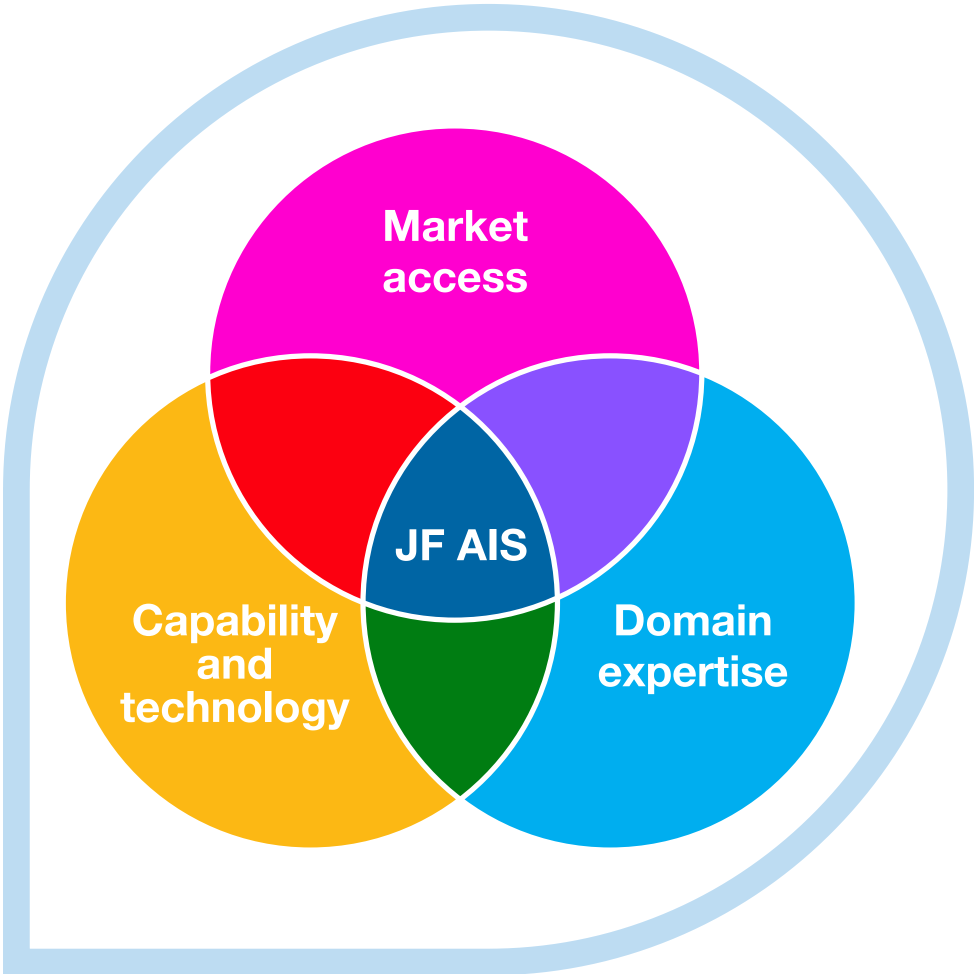
What is Design Thinking, and why do it?

In 2017, the Design Value Index (DVI – a portfolio of stocks focused on companies that actively engage in Design Thinking (DT) techniques - stated that: "Design thinking and co-creation isn't a fad, but rather a new way for all problem solvers to put the user at the centre of a problem to develop solutions from the outside in rather than the inside out" (Yong 2017).

Putting their money where their mouth was in that same year, the DVI also reported that its portfolio of 16 companies showed a 211% return over the S&P 500. This performance marked the third consecutive year that the index revealed a performance in excess of 200% over the S&P, having also outperformed the S&P 500 by 228% in 2013.

James Fisher Asset Information Services (AIS) feels such evidence is compelling, and placed on the back of our own experiences with DT, we took the conscious decision to develop our own version. Since its inception, our methodology has been remarkably successful for both AIS and our clients in seeking best-fit business solutions through an exploration of how we design and engineer within the context of what we offer them. Through this confluence of approaches, we hope to produce synergies from disruptive collaboration between business elements.



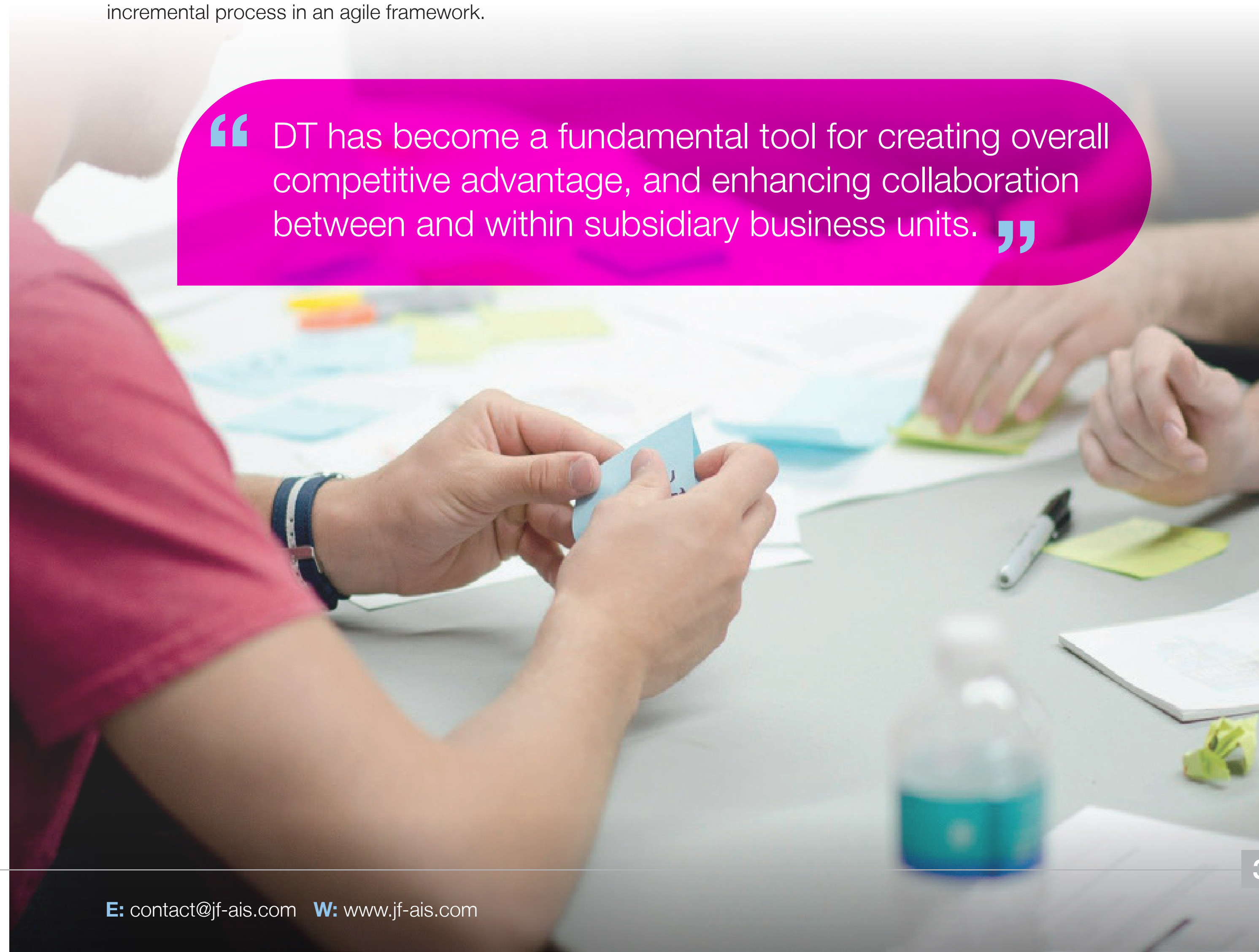
Here, we discuss our experiences and the learning curve for how we came to implement DT as the preferred methodology for not only improving our product development process, but also in helping our customers improve the ways in which they use our technology solutions.

What we've learned…

At the group level in James Fisher and Sons, DT has become a fundamental tool for creating overall competitive advantage and enhancing collaboration between and within subsidiary business units (BUs). In the past, BUs were siloed, and as in many large, but disparate, organisations didn't work closely with each other. This lack of coordination sometimes meant that opportunities for synergy were lost due to lack of awareness of capabilities and capacities contained in other BUs across the group. The collaborative nature of the process has naturally removed these barriers.

AIS's first introduction to DT as a concept began with a project partnership with IBM, where DT was used as the primary springboard for launching the conceptual ideas and value propositions that would eventually underpin a project in high-voltage asset management for offshore renewables (ibmbigdatahub.com/blog/picture-worth-thousand-volts). On the back of this project, AIS decided to take on board the lessons learned from that process, modify and customise DT techniques to its needs, and employ these innovative methodologies to collaboratively focus on stakeholders and markets common to all of their BUs – primarily those operating in high-risk sectors.

Over time, AIS has learned the importance of focusing on users and user stories over the technical and engineering concerns that tended to dominate some early workshops. Figuring out over time who the right participants would be has focused the workshops on value to the customer, as opposed to unintended deep dives into excessive detail and minutiae. Focusing on the user also steered technically-minded participants to remember that, though they might have developed the platform under examination, they were ultimately not the end-user of that platform, and that, from an end-user perspective, not every corner may need to be completely squared at the start. Squaring corners is an iterative and incremental process in an agile framework.



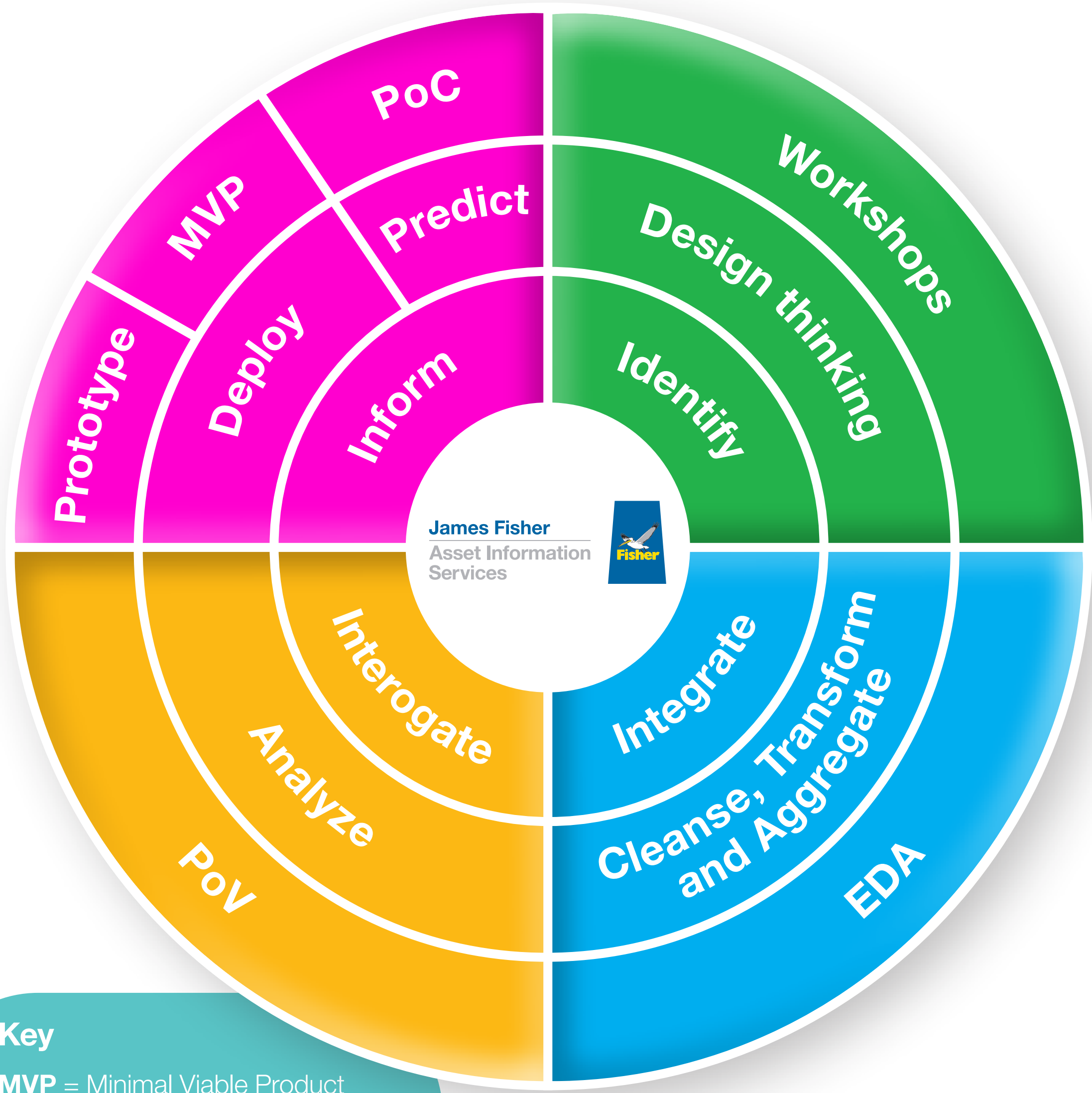
> "DT has become a fundamental tool for creating overall competitive advantage, and enhancing collaboration between and within subsidiary business units."

Design Thinking.

Value gains through structured exploration

The structure provided by DT provides for a much more rigorous and disciplined approach to exploration of ideas. That helped ground discussions, moving focus away from blue-sky ideas that may never see fruition by encapsulating and prioritising them within feasibility and value proposition frameworks that did not hinder them, but rather enhanced their overall value.

This approach was further enhanced by the calculated inclusion of cross-functional groups deliberately chosen from marketing, research, leadership, and often a 'wildcard' individual, in order to promote the expression of different perspectives (Appleyard, et al. 2020). In creating a rounded group, our DT workshop facilitators were able to reduce psychological biases such as groupthink, cognitive dissonance, and in-group affiliations (Liedtka 2015). Mitigating these biases allowed groups to begin focusing on customer value as conveyed, not by supposition in a vacuum about what customers should want, but by a justifiable, feasible hierarchy of customer needs, explicitly stated by those customers themselves.



Key

MVP = Minimal Viable Product
PoC = Proof of Concept
EDA = exploratory data analysis
PoV = Proof of Value

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Finally, we wrapped our methodology around our pre-existing "i4" model of (clockwise) "identify, integrate, interrogate, inform", which summarises our approach to a data-driven business model. Here we identify data that is of value to the client using DT workshops, integrate the data with other data sources, and a wider contextual understanding to form information and knowledge, interrogate it using data science techniques to create proof of value and concept, and use it to inform the client of the resulting valuable information with a Minimum Viable Product. Each of those steps is initially informed by the results of the DT workshops executed within an incremental and iterative agile framework to ensure the client is re-engaged effectively on a regular basis with a functional demonstration of progress on the project.

Customer inclusion: in their own voice

Finally, once enough confidence and trust in implementing the DT process was gained internally, the inclusion of the customer themselves represented another opportunity to hone our understanding of the value proposition by taking all guesswork out of the voice-of-customer equation. No longer was customer voice understood as the by-product of a broad survey, a limited, incidental conversation, or an indirect conclusion drawn from a press release; the customer was speaking for themselves and presenting their own pain points as part of the process.

Indeed, many clients reported very positive experiences with DT processes that ranged from the opportunity to engage in completely new and refreshing group interactions to ground-breaking explorations of internal workflows and processes that resulted in dramatic improvements in, and divergence from, "the way we've always done things". One client even reported a huge sense of value in being able to meaningfully interact with her own co-workers in a two-day setting because, "we only ever see each other for fifteen minutes at a time in meetings." Many saw the simple value of having work time specifically set aside for intensive explorations of topics that otherwise might have never been explored in 'normal' business settings to that level of depth. Hence, many reported epiphanies surrounding their own company's processes and practices.

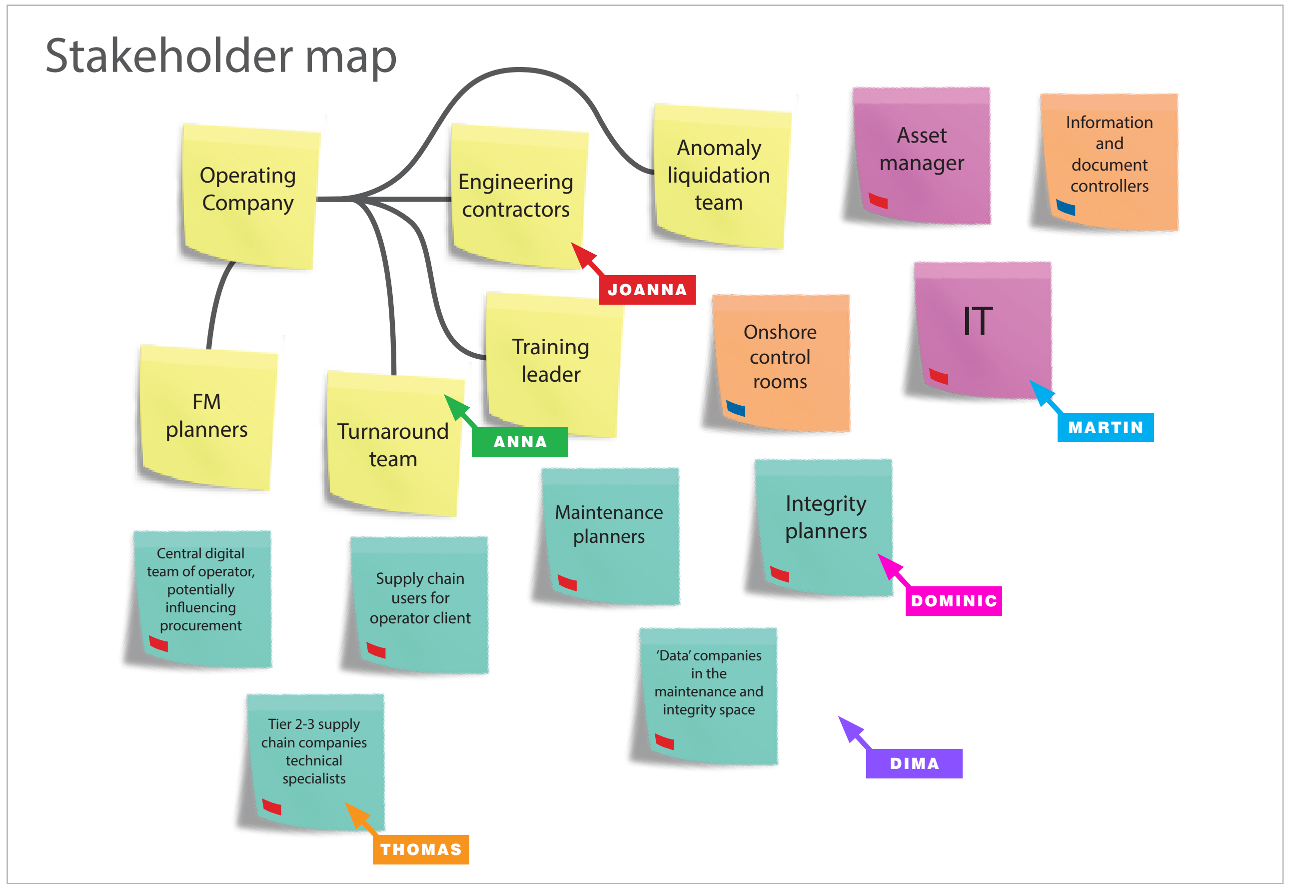
As a direct result of client participation, customers have requested the development of bespoke applications of DT that are AIS product-specific explorations for how the customer can, for example, best implement a tool such as R2S (R2S.co.uk) into their workflows and processesto derive the greatest value. In response, AIS has developed workshop offerings that are on-site at the JF AIS office – preferred by customers who feel the need to remove themselves from the distractions of the daily office environment – and on-location with the client – for clients who feel more at home in their own spaces.

Moving Online with DT Cloud Lab

One result of our continual development has been a direct product of the COVID-19 pandemic and subsequent global lockdown, which has forced an increased collaboration online almost overnight. We call this online DT process our Design Thinking Cloud Lab, which exists as a compression of our standard DT method into a digestible remote format using a common online whiteboard platform to maintain participant interactivity to the greatest degree possible in an online environment. Indeed, we have already successfully facilitated Cloud Lab sessions both internally and with external clients from far-flung areas of the world such as West Africa and South America. Through this implementation, we've learned a great deal about facilitating in an online environment where the feedback has been consistent and positive:

- Cloud Lab has been viewed as a positive methodology to continue workshopping in a remote working environment;
- Participants like being able to see the whole process on their individual screens in order to recap what's been covered, and have vision of what comes next
- Traditionally more reserved participants more readily 'find their voice', enriching the discussion and empowering all more equally
- Fewer participants means more contribution in a shorter timespan (limited to three hour sessions), so results are quicker and more salient than in a large room full of people

Of course, there are trade-offs. As with any online modality, it becomes difficult to judge suprasegmentals and body language in relation to buy-in, enthusiasm in solving challenges, engagement level and so on, but these are a small price to pay in exchange for being able to continue to work through challenging issues and create value during a pandemic.



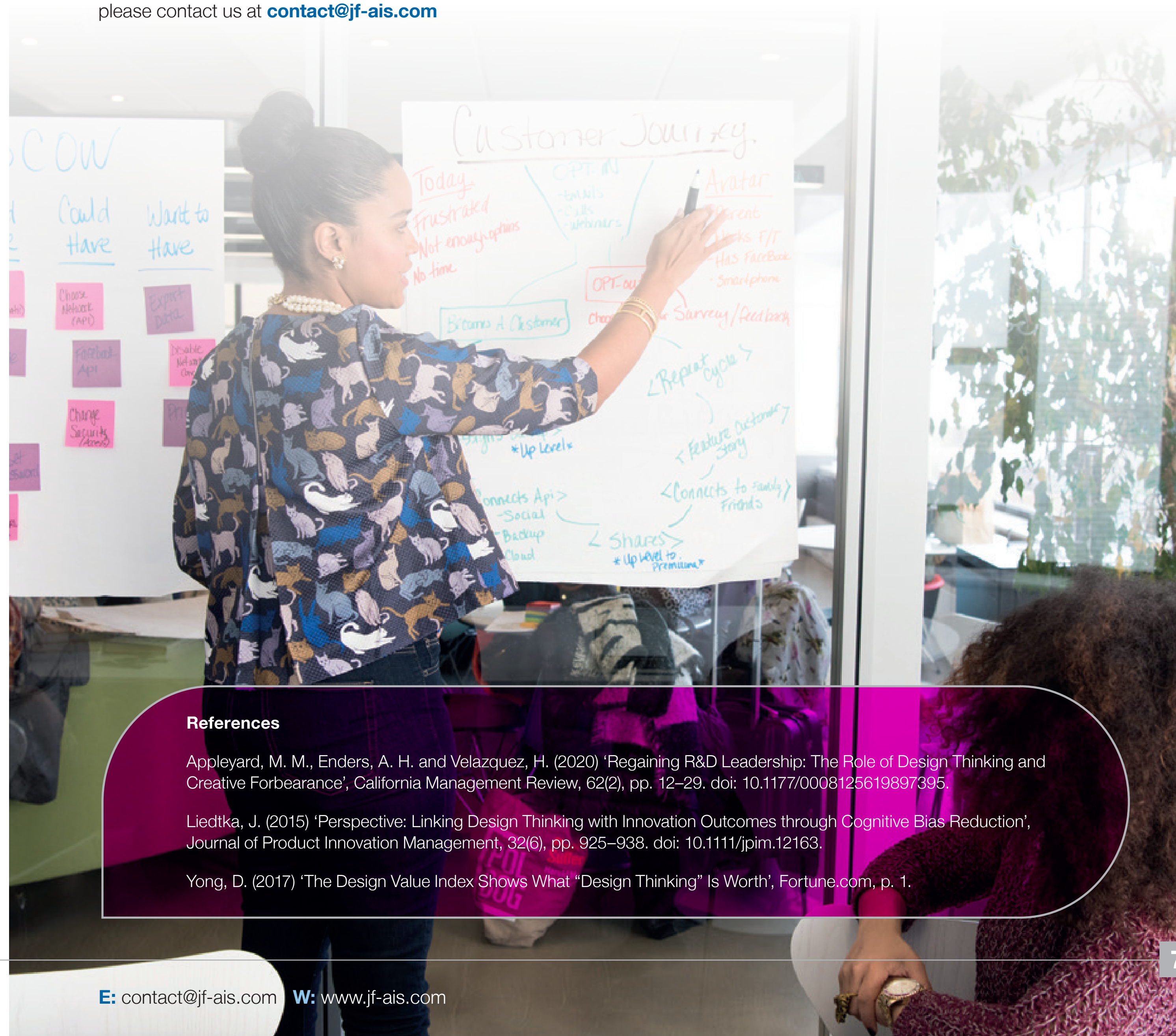
Conclusions

In looking to the future, we consider our DT Cloud Lab to be a breakthrough model in the way DT can be implemented and delivered remotely. Though face-to-face solutions are often preferable, over time we hope to make Cloud Lab into an integral part of our DT portfolio that can be used for clients with special requirements such as those...

- In remote, inaccessible, or high-cost travel locations;
- In dangerous environments with restricted entry;
- In well-established relationships who are simply wishing to curb travel expenses.

Indeed, we are taking the last of these requirements to heart in recommending curbing travel in a post-COVID-19 world wherever and whenever possible in order to reduce our environmental footprint. We would like to take this opportunity to encourage our clients to do the same and join us online for some creative and value-generating workshop sessions.

For more information on how we can facilitate your online Design Thinking Cloud Lab workshops, please contact us at **contact@jf-ais.com**



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