Engaging and leveraging the tremendous advances that IoT brings to enterprise solutions can be challenging. The 2016 Strategic Innovation Symposium: The Intelligent Enterprise at Harvard brought together leaders from across industries to discuss the opportunities and challenges in engaging in the Intelligent Enterprise. The following are the key actions that the leaders at the Symposium felt were paramount to a successful adoption and deployment of IoT solutions.

Business Unit Engagement: Is there an ROI for the IoT program? Unlike internal programs where the ROI on IT projects can be well understood, launching complex IoT initiatives often requires a clear business case for both the investment in infrastructure and also the greater investment in change management, education and process re-engineering. Most successful IoT initiatives have a clear ROI and business case, often lead by the business unit itself.
Technology Solution Partner: Who will provide sensors, RFID, software and integration solutions? Intelligent IoT solutions require a holistic, or ecosystem perspective. Does your plan have all of the key pieces integrated: sensors, software, and integration? Without a high-level perspective, many projects fail to yield the expected benefits.
Change Management Plan: How will new solutions be adopted by current systems and employees? Key to the success of IoT projects is not only the technical hardware and software but also the adoption and utilization by the end users. One of the largest impediments to success is not having sufficient planning and effort regarding training new users, developing an adoption plan, and reorganizing processes to integrate the technology in an efficiency and user-friendly manner.
Security and Standards: How will security and platform compatibility be managed? In a world of never-ending viruses and hacking, your data and IoT solutions need to be secure, not only to prevent disruption in your business but also to prevent customer data from being accessed. It is critical to have a security plan at the outset and a set of standards to ensure the integrity of your plan.
Adoption Plan: How to engage, train and ensure full adoption by all users? New technology has a limited effect when no one uses it. One of the most cited challenges at the Symposium was new user adoption. This goes beyond training and education and extends to behavior and culture as well as ease of use and ease of integration with existing workflows.
Lifetime Plan: What is the expected lifetime of the solution and ROI time period? Many solutions take up to a year or more to implement, reaching full deployment as long as two years out. What is the lifetime of your current plan and does it match with the ROI?
Data Plan: What data is needed and how will it be obtained, managed and stored? One of the greatest challenged with IoT is what to do with all that data? Storage is a simple solution, but more important is how it is organized, accessed and managed. It is imperative that any initial plan has a solution for the entire lifecycle of the data that will be generated.
Intelligent Analysis: What new understanding is needed from the data? How will data be analyzed/mined? Are solutions for analysis identified?

Data by itself is not useful – it is the insights that are derived from the data that will help your business or organization. How will you analyze your data? Beyond the hardware or cloud solution for computation, how will you know what the data is "saying," in order to take action on it? Having a clear plan for analysis is key to capturing the value in an IoT initiative.