



## DEPLOYMENT IN ADVANCED ANALYTICS PROJECTS

Best practices and key considerations before, during and after deploying an analytical initiative



The deployment phase is the final phase of any IT or SW development project, including those that are exploring Advanced Analytics capabilities.

The main objective is to ensure that the final solution is ready to be used within the operational environment and that end users have all the required tools to act upon the analytical insights discovered during the development phases of the project.

However, organisations, especially those that are deploying analytical initiatives for the first time, or that are still analytically “immature”, typically focus too much on building an IT infrastructure, instead of planning how to deliver actionable insights to their end users and integrate this intelligence into internal organisational processes.

The lack of vision regarding usability and access to analytical information to drive decision making, is a common mistake in Advanced Analytics projects.

At Presidion, we’ve seen organisations perform best when they take the before, during and after of the deployment of analytics initiatives into consideration. This will help to maximise return on investment and achieve a high impact on business and operations.

### Things to consider BEFORE deployment



There is a strong need for a **pre-deployment, planning phase** to ensure that the final solution is ready to operate in production mode.

The key activities that should be performed before deploying the final solution are **Testing** and **Validation** activities and preparation of a well-defined **Transition period**. Depending on the size and the scope of the

analytical application, this can include a formal **User Acceptance Testing (UAT)** and/or a **Cutover** plan for the application, which will replace a legacy solution or existing manual processes and **Go-live**.

Before proceeding to deployment, Data scientists and Development teams should exhaustively evaluate analytical outputs to assess quality and accuracy, but most importantly to validate that business objectives are properly addressed and success criteria, that were set during project initiation, are fully met.

The goal of the transition period is to make sure that end users have accepted the functionalities and the outputs of the solution, and that they are now ready to integrate the system outputs in a way that will improve future outcomes and decision making.

During the pre-deployment phase, end users should be placed at the centre of attention. **Training** and formal **Knowledge Transfer** sessions can significantly help them learn how to operate the new solution, validate the usability of the new system and ensure a smooth transition period.

Instead of deploying the technology, pre-deployment activities in Advanced Analytics projects should focus on the business problems that the new solution addresses. Data Scientists and Developers should be aware that they are deploying business, analytical insights and not technical, statistical outputs or model results. The terminology used in front end applications should be appropriate for non-technical users to enable them to adopt and quickly use the solution.

## Things to consider DURING deployment



At this stage, technical teams can focus on deploying the technology and integrating the solution into an operational environment to automate decision making process.

The **Technical Infrastructure** and the **Production environment**, which will host the solution, and any required **Integration Interfaces** should by now be already developed, tested and ready in order to initiate deployment and successfully incorporate analytical results into an organisation's daily operations.

Typically, deployment of Advanced Analytics insights includes all operations to generate reports and recommendations for end users, visualisation of key findings, self-service and data discovery functionalities for business users, and finally, depending on the size and scope of the analytical application, implementation of a scoring process or workflows that integrate analytical outputs (in real time or not) with custom, operational and core systems.

During deployment, many iterations, enhancements and fine-tuning activities might be necessary to finalise the deployment of the system. Other activities necessary during deployment include **Administration**, **Security** and **Authorisation**, as well as finalising **Documentation** and **Transferring Ownership** to business and operations.

## Things to consider AFTER deployment

Market conditions, trends, policies and regulations, all change over time. **Monitoring** Advanced Analytics insights is essential to ensure that performance and accuracy is maintained over longer periods.

The goal of a **post-deployment** monitoring phase is to create the strategy and the foundations to continually monitor the solution's performance, **review** outputs, collect **feedback** from business users and address issues detected on an ongoing basis in a timely manner, without creating operational disruptions.

**Model management** is a very important concept towards that objective, as it is possible to systematically compare and assess analytical outputs, detect decrease in performance, and promote the best possible analytical results.



Finally, do not forget to **learn** from your previous mistakes and incorporate your end users feedback into this monitoring process to address issues either in future enhancements of the application or during regular updates to overall improve the accuracy of analytical outputs.

*Why not just go with a light touch deployment as this all just seems like too much work?*

## About Presidion

Presidion have operated for over 20 years and have been the pioneers in implementing cutting edge predictive analytics solutions with top UK and Irish organisations. We specialise in helping organisations leverage their data to deliver tangible practical returns on investment, aligned with their strategies.

Presidion works with both government and commercial clients, currently partnering with hundreds of organisations enabling them to understand what has happened in the past, anticipate what may happen next to take appropriate and timely strategic decisions for their organisation.