Abstract
Infosys BPM with its automation approach helped the client, one of the leading film studios across the globe, to substantially eliminate the manual effort and achieve a high quality of delivery along with efficiency. Read on to know how did Infosys robotic process automation (RPA) with the design thinking framework not only enable the client to make the online content available quicker than ever, but also increase its business and achieve savings of $200,000.
The client relationship

The client is one of the largest film studios company with about 10000 employees and an annual revenue of over $30 billion. Infosys BPM maintains and manages the client’s digital assets delivery for worldwide distribution across all territories and for all of its digital distribution partners. The Infosys BPM team is also responsible in researching and maintaining over a million master-data points for the client annually.

The high volume of challenges

Overall, the client produces more than a million metadata, the data which gives more information about other data, every year. The client’s process involved research, creation, data collation of digital assets and data entry from multiple sources and ingesting them into the master data management (MDM) systems. Processing huge volumes of metadata was a time consuming task which often led to manual errors.

The major challenge for the client was the frequent need to process ad hoc volumes of metadata and make them available online within a stipulated time. These ad hoc volumes impacted the average handling time per transaction, and due to the lack of a centralized data repository, the client had to put in a substantial amount of manual effort in redundant researches and data collation. Quality of delivery along with efficiency were two critical components the client was seeking.

Design thinking and robots to the rescue

The team is responsible in standardizing and managing the client’s metadata across various systems, and ensuring the distribution to its business-to-business (B2B) digital vendors. 18 months into the operations, the client wanted to increase its business by 50%. To overcome the quality and efficiency challenges, and increase the client business, Infosys BPM came up with a solution which included automation based on design thinking.

Empathize: The team thoroughly analyzed the client’s way of working operations. During the initial phases, the team set up a research & analysis team to identify all the metrics involved in servicing a request – almost 50 data points which needed to be independently validated. Over a brief period, this team was responsible for researching, analyzing and identifying, the data points which were least likely to change.

Define: Based on the inputs, the team decided to automate the processes. The team concluded that the new solution should be easily scalable, configurable, and intelligent enough to capture various possible scenarios which would reflect the routine work of the operations team.

Ideate: The team performed an ideation session to come up with different ideas to build a completely new solution. It also had an automation strategy with several key business objectives. These included – absorbing the incremental volume by 150%, reducing delivery timelines by 30%, keeping additional staff recruitment to a minimum, and achieving 100% serviceability in the shortest possible transition time. The approach centered on identifying redundant steps, collating and storing master data in a centralized, retrievable, and user controlled solution.

Prototype: The Infosys robotic process automation (RPA) team along with the help of the subject matter expertise (SMEs) carried out a detailed assessment of the process and understood the activities performed at the keystroke level.

Test: The team showcased the new applications to the client for user acceptance testing, where the team helped the client get familiar to the solution and helped with its implementation and usage.
Deploying the solutions

**Step 1:** The Infosys BPM team identified redundant steps and designed a web hosted database solution for collating and storing master data in a centralized, retrievable, and user access controlled system known as the golden record management system (GRMS). The team created an additional programmatic layer to automatically service work orders using a web interface, and to generate a queue of all the orders requiring manual intervention. The overall goal was to automate ~40% of the queue while ensuring that all the deliveries were part of a central workflow management solution. Based on this solution, the team developed dashboards for reporting services.

**Step 2:** The team identified manual steps for automation with the help of robots (BOTs). The development of BOTs involved a series of distinct phases including brainstorming and design, planning, development, testing, and finally the launch phase.

Infosys BPM had two teams, the implementation team and the operations team, working closely with each other which carried out the entire development and execution of the automation plan.

The two teams worked together through multiple sessions to understand the activities performed at the keystroke level. Through detailed discussions, the teams identified steps to be automated in the as-is process for maximum optimization. For the to-be process, the operations team discussed, refined, and signed-off the design.

To accommodate this new improved processes, it was necessary to tweak the existing workflow, train the operations team on the new approach, and identify control points to ensure sanctity of the data. We established the new workflow weeks ahead of the actual implementation which helped us ensure that both the teams were aligned to the necessary changes, and the testing of the new system when implemented would not be hampered by the challenges of change management. Many brainstorming and elaborate process flow training sessions were part of the preparation for this change.

The high level solution overview diagram below lists the various steps in processing a title level metadata request. ZVVR – video version, ZEST – electronic sell through.

This is how the overall process looked pre- and post-implementing the solution.
Benefits reaped

Our automation approach delivered success on all counts. During the first leg of the journey, Infosys BPM successfully developed GRMS within 6 months with its automation approach. Post implementing GRMS, the team implemented the BOTs in 8 months, and as of 2017, the combined benefits of GRMS and BOTs were as follows:

a. Delivery time for one work order reduced from 19 minutes to 7 minutes
b. Annual Savings of $75,000 USD via GRMS and $125,000 via BOTs
c. Reduced headcount by 21 FTE via GRMS and 27 FTE via BOTs

With the solution in place, the team was able to handle 150% more volume in 30% lesser time. The GRMS had records of 80% of the overall SKU’s and consistently delivered around 40% of any work order. It also started performing quality checks on the results and delivering them automatically.

As an uncorrupted source of data with logical data survivorship and stewardship rules, the GRMS established itself as the “single source of truth” system for 90% of the client’s database. The GRMS data helped the client populate a brand new MDM system to expand into 4 territories by adding new digital store fronts and onboarding new digital distributors within a week of final agreement. This solution helped our client book revenues much earlier and enabled them to expand rapidly without hiccups.