Digital Transition as a ‘Culture’

Theme of the paper: Digital transformation
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ABSTRACT

Organizations and businesses often go through volatile decision making, that leads to newer problems with added pressure to the bottom of the organizational pyramid.

In my role of account delivery lead responsible for delivering Projects and Operations, for 65 countries across the globe, we faced exponential attrition of talented human resources.

It was a clear example of what Herzberg (Fig 1.1) foresaw in his theory of managing human resources. For us the hygiene factors took a dip!

Hygiene Factors surround the employee and his work, whereas the Motivators are found within the work.
Impact to the hygiene factors result in employees working less hard.
In our case, it was a classic case of High Motivation but a Low Hygiene.

Controlling the hygiene factors was out of our control. We hence worked on focusing on negating the impact this would cause to the quality of our delivery.

The reader is requested to look at this solutioning more from how the ill effects of organizational policies impact delivery and how to overcome these to retain delivery quality. Importantly how Digitization came to the rescue.
INTRODUCTION

In my role of account delivery lead responsible for delivering Projects and Operations, for 65 countries across the globe, we faced exponential attrition of talented human resources.

With environmental factors, slowing down the inclusion of external replacements, it was a tough roadblock that would impact our quality levels (and all parameters the would influence this quality).

Managing a program, is more about managing it with a philosophy as much it is, by applying Program Management theories. E.g. Apple products are bought not just for its technical brilliance, rather for the philosophy behind its design.
SO, WHAT’S THE SOLUTION?

Going *Digital* is the direction the entire industry is moving towards.
The industry of Information Technology (IT) is at the forefront of driving this transformation across the commerce world. *However, the IT industry is itself under severe pressure of digitizing their own operations.*

Recall, the machines (motors, engines, gears) improving efficiency of working humans at the industries, resulting in an industrial revolution in the 50s era?! This is the era of *soft and virtual, non-existent machines, transforming our world* (*Fig 3.1*).
THE APPROACH

MEETING 0

We deliberated on the need to transform our service delivery to our client, by lowering our Operating Costs and improve efficiency that would cover up for the drain in human talent (Fig 4.1), which was our major threat.

Fig 4.1

Most desirable option was to follow the pack and implement in whatever capacity, the Lean, KanBan, Agile, Devops, Robotic Process Automation, Machine Learning, Cognitive, Artificial Intelligence (AI) theories, and claim that we have transformed to a 'digital way' of delivery.

However, during the deliberation phase, we strongly felt it would be a humongous fallacy, to meagerly work it top down by pushing this famous (digital) thought, down the throat of our 100-member strong team.

A fallacy because

1. Top down hasn’t been successful in a 'transformational' journey as compared to bottom-up
   We need both hands to clap. Hence a push from the above, until the below is convinced, the clap wont be heard.
2. It can be one sided effort and fall flat in a matter of no time, failing to sustain the momentum
   Though in short term, it may show spurts of success, longer term success, needs sustainability. Which can be brought in, only by a convinced work force.

That is the reason we picked the approach of ‘building a culture’ around our journey.
MEETING 1

This is where the first draft of our 'Digital Culture' was born. Read the below visual (Fig 5.1) from 'right' to 'left'.

*Client* - is a source of business use cases that can be automated.

*Client + My Org.* - are a joint source of use cases technical in nature.

They respectively take 2 different approaches.

a. **Business use cases (top branch)**
   i. Complex in nature
   ii. Larger scale
   iii. Larger benefits
   iv. Requires weighted technology to be leveraged

b. **Technical use cases (bottom branch)**
   i. Routine and Simple in nature
   ii. Small scale
   iii. Small to Medium benefits
   iv. Requires, less weighted tools

Note: VSM = Value Stream Mapping. Part of a Lean Sigma methodology, of analyzing the current state and designing a future state for the series of events that take a product or service from its beginning through to the customer with reduced lean wastes as compared to current map.

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**Fig 5.1**
MEETING 2

We embarked on identifying the potential problems that can be solved by automation in 2 areas:
- Business Use Case - Projects delivery that can have automation of repetitive tasks
- Technical Use Case - Operations delivery enhanced by Lean and automation

*Robotic Process Automation or RPA* is more linear in its approach to automation. Without bringing its own interfaces/technicalities, it just imitates the human actions. The investment hence is restricted to only knowledge of RPA development and licensing.

We delved deeper on 2 RPA levers, the *WorkFusion* and the *BluePrism*.

The Gartner study (link shared below), helped us with getting a first-hand information on the differences:

We took assistance of Automation COE and applied evaluation technique to determine the best suited technology for our automation.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>WorkFusion</th>
<th>BluePrism</th>
<th>UiPath</th>
<th>WinAutomation</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Desktop version.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Blueprism also triggering from a client (for development &amp; testing); but not for deployed solutions</td>
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<tr>
<td>Zero/Additional license cost.</td>
<td></td>
<td></td>
<td>Free Trail for development; need license before deployment</td>
<td>Free Trail for development; need license before deployment</td>
<td>Workfusion RPA express and UiPath-Community edition. P&amp;G has BluePrism tool license. Winautomation has trial version, however DXC owns licensed version.</td>
</tr>
<tr>
<td>Supports process flow/decision making.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Workfusion has stronger workflow and cognitive abilities; not required for this business case</td>
</tr>
<tr>
<td>Web, email and excel automation supported.</td>
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<td></td>
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<td>Implementing complex business process.</td>
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<td>4</td>
<td>3</td>
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Ease and Speed of Implementation (Development time).
Ordinal ranking 1 (Slowest)-4 (Fastest)

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<tr>
<td>Design -UiPath, BluePrism and WinAutomation takes drag-and-drop approach. Automation can be developed in WorkFusion using Java/Groovy program and drag-and-drop and coding. Coding Testing effort (Lowest to Highest) -BluePrism and UiPath have large library of custom built-in components to implement web automation. WinAutomation has relatively lesser built-in components. WorkFusion- there is very limited availability of built-in components, hence there is more development and testing effort. Efficient Exception handling (Highest to Lowest) -BluePrism, UiPath, Workfusion and WinAutomation.</td>
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Ease of use (Training end users to use the automation and Error handling). Visual interface to execute and debug routine errors.
Ordinal ranking 1 (Lowest)-4 (Highest)

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<tbody>
<tr>
<td>BluePrism, UiPath and WinAutomation solution support visual representation of the total automation solution. However all components of automation in Workfusion cannot be represented visually.</td>
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Long term objective to scale up beyond the desktop version and automate manual tasks in PLM applications.

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<tr>
<td>Based on following considerations: 1. built-in ability/framework for exception handling 2. Ability to handle higher volume 3. existing Platform availability in P&amp;G (WF &amp; BluePrism) 4. stability of platform</td>
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Final ordinal ranking in the order of acceptance.
Ordinal ranking 1 (Lowest preference)-4 (Highest preference)

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Analysis Credits - Gururaj Kulkarni, RPA Solution Architect, DXC Technology

Decision - *Blue Prism* was the chosen technology that would cater to the need of automating Operational Tasks.
ANAPLAN MODEL BACKUP

Anaplan is a web-based enterprise platform for business planning. Its name combines the words, ‘analysis’ and ‘planning’, known for its in-memory database.

The data is stored in ‘satellites’ and ‘hubs’, collectively called as ‘models’. After the deployment of these models in production, there is a need for taking ‘model backups’.

The need to backup models arises due to the limitation of the technology to store historical logs of the data manipulation to trouble shoot incidents.

*Exponential Problem* - as the number of *models increase*, due to architecture and expansion in adoption, the *effort and time needed to take backups of these models increases exponentially*.

As such the effort of manually (non-value) taking backups also increases.

Translating this manual effort into a process imitation by a bot, eliminated the cost associated with the architectural changes and effort induced to the Operations team to support the production environment.

‘*Reduction*’ in time was not a factor for automation, whereas ‘replacement’ of the manual effort by that of a ‘bot’ was the KPI for the success.

We had similar exercises performed for another activity for comparing status of records between 2 applications, to accomplish the need for validation of critical business data, by deploying a bot.

Benefit gained was not on reducing effort as it is often equated with automation. Remember that the bots, replace the humans and as such we may only see a marginal reduction in end-to-end time.

The gain rather is saving that time for the humans from doing non-value add work to do value added work (revenue generating, balancing capacity crunch).
SECURITY AUDIT

There is a need to download system logs and filter actions by scanning through GBs of records. The actions that are filtered out, are to be audited monthly to identify any suspicious, unwarranted and incorrect action being performed by un-authorized personnel.

These actions again result in huge manual efforts being consumed. Deploying a 'bot' to automate this work, enabled savings in human efforts.

M-BOT OR THE MONITORING-BOT AS PART OF RELEASE TO OPERATIONS

This was a hybrid solutioning. Not related to RPA, but a very niche solution that needs a special mention.

As part of deployment and expansion of batch interfaces for our applications, we induced increased efforts to 'baby-sit' the interfaces, terming the job as 'monitoring'.

We had Duty Managers or DMs, working round the clock monitoring these interfaces for 'failed' 'not started' and 'long running' cases.

Once identified, their duty is to reach out to the Level-2 expert at the earliest possible time to make sure it is attended.

Fig 4.4.1
Delays in this entire escalation mechanism would result in delays in resolution and in turn increase risk of SLA misses. Thus, impacting the availability of reliable data by the start of the business in that business region.

A business region constitutes a group of countries and business relies on end customer satisfaction to maintain market success in sales and revenue.

The entire baby-sitting effort was automated, and the need for manual actioning was eliminated.

The key aspects of this automation included
i. Continuous monitoring of logs for identifying one of
   i. Long Running
   ii. Not Started
   iii. Failed
ii. Triggering ‘patented’ calling platform, that would place telephone calls to the DM on schedule. At the same time, logging the issue on a dashboard
iii. The DM then answers the automated call and responds to the incident. In case of a failure to get the DM response in time, Level 2 and 3 escalation of the telephone call happens.
OUTCOME

It is important to know if our plan met its objectives. By changing the cultural fabric of our team, we measured the mileage we achieved.

a. **Invisible service delivery** to the business, while maintaining healthy scores and achieving a high *Net Promoter Score of 10/10!*

b. **Crowd sourcing the opportunities**: the ideas, pain points were sourced from the ground level members. This was possible due to creating a thinking of automation. Every member started thinking if the work they do can be automated. We hence decreased our reliance on think tanks alone.

c. Equipping the members to practice automation. This led to *self-automation* of work they did. Thereby reducing their effort on non-value add work and in turn increasing value-added efficiency.

d. **Reduction** in impact caused by *attrition*: The biggest underlying threat to our delivery, was minimized in its impact. We became self-reliable, self-sufficient, reduced risk of delays in replacing roles and lag in capability improvements.

e. Cultural shift in approach and mindset of the members, by making it a win-win approach in challenging times

f. Savings in effort, negating the effect of hiring freeze

CONCLUSION

The aspect of Digitization is often seen with a pinch of salt. By replacing human effort with automation, we tend to equate that with loss of jobs.

Though this strategy depends on the business, it need not often equate to job loss.

In our case, we ensured the time and efforts of our team members are used in value added work. As a side outcome, the impact of attrition was negated.

This in turn, converted into additional revenue as we started accepting projects that were held back due to resource crunch.

ABOUT THE AUTHOR

**Sumanth Shampur**, ([sumanth.shampur@gmail.com](mailto:sumanth.shampur@gmail.com), +919980311553) an IT professional working with DXC Technology, Bengaluru, in the capacity of an Account Delivery Leader.

A technical and project management enthusiast, often working with members to look at continuously improving their approach to delivery.

As an advocate of Project Management, volunteers with PMI India as a Senior Champion. Has PMP, CSM, SAFe 4 Agilist, ITIL certifications to his credit.

Has been a finalist in the Pitch Perfect contest held in the Project Management National Conference in New Delhi in 2018.