Quality Assurance in Banking

When less is more: Reducing cost of quality to unlock superior quality assurance

Remember how we managed banking and finance even a couple of decades back? With net banking, mobile banking, and e-wallets, the long queues to the bank and the paper cheques have become things of the past. It's incredible how much technology has changed the face of the banking and finance sector, with secure digital payment options and superior data protection mechanisms completely transforming customer experiences. However, this transformative advancement in banking comes with a cost. The increased reliance on technology to provide efficiency and performance necessitates a more stringent focus on the cost of quality, with poor quality resulting in significant risks and heavy penalties.

What is cost of quality?

Cost of Quality (CoQ) allows companies to examine the balance between how much of their resources are spent on prevention and maintaining standards versus how much internal and external quality failures cost the company. The root cause of significant quality gaps in banking & financial services is the gap in product, process, or human knowledge and oversight. Quality assurance is critical to business growth and customer satisfaction, causing a significant impact on the top and bottom line if not done right.

For example:

- An underwriter erroneously failing to validate one of the numerous mortgage disbursement parameters can lead to millions of dollars becoming a bad loan.
- A new payment processing agent can accidentally select a wrong currency or decimal value, thereby jeopardizing the transaction.

Human or process errors are the most common and most significant organizational risk. These scenarios clearly show how hefty the cost of human errors can be. This type of error occurs with human mistakes resulting in incorrect input due to incomplete information, incomplete understanding, inconsistent processing, genuine input error, or poor data quality. However, processing such an error may seriously affect the output and potentially lead to a loss.

What are the factors that lead to errors?

There are a few other issues that directly or indirectly cause human errors:

Lack of qualified & experienced staff without operational experience or familiarity with the core systems or applications

Many times, errors occur due to **oversights in repetitive tasks**. For example, let us assume that ABC organization provides financial services to the client and processes their client's credit rating based on various parameters. If the processor makes an input error by inserting $1,000,000 instead of $1,00,000, the client's credit rating may change from B to AA. This critical human error can have disastrous results, like portraying an incorrect picture of the client's creditworthiness in markets and overestimating debt repayment capacity.

The **underlying applications often require changes** to perform upgrades or add new features, and a lack of training or awareness of these changes increases the chances of errors.

Errors tend to occur when **organizations do not update the SOPs**. With old or unavailable information, outdated SOPs increase the chances of errors and the average handling time (AHT).

From industry samples, we have seen that, on average, organizations consider only 10%-15% of the application processes for monitoring and audits, opening up a high probability of critical errors left out of this sample size. These errors might remain unnoticed until a customer discovers and highlights them, by which time it is too late for corrections.

The **heavy reliance on manual effort** makes bank processes vulnerable to errors and costly re-works. An average mortgage application goes through 35 manual handoffs before completion, increasing the chances of human error. Overly complex products that require too many manual processes cause these expensive errors. For instance, the Australia-based Bank of Queensland had to refund $34.5 million to its customers after discovering interest rate and fee errors dating back almost a decade. The bank also expects to incur an additional $11.5 million in costs to clean up the problems that impacted 4% of its customers.

Here are some facts and figures which prove that human errors cost the most to the organization

For a leading European bank , $175 million represents duplicate payment that was due to operational scheduling error

According to a report from IBM, bad data alone costs US businesses more than $3.1 trillion a year

From 2014-2019, 83 banks have reported 778,639 loss events, totaling $533 billion

Financial Institutions have taken a hit of $10.4 billion in global fines & penalties related to AML, KYC, Data Privacy & MiFID (Markets in Financial Instruments Directive). Most organizations have blamed technology & human errors for these heavy penalties

Human errors cause financial losses and result in poor customer experience, reputational damage, lower share price or money, and time spent responding to regulators.

Leveraging technology to minimize errors

The primary way to reduce errors is to focus on humans and processes. Let's focus on humans first. To minimize human error, we need to prevent humans from making mistakes. We can do this by changing human behavior – the behavior of inputting the wrong information, miss executing specific steps, or miscommunicating. How can we achieve this? We must first predict when and where the error is likely to happen and accordingly prompt humans to offset the behavior that leads to a mistake.

A solution with a predictive model can identify the factors that collectively contribute to a higher likelihood of human error by helping select more error-prone samples. At Wipro, we recently deployed a predictive model (adaptive boost model) that can identify ~75% of the errors by merely selecting 30% of samples in one of our client's mortgage underwriting processes. The primary concern with this process was high human errors posing a risk of credit loss due to approving ineligible loan applications. At the same time, there were revenue losses in the case of disapproving an eligible loan application. We collected twenty-seven parameters for 6787 loans processed and performed data cleansing with 2671 valid data points. The predictive analytics model clustered out the most likely factors to cause high critical errors. We then prompted the inputs to loan processors to work accordingly, thereby successfully reducing the critical errors from 5.6% to 1.4%.

Another way of reducing human errors is through process automation and workflow technologies by leveraging robotics and ICR/OCR to capture digital information. Although robotics and workflow engines are helpful technologies, you can only use them meaningfully in standardized cases and repetitive processes.

A digital process adoption solution can address these challenges

Transforming an organization's processes to achieve efficiency and minimize errors can face the following challenges:

- Banks' legacy systems are complex, and replacing them without impacting running operations may not be easy.
- They are expensive to upgrade.
- Enterprise approval is required to introduce any technology in the bank's environment, which is often time-consuming.

Partnering with a premier digital adoption platform provider with a cross-sector presence can help address the above issues. A "no-code" digital adoption platform can help users learn workflows and reduce the risk of human errors through various features like smart tips, auto-fill, and flow automation.

How adopting this platform can solve the challenges mentioned above:

Challenges	How a digital process adoption solution helps
Lack of qualified and experienced staff	Features like **self-help**, **task list**, and **pop-up** can help newly onboarded users to learn in the workflow. These new resources can leverage engaging training content and knowledge-check quizzes through task lists and pop-ups. Expected benefit – **Proficiency** improvement by **1.25X-1.35X**
Changes in underlying application or process	**Beacons** and **pop-ups** can make users aware of any newly added feature or application upgrade, leveraging them for learning or training. Also, the in-app guidance can help users complete each step of a process. Expected benefit – **Error reduction** to up to **75%**

Challenges	How a digital process adoption solution helps
Outdated SOPs	**Interactive SOPs** can guide users to complete the task step-by-step accurately. Expected benefit – **Error reduction** to up to **75%**. Reduction in Average Handling Time **(AHT)**
Monitoring by quality analyst	This platform can perform **real-time monitoring**, sending feedback on a real-time basis to the process manager/ QA if any user skips a step/field or overrides the instruction given in the form of tips. As a result, the process manager/QA can immediately nudge the user to correct the error. Expected benefit - **Real-time monitoring**
Heavy reliance on manual efforts	With a feature like Smart Tips (Help tip and Validation tip), the platform can help the user correct input information and, if required, restrict the user from moving ahead before inputting the correct and valid information, reducing the chances of errors. It can also have an auto-fill feature to input pre-defined standard or critical data in specific fields. A flow automation feature can complete fields on behalf of humans and stop only when human intervention is required. Expected benefit – **75% error reduction**, improves user **productivity** by **25-37%**
Legacy systems are complex. Expensive to upgrade.	This platform can run as an overlay on the underlying system and may not make changes or capture data from the underlying application. Moreover, the platform can work in an open ecosystem, which helps organizations seamlessly integrate their existing enterprise-level platforms (e.g., CRM, LMS, Analytical Tools, Loan Origination Software, etc.). Expected benefit – **No replacement, upgrade, or customization of legacy systems, No data leakage**
Time-consuming enterprise approvals	The platform can support cloud and on-premise deployment, adding single-line JS for internally built applications or systems. Users will require a browser extension to install third-party vendor applications, generally pushed automatically by IT. Expected benefit – **Less time required for approval. Easy to deploy**

Conclusion

Though several factors can impact the cost of quality, operational errors are the most significant and risky for any organization. Some of these errors are human-driven, some are technology-driven, and few are beyond the control of humans and technology. Whatever the type may be, we can reduce the impact of operational errors on the cost of quality by working on the factors within our control. A digital adoption solution can provide both the analytics and a platform to help eliminate manual errors and improve quality, proficiency, productivity & accuracy at work while ensuring process adherence and compliance, enabling businesses to improve efficiency and focus on growth.

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Mital Shah has 15+ years of experience across SDLC phases for multiple Banking & Financial services(BFS) institute globally. Seasoned in solution design and implementing Business Transformation & Enterprise solutions across business operations & technology lifecycle. Over the last 4 years within Wipro, he has lead design, solution, and implementation of over 800+ digital bots, multiple products implementations ,and setting up the Business Change & Transformation Practice; enabling significant value for our BFS customers globally.

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