CHAPTER – 7

ANALYSIS AND ENHANCEMENT

A business process is a combination of activities to be performed based on standard operating procedures (SOP) by a set of resource at a stipulated time and within certain cost limits. Considering all the factors, the smooth flow in business is vital for its further growth and development. Thus the efficiency and the effectiveness of a business processes activities are very important and form the crux of the business. Further to this all businesses are customer-centric and work towards customer satisfaction and ultimate ecstasy. Flaws in the business process lead to angry unsatisfied customers, back-log, high turn-around-time (TAT), low service levels and finally lack of customer loyalty.

Regular, continuous and rigorous monitoring of the business process is mandatory. Business process analysis include

- Process verification – verifying the correctness of a process
- Process performance analysis – analyzing the efficiency and effectiveness of a process

7.1 Customer Feedback Analysis

Before entering into the field of verification and process analysis, a survey was done for a group of customers who have experienced insurance claim process. The desired questionnaire was developed and was handed over to the call center team who indeed did the calling.

The questionnaire was designed to get inputs from the customer on the following parameters

- Transparency in the claim process
- Clarity with the process
- Customer relationship and interaction
- Happy with the insurance company
- Future shift to another insurance company

The consolidated summary of the feedback received from the customer was
Table 7.1 Summary of the customer feedback analysis

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Don’t know / Can't say</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency</td>
<td>7.41%</td>
<td>17.28%</td>
<td>32.10%</td>
<td>43.21%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Clarity</td>
<td>12.35%</td>
<td>18.52%</td>
<td>27.16%</td>
<td>39.50%</td>
<td>2.47%</td>
</tr>
<tr>
<td>Customer relationship</td>
<td>39.51%</td>
<td>43.21%</td>
<td>4.94%</td>
<td>8.64%</td>
<td>3.70%</td>
</tr>
<tr>
<td>Happy with the insurance company</td>
<td>13.58%</td>
<td>45.68%</td>
<td>22.22%</td>
<td>16.05%</td>
<td>2.47%</td>
</tr>
<tr>
<td>Future Shift</td>
<td>50.62%</td>
<td>16.05%</td>
<td>16.05%</td>
<td>7.41%</td>
<td>9.87%</td>
</tr>
</tbody>
</table>

The feedback is graphical represented below

Fig 7.1 Graphical representation of Customer feedback

The consolidation of the customer feedback revealed the following key points
- The customers strongly disagree on the transparency in the claim process
- The customers also strongly disagree on the clarity in the activity
- The customers strongly agree in the future shift of the insurance company during the time of renewal
Having all these points, the reason for the lack of transparency and clarity has to be identified and then necessary counter-measures to be suggested.

7.2 Process Verification

Verification is an activity in which process models are analyzed to find errors in systems or procedures. There are various tools to verify process models. A classic example is Woflan which checks the soundness of a process.

7.2.1 Woflan

The development of the tool Woflan started at the end of 1996 and the first version was released in 1997. Basically, Woflan takes a workflow process definition from some workflow management system, converts it into a net, and checks whether or not the net is a sound WF-net or whether one sound WF-net is a subclass of a second sound WF-net under life-cycle inheritance. Furthermore, using standard net-analysis techniques as well as those tailored to WF-nets, the tool provides diagnostic information in case the net is not a sound WF-net.

Using the Woflan plug-in, one can check whether a Petri net is a sound workflow net.

7.2.2 Soundness

A Petri net is a workflow net (or WF-net) if and only if the following three requirements hold:

- There is only one source place, that is, only one place without incoming arcs.
- There is only one sink place, that is, only one place without outgoing arcs.
- Every node is on some path from the only source place to the only sink place.

In workflow terms, a token in the source place corresponds to the arrival of a new running case for the workflow at hand, while a token in the sink place corresponds to the completion of a running case. As the goal of a workflow is to complete running cases, every task in the workflow should contribute in doing so. Hence, they should be on some path from arrival to completion.

However, completion cannot be taken for granted. For this reason, the soundness property has been defined on WF-nets. A WF-net is sound if and only if the following four requirements hold:

- Safeness
- Proper completion
- Option to complete
- Absence of dead parts

The soundness property is considered to be a minimal sanity check for workflows.

Apart from checking whether a Petri net is a sound workflow net, Woflan can also give detailed diagnostic information on why the net is either not a WF-net or not sound. While the former is quite straightforward, the latter is more complicated as it includes the behavior of the net. For the latter, Woflan uses the fact that soundness of a WF-net corresponds one-to-one with the boundedness and liveness of the short-circuited net, where the short-circuited net is obtained from the net by adding an extra transition with the sink place as input and the source place as output. Thus, in a way, by short-circuiting the net we push a completed case back as a new case.

Woflan uses the well-known boundedness and liveness properties. Woflan checks whether the net is a WF-net. If not, then information is given (source places, sink places, nodes not on any path). If it is a WF-net, then Woflan first decides the boundedness property (on the short-circuited net), as deciding liveness requires a full state space which is only possible if the short-circuited net is bounded. For deciding boundedness, Woflan decides the following three properties in the given order, until one is positive:

- The short-circuited net is S-coverable. If so, it is bounded.
- The short-circuited net is covered by a positive place invariant. If so, it is bounded.
- The short-circuited net contains no unbounded places.

As the first two properties are structural properties (they abstract from behavior), they are less complex to decide. For this reason, we try them first. The S-coverable property is tried first as it has an appealing meaning in the context of workflow. Typically, a running case can be divided into a number of aspects (say, data fields), which are to be filled if necessary by the process. At completion, a subset of the aspects has been given certain values, and the case can be closed. Any aspect can therefore have a number of values, or a number of states. As such, any aspect should be coverable by an S-component, which should make the net S-coverable. A place that is not covered by any S-component does not relate to any aspect of the case, and is therefore suspicious. However, note that it is possible for a sound net to be not S-coverable.
If the net is not S-coverable, Woflan uses two other well-known properties to preliminary check whether the net is sound:

- A free-choice net that is bounded and live is also S-coverable.
- A well-handled net that is bounded and live is also S-coverable.

Hence, a net that is not S-coverable can only be bounded and live if it is not free-choice and not well-handled. For this reason, Woflan first checks the free-choice property if the short-circuited net is S-coverable. If the short-circuited net is free-choice, the net is not sound. Otherwise, Woflan checks whether it is well-handled, that is, whether PT-handles or TP-handles exist. If no handles exist in the short-circuited net, the net is not sound. However, the diagnosis process will continue to provide additional diagnostic information.

If the short-circuited net is unbounded, then Woflan will report this, along with:

- the places which are unbounded,
- the marking-transition pairs which indicate that firing the given transition in the given marking effectively removes the option to remain bounded,
- places which are not covered by S-components,
- places that are not covered by a positive place invariant, and
- TP-handles, as these can put multiple tokens in one place.

If the net is bounded, Woflan will first check whether no transition is dead. If some transitions are dead, Woflan will report them as such. Otherwise, Woflan checks whether the short-circuited net is live. If not, it will report so, along with:

- The transitions that are not live,
- The marking-transition pairs which indicate that firing the given transition in the given marking effectively removes the option to reach proper completion (one token in the sink place), and
- PT-handles, as these transitions could possible block due to a lack of tokens.
7.2.3 Insurance Motor Claim Process Verification
Consider a fragment of an insurance motor claim process

Table 7.2 Event Log of the existing insurance claim process

<table>
<thead>
<tr>
<th>Case ID</th>
<th>Event ID</th>
<th>DD/MM/YYYY</th>
<th>Activity</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4589213</td>
<td>02/10/2011</td>
<td>register claim request</td>
<td>Sam</td>
</tr>
<tr>
<td>1</td>
<td>4589214</td>
<td>02/10/2011</td>
<td>collect documents</td>
<td>Mano</td>
</tr>
<tr>
<td>1</td>
<td>4589215</td>
<td>03/10/2011</td>
<td>appoint surveyor</td>
<td>Mano</td>
</tr>
<tr>
<td>1</td>
<td>4589216</td>
<td>04/10/2011</td>
<td>check 64vb confirmation</td>
<td>Ravi</td>
</tr>
<tr>
<td>1</td>
<td>4589217</td>
<td>04/10/2011</td>
<td>Decide</td>
<td>Ravi</td>
</tr>
<tr>
<td>1</td>
<td>4589218</td>
<td>04/10/2011</td>
<td>approve the claim</td>
<td>Raj</td>
</tr>
<tr>
<td>1</td>
<td>4589219</td>
<td>06/10/2011</td>
<td>repair the vehicle</td>
<td>Sam</td>
</tr>
<tr>
<td>1</td>
<td>4589220</td>
<td>07/10/2011</td>
<td>submit invoice</td>
<td>Raj</td>
</tr>
<tr>
<td>1</td>
<td>4589221</td>
<td>10/10/2011</td>
<td>payment reimbursed from insurance company</td>
<td>Ravi</td>
</tr>
<tr>
<td>2</td>
<td>4579213</td>
<td>12/10/2011</td>
<td>register claim request</td>
<td>Sam</td>
</tr>
<tr>
<td>2</td>
<td>4579213</td>
<td>12/10/2011</td>
<td>collect documents</td>
<td>Mano</td>
</tr>
<tr>
<td>2</td>
<td>4579213</td>
<td>13/10/2011</td>
<td>appoint surveyor</td>
<td>Mano</td>
</tr>
<tr>
<td>2</td>
<td>4579213</td>
<td>16/10/2011</td>
<td>repair the vehicle</td>
<td>Sam</td>
</tr>
<tr>
<td>2</td>
<td>4579213</td>
<td>17/10/2011</td>
<td>submit invoice</td>
<td>Raj</td>
</tr>
<tr>
<td>2</td>
<td>4579213</td>
<td>18/10/2011</td>
<td>check 64vb confirmation</td>
<td>Ravi</td>
</tr>
<tr>
<td>2</td>
<td>4579213</td>
<td>19/10/2011</td>
<td>repudiate the claim</td>
<td>Ravi</td>
</tr>
</tbody>
</table>

The above insurance event log has to be converted into either MXML / XES format, for it to be analyzed using ProM5.2/6. This conversion is executed using the DISCO tool.
**Stage 1:** The CSV file is first imported into the tool

![Fig 7.2 - DISCO Tool showing an event log imported](image)

**Stage 2:** Then click the “Start Import” button on the right hand bottom corner of the screen and the map is generated immediately.

![Fig 7.3 - Screen shot of the map generated using the DISCO tool for the above event log](image)
Stage 3: The final stage is to export the file into the desired format either MXML or XES.

**Fig 7.4 - Exporting the file into a XES file**

The exported file in the MXML format can be used in ProM 5.2 and the XES format in ProM 6.

Stage 1: The XES file is imported into the ProM framework

**Fig 7.5 - Importing a XES file in the ProM 6 framework**
The file is imported by clicking the “Import” button on the top right side corner and then the required file is selected.

Stage 2: Using the alpha algorithm miner, a petri net is generated for the imported event log.

Fig 7.6 - Mining the event log using the alpha algorithm miner

Fig 7.7 - Petri net generated using the alpha miner
Stage 3: The generated Petri net is then analyzed using the Woflan plug in and the report is generated.

Fig 7.8 - Woflan diagnosis report of the existing insurance claim process

First Instance:

When a vehicle meets with an accident, the vehicle is immediately either brought or towed to the nearby authorized dealer workshop. The dealer workshop immediately informs the respective insurance company through their call center. The insurance company registers the claim request and appoints a surveyor for the damaged vehicle. The dealer workshop collects all the necessary documents (Registration certificate, Driving license, policy copy and police certificate/FIR) from the customer and forward the same to the insurance company through their appointed surveyor. The insurance company on receipt of the claim intimation, checks the 64VB conformance.

64VB Conformance:

As per The Insurance Act 1938, section 64VB states that “No risk to be assumed unless premium is received in advance”.

“No insurer shall assume any risk in India in respect of any insurance business on which premium is not ordinarily payable outside India unless and until the premium payable is received by him or is guarantee to be paid by such person in such manner and within such
time as may be prescribed or unless and until deposit of such amount as may be prescribed, is made in advance in the prescribed manner”.

As per the clause, if the premium is receipted in the insurance company, any claim is payable. If not receipted, either a cheque bounces or premium collected from the customer by the agent not handed over to the insurance company.

In the above case, the 64VB clause is verified and the insurance company decides to approve the claim. The dealer repairs the vehicle and submits the invoice/bill to the insurance company. The insurance company then settles the claim and forwards the settlement to the dealer workshop.

**Second Instance:**

In the second instance, the dealer workshop repaired the vehicle before verifying the 64VB confirmation from the insurance company. In this case, the clause was not confirmed and hence the claim was repudiated. As result, the customer was put in distress and the payment from the insurance company was denied to the dealer workshop.

**Analysis:**

From the above verification, it was found that the net was not sound as few activities were not completed. The check-point from the dealer workshop did not include the 64VB confirmation from the insurance company. This had a tri-party effect

- **Customer** was unhappy
- **Dealer workshop** not able to get his settlement
- **Insurance Company** loses customer loyalty

The suggestion was to just to re-arrange the sequence of activities, whereby the 64VB confirmation was made as a mandatory check. After re-alignment of the activities, a fragment of the insurance claim event is given below.
### Table 7.3 Event log of the revised insurance claim process

<table>
<thead>
<tr>
<th>CaseID</th>
<th>EventID</th>
<th>DD/MM/YYYY</th>
<th>Activity</th>
<th>resource</th>
</tr>
</thead>
<tbody>
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<tr>
<td>1</td>
<td>4589214</td>
<td>02/10/2011</td>
<td>collect documents</td>
<td>mano</td>
</tr>
<tr>
<td>1</td>
<td>4589215</td>
<td>03/10/2011</td>
<td>appoint surveyor</td>
<td>mano</td>
</tr>
<tr>
<td>1</td>
<td>4589216</td>
<td>04/10/2011</td>
<td>check 64vb confirmation</td>
<td>ravi</td>
</tr>
<tr>
<td>1</td>
<td>4589217</td>
<td>04/10/2011</td>
<td>Decide</td>
<td>ravi</td>
</tr>
<tr>
<td>1</td>
<td>4589218</td>
<td>04/10/2011</td>
<td>approve the claim</td>
<td>raj</td>
</tr>
<tr>
<td>1</td>
<td>4589219</td>
<td>06/10/2011</td>
<td>repair the vehicle</td>
<td>sam</td>
</tr>
<tr>
<td>1</td>
<td>4589220</td>
<td>07/10/2011</td>
<td>submit invoice</td>
<td>raj</td>
</tr>
<tr>
<td>1</td>
<td>4589221</td>
<td>10/10/2011</td>
<td>payment reimbursed from insurance company</td>
<td>ravi</td>
</tr>
<tr>
<td>2</td>
<td>4579213</td>
<td>12/10/2011</td>
<td>register claim request</td>
<td>sam</td>
</tr>
<tr>
<td>2</td>
<td>4579214</td>
<td>12/10/2011</td>
<td>collect documents</td>
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<tr>
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<td>ravi</td>
</tr>
<tr>
<td>2</td>
<td>4579217</td>
<td>19/10/2011</td>
<td>repudiate the claim</td>
<td>ravi</td>
</tr>
</tbody>
</table>

After the rearrangements of the activities in the insurance claim process the event log was taken. This event log was used to generate the map with the DISCO tool.

![Fig 7.9 Map generated using the DISCO tool](image)
The petri net was generated and the petri net was analyzed for soundness using the Woflan plug-in in the ProM framework. The resultant was that the reworked process flow was a sound workflow net.

![Woflan Diagnosis report of the revised insurance claim process](image1)

**Fig 7.10 - The Woflan diagnosis report of the revised insurance claim process**

The importance of 64vb confirmation in the insurance event flow can further be validated by the “Decision Point Analysis” tool in the ProM framework. The screen shot of the existing process flow is shown below.

![Screen shot of the Decision point analysis of the existing process](image2)

**Fig 7.11 - Screen shot of the Decision point analysis of the existing process**
The petri net on analysis clearly shows that the flow is completely blocked after the “repudiation of the claim process”.

After realignment, the decision point analysis indicated the importance of 64VB confirmation.

Fig 7.12 - Screen shot of the Decision point analysis of the revised process

The importance of 64VB confirmation is automatically highlighted.

7.3 Performance Analysis of the Insurance Claim Process

The performance of a process or organization can be defined in different ways. Typically, three dimensions of performance are identified:

- Time
- Cost
- Quality.

For each of these performance dimensions, different Performance Indicators can be defined. There exist many different performance indicators, which can be time-related (e.g. throughput time of a process, service time of an activity), cost-related (e.g. process costs, material costs) or quality-related (e.g. visiting frequencies, error rates). For every different kind of organization, different performance indicators are of importance. The indicators that
best represent the mission and strategy of an organization are called its **Key Performance Indicators (KPIs)**. They reflect the critical success factors of the organization and help the organization to define and measure progress towards its organizational. The well-known Balanced Scorecard (BSC) is often used to translate the mission and strategy of an organization into a comprehensive set of KPIs. The BSC results in a set of planned values for the KPIs of the organization. The actual values of these KPIs can then be monitored and analyzed to evaluate the performance status of the organization.

The following performance indicators can be identified for the time dimension.

- **The lead time** (also referred to as flow time) is the total time from the creation of the case to the completion of the case. In terms of a WF-net, this is the time it takes to go from source place i to sink place o. One can measure the average lead time over all cases. However, the degree of variance may also be important, i.e., it makes a difference whether all cases take more or less two weeks or if some take just a few hours whereas others take more than one month. The service level is the percentage of cases having a lead time lower than some threshold value, e.g., the percentage of cases handled within two weeks.

- **The service time** is the time actually worked on a case. One can measure the service time per activity, e.g., the average time needed to make a decision is 35 minutes, or for the entire case. Note that in case of concurrency the overall service time (i.e., summing up the times spent on the various activities) may be longer than the lead time. However, typically the service time is just a fraction of the lead time (minutes versus weeks).

- **The waiting time** is the time a case is waiting for a resource to become available. This time can be measured per activity or for the case as a whole. An example is the waiting time for a customer who wants to talk to a sales representative. Another example is the time a patient needs to wait before getting a knee operation. Again one may be interested in the average or variance of waiting times. It is also possible to focus on a service level, e.g., the percentage of patients that has a knee operation within three weeks after the initial diagnosis.
• The **synchronization time** is the time an activity is not yet fully enabled and waiting for an external trigger or another parallel branch. Unlike waiting time, the activity is not fully enabled yet, i.e., the case is waiting for synchronization rather than a resource.

Performance indicators can also be defined for the cost dimension. Different costing models can be used, e.g., Activity Based Costing (ABC), Time-Driven ABC, and Resource Consumption Accounting (RCA). The costs of executing an activity may be fixed or depend on the type of resource used, its utilization, or the duration of the activity. Resource costs may depend on the utilization of resources. A key performance indicator in most processes is the average utilization of resources over a given period.

The quality dimension typically focuses on the “product” or “service” delivered to the customer. Like costs, this can be measured in different ways. One example is customer satisfaction measured through questionnaires. Another example is the average number of complaints per case or the number of product defects. Whereas verification focuses on the (logical) correctness of the modeled process, performance analysis aims at improving processes with respect to time, cost, or quality. Within the context of operations management, many analysis techniques have been developed. Some of these techniques “optimize” the model given a particular performance indicator.

For an insurance motor claim process, there are four main stages

• **Initial loss survey** – When the vehicle meets with an accident, the insured brings the car to the authorized dealer workshop to repair the vehicle. The insured informs the insurer and submits all the relevant documents to the insurance company. The initial loss survey time is the taken by the insurer to appoint the surveyor.

• **Repair authorization** – This is the time taken by the insurance company to verify 64VB clause and decide to either honor or repudiate the claim.

• **Liability letter** – This is the time taken by the insurer to issue the liability letter to the dealer workshop.

• **Cheque preparation** – This is the time taken for the insurer to make the settlement to the dealer.
The above-mentioned four parameters are the KPI’s for the time dimension to be monitored for enhancing the process flow. Let us verify the KPI’s for the time factor using the ProM framework for the existing claim process. Using the ProM6 framework, the BPMN generated is shown below.

![BPMN Diagram](image1)

**Fig 7.13 - BPMN diagram generated for the existing claim process**

The corresponding time lines are also shown.

![Table View](image2)

**Fig 7.14 - Table view of the Basic performance analysis of the existing process**
Table 7.4 Time bucket analysis of the existing insurance claim process

<table>
<thead>
<tr>
<th>Initial Loss Survey</th>
<th>Repair Authorization</th>
<th>Cheque Preparation</th>
<th>Liability Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 working day</td>
<td>1 working day</td>
<td>7 working days</td>
<td>4 working days</td>
</tr>
</tbody>
</table>

Also it was found that the fitness of the existing model was 0.8888889

Fig 7.15 - Conformance checker showing the fitness of the existing model was 0.8888889

Analysis: The flow of activities can be represented as below

Fig 7.16 - Existing insurance claim process flow
The damaged car reached the dealer workshop and the claim gets registered with the insurance company. The dealer collects all the documents. The insurance company appoints the surveyor. The insurer then verifies 64VB clause, approves the claim. The vehicle is repaired and the invoice is generated. The invoice is sent to the insurance company which in turn issues the liability letter first and then reimburses the payment to the dealer workshop.

All the activities occur as a sequence one after the other. From the results generated from the ProM tool it is evident that at the four important points the time is relatively high.

At two places, the activities are made to happen parallel. By the time the surveyor is appointed and reaches the dealer workshop, the 64VB clause is verified. In the second stage, when the vehicle is getting repaired itself the liability letter is issued and the payment is reimbursed as soon as the invoice reaches the insurance company.

![Revised insurance claim process](image)

**Fig 7.17 - Revised insurance claim process**

The activities in the process were rearranged and parallel approach was adopted. The BPMN was generated from the new event log generated and the corresponding timelines were generated.
Fig 7.18 - BPMN generated for the revised insurance claim process

Fig 7.19 - Table view of the Basic performance analysis of the revised process

Table 7.5 - Time bucket analysis of the revised insurance claim process

<table>
<thead>
<tr>
<th>Activity</th>
<th>Average (working)</th>
<th>Frequency (working)</th>
<th>Scale (working)</th>
<th>Average (working)</th>
<th>Frequency (working)</th>
<th>Scale (working)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Loss Survey</td>
<td>0.5 working day</td>
<td>instant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repair Authorization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheque Preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liability Letter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.5 working day</td>
<td></td>
<td>instant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 working days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 working days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The fitness of the new process was found to be 1.0

7.4 Summary

With the time factor analysis and the feedback received from the customers, the motor claim process is restructured in such a way that few of the activities that happened in a sequential manner was now made to operate in a parallel / concurrent manner. Also the importance of few activities was highlighted. In the claim process, 64VB confirmation was neglected earlier rather was not given top priority activity but now it was understood that without the 64VB confirmation the process will not proceed.

This led to a lot of reduction in time whereby, the

- Efficiency of claim settlement improved
- Customer satisfaction increased
- Turnaround time for the claims settlement process improved
- Better utilization of resource
The comparison of the time bucket analysis for the KPI’s for the time dimension is explained below.

**Table 7.6 - Comparative time bucket analysis**

<table>
<thead>
<tr>
<th>Situation</th>
<th>Initial Loss Survey</th>
<th>Repair Authorization</th>
<th>Cheque Preparation</th>
<th>Liability Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>1 working day</td>
<td>1 working day</td>
<td>7 working days</td>
<td>4 working days</td>
</tr>
<tr>
<td>After</td>
<td>0.5 working day</td>
<td>instant</td>
<td>2 working days</td>
<td>3 working days</td>
</tr>
</tbody>
</table>

There is a clear evidence of reduction in the time taken

- to approve the claim process
- to issue the liability letter and
- reimbursement of the money to the dealer workshop

![Graphical Representation of the Comparative time bucket analysis](image-url)