

# ENHANCING VERIFICATION AND REVIEW PROCESSES

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## 1.0 Introduction

The client delivers a range of engineering services to its customers including **report** deliverables.

A standard quality assurance process is followed in order to ensure that the deliverables contain **minimal errors**. The two processes are:

**Verification** checks that a deliverable does not contain technical or editorial errors.

**Review** ensures that the correct methodology is used.

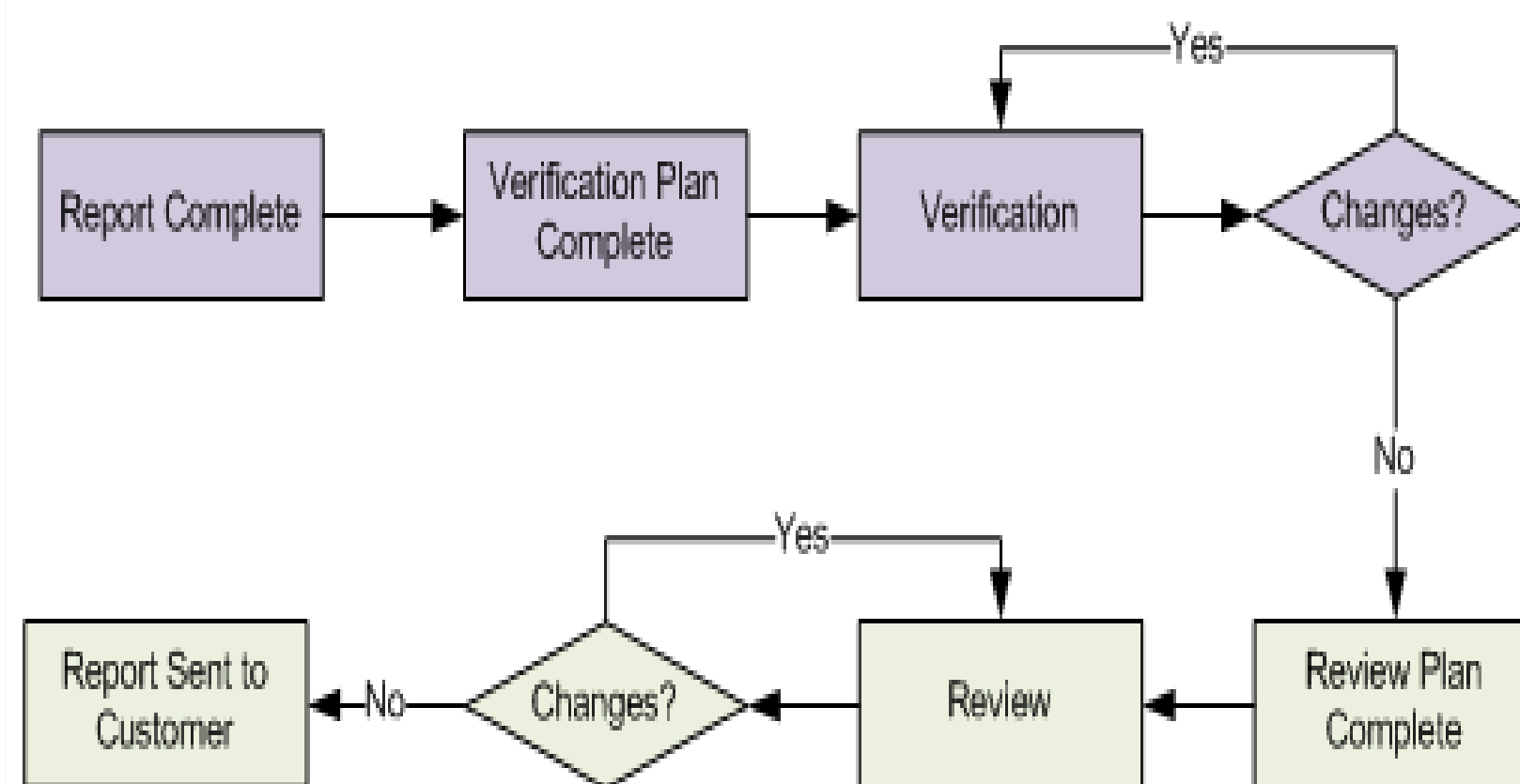


Figure 1: Current Verification and Review Processes

Prior to the Verification and Review (V&R) processes, a **Verification Plan** and a **Review Plan** are completed. This outlines how the V&R will be performed.

Currently, some errors are not caught by the V&R processes and as a result are found by customers. In order to reduce these incidences, the client has asked the team to improve the V&R processes.

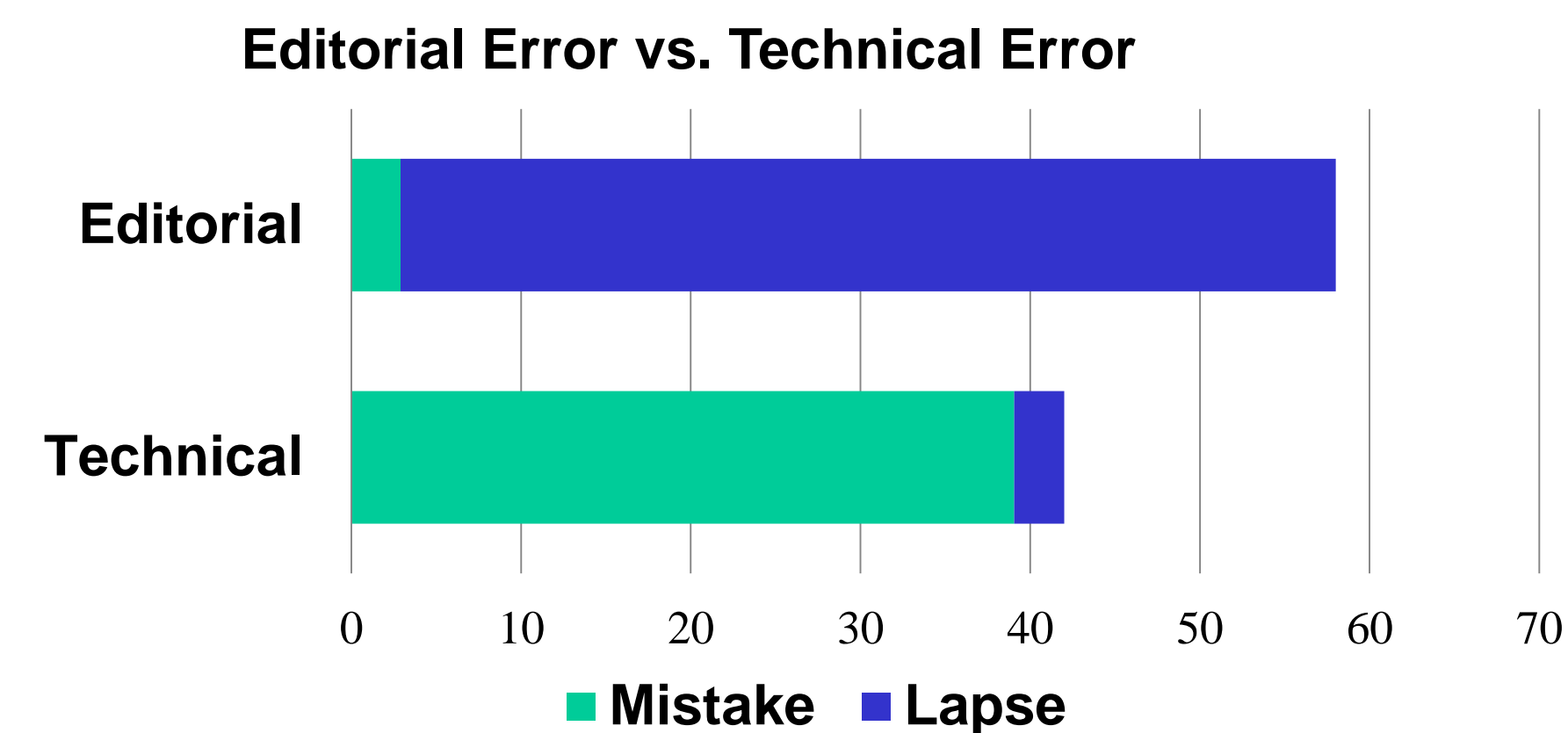
### 1.1 Project Objective

Redesign the V&R Processes to reduce errors found in deliverables.

## 2.0 Analysis

### 2.1 Quantitative

**Verification errors** are errors that are found in deliverables which were missed in the Verification process. The following graph illustrates the breakdown of Verification errors into editorial / technical and mistake / lapse categories.



- Editorial errors are mostly **lapses** which implies that the verifier did not follow through with checking for factors such as spelling, grammar and formatting throughout the entire document.
- Most technical errors were **mistakes** meaning the verifier lacked appropriate knowledge to identify the errors.

### 2.2 Gap Analysis

A gap analysis performed using information gathered in surveys and interviews showed provided areas of focus for process improvement. The most significant gaps were determined based on impact of the gap and are the primary focus of the recommendations.

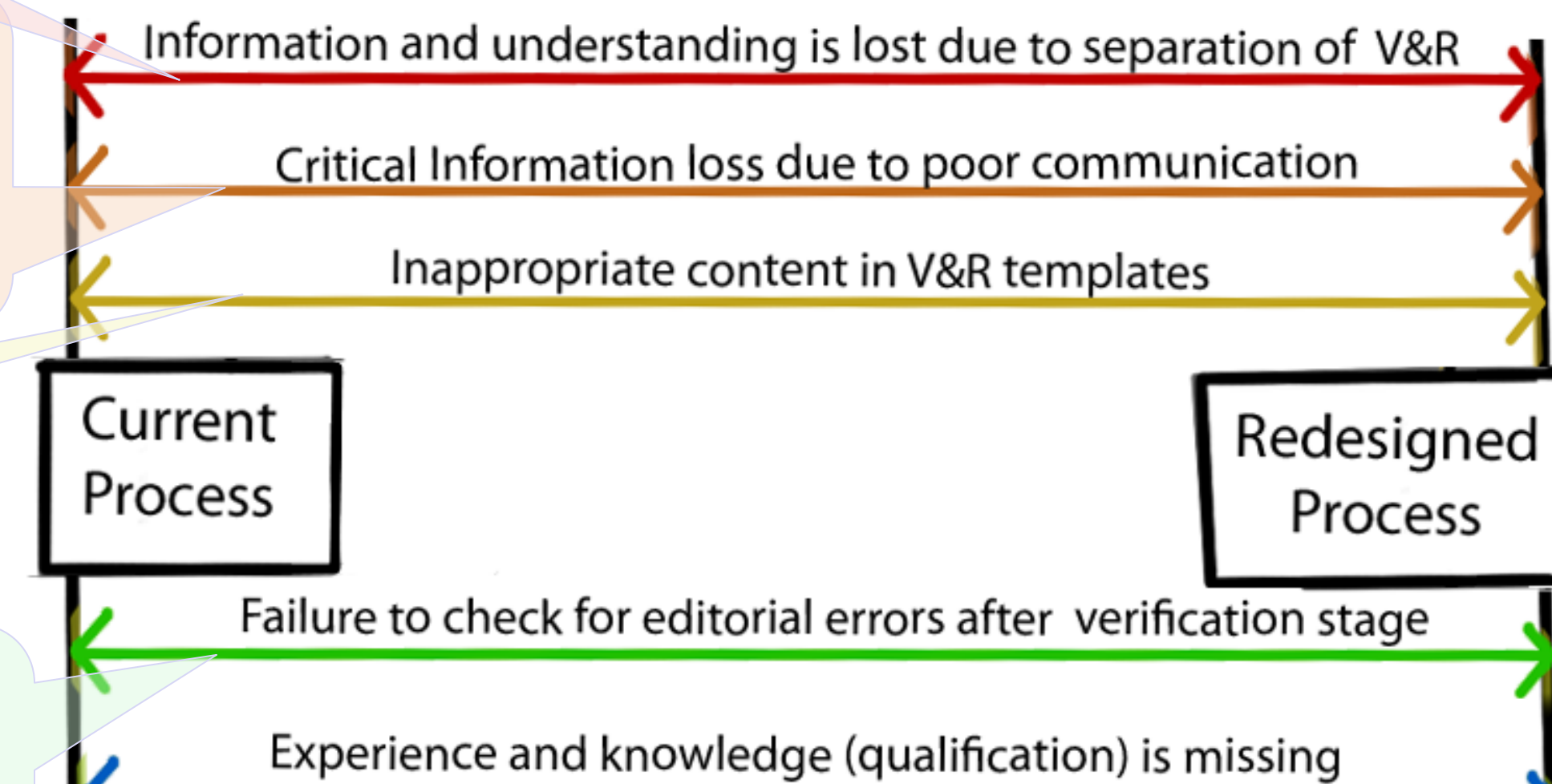
“The two processes often overlap ...time is wasted performing the same checks twice.”

“the project should be set up with the three parties (author, verifier, reviewer) collaborating from the beginning.”

“The current plan template is not useful.”

“Verifiers and reviewers are chosen based on their technical competency. We shouldn't reply on them for editorial review.”

#### Most Significant



#### Least Significant

Figure 2: Gap Analysis

## 3.0 Recommendations

Figure 3: Redesigned V&R Processes

Meeting with subject matter experts to evaluate solution, analytical concepts and assumptions to ensure optimal solution and to catch technical errors. This bridges the information gap caused due to lack of operations experience or knowledge about parametric conditions. It helps in avoiding re-work

Separates editorial tasks from V&R processes; task is performed after all technical work and editing has been completed. Addresses the high occurrence of editorial errors due to lapses

The combination of the verification and review processes for certain directorates in order to streamline the V&R processes and to prevent loss of information between the two processes.

Meeting to communicate the purpose of the report to verifier/reviewer. This bridges the information gap caused by lack of communication

### 3.1 Further Recommendations

- Heuristic redesign of the V&R templates
- Ensure V&R is completed by employees with appropriate qualifications

Future Work will entail implementation and testing in order to evaluate the recommendations

