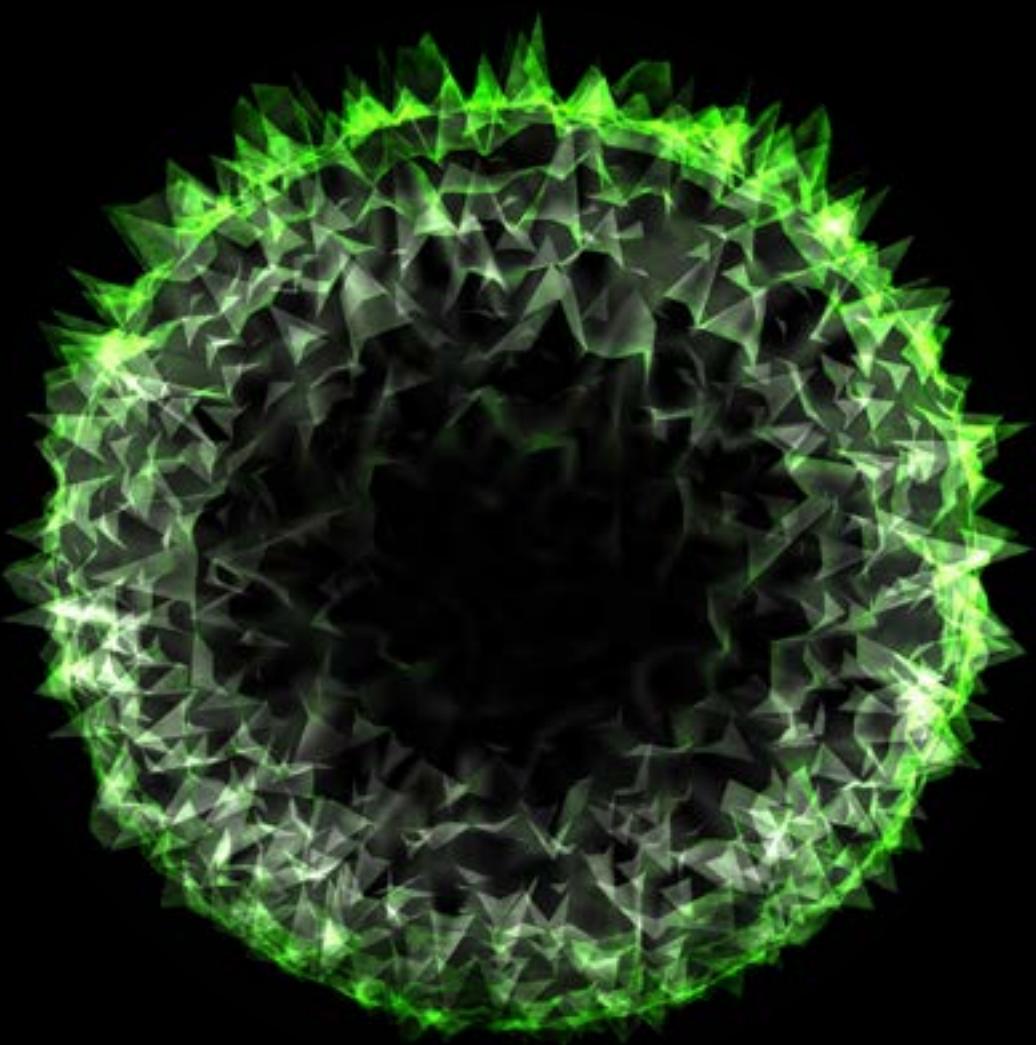


# Deloitte.



## Preventive analytics

Predict to prevent

June 2019

Risk Advisory



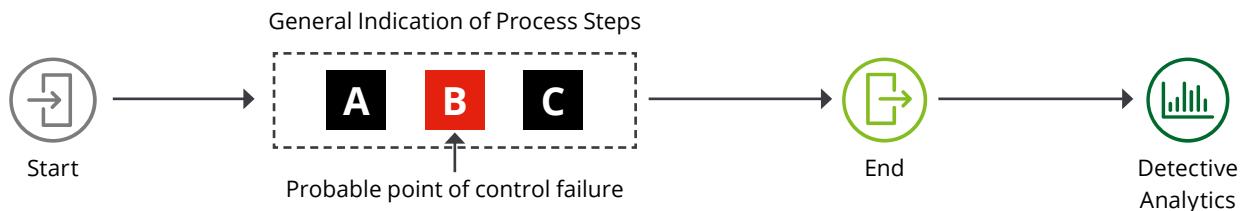
Traditional risk assessment and control failure detection mechanism are questioned constantly for benefits reaped by the business and its effectiveness in preventing control failures and fraud occurrences. The need of the hour is to leverage data applying powerful artificial intelligence algorithms to deliver preventive risk alerts. The quality of protection delivered through risk alerts services and suggested solutions (Root cause analysis) to the risk will be the most important differentiating factor and key to business success for robust control environment.



## Are your business processes reeling with these pain points?

-  An identified critical issue occurring due to control gaps, process inefficiency or non-compliance
-  A recurring issue leads to sizeable financial/reputational losses due to non-identification of complex reasoning behind it
-  A failure to identify the underlying cause of an issue
-  An inability to predict the impact of a failure in the future

Traditionally we would go about performing Root Cause Analysis – RCA to understand what has already happened.



## Flaws in the process of Detective analytics

-  Limited to standard trending analysis and visual discovery
-  Delivers only high level insights into the causes
-  Fails to identify synergistic impact of various causes
-  Incapable of tracing the future occurrence or re-occurrence of a failure
-  Requires significant SME hours for manual assessment to understand root causes
-  Requires significant resources on manually interpreting data from multiple touch points to identify the root cause

But what if we strengthen your process controls by identifying the issue on a real-time basis?

## Why our solution?

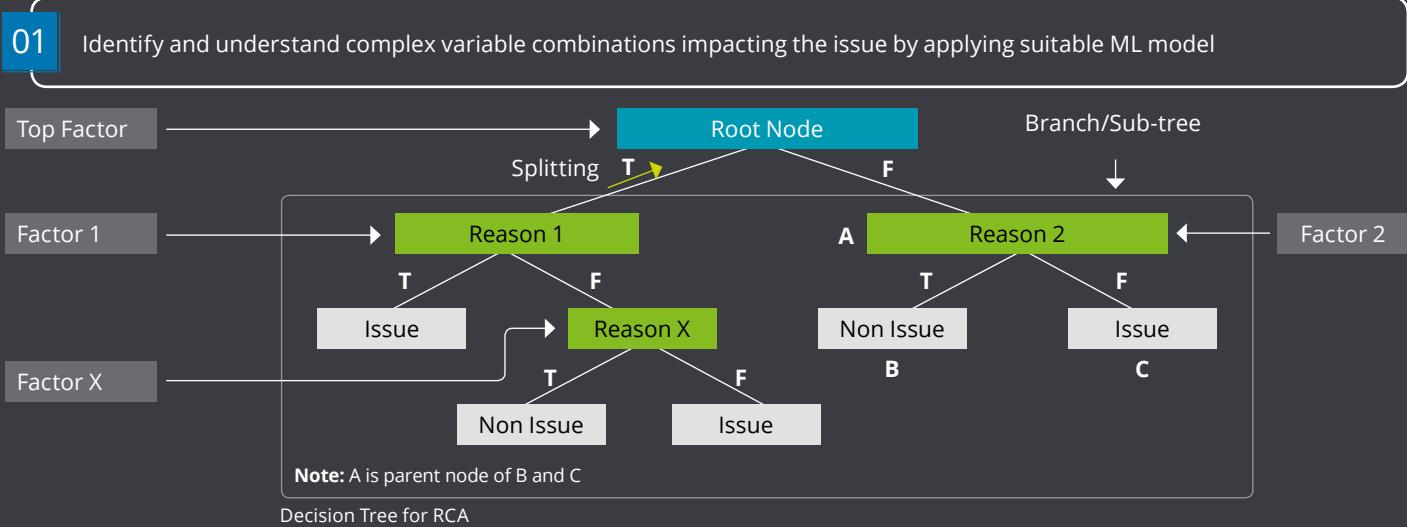
				
<b>Deep Insights</b> Detect previously unidentified factors that were causing the problem	<b>Prioritized Root Causes</b> Understand hierachal impact of the factors and focusing only on high impact causes on priority	<b>Reduced human bias</b> Identify false exceptions thrown by traditional RCA	<b>Minimized effort</b> Self-trained solution with reduced manual effort and SME intervention	<b>Strengthen internal processes</b> Effectively impacting and assisting in securing the process from a potential fraud

# Our solution

The Deloitte Preventive analytics solution is built upon an advanced machine learning platform. It leverages machine learning models that data scientists and developers use to relate transactional data to fraud/control exceptions data. This makes it ideal for situations that require highly personalized and customized outputs to prevent an occurrence of activity which is not in line to business environment leading to frauds and leakages. We have developed highly effective algorithms that can be tailor-made for identifying root causes for your specific business problem.

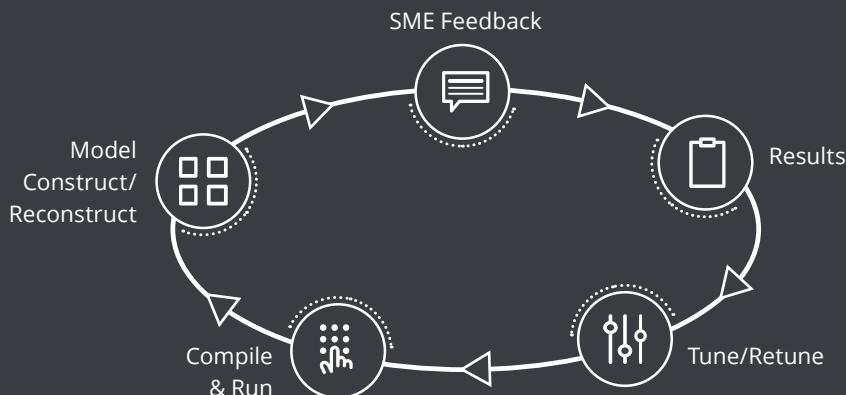
Our approach is to analyse your current business problems and key control exceptions to identify the root causes/bottlenecks that need to be addressed and prevent the occurrence of both fraud and error.

## Root Cause discovery by applying Statistical Models



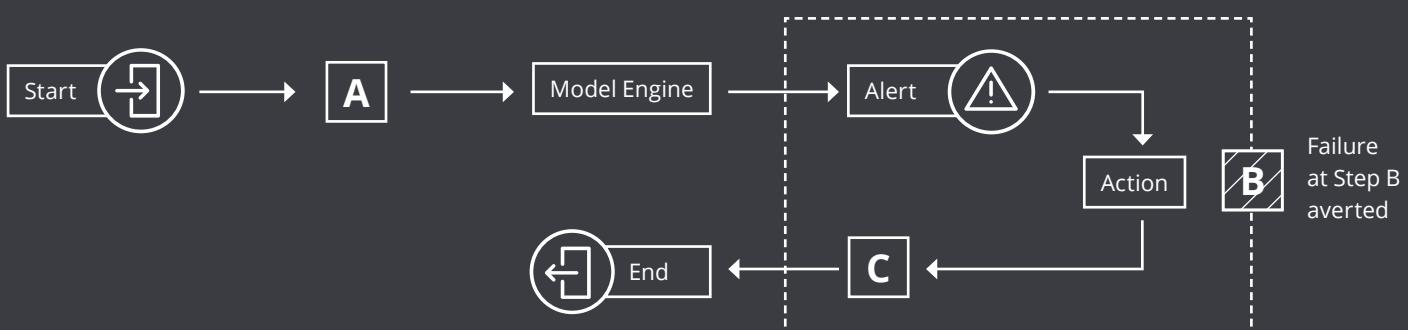
**02** Validate the business outcomes with process stakeholders and based on their inputs fine tune the model as an iterative process

**03** Derive business themes discovering actual root causes from model results



## Predict to prevent

- Build Model for future control exception flags with high predictive power
- Create an alert generating mechanism for to prevent control failure



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