



Next Wave of Continuous Control Monitoring solution A Point of View

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Introduction

With advent of integrated audits and the importance which regulators place on internal controls, enterprises are looking at options to make more effective and efficient internal control environments.

Organizations of today are looking at maturing their control environment from a point in time reactive model to more real time continuous monitoring techniques. Most enterprises have realized that proactive review is the key success factor in the area of compliance. Emergence of data analytics technologies have opened windows to the continuous control monitoring or inflight control monitoring solutions. The in-flight monitoring which means monitoring activities as it happens or near to when it happens is clearly the game changer.

Most financial and auditing executives would have heard about continuous monitoring and of general benefits to the

company from such programs. However a very few of them would have realized the full potential of such programs. This can be due to the fact that the executives would not have seen a strong business case for establishing these continuous monitoring solutions.

The current scenario of rising risks, changing regulations and compliance costs make this an ideal time to consider such a solution in your enterprise. Continuous monitoring will in turn help the management to operationalize the overall risk management effort. Today enterprises are moving from a rule based exception reporting Continuous Controls Monitoring (CCM) solutions to solution which provides actionable insights in terms of dynamic dashboards which will enable a behavioral enterprise wide change.



What is Continuous Controls Monitoring (CCM)?

By definition, Continuous controls monitoring (CCM) refers to the use of automated tools and various technologies to ensure the continuous monitoring of financial transactions and other types of transactional applications

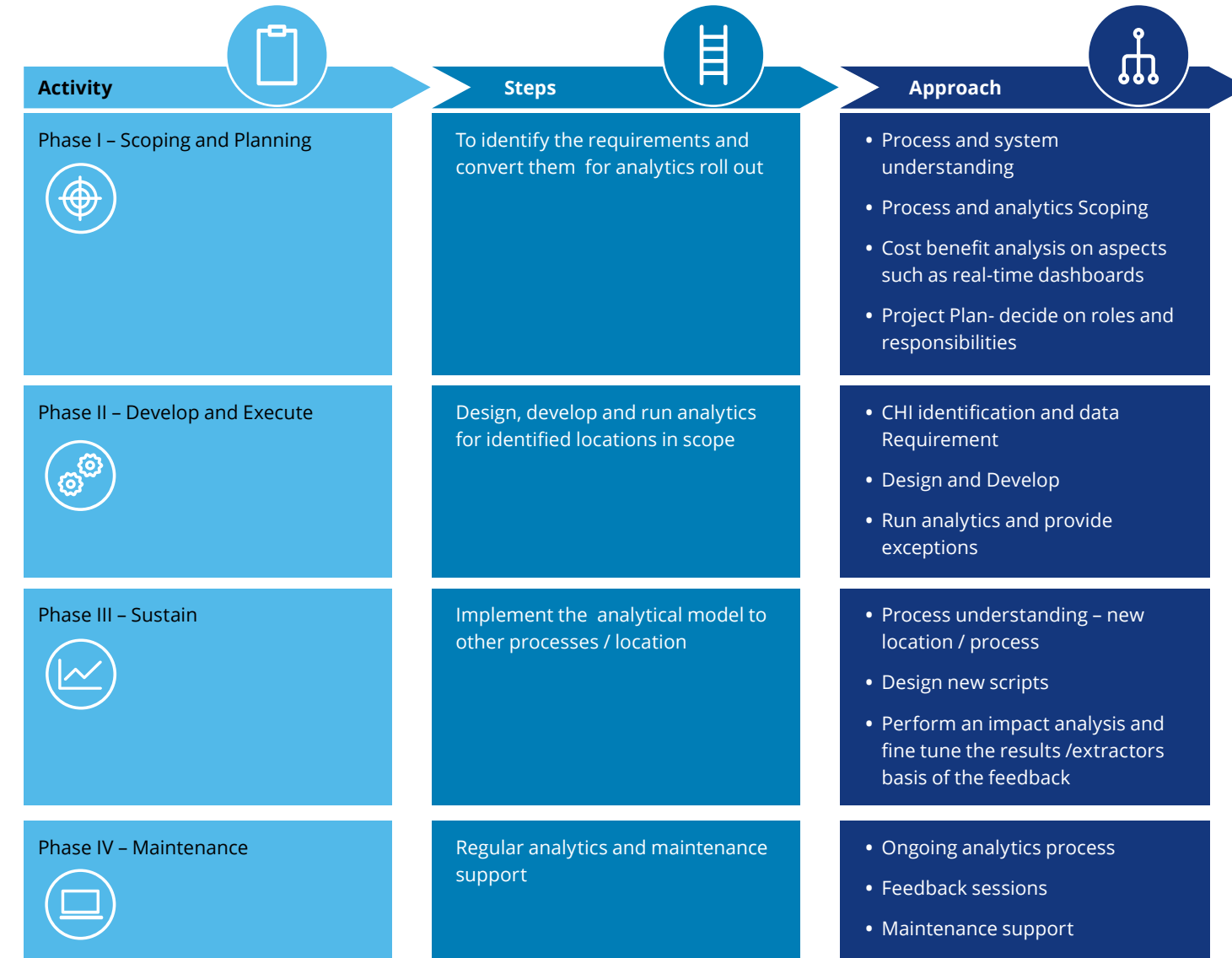
to improve the general compliance posture and reduce cost such as audit cost. By CCM we look it as a journey from a fragmented manual reactive control review to more continuous automated and proactive review.

CCM enables:



Our Approach for Implementing CCM:
 Deloitte's approach to continuous control monitoring follows a risk based approach. A full spectrum of risk including strategic, operational, compliance, reporting, security, environmental and other risk areas across the enterprise should be

considered when deciding which of these would be considered for the continuous monitoring. As a next step control health indicators are identified for each control (ITGC or Business process) and dashboards are build using various dash boarding tools for continuous monitoring.



Phase 1- Scoping and planning: This phase starts with a strong business case which will involve connecting the initiatives to drivers of value. A process and system understanding of the enterprise is a very critical aspect of this phase. A formal walkthrough of the process and process documents will help the team achieve this. A decision on whether the enterprise require a real time dashboard or a near to real time dashboard for monitoring is also to be decided at this stage. The hardware and software requirements will depend on this. The byproduct of this step would be a detailed plan for implementation clearly calling out roles, responsibilities and the time lines.

Phase 2- Develop and Execute: At this stage a design is created for the solution and the development is initiated as per the plan. Beginning with easy controls or areas as a pilot would be better to build the confidence of the team and the stake holders. Test the solution for performance or the impact on other systems. Analytics are run on the data and exception reports/dashboards are provided to the various stake holders.

Phase 3- Sustain: This stage takes into considerations of any new additions of locations, process etc. Solution have to revamp considering these changes. Feedbacks from the various stake holders are considered to fine tune the solution.

Phase 4-Maintenance: A maintenance support is provided for the ongoing monitoring.

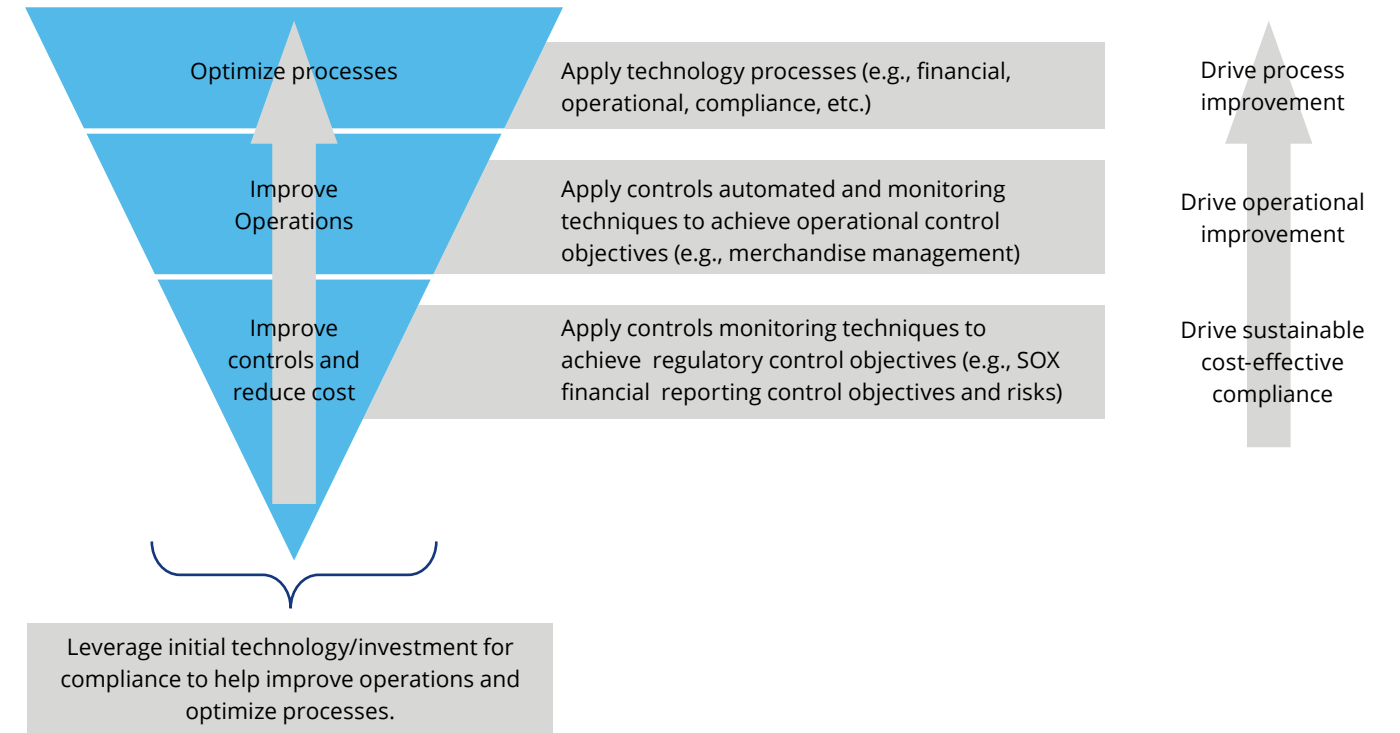
An inflight monitoring can be enabled or activated or the following:

- **Configuration controls:** Dynamic dashboards could be built to check whether the configuration behind the certain control is set as per the recommended settings.
- **Exception reports with actionable insights:** Exception reports are built based on a predefined rule. This predefined rule is designed based on some specific business or audit requirements. This could be a business process rule such as to identify cases where GR quantity is more than PO quantity, or it can be from IT general controls area such as to identify cases where user access is created much before the approval.
- **Impact analysis for SOD conflicts:** After identifying the access level conflicts existing in the system, it is imperative to know whether this conflicting access has been misused at all. This helps to understand the impact of these conflicts better.
- **Access related controls:** Analytics could be applied to monitor the user access controls such as approved user creation, timely revocation of access for exit and transfers, access reviews admin activity reviews and default users.
- **Change management controls:** A continuous monitoring can be established to see if all the changes are approved and adequately tested before moving it into production, to see if there is significantly higher number of emergency changes, if initiator and approvers are the same.

Maturity model for CCM solution:

Organization who have already adopted CCM solution in their environment would be in different level of maturity in terms of monitoring.

Any enterprise which would have a CCM model will be in these stages.



01. In the initial stage, the enterprise uses controls monitoring techniques to ensure that their controls meet their objectives and thereby by being compliant in terms of regulations such as Sarbanes-Oxley (SOX).
02. In the intermediary stage, enterprises applies controls automation and monitoring techniques to achieve operational control objectives.

03. In the final stage, enterprises apply technology to optimize process including operational, financial processes. This can be made possible by implementing predictive techniques to foresee a possible failure in the above areas and thereby bringing a behavioural change

4 W's of New era in CCM and difference with its old version:

4 W's for CCM	Old Era of CCM	New Era of CCM
What(Deliverables)	Exceptions	Actionable insights from dynamic dashboards driving behavioral change
Why(Main objective)	To identify symptoms of gaps in terms of exceptions	To address the root cause
Where(At what level is the monitoring done)	De-centralized monitoring	Centralized monitoring
Who(For whom is the solution useful)	Either auditor, control/process owner, top management	All of them

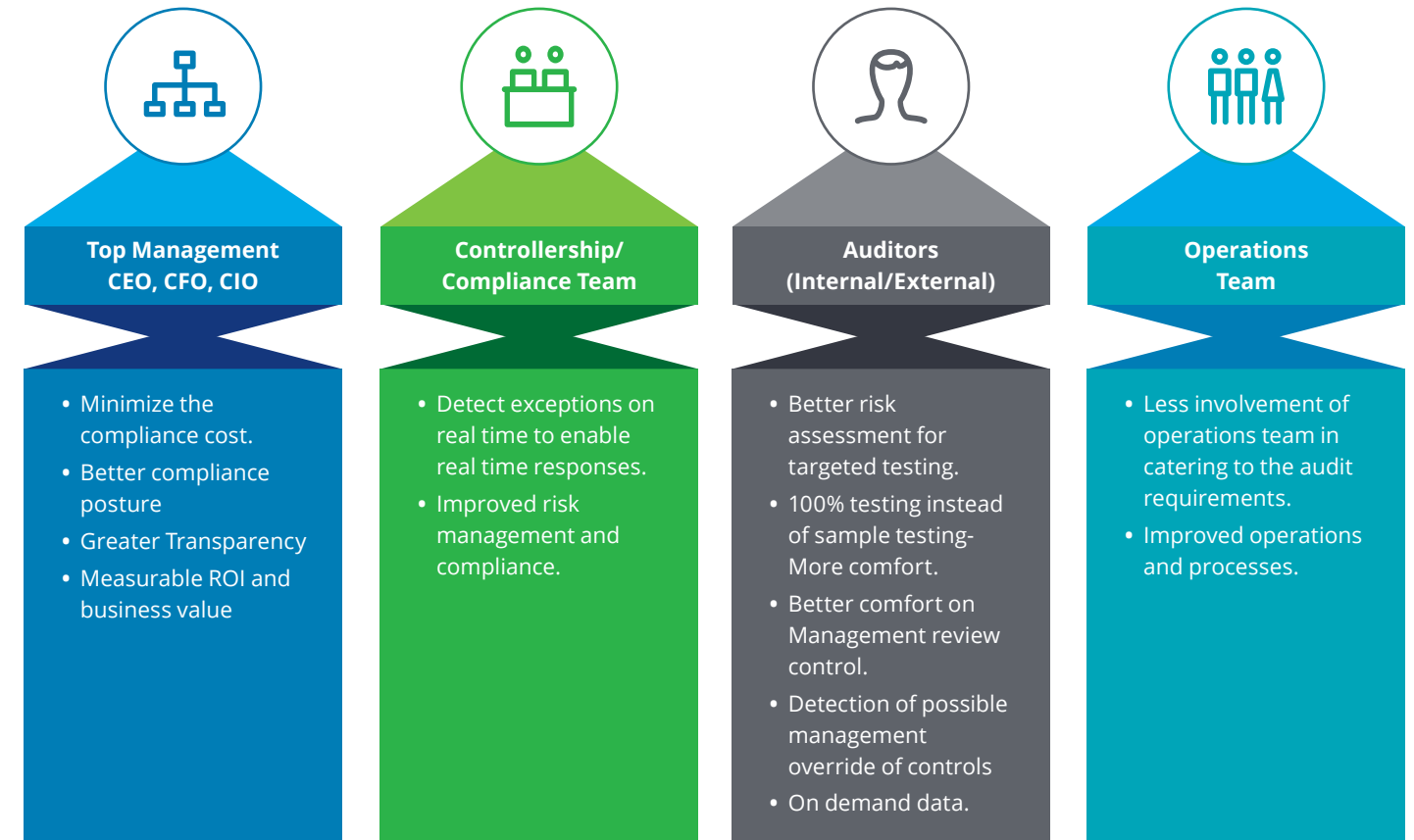
Moving on to a centralized monitoring model in shared service centers

Few years back shared service centers are being used to outsource back office operations such as HR, finance and IT. Compliance functions were considered risky to be moved to a centralized shared service centers. However today businesses are looking at shared centers to bring in lot of efficiencies in terms of cost in area of compliance. The main enablers for this should be technologies such as analytics, global ERP instances and eGRC's. A clear trend is developing where there is shift towards location independent controls monitoring solutions. Controls have been restructured and standardized to achieve a common control framework which in turn ensures compliance with various applicable regulations such as SOX, GDPR, NIST etc. These shared service centers locations are carefully chosen to leverage the cost benefits and the skillsets availability. This kind of a model help to re-engineer the control framework and rationalize the controls to find the correct balance in terms of cost and monitoring requirements. The ask of the hour is to have a continuous control monitoring solution that recognizes the inherent complexities and volumes associated with today's global processes.

Challenges for CCM solutions and how to deal with them

- Multiple sources of data and poor quality of data. Special care to be taken to invest in understanding the data from multiple sources and store it in a common place removing redundancies for easy reporting.
- Inability to identify a strong business case for a CCM solution. A detailed requirements including the scope has to be drawn as part of plan. All the key stakeholders have to be identified and taken into confidence before building the solution.
- To ensure the completeness and accuracy of the reports and dashboards from the CCM solution. The solution should be developed and maintained keeping in mind the importance of ensuring completeness and accuracy of the dashboards and reports used by various users of this solution. This will include business operations (First line of defense), management (Second line of defense) and auditors (Third line of defense).

Benefits:



Sample monitoring dashboards:

Control Monitoring for IT general controls



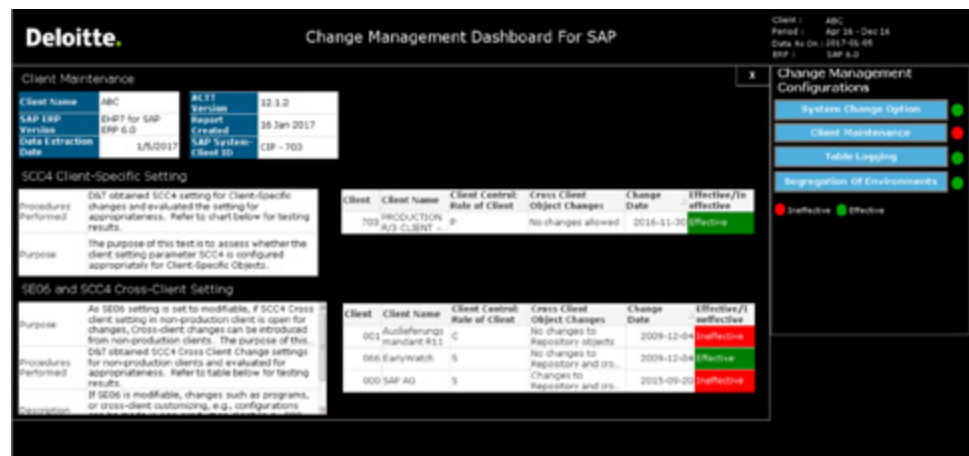
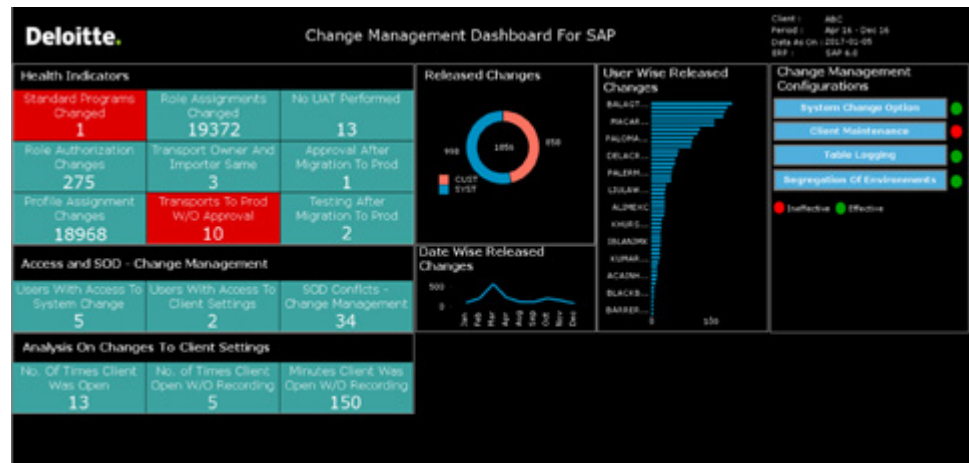
Objective:
To monitor the status of each domain of ITGC at all three levels of application database and Operating system.



User groups:
CIO, Compliance team, Auditors, IT and support teams.



Benefits:
Enables inflight monitoring of controls across ITGC domains across all the systems



Continuous control monitoring for Purchase to pay cycle:



Objective:
Exception reporting for pre-fixed control attributes in purchase to pay cycle



User groups:
Controllership/ Compliance team, auditors, CFO and



Benefits:
Actionable insights to the management from each areas.



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