UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO

FACULTAD DE INGENIERÍA

Proyectos de remediación del negocio de flotillas

INFORME DE ACTIVIDADES PROFESIONALES

Que para obtener el título de

Ingeniero Industrial

P R E S E N T A

Israel Morales Medina

ASESOR(A) DE INFORME

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Reconocimientos

Deseo expresar mi sincera gratitud a Joanna Sadowska, Líder de Controles de Operaciones en Empresa ABC, por su dirección y ánimo durante el desarrollo de los proyectos de remediación. Su liderazgo y arduo trabajo fue sin duda fundamental.

También agradezco a Adrián Méndez, Líder de Controles para Latinoamérica (y también mi gerente), por siempre fomentar mi desarrollo. Su disposición para siempre enseñar y ayudar es extraordinaria.

Y por último (pero no por eso menos importante) agradezco a mis padres, Araceli y Aurelio, por siempre proveerme lo necesario para cumplir mis metas. Su amor incondicional y confianza han sido esenciales para mi formación.

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Introducción

Por casi dos años trabajé como becario del área de Riesgo Operacional para Empresa ABC. Obtuve experiencia en las áreas de auditoría, mapeo de procesos, evaluación de riesgos y administración de riesgos.

Tuve demás la oportunidad de liderar diversos proyectos cuyo objetivo fue el mejoramiento de procesos, evaluación de riesgos, optimización de costos y documentación. Durante mi asignación en Empresa ABC tuve la oportunidad de interactuar con diversas áreas de la organización y pude aprovechar su experiencia para obtener un profundo conocimiento del negocio.

Afronté proyectos retadores que requirieron la aplicación de diversas herramientas adquiridas durante mi educación universitaria. Personalmente, creo que mi formación ingenieril me proveyó ciertas herramientas que fungieron como ventajas profesionales en el sector financiero como lo son el pensamiento crítico, la capacidad de resolver problemas y la habilidad de trabajar bajo presión.

El hecho de tener una estructura mental orientada en mapear los procesos para comprenderlos, tratar de averiguar los cuellos de botella, identificar los pasos que generaban retrabajo y sobre todo los pasos que más riesgo generaban, me permitió proponer soluciones integrales eficaces.

El objetivo del presente trabajo es exponer los resultados obtenidos del diagnóstico, análisis, remediación y establecimiento procesos de control de los proyectos que desempeñé en el negocio de flotillas, cuyas fallas detectadas a lo largo de las auditorías y pruebas realizadas durante mi estancia como becario derivaron en pérdidas financieras y potenciales riesgos estratégicos y reputacionales.

El escrito se dividirá en tres partes, la introducción al Riesgo Operacional (ya que es el marco con el cual se desarrolló el trabajo), la descripción detallada de principio a fin de la resolución de uno de los proyectos (el resto de los proyectos se encuentran en el anexo) y por último el anexo que contiene el informe completo de los proyectos (en inglés).

Descripción del puesto de trabajo

Como becario de riesgo operacional apoyaba tareas críticas del área como el proceso de valoración de riesgos, mejora de procesos y seguimiento de indicadores clave de riesgos, documentando y reportando problemas internos de acuerdo con los requerimientos regulatorios vigentes. Elaborar revisiones detalladas de transacciones consideradas de alto riesgo para asegurar adherencia a las políticas y procedimientos internos.

Nosotros atendíamos el análisis de problemas identificados a través del proceso de valoración de riesgos hecho anualmente o atendiendo requerimientos auto-identificados por las áreas.

Procuraba acercarme con el área involucrada, entender el proceso, mapear el flujo, entender que controles se tienen y asegurarme si esos controles estaban mitigando todos los riesgos. Una vez concluido, procedía a probar que los controles funcionan adecuadamente y solicitar información histórica para realizar pruebas de eficacia.

De encontrar errores o inconsistencias tenía que alinear los descubrimientos con los dueños del proceso y el líder del área. En caso de que los errores involucraran pérdidas financieras o potenciales problemas reputacionales, debía proceder a documentar detalladamente el descubrimiento y coordinar con las áreas pertinentes su solución (legal, ventas, finanzas, recursos humanos, etc.).

Metodología utilizada: Control Based Audit (CBA)

La metodología utilizada se denomina auditoría basada en controles o CBA por sus siglas en inglés. Se divide en seis etapas que buscan tomar decisiones basadas en los riesgos potenciales:

1. Análisis de riesgo del entorno: busca desarrollar una amplia perspectiva de los riesgos provenientes de presión regulatoria, expectativas de mercado, expectativas de los accionistas y diversas políticas de cumplimiento de la empresa.
2. Determinación de alcance: determinar áreas para auditar, así como ciclos (alinear la operación del negocio con la auditoría).
3. Plan de auditoría: construir mapas de proceso y desarrollar una matriz de control de riesgos que empate los riesgos y controles. Basado en los riesgos y el alcance definido en el punto 2, se determina una mezcla de trabajo que pruebe los controles, pero también se desarrolle trabajo sustantivo (es decir, una revisión exhaustiva de la información que fluye a través del control).
4. Controles: Auditoría de procesos y procedimientos, así como desarrollo en caso de inexistencia.
5. Análisis sustantivo: Se analiza la composición del balance de las cuentas y transacciones que componen esos balances para determinar precisión y apego al proceso.
6. Cierre de auditoría: Tras el análisis sustantivo se determinan ajustes en caso de encontrar inconsistencia en los balances de las cuentas y se reportan los descubrimientos a los dueños del proceso, pero también se reportan a nivel organización para que otras áreas puedan apalancarse de esos aprendizajes y puedan prevenir que ocurran en otras áreas.

Líneas de defensa

El negocio está categorizado en tres líneas de defensa, dependiendo de la función y los roles dentro de la organización:

Primera línea

Plataforma – Responsables del proceso, administración y monitoreo

- Dueños de los riesgos, monitoreo y remediación

- Supervisión del proceso "de punta a punta", incluyendo Centros de Excelencia funcionales y procesos y controles llevados a cabo por terceras personas

- Ejemplos: Monitoreo de procesos de control, establecimiento de gatillos de escalación, remediación y escalación de problemas

- Programa de Autoevaluación de Riesgos y Controles (RCSA, por sus siglas en inglés)

Segunda línea

Riesgo/Cumplimiento – Gobierno y monitoreo independiente y Evaluación

- Co-definen estrategia, apetito de riesgo y marco de control

- Supervisión de programas de riesgos operacionales y RCSA

- Proveen consejo, guía y herramientas a la plataforma

- Programas de evaluación independientes basadas en riesgos potenciales

- Ejemplos: Administración de políticas, anti lavado de dinero (AML, por sus siglas en inglés), programa "Conoce a tu cliente" (KYC, por sus siglas en inglés), pruebas de cumplimiento, pruebas y monitoreo de riesgos operacionales, análisis causa raíz

Terceira línea

Auditoría, pruebas independientes

- Evaluación de riesgos completamente independiente

- Revisión de procesos de la primera y segunda línea de defensa

- Opinar en requerimientos de cumplimiento y competencia

- Proveer reportes al equipo directivo de la organización

Durante mi gestión en el área de Riesgo Operacional tuve la oportunidad de trabajar directamente con la primera línea de defensa y coordinar esfuerzos de remediación en la primer y segunda línea.

¿A qué nos referimos con riesgo corporativo?

El riesgo corporativo es el riesgo potencial proveniente de todas las posibles fuentes que puedan amenazar el valor de la organización a corto y mediano plazo.

Por lo tanto, Administración de Riesgos Corporativos (ERM, por sus siglas en inglés) es un proceso efectuado por el consejo de administración del negocio, miembros directivos, entre otros, que es aplicado en desarrollo de estrategias a lo largo de la organización, diseñado para identificar potenciales eventos que puedan afectar la entidad. A su vez se administra el riesgo para que sea generado dentro del apetito de riesgo de la organización y para proveer garantía razonable respecto al cumplimiento de los objetivos de la organización.

Los recursos de Riesgo Corporativo se agrupan en cinco grandes categorías:

El riesgo de pérdida directa o indirecta como resultado de fallas internas derivadas de procesos inadecuados, personas, sistemas o de eventos externos.

El riesgo actual o potencial ganancias y capital proveniente de cambios en el ambiente del negocio y de decisiones adversas al negocio, implementación inadecuada de decisiones o falta de responsabilidad ante los cambios en el ambiente del negocio.

El riesgo de pérdida debido a cambios en variables externas del mercado tales como tasas de interés, tasas de tipo de cambio, fluctuaciones en precios de la canasta básica y valuación de activos colaterales.

El riesgo de pérdida que surge cuando un obligante falla en cumplir los términos contractuales al no tener suficientes activos colaterales de respaldo para satisfacer las obligaciones.

El riesgo que una institución financiera puede presentar al tener la incapacidad (o percibirse externamente de esa manera) de cumplir con sus obligaciones contractuales a corto y largo plazo.

Manejo de riesgo operacional (MRO)

El manejo de riesgo operacional existe con el objetivo de apalancar las funciones existentes de contraloría a través de la alineación y supervisión de cumplimiento que los dueños funcionales de los procesos, sistemas y líderes del negocio deben de tener. Provee una interconexión con otras actividades de riesgo y responsabilidad de las actividades de riesgo que realizan todas las funciones. El Riesgo Operacional es parte de la primera línea de defensa.

Al enfocarse en las personas, procesos, sistemas y eventos externos a través de la metodología de Riesgo Operacional podemos:
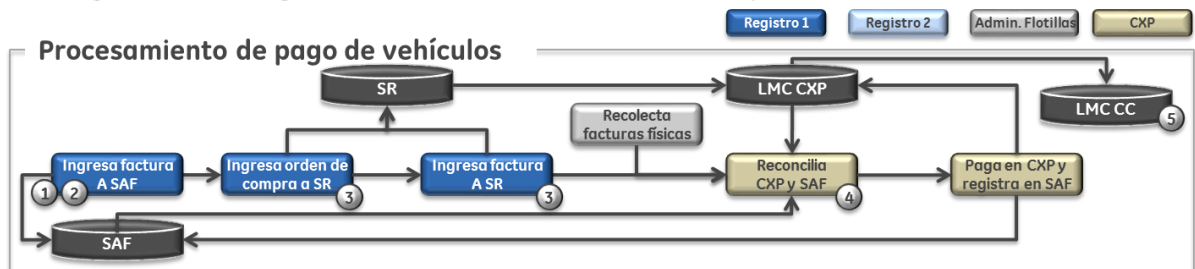
- Reducir pérdidas provenientes de eventos operacionales
- Potencialmente optimizar el capital
- Mejorar la coordinación y colaboración
- Satisfacer las expectativas regulatorias

El proceso como solía ser

Pago de seguros de vehículos – proceso actual

Procesamiento de pago de vehículos

Registro 1 | Registro 2 | Admin. Flotillas | CXP

SR — LMC CXP — LMC CC (5)

Recolecta facturas físicas

Ingresa factura A SAF (1)(2) → Ingresa orden de compra a SR (3) → Ingresa factura A SR (3) → Reconcilia CXP y SAF (4) → Paga en CXP y registra en SAF

SAF

Falla de controles

Entrada manual de los detalles de la factura al SAF
(1) ➤ No existe una revision de eficacia en las entradas mientras la información del SR es usada para validar pagos de CXP

Modificación de información de factura tras procesamiento de pago
(2) ➤ No existen controles de Sistema para asegurarse que los detalles no pueden ser modificados

Entrada manual de información de facturación en SR
(3) ➤ No hay control de eficacia, el SR alimenta al LMC CXP, no permite correcciones y errores resultas en registros duplicados

Revisión y aprobación manual de pago a proveedores
(4) ➤ Conciliación totalmente manual entre SR y SAF, vulnerable a errores en procesode revisión

Análisis de facturas pagadas y revision de duplicados
(5) ➤ No existe un control que asegure que no se han pagado facturas dos o más veces

Problemas identificados

Se identificó 5 pagos que fueron incorrectamente procesados (duplicados o monto incorrecto), impacto total de ~$87K USD

1/20 transacciones de muestra confirmada como pago duplicado... se pagó $33K USD de más al proveedor

Causa raíz: (2) (5)

3/20 transacciones de muestra confirmadas como pago de montos incorrectos... se pagó $38K USD de más

Causa raíz: (3) (4) (5)

1/20 transacciones de muestra confirmadas como pago a proveedor incorrecto... se pagó $16K USD

Causa raíz: (1) (3) (5)

SAF: Sistema de Administración de Flotillas
SR: Sistema de Registro
CXP: Cuentas por Pagar
LMC: Libro mayor de Contabilidad
CC: Cuenta de Compensación

Proceso de pago de vehículos del área de cuentas por pagar

Una vez que las facturas han sido registradas en el Sistema de Registro y el Sistema de Administración de Flotillas, se configuran para pago y el equipo de Cuentas por Pagar necesita realizar la siguiente validación manual con el fin de asegurarse que los pagos a proveedores sean realizados correctamente.

SAF

LMC CXP

Lista de facturas por pagar a proveedores
Facturas ingresadas por el equipo de registro y sin marcar como pagadas aún

Factura#	Proveedor	Monto
___	___	___
___	___	___
___	___	___

Lista de transacciones de pagos
Facturas ingresadas por el equipo de registro al Sistema de Registro que viajan automáticamente al LMC CXP

Factura#	Proveedor	Hold
___	___	☑
___	___	☑
___	___	☑

① Imprimir reporte de SAF

② Se compara el SAF contra LMC CXP y se inhabilita la casilla de hold para aquellas a pagar. Se resalta con marcador las transacciones en la impresión.

③ Se compara la impresión vs el SAF vs facturas pagadas.

Factura#	Monto	Pagado
___	___	☑
___	___	☑
___	___	☑

Falta de un control en sistema

1. El equipo de registro ingresa la facture al SAF y SR.
2. CXP da seguimiento al proceso de pago y marca las facturas como pagadas.
3. El equipo de registro cambia los detalles de la factura en el SR y SAF.
4. Nueva información es enviada al LMC CXP del SR.
5. Las facturas marcadas como no pagadas en SAF envía alerta de seguimiento al equipo de CXP para su pago.
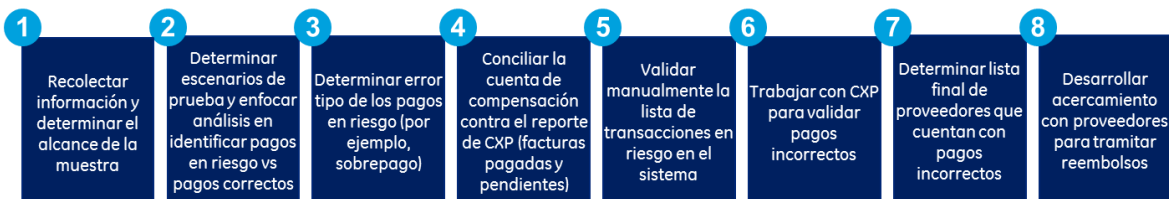
- - - **Operación manual**   **SAF: Sistema de Administración de Flotillas**   **SR: Sistema de Registro**   **LMC CXP: Libro Mayor de Contabilidad modulo Cuentas por Cobrar**

Proceso de reconciliación de pago de vehículos

Proceso de reconciliación principio a fin

Con el fin de conciliar los pagos de vehículos, determinar la lista de proveedores a los cuales se realizó pagos incorrectos y desarrollar un acercamiento con los mismos para obtener los reembolsos correspondientes, es crítico analizar las posibles excepciones y cerciorarse al cien por ciento que todos los casos hayan sido validados.
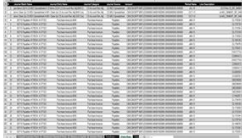

1. Recolectar información y determinar el alcance de la muestra
2. Determinar escenarios de prueba y enfocar análisis en identificar pagos en riesgo vs pagos correctos
3. Determinar error tipo de los pagos en riesgo (por ejemplo, sobrepago)
4. Conciliar la cuenta de compensación contra el reporte de CXP (facturas pagadas y pendientes)
5. Validar manualmente la lista de transacciones en riesgo en el sistema
6. Trabajar con CXP para validar pagos incorrectos
7. Determinar lista final de proveedores que cuentan con pagos incorrectos
8. Desarrollar acercamiento con proveedores para tramitar reembolsos

Información requerida

Con el fin de realizar la conciliación de pago de vehículos se requiere los siguientes reportes:
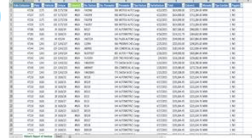
Reportes para conciliación de pago de vehículos

1

Cuenta de compensación
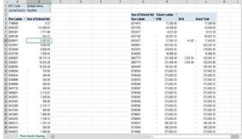
- Utilizado como información base para el análisis

5

Reporte histórico de facturas

- Reporte histórico def acturas utilizado para revisar todos los pagos realizados por todos los vehículos

2

Reporte del sub libro mayor de contabilidad

- Tabla pivote con todas las unidades
- Utilizado para revisar la fecha y monto de capitalización de unidades

6

Reporte de CXP – Facturas sin pagar

- Reporte de facturas pendientes de pago, para revisar facturas en espera de procesar pago con el fin de minimizer la revisión manual
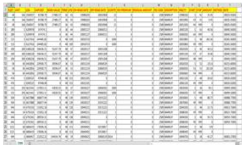
3

Reporte de SAF

- Utilizado para revisar el monto designado para abono a capital

4

Reporte de márgenes

- Utilizado para regisar la precisión del proceso de capitalización de unidades

Vehículos en alcance o fuera de alcance

Los criterios a continuación definen todas aquellas unidades que se encuentran dentro y fuera del alcance del análisis:

(A) Códigos dentro de alcance
Códigos relacionados al pago de seguros que se excluyen del alcance del presente análisis

Fuente	Código	Clasificación
Cuentas CAP	001	Valor del auto
	002	Renta Inicial
	003	Accesorios (GPS)
Cuentas de subsistemas	004	Valor del auto
	005	Accesorios (GPS)
CXP	006	Pago de Unidades
CXC	007	Rentas Iniciales

(B) Contratos especiales fuera de alcance
Contratos relacionados a re-registro y a re-arrendamiento están fuera del alcance del presente análisis

Tipo de unidad	Descripción
Terminación RB	Re-registro
Terminación RL	Re-arrendamiento

(C) Número Log
Si carece de número log (-), se encuentra fuera del alcance

(D) Flotilla y unidad
Si no se cuenta con número de unidad o flotilla (-), entonces fuera de alcance

Unidades sin conciliar

El primer filtro de verificación para conciliar una unidad es realizar una revisión entre el balance obtenido en la cuenta de capitalización y el balance en cuentas por pagar.

Conciliación – 1er Filtro

1er Filtro
- Cuenta de capitalización y cuentas por cobrar para la misma flotilla/unidad debe cuadrar al centavo

Ejemplo

Fuente	Monto
Cuenta CAP	- 1,034.46
Cuenta CAP	- 282,769.02
CXP	282,768.98
CXP	1,034.48

Conciliación – Tras revision manual

Correcto –CAP no encontrado
- Capitalización de unidad no encontrada como capitalizada en la cuenta de compensación
- Se concilió número log con el reporte de subsistema donde se verifica el monto y fecha de capitalización
- El momento en que se capitalizó afecta este campo ya que no se cuenta con información anterior a 2012, 119 de 16 unidades fueron impactadas por esta situación

Correcto – Renta inicial
- Factura de renta inicial de la unidad no se muestra en la cuenta de compensación, factura no se encuentra en sistema
- Se concilia el número log con el reporte general del SAF para verificar si la renta inicial fue registrada

Correct – Payment Found
- Pago de unidad no se muestra en la cuenta de compensación a pesar de haber sido registrado correctamente en SR
- Se concilia la unidad por número de flotilla y unidad con el reporte de pagos históricos del SAF para verificar si el pago fue registrado

Vehículos con sobrepago

El sobrepago de unidades se refiere a aquellos casos donde se realizó un pago adicional no correspondiente, duplicado o incorrecto. Para verificar todas las posibilidades es necesario verificar las cuentas de capitalización, de cuentas por cobrar y pagar a nivel número log en las bases de datos.

Sobrepagos

Pagos adicionales no correspondientes
- Las unidades identificadas con multiples pagos que en su conjunto suman más que el monto de capitalización

Pagos duplicados
- Unidades identificadas con pagos duplicados (mismo monto pagado dos veces)
- Los pagos pudieron haberse realizado al mismo proveedor o uno distinto. Esto debido a modificaciones de la información de pago de factura después de haberse procesado

Ejemplo

Fuente	Monto
Cuenta CAP	- 435,344.83
Payables	435,344.83
Payables	435,344.83

Monto de pago incorrecto
- Unidades identificadas con pago de montos incorrectos, en algunos casos debido a errores manuales al ingresar montos a pagar

Vehículos sin conciliar

Algunas unidades fueron conciliadas tras una revisión manual y con la ayuda de reportes adicionales, sin embargo, hubo unas cuantas que no fue posible conciliar por completo debido a la calidad de la información utilizada.

Sin conciliar

Incorrecto – Cuenta CAP no encontrado
- Unidad no se muestra como capitalizada en la cuenta de compensación
- Se concilió el log number con un reporte de sub-sistema para verificar la fecha y monto de capitalización

Ejemplo

Fuente	Monto
CXP	192,211.21
CXP	1,034.49

Renta inicial – Registro
- El pago inicial de la unidad no se muestra en la cuenta de compensación y la renta inicial no se factura

Ejemplo

Fuente	Monto
Cuenta CAP	-101667.24
Cuenta CAP	19612.07
CXP	101667.24

Renta inicial – Cobrables
- Renta inicial del vehículo facturada dos veces, se encontró facturas emitidas de manera duplicada (misma flotilla y unidad)
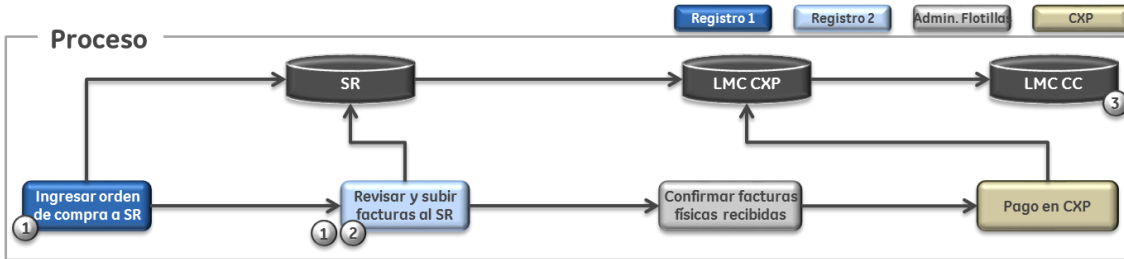
Sin conciliar
- Unidades que no fue posible conciliar debido a la calidad de la información

Pago de seguro de vehículos – proceso mejorado

Conclusiones

Desde que la venta de Empresa ABC fue anunciada en abril de 2015, quedó claro para áreas como Riesgo Operacional que esta oportunidad era única para aprender ya que la adquisición global de la plataforma requería que nos esforzáramos al máximo en cumplir con todas las mejoras requeridas en los procesos que ya teníamos en la mira, así como redoblar esfuerzos para la detección y corrección de errores en los procesos que aún no se revisaban a fondo.

Aunado a esto, estas remediaciones tenían que realizarse en tiempo y forma para cerciorarnos que el valor del negocio no se vería comprometido al momento de la venta con el comprador (es decir, que tras una valuación detallada los errores encontrados devaluaran el valor de compra pactado originalmente).

Las funciones de gobierno corporativo son necesarias en grandes compañías, en especial aquellas que se encuentran reguladas por alguna entidad de gobierno debido a su tamaño e impacto potencial en caso de sufrir algún contratiempo. Estas funciones de gobierno corporativo se encargan de integrar personas, procesos y sistemas con el fin de prevenir o remediar problemas a lo largo de la organización. Son funciones que al no encontrarse enfrascadas en las tareas del día a día del resto

de las áreas les permite ver la foto completa y no cegarse ante la comúnmente conocida "ceguera de taller". Esta denominada ceguera de taller muchas veces obstruye a los empleados de ver las causas raíces que están originando defectos y pérdidas dentro de la organización. Además, las funciones de gobierno corporativo no solamente se enfocan en ver una parte del proceso, sino que analizan el flujo desde principio a fin y esto también permite obtener una mayor perspectiva de insumos requeridos, personal, sistemas, áreas involucradas, documentación generada, etc.

Los procesos de remediación realizados impactaron positivamente los resultados financieros de la compañía ya que se permitió recuperar dinero proveniente de fallas en procesos y por otro lado la optimización de los mismos generó ahorros acumulativos a futuro.

La plataforma de administración de flotillas fue entregado al comprador con fecha efectiva del 30 de septiembre de 2015. Yo considero que la continua vigilancia y testeo de los procesos y sistemas a lo largo de las organizaciones es una actividad clave requerida para asegurar el futuro de la organización, sin importar si la compañía está regulada por una entidad gubernamental o no.

A continuación, se encuentra el escrito completo que detalla el proyecto antes mencionado de pagos duplicados de vehículos y algunos otros que formaron parte de mi estancia como becario y cuyas cuantificables pérdidas tuvieron tres desenlaces: fueron completamente mitigadas, parcialmente mitigadas o registradas en libros como pérdida.

El anexo se presenta en el idioma inglés porque mandatorio que todo el contenido que yo desarrollase para Compañía ABC fuese redactado en ese lenguaje ya que sería compartido en sistemas globales y a su vez es requerido de esa forma para temas regulatorios, siendo así una oportunidad de crecimiento profesional que me ha permitido explotar mis conocimientos obtenido a lo largo de mis estudios profesionales.

Bibliografía

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2. Regulating Systemically Important Financial Institutions That Are Not Banks (The Brookings Institution) http://www.brookings.edu/research/papers/2013/05/09-regulating-financial-institutions-elliott

ANEXO A: Versión original en inglés

UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO
FACULTAD DE INGENIERÍA

Fleet Remediation Projects

GE Capital Mexico
Operational Risk Internship Project

Israel Morales Medina
10/29/2015

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I also thank my parents, Araceli and Aurelio, for always providing me the necessary to carry on with everything I propose. Their unconditional love and trust have been essential in my formation.

1. Introduction

For almost two years I have been working as Operational Risk Intern at Company ABC. I have gained experience in the areas of Audit, Processes Mapping, Risk Assessment and Risk Management. I have led various projects on process improvement, risk assessment, cost efficiency and documentation. During my assignment within Company ABC I took opportunity to interact with several functions and I have leveraged their experience to gain deep understanding of the business.

Through all that time I was able to face challenging projects that demanded me to apply several tools acquired throughout my college education. I personally believe that my Engineering formation provided me several professional advantages such as critical thinking and the ability to solve problems, which meant that I was able to tackle difficulties with different approach depending on what it was needed to accomplish.

The aim of all this is to lay the groundwork of the project which is mainly focused on several remediation projects I supported during my internship. The interesting thing about those remediation's is that were hustled by the global sale the Company ABC Fleet vertical to a company leader in the fleet management market. This highly transactional product had a lot of problems that needed to be solved (or at least find the solution and hand it in to the buyer) before the sale was complete. I am going to explain the problems identified, the methodology used for understanding the processes, people and systems involved and the way it were remediated.

2. Risk Management in Company ABC

2.1 Lines of defense

The business is categorized in three lines of defense depending on the function and its roll within the organization:

2.1.1 1st Line

Platform – Process Ownership, Management, & Monitoring

- Ownership of risks, monitoring, and remediation
- Oversight of end-to-end business processes, including Functional Center of Excellence (COE) & 3rd Party processes & controls
- Examples: Process control monitoring, establishment of triggers for escalation, issue/event remediation & escalation
- Risk and Control Self-Assessment Program (RCSA)

2.1.2 2nd Line

Risk/Compliance – Independently Govern and Monitor and Assess

- Co- define strategy, risk appetite & control framework
- Oversight of Op Risk and RCSA programs
- Provide advice, guidance and tools to Platform
- Risk-based and independent assessment programs
- Examples: Policy Mgmt, AML/ KYC/Compliance testing, Operational Risk testing & monitoring, root cause analysis

2.1.3 3rd Line

Audit, independently Test

- Complete independent risk assessment
- Review 1st & 2nd line of defense processes
- Opine on compliance to requirements & competency
- Provide reporting to Management

During my Operational Risk assignment, I was able to work directly from the first line of defense and coordinating efforts from the second one.

2.2 Enterprise Risk Management

The enterprise risk is the risk from all possible sources that threaten an organizations short & long term value to its stakeholders.

Thus, Enterprise Risk Management (ERM) is a process, effected by an entity's board of directors, management, & other personnel, applied in strategy setting & across the enterprise, designed to identify potential events that may affect the entity, & manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.

Enterprise Risk sources fall within the major categories of:

Strategic Risk: The current or prospective risk to earnings & capital arising from changes in the business environment & from adverse business decisions, improper implementation of decisions or lack of responsiveness to changes in the business environment.

Operational Risk: The risk of direct or indirect loss resulting from inadequate or failed internal processes, people & systems or from external events.

Market Risk: The risk of loss due to changes in external market variables such as interest rates, foreign exchange rates, equity prices, asset & collateral values & commodity prices.

Credit Risk: The risk of loss that arises when an obligor fails to meet the terms of a contract &/or the underlying collateral is insufficient to satisfy the obligation.

Liquidity Risk: The risk that an institution's financial condition or overall safety & soundness are adversely affected by an inability (or perceived inability to meet contractual obligations.

2.3 Operational Risk Management

Operational Risk Management stands for leveraging existing functional controllership activities through alignment and engagement of the functional owners of the processes and systems and the leadership team of the business. It provides linkages across other risk activities and accountability for self-assessment and ownership of risk activities across all functions. Operational Risk is part of the first line of defense.

By focusing on people, processes, systems and external events Operational Risk Management can:

- Reduce losses from operational events
- Potentially optimize capital
- Improve coordination and collaboration
- Satisfy regulatory expectations
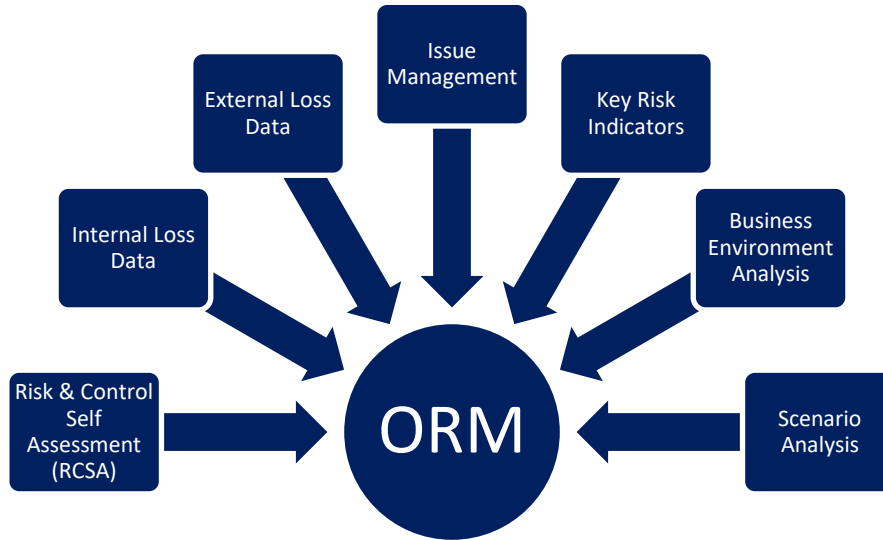
2.3.1 External Loss Data Events (ELD's)

An External Operational Risk Event is an Event that occurs at a similar financial institution that due to similar risks could impact Company ABC. A review of processes and controls in Company ABC related to the External Event should be conducted to ensure the risk of Operational Risk Event is mitigated. Currently, external loss data information is available to Chief Risk Officers, Platform Governance Leaders and Operational Risk Managers and they or their designee should perform the related assessment and escalation.

2.3.2 Internal Loss Data Events (ILD's)

An Internal Operational Risk Event results from one or more of the following:

1.   Failure of the design of the control (the control did not perform as designed)
2.   Failure of the effectiveness of the control (the control did not perform as anticipated)
3.   Absence of a control
4.   Process failure
5.   People failure (human error or fraud)

An Operational Risk Event may result in one or more of the following outcomes:

1. An adverse customer impact
2. A potential regulatory or compliance breach
3. A breach of company policy
4. An Operational Risk Loss or Near Miss or Boundary Event
5. An actual or potential negative media coverage

An Event does not have to result in a loss, but could reflect a control gap or weakness that could lead to a loss and results in an Issue.

ILD's structure:
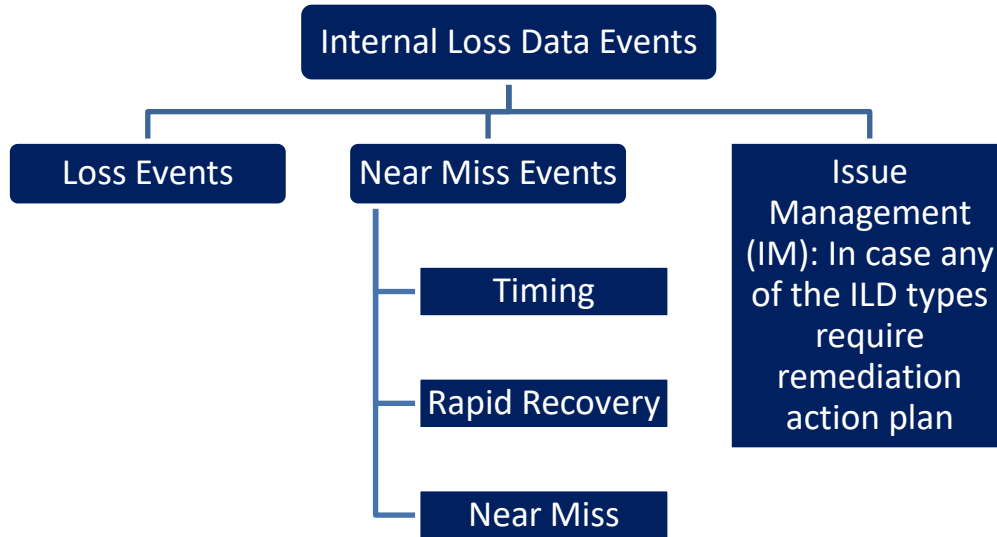
2.3.2.1 Loss Events

A Loss Event is an incident leading to an outcome which differs from the expected outcome, due to inadequate or failed processes, people and systems, or due to external factors which has resulted in a loss to the organization. A Loss Event will have an actual impact on the financial statements of the business, may have multiple associated losses both direct and indirect, and may also include recoveries.

2.3.2.2 Near Miss Events

A Near Miss Event is an incident where a potential existed for a loss that was avoided through good fortune or focused management action, preventing a loss from being realized after it was identified. Near Misses broadly refer to events caused by an unexpected gap in the control environment that did not result in a loss. An incident which was identified or prevented by a control, that is designed to prevent or detect that risk, is not a Near Miss but evidence of the control working. There are two types of Near Miss Events: 1) Timing Events and 2) Rapid Recovery Events.

a) **Timing Events**

Timing Events are related to a temporary misstatement of the aggregated financial statements in a particular reporting period that can be fully corrected when discovered in a later reporting period; the result is a shift from one reporting period to another reporting period. Examples include: incorrect formula used in calculating depreciation, a manual journal entry accrual not being reversed, or a sales tax obligation not being paid and discovered in a later period.

If the Timing Event occurred over two or more quarters it is considered a Near Miss Event and is required to be reported in the ILD Module regardless of its impact rating.

b) Rapid Recovery Events

Rapid Recovery Events lead to losses that are recovered within 2 business days (i.e. bank transfers money to wrong party but recovers money same day). When the Rapid Recovery is made in full and within the allotted time period, the event is considered a Near Miss Event with the Gross and Net Losses for these events reported as zero.

An Event where 100% of the loss is not recovered or the Recovery takes more than 2 business days are considered a Loss Event, with a Direct Loss and Recovery, and not a Near Miss; an example is a duplicate payment made to a supplier that is recovered after 7 days.

2.3.3 Issue Management

An issue is the description of a control weakness or control failure that could lead to an operational loss or has already resulted in an operational loss. There are two types of issue; audit issues and Business Self-Identified issues.
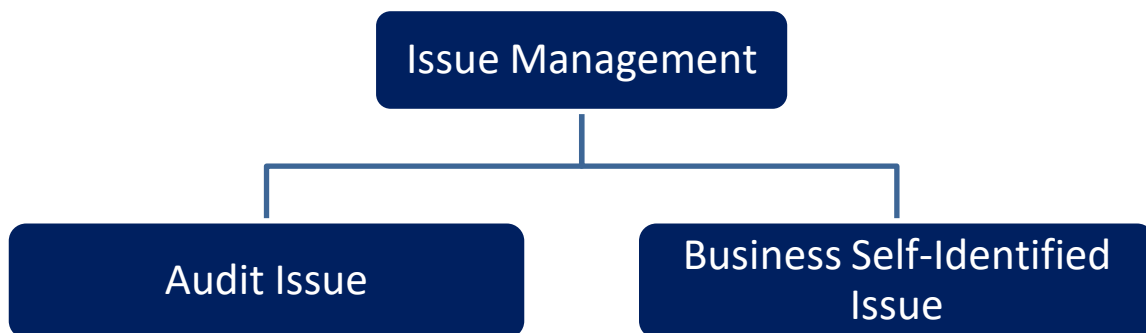

2.3.3.1 Audit Issue

An audit issue is an issue identified through one of the quarterly or yearly scheduled audits. Company ABC faces every year audits coming from five different external teams; Internal Audit (IA), Compliance, Risk Review, Corporate Audit Staff (CAS) and IT Control.

2.3.3.2 Business Self-Identified Issue

Is an issue identified by the business itself (platform, Center of Excellence and functions) within the 1st or 2nd lines of defense that results in a remediation plan or is risk accepted and is tracked through the ILD-IM System. The goal of the organization is to maintain a relation between BSI and Audit issues of 70%-30%, which means that local Control Leaders are being able to identify the great majority of them.

## 2.3.3.3 Cycle of an Issue (BSI or Audit)
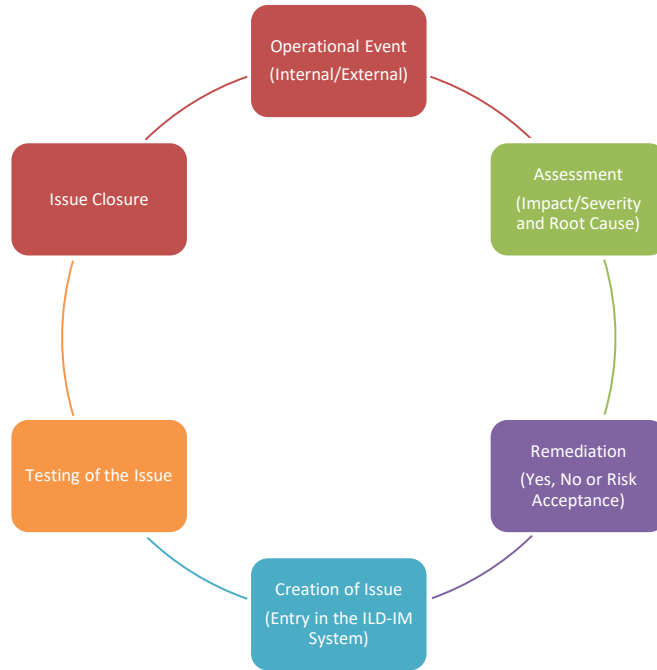
Sequence:

- Event: Originated internally or externally.
- Assessment:
  - Impact/Severity
  - Root Cause
    - People
    - Process
    - Systems

Issue reporting

All amounts in USD

Internal Loss Data

Reporting owner: Ops Risk/PGL

Timelines:
➢ **Verbal escalation**
≥ $500k ... 3 days from date id'd
≥ $100k ... 10 days from date id'd

➢ **EOR ILD system reporting**
≥ $100k ... 10 days from date id'd
< $100k ... 30 days from date id'd

Issue Management

Reporting owner: Control Ldr

Timelines:
➢ **Issue reporting & publication** -a) ...
... within 45 days from date id'd

➢ **Action plan creation & approval...**
... within 30 days from date published

➢ **Issue/Action status update ...**
... at minimum every 30 days

SOX deficiency

Reporting owner: Ops Risk Assessment Ldr

Timelines:

➢ **14 days from point of escalation by the business**

Issue reporting timelines
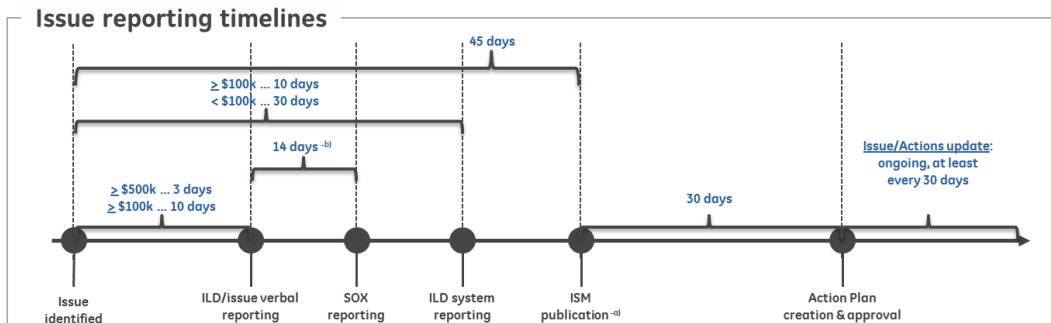
a) Issue is published when it is entered into the system and approved
b) SOX issues should be reported within 14 from the point of escalation to Ops Risk Assessment Leader
c) ILD – Internal Loss Data
d) ISM – Issue Management

1

- Remediation: Define if remediation is required to solve the issue. In case it is necessary the process flow continues, otherwise it ends.
- Creation of BSI/Audit and ILD-IM System entry:
  - Potential and actual loss impact
  - Issue owners

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[1] **The Sarbanes-Oxley Act** came into force in July 2002 and introduced major changes to the regulation of corporate governance and financial practice. It is named after Senator Paul Sarbanes and Representative Michael Oxley, who were its main architects, and it set a number of non-negotiable deadlines for compliance.

The Sarbanes-Oxley Act is arranged into eleven 'titles'. As far as compliance is concerned, the most important sections within these eleven titles are usually considered to be 302, 401, 404, 409, 802 and 906.

- o Actions owners
- o Action plan
- o Due dates

Once an issue has been reported in the Enterprise and Operational Risk System it is necessary to give the proper follow up to the remediation action plan. Action owners (most of the time action owners are the functional process owners as well) are in charge of making the recommended enhancements or modifications to the processes and systems to avoid another similar incidence.

- Testing of the issue: As part of ensuring that modifications performed have positively changed the process and systems involved, tests of effectiveness, substantiveness and design must be done.
  - o Substantive test: Is an audit process that examines financial information and supporting documentation to see if they contain errors. This test is needed as evidence to support that the records of the process are complete and are accurate.
  - o Test of Effectiveness: Testing of the control to verify it is implemented and operating effectively for its intended purpose.
  - o Performing a walk-through of the procedure from source documentation to the recordation in the general ledger to verify the controls in place are designed appropriately to prevent or detect incorrect instances of material misstatement.

As further on it will be mentioned, this test methodologies were applied to the Fleet remediation before it was sold to a third party.

- Closure: Validation of the action plan by the issue approver and closure in the ILD-IM system.

2.3.4 Risk and Control Self-Assessment (RCSA)

This corporate effort stands for identifying and analyzing the relevant risk in order to achieve the business objectives, and the assessment of the controls in place to mitigate those risks, forming a basis for determining how the risks should be managed and defining the operational risk profile of the platform.

2.3.5 Key Risk Indicators (KRIs)

The Key Risk Indicators are tolerances or metrics against controls designed for measuring key business risk exposures. They enable the Governance team to monitor the ongoing adequacy of the control environment and to initiate remediation as required. Ongoing monitoring of KRIs also informs the ongoing Risk and Control Self-Assessment (RCSA) and Business Environment Analysis (BEA).

2.3.6 Business Environment Analysis (BEA)

The business Environment Analysis is the periodic evaluation of the operating environment of the organization. It analyses trends and new developments (of processes or systems) that could have an impact on the level of operational risk. This information also feeds the ongoing RCSA.
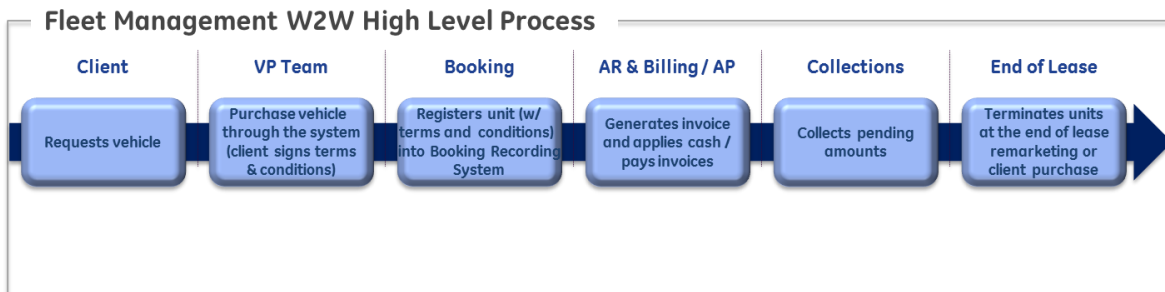
2.3.7 Scenario Analysis

The scenario analysis is the systematic process of obtaining expert opinions from business managers and risk-management experts to derive reasoned assessments of the likelihood and loss impact of plausible, high-severity operational losses.

3. Fleet Remediations Overview

As I mentioned at the beginning of the paper, Company ABC Fleet Management Services was sold to a third party. Company ABC was one of the largest and most experienced companies in fleet management worldwide. In Mexico, it helped industry-leading companies manage fleets for more than 15 years. At the moment of the selling, the vertical provided services to 200 customers with more than 30,000 vehicles in service.

The transition remediations were part of a collaborative effort of the company to maintain the value of the product since the sale was announced back in June 2015. Herein, I am going to list some of the most significant remediations performed, including the issues found and the corrective actions taken.

In order to be able to talk about the issues identified, it is necessary to include the big picture of how the process works:

Fleet Management W2W High Level Process

Client	VP Team	Booking	AR & Billing / AP	Collections	End of Lease
Requests vehicle	Purchase vehicle through the system (client signs terms & conditions)	Registers unit (w/ terms and conditions) into Booking Recording System	Generates invoice and applies cash / pays invoices	Collects pending amounts	Terminates units at the end of lease remarketing or client purchase

At very high level, the fleet management process consists in:

- Client prospection and deal origination.
- Booking Team in charge of registering all the terms and conditions into Booking Recording system[2], configures a deal according to the master contract signed between Company ABC and the client.
- Once the client is ready to acquire vehicles, these are request to the Vehicle Procurement Team through the Fleet Management System[3], which is in charge of generating the purchase order and deliver the unit to the final user.
- Every unit has its own annex containing the corresponding financial information that is used by Booking Team to set the unit accordingly in the Booking Recording system.
- Booking Recording system feeds the General Ledger[4] Accounts Receivable and Billing and the General Ledger Accounts Payable systems so the corresponding invoices and payments are generated.
- If needed, Collections Team gets in touch with the client to collect overdue rents. At the end of the leasing period (usually 36 or 48 months).

End of Lease Team is in charge of terminating the unit into the systems. At this point, the vehicle can be acquired by the client upon request or returned so the remarketing team can resale it.

Coming up next, I am going to catalog the identified issues throughout the remediation process according into two big categories giving a quick overview of each one and I am going to take one significant example of each category to explain the methodology of investigation and the remediation process. Both categories involve people, processes, systems and external events but contain certain significant features that led to failure and that is why there are cataloged thereby.

3. 1 Issues due to manual error entries

As in every company, there are some processes that are performed manually as opposed to thorough automated solutions. The more manual entries are made, the higher the risk of error, especially if the errors are repeated on ongoing basis.

For example, in Company ABC some of the high risk processes are managed manually, this includes but is not limited to Fleet Booking process.

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[2] Booking Recording System: Vehicle managing system used to book vehicles and set up terms and conditions of the deals. It interconnects with the General Ledger Accounts Receivables and Billing and the General Ledger Accounts Payable systems.

[3] Fleet Management System: Manages the purchase of vehicles since the requisition from the client is placed to the delivery of the unit.

[4] General Ledger: Is a complete record of financial transactions over the life of a company. The ledger holds account information that is needed to prepare financial statements, and includes accounts for assets, liabilities, owners' equity, revenues and expenses.

Booking activity consists of manually registering the information retrieved from original documentation of the deals in the systems. Humans make mistakes from time to time and this is not the exception, what happens here when someone makes a mistake it directly impacts on the assets and liabilities in the General Ledger.

3.1.1 Vehicle Double Payments

Issue Description: Duplicate payments were processed for vehicle purchases in Latin America. This issue was caused due to insufficient system and manual controls around the payments process. This issue was identified through the review of 15 sampled transactions in which five of them were confirmed to be overpaid or double paid.

Highlights & Corrective Action Steps:

- System control was enhanced.
- Clearing account (ledger account in which this type of transactions are accounted) and Accounts Payable transactions were analyzed in order to identify the whole population (15 cases were identified in total).
- The vehicle purchase team reached out to the vendors to obtain the corresponding reimbursements.
- It was also performed an analysis of the incorrect payments to identify possible trends.
- It was established a new process for vehicle payments initiation and processing.

3.1.2 Insurance Policy Premiums

Issue Description: Incorrect insurance policy premiums were entered in Booking Recording System and Fleet Management System resulting in inaccurate charges to some customers. This issue was Business Self-Identified after a client inquiry about inconsistent charged raised the alert. A three-way match between Booking Recording System, Fleet Management System and the insurance policy/quote was necessary in order to confirm the assumptions.

Highlights & Corrective Action Steps:

- A new process was implemented for quoting and booking insurance amounts, with a new confirmed effectiveness of 98%.
- 3-way match analysis to determine scope of the issue was completed.
- Correct approach to the customer was defined and the corresponding team proceeded accordingly to contact the customer and explain the issue.

- Credit memos were issued to the impacted customer and applied to the corresponding account.
- Implemented new process to manage insurance payments and build insurance data base.
- Implemented workflow to manage insurance clarifications.
- Establish insurance price variance amount and document it accordingly.

3.1.3 Procurement Fees

Issue Description: Procurement fees were not charged or incorrectly charged to some customers. Incorrect charges were originated by different reasons:

- Procurement fees were wrongly recorded in Annex A document due to system issues and booking errors.
- Procurement fees were wrongly recorded in the Booking Recording system due to booking errors.

All the mistakes eventually led to incorrect billings to the customers.

Highlights & Corrective Action Steps:

- System defects responsible for the issue were fixed.
- A new process was introduced to ensure accuracy of procurement fees going forward.
- Over 350 Master Contracts to collect data about the proper Procurement Fees that should be set up in the Fleet Management System.
- Analyzed the procurement fees and determined impact by customer and corrections needed.
- Determined the approach towards the customers and executed accordingly.
- Corrections of the Procurement Fees wrongly set up in the Fleet Management System and transferred to each newly issued Annex A.
- It was proposed to consider changing the Contract Setup process to ensure original documents are used for this purpose.

3.2 Issues due to the Overall Risk Framework & IT Challenges

Big companies with highly transactional products and services require strong systems made to size in order to deliver the expected results fitting in exactly to the processes. Nevertheless, most of the time the costs and time required to develop them is just not feasible so business acquire predesigned systems. The problem when trying to adjust processes to systems instead of systems

to processes is that it is going to be necessary to create patches when problems arise. At Company ABC, it is not only necessary to make sure a processes work properly but also if they are complying with regulatory and risk requirements.

This is often a daily duty at Company ABC because that functions like IT do. They make sure the process and systems are working properly, making sure sensitive information is well protected and patching the systems when needed (we already mentioned the main cause in which systems needed to be patched).

3.2.1 Booking Recording System to the General Ledger Transfer

Issue Description: During a separate finance remediation performed in 2014, some enhancements were introduced in General Ledger and Booking Recording systems for process optimization purposes. The changes were applied within fee codes related to End-of-Lease and Remarketing charges and affected the process of transferring general ledger and receivable balances from Booking Recording System to the General Ledger.

As a result of re-mappings on some accounts, it was detected that some lease invoices total amount transferred from Booking Recording System to the General Ledger was incorrect. However, the invoices sent to the customers were correct.

During the analysis of variances the Finance and IT team reported two issues related with ELTO mapping changes, those were escalated with Booking Recording System and General Ledger USA teams in order to define the to be process and attend the solution.

Total unapplied cash went up to USD $2.1 million until the problem was solved, increase rate was USD $0.5 million per month approximately.

Highlights & Corrective Action Steps:

- System enhancement was done.
- Manually adjust of the balances in the General Ledger and apply accumulated cash meanwhile the system enhancement was finished.

3.3 Issues due to No Process Oversight / No Wing To Wing Process

Most of the time, processes are built and modified in the way up with few or any previous planning and without considering that process as part of a bigger structure (as part of that bigger structure,

process will interact and affect positively or negatively another processes). Taking the time to visualize the big picture of processes sometimes makes us realize how deficient or obsolete a process is.

During the remediation period of Company ABC, the Control Leader of the business focused on understanding the wing to wing processes intended to be remediated in order to be able to see the possible positive and negative outcomes a process might have. Trying to spot issues auditing processes that you don't know how they work is like walking through a maze in complete darkness extending your arms in front hoping to find the way out.

3.3.1 Security Deposits[5]

Issue Description: Fleet security deposits were not been collected or were collected at wrong amounts. This issue was discovered after comparing the historical Security Deposits report from Booking Recording System report to the General Ledger and the actual contracts.

Highlights & Corrective Action Steps:

- "Charge back" process was implemented to match calculated Security Deposit to Accounts Receivable.
- It was performed a reconciliation of Security Deposits collected since 2012 to date.

3.3.2 GPS Vendor Advanced Payments

Issue Description: A third party provider of vehicle tracking services and monitoring devices stopped servicing. The vendor gave a two week notice before it completely stopped providing services and it went impossible to contact after that. By that time, Company ABC had around USD $0.6 million of non-amortized prepaid services that were supposed to be provided until 2019 and over 2000 units were impacted.

A deep dive investigation of all the rest tracking devices service providers was triggered and it turned out there were another 8 suppliers with pre-paid services for the lease term.

Highlights & Corrective Action Steps:

- Company ABC determined it would not provide tracking services going forward.
- Situation and going forward plan was communicated to the impacted customers.

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[5] Security deposits: Sums of money the client deposits at the beginning of the lease to cover possible losses from damages to the vehicle.

- Impacted units were re-booked as necessary.
- Review of the down-payments exposure of all vendors was done.
- The vendor risk monitoring process was strengthened.
- Bails were requested to the remaining tracking devices vendors.
- Legal actions were taken for the vendor that stopped service deliberately.

3.3.3 Evergreen[6] Calculations

Issue Description: Incorrect Evergreen charges were booked in Booking Recording system resulting in incorrect rents billed to the customer or missed billing after the end of the amortization.

Highlights & Corrective Action Steps:

- Introduced a new process to book evergreen charges.
- It was quantified exposure from incorrect and missed billings to the customer.
- It was determined the approach towards the customer and executed accordingly.
- Determined and implemented the process and IT improvements that ensured effectiveness of the monthly audit process.

3.3.4 Initial Rents

Issue Description: Leasing initial rents were incorrectly booked, incorrectly billed or not billed to some customers. After a deep dive analysis performed it was determined that over 280 accounts were impacted according to the General Ledger Clearing account data.

Highlights & Corrective Action Steps:

- Initial rents process was reviewed and several system reports were reconciled.
- Manual reviews of data in the subledgers were performed.
- Exposure by client was quantified.
- Determined and implemented the process and IT enhancements to manage initial rents going forward.

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[6] Evergreen rent: It is called an evergreen to any subsequent rent a client pays for a lease that is already over, taking into consideration that no contract renewal was requested.

4. Detailed Fleet Remediation

In this section I will go into details of the two most significant projects performed during the remediation. I consider them to be the most significant because of their materiality, complexity and the obtained results.

4.1 Vehicle Double Payments

4.1.1 Process as it was

Vehicle/Insurance Payments – as is process

4.1.2 Accounts Payable Vehicle Payment Process

Once the invoices have been recorded in Fleet Management System and Booking Recording System, they are set for payment and Accounts Payable Team needs to perform the following manual validation in order to ensure payments to vendors are done are correct.

FMS   GL AP

List of unpaid invoices by vendor   **List of payment transactions**

Invoices entered by the booking team and not marked as paid yet   *Invoices entered by the booking team to BRS and transferred to GL*

Invoice #	Supplier	Amount
___	___	___
___	___	___
___	___	___

Invoice #	Supplier	Hold
___	___	☑
___	___	☑
___	___	☑

1 Print the report from FMS

2 Compare FMS report against GL transactions and unhold those for payment. Highlight paid transactions in the printout.

3 Compare printout to FMS screen and invoices paid.

Invoice #	Amount	Paid
___	___	☑
___	___	☑
___	___	☑

Missing system control

1. Booking Team enters invoices to FMS and BRS.
2. AP follows payment process and marks invoice as paid.
3. Booking Team changes invoice details in FMS and BRS.
4. New invoice data is again sent to GL AP from BRS.
5. Invoice is shown as unpaid in FMS which triggers AP Team to follow payment again.

- - - Manual operation

4.1.3 Vehicle Payments Reconciliation Process

4.1.3.1 Reconciliation Process W2W

In order to reconcile vehicle payments, determine list of vendors with incorrect payments and develop approach to obtain reimbursements, it is critical to analyze potential exceptions to help refine the data set.

1	2	3	4	5	6	7	8
Collect data set and determine data in scope	Determine testing scenarios and refine analysis to identify correct vs. at risk payments	Determine error type of at risk payments (e.g. overpayments)	Reconcile clearing account report with AP report of unpaid / paid invoices	Manually validate list of at risk transaction in the system	Work with AP team to validate incorrect payments	Finalize list of vendors with incorrect payments	Develop approach to manage reimbursements

4.1.3.2 Data Required

In order to perform the vehicle payments reconciliation, the reports below are necessary:

Reports for Vehicle Payments Reconciliation

In order to perform the vehicle payments reconciliation, the reports below are necessary

1 **Clearing Account (046)**
- GL 046 report
- Used as baseline data

2 **Sub-Ledger Report**
- Sub-ledger report pivot table for all units
- Used to review unit capitalization date and amount

3 **FMS – Report**
- FMS report
- Used to review amount for "Abono a Capital"

4 **Mark-Up Report**
- Fee code XXX reports
- Used to review capitalization amount accuracy

5 **Historic Report of Invoices**
- Historical payments used to review all payments for all units

6 **Unpaid Invoices – AP Report**
- AP unpaid invoices report used to review unpaid or on-hold invoices to minimize manual review

4.1.3.3 In Scope /Out of Scope Units

The items below defined the scope of the analysis:

A Fee Codes In Scope

Fee codes related to insurance payments are out of scope for the purposes of this analysis

Journal Source	Fee Code	Classification
CS MEX CAPP	0100	Valor del auto
	0101	Renta Inicial
	0414	Accesorios (GPS)
CS MEX PMNL	0100	Valor del auto
	0414	Accesorios (GPS)
Payables	-	Pago de Unidades
Receivables	-	Rentas Iniciales

B Special Contracts Out of Scope

Contracts related to re-booking and re-release are out of scope for the purposes of this analysis

Unit Type	Description
Ending in RB	Re-booking
Ending in RL	Re-lease

C Log Number

If missing log number (-), then out of scope

D Fleet and Unit

If missing fleet and unit number (-), then out of scope

4.1.3.4 Reconciled Units

Reconciled units after first pass reviewing balance between CAPP amount and payable or after manual reconciliation with multiple reports

Reconciled – 1st Pass

1st Pass

- Booking (CAPP) and payments balance for log number (same fleet and unit)

Example

Journal Source	MXZ
CS MEX CAPP	- 1,034.46
CS MEX CAPP	- 282,769.02
Payables	282,768.98
Payables	1,034.48

Reconciled – After Manual Review

Correct – CAPP Not Found
- Unit capping not shown as capped in GL 046
- Reconciled log numbers with sub-ledger report to verify capping date and amount
- Timing is a consideration for "CAPP Not Found" as capping data before 2012 is not available, 119 of 186 units were impacted due to timing with an in-service process date in Dec 2012

Correct – Initial Rent
- Unit initial rent invoice not shown in GL 046; invoice entry is missing in the report
- Reconciled log number with FMS General Report to verify if initial rent was registered

Correct – Payment Found
- Unit payment not shown in GL 046 despite proper registration in BRS sub-ledger
- Reconciled fleet and unit numbers with historical payment data from FMS to verify if payment was registered

4.1.3.5 Overpayment Units

Overpayments were identified for units due to additional payments, duplicate payments, and incorrect amounts. To verify all entries (CAPP, Payables, and Receivables) it is necessary to filter data base by log number.

Overpayments

Additional Payments
- Units identified with multiple payment entries higher than CAPP amount

Duplicate Payments
- Units identified with duplicate payment entries (same amount)
- Duplicate entry could be to same party name or different. This is due to modifications in the system after payment was processed

Example

Journal Source	MXZ
CS MEX CAPP	- 435,344.83
Payables	435,344.83
Payables	435,344.83

Incorrect Payment Amount
- Identified units with payments entries with incorrect amount, in some cases due to entry mistakes or typos

4.1.3.5 Unreconciled Items

Some units were reconciled after manual review with additional reports; however some other units were not able to be fully reconciled due to data quality. To verify all entries (CAPP, Payables, and Receivables) it is necessary to filter data base by log number.

Unreconciled

Incorrect – CAPP Not Found
- Unit not shown as capped in GL 046 (only payable entries)
- Reconciled log numbers with sub-ledger report to verify capping date and amount

Example

Journal Source	MXZ
Payables	192,211.21
Payables	1,034.49

Initial Rent – Booking
- Unit initial payment invoice is not shown in GL 046, initial rent is not billed

Example

Journal Source	MXZ
CS MEX CAPP	-101667.24
CS MEX CAPP	19612.07
Payables	101667.24

Initial Rent – Receivables
- Initial rent double billed, found duplicate receivables (initial rent invoice) entries for same fleet and unit

Unreconciled
- Units were not able to be fully reconciled due to data quality

Vehicle/Insurance Payments – new process
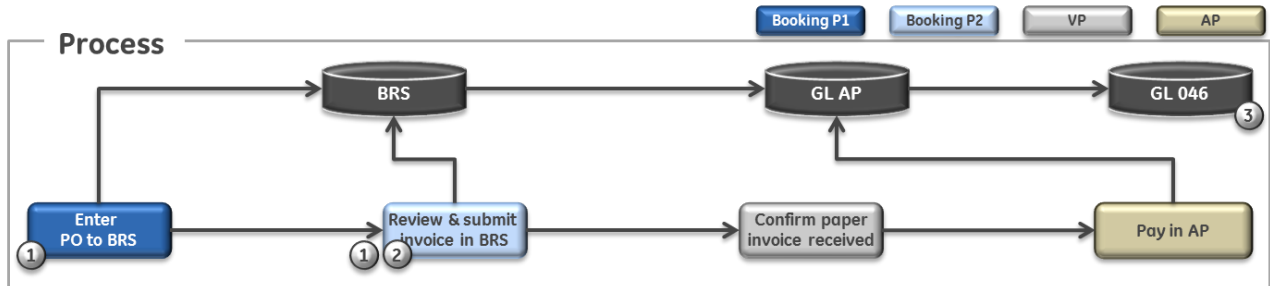
Process details

Enter PO to BRS — Booking Person 1 entering PO information to BRS system based on information from FMS

Review & submit invoice in BRS — Booking Person 2 reviewing invoice against PO and entering invoice data ... **3-way match**

Confirm paper invoice received — Vehicle Procurement to confirm paper invoice received ... no change in the process

Pay in AP — AP Team to process payment once paper invoice received ... no validations at this step

Controls

1. **Segregation of Duties** ... different person enters BRS PO and BRS invoice information

2. **3-way match** ... review of invoice against PO after delivery of the vehicle and all accessories

3. **Reconciliation of clearing account** ... detective control to review payables against cap cost of the unit & clarify differences

Main changes & benefits

Invoice entry validation in BRS only
- FMS no longer repository of invoices, invoice data stored and validated directly in the BRS sub ledger
- Eliminated one process step and touch point

Segregation of Duties between BRS PO and invoice entry
- Will utilize functionality of BRS system not used so far
- Validation of data will occur in BRS system, prior to transfer to AP
- 3 way match in BRS system ... invoice against PO validation after equipment delivery and prior to payment

Eliminate On Hold invoices and their review
- All invoices sent from BRS accurate – no On Hold invoices and necessity for their review ... eliminated 2 process steps
- No necessity for AP analyst to review accuracy of AP invoices ... eliminated process step and touch point

Implementing detective control to ensure no errors in the process
- Regular reconciliation of clearing account to identify and follow up on instances of potential errors

4.2 Insurance Policy Premiums

The process for quoting, recording and paying the fleet insurance amounts is manual. This process requires quoting the insurance cost in an existing Broker's website; this amount is then captured manually in Fleet Management System. Finally, these figures are also manually entered into Booking Recording billing screen that feeds billing.

At the end of the month the insurance broker provides a list with the new insurance policies for the period with the associated costs. Company ABC team validates that the units of reference are actually ours and instruct payment. However, no validation occurs in relation to the amounts, either by the Vehicle Procurement team, the Broker or the Insurance team.

In June 2014, a client contacted the FMS (Fleet Management Specialist) to inquire about an insurance charge for the corresponding vehicle. A review by Company ABC, detected an error in Fleet Management and Booking Recording Systems capturing processes. An extended review was performed with the following findings:
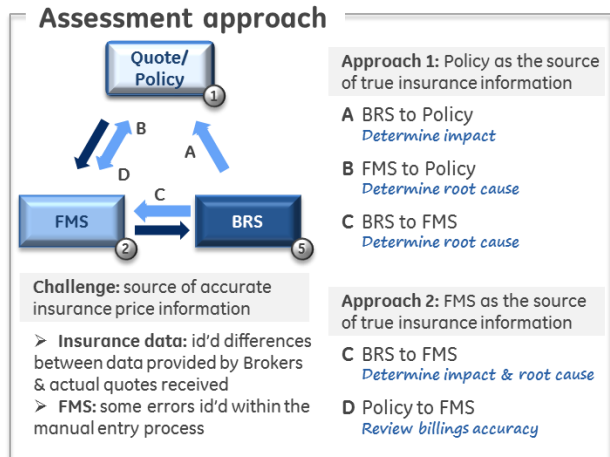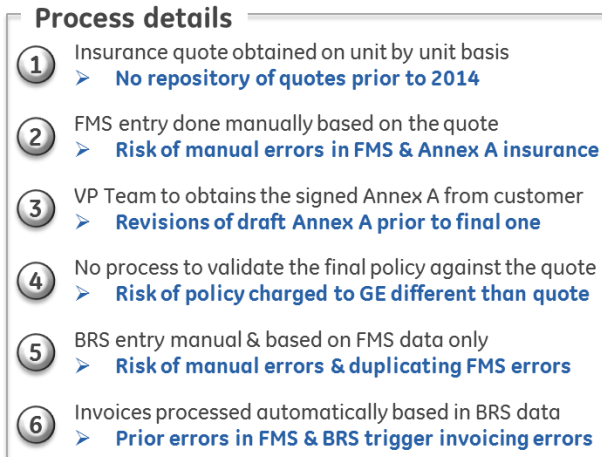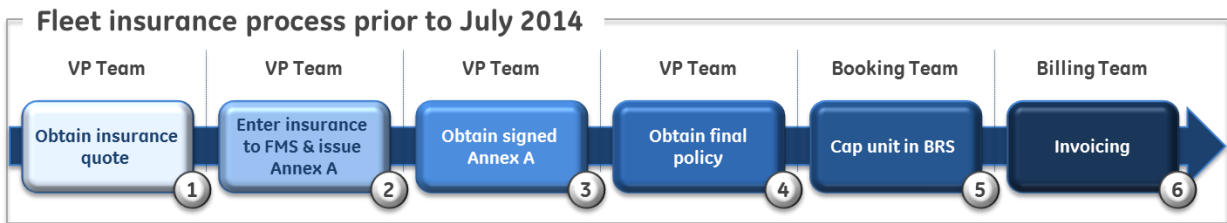
101 cases where Company ABC overcharged for insurance to clients (21 clients / USD$43.5K)

88 cases where Company ABC undercharged for insurance to clients (18 clients/ USD$44.5K)

4.2.1 Process as it was

In 2Q'14 customer approached Company ABC to inquire about the cost of insurance quoted within Annex A as it showed variance vs. prior quotes for the same type of vehicle. Review of insurance policy premiums process revealed some breakdowns.

Fleet insurance process prior to July 2014

VP Team	VP Team	VP Team	VP Team	Booking Team	Billing Team
Obtain insurance quote (1)	Enter insurance to FMS & issue Annex A (2)	Obtain signed Annex A (3)	Obtain final policy (4)	Cap unit in BRS (5)	Invoicing (6)

Process details

1. Insurance quote obtained on unit by unit basis
   ➢ **No repository of quotes prior to 2014**
2. FMS entry done manually based on the quote
   ➢ **Risk of manual errors in FMS & Annex A insurance**
3. VP Team to obtains the signed Annex A from customer
   ➢ **Revisions of draft Annex A prior to final one**
4. No process to validate the final policy against the quote
   ➢ **Risk of policy charged to GE different than quote**
5. BRS entry manual & based on FMS data only
   ➢ **Risk of manual errors & duplicating FMS errors**
6. Invoices processed automatically based in BRS data
   ➢ **Prior errors in FMS & BRS trigger invoicing errors**

Assessment approach

Quote/Policy (1)

B
A
D
C

FMS (2)   BRS (5)

Challenge: source of accurate insurance price information

➢ **Insurance data:** id'd differences between data provided by Brokers & actual quotes received
➢ **FMS:** some errors id'd within the manual entry process

Approach 1: Policy as the source of true insurance information

A BRS to Policy
   Determine impact
B FMS to Policy
   Determine root cause
C BRS to FMS
   Determine root cause

Approach 2: FMS as the source of true insurance information

C BRS to FMS
   Determine impact & root cause
D Policy to FMS
   Review billings accuracy

4.2.2 Annex A to Booking Recording System Reconciliation

Data Calculation Steps

1. Determine Scope
2. Obtain system data (Fleet Management System, Booking Recording System)
3. Reconcile the insurance charges
4. Identify units with missing data and unreconciled
5. Collect and review documentation for these units (10k+ documents researched and reviewed)

6. Manually obtain system information missing in reporting for unreconciled items
7. Continue reconciliation using document data
8. Calculate alternative scenarios using different data sets

Data Source used for calculation

Variable	Calculated Field	BRS	FMS	Annex A	Table of Payments
Model of Payments	●	◍	◍		◍
Interest Rate		◍	◍	◍	
Annex A insurance	●		◍	◍	
UDI/Markup Model	◍				
Markup %			◍		

● Data easily available

◍ Data difficult to obtain, data different in each data source

- Model Of Payments: Necessary to calculate applicable interest, available in 3 data sources which are inconsistent and show different values for the same vehicle.
- Interest Rate: Available in 3 data sources which are inconsistent and show different values for the same vehicle; interest indicated in Booking Recording system considered correct and most reliable source.
- Insurance Value: information in Annex A considered binding; should be available in Fleet Management System; since Fleet Management System data often changes after signing Annex A, the data might be inaccurate; cannot retrieve all Annex A documents to confirm proper amounts.
- Markup %: Historical data purged from the system; obtained 3 reports from 3 different sources, reports on occasion showing 2-3 different %s for the same fleet.
- Markup/UDI model: UDI model implemented in July 2014 but insurance policies issued according to both models in transition period.

Assumptions

1. Data in Scope – all policies that had at least one payment from the customer received after 1st October 2013 (based on 2 year period for statute of limitation).
2. Model Of Payments – Model of Payments recorded in the Booking Recording system is correct.
3. Interest Rate – Interest Rate recorded in the Booking Recording system is correct.

Adjustments that led to "PASSING" some units

- Rounding – If the difference between calculated and recorded in the Booking Recording System insurance is less than 165 MXN (~10 USD) it is considered correct.
- Interest Adjustment – recalculating value of the insurance policy using different interest rates from different sources.
- Markup Adjustment – recalculation of the insurance policy using different markup % from different data source.
- Mode of Payment adjustment - recalculation of the insurance policy using different Model of Payments from different data source.
- Nestle Adjustment – comparison of the Booking Recording System values to manually maintained Excel file used for rebooking purposes of Nestle units.
- Transition Adjustment – change of the calculation method for the units booked during UDI implementation period (06-09.2014).
- Sales & Leaseback, Re-booking and Re-leases: data/documents difficult to obtain and not reliable, hence showing errors. Excluded from exposure calculation going forward.

Preliminar Results

		Units	USD
PASS	PASS	576	N/A
	ROUNDING	12,993	N/A
	INTEREST ADJUSTMENT	14	N/A
	MARKUP ADJUSTMENT	46	N/A
	MOP ADJUSTMENT	301	N/A
	NESTLE ADJUSTMENT	173	N/A
	TRANSITION ADJUSTMENT	9	N/A
		14,112	
CAN'T CALCULATE	RE-BOOKING	4	N/A
	RE-LEASE	6	N/A
	SALES AND LEASEBACK	61	N/A
	CAN'T CALCULATE	87	N/A
		158	
OVERBILLING	RE-BOOKING	17	8,823
	RE-LEASE	3	1,721
	SALES AND LEASEBACK	51	42,851
	OVERBILLING	185	93,833
		256	147,227
UNDERBILLING	RE-BOOKING	25	57,233
	RE-LEASE	14	7,075
	SALES AND LEASEBACK	4	16,663
	UNDERBILLING	469	548,570
		512	629,541
		15,038	

Units subject to next steps of the analysis

4.2.3 Annex A to Insurance Payment Reconciliation

What percentage of cap cost is insurance?

Range	Units	Impact*
0%-10%	2125	
11%-20%	10009	
21%-30%	2818	
31%-40%	328	15,990,342.47
41%-50%	46	2,884,633.85
51%-60%	20	1,388,265.33
61%-70%	1	241,603.85
111%-120%	1	257,614.67

- 16% - Average value of insurance compared to cap Cost for 15k+ scoped units
- 17% - Average value of insurance compared to Cap Cost for 500+ units booked in February and March and audited
- 35% - Maximum value of insurance compared to Cap Cost for 500+ units booked in February and March and audited

4.2.4 Manual review of unreconciled items

Manually reviewed all on-road overbilled units with available documents; reviewed some underbilled units and units that could not be calculated.

Scope of review

Amounts in USD*

		Units	USD
CAN'T CALCULATE	RE-BOOKING	4	N/A
	RE-LEASE	6	N/A
	SALES AND LEASEBACK	61	N/A
	CAN'T CALCULATE	87	N/A
		158	
OVERBILLING	RE-BOOKING	17	8,823
	RE-LEASE	3	1,721
	SALES AND LEASEBACK	51	42,851
	OVERBILLING	185	93,833
		256	**147,227**
UNDERBILLING	RE-BOOKING	25	57,233
	RE-LEASE	14	7,075
	SALES AND LEASEBACK	4	16,663
	UNDERBILLING	469	548,570
		512	**629,541**

- Calculated what % of the Cap Cost are the disconnects and excluded all units where the difference was less 1% of cap cost.
- Performed manual review of the overbilled units, documentation for which was available.

Results

Amounts in USD*

		Units	Exposure
CAN'T CALCULATE	CAN'T CALCULATE	83	N/A
	RE-BOOKING	4	N/A
	RE-LEASE	6	N/A
	SALES AND LEASEBACK	61	N/A
		154	
OVERBILLING	OVERBILLING	78	80,878
	RE-BOOKING	12	8,348
	RE-LEASE	2	1,704
	SALES AND LEASEBACK	43	41,988
		135	**132,919**
PASS	< 1% OF CAP COST	142	7,156
	ROUNDING	10	0
		152	**140,075**
UNDERBILLING	RE-BOOKING	23	57,171
	RE-LEASE	14	7,075
	SALES AND LEASEBACK	4	16,663
	UNDERBILLING	445	561,878
		486	**642,787**

Insurance Disconnect vs. Cap Cost analysis

Calculated what % of the cap cost is the insurance disconnect, all units where this difference was less than 1% were excluded from the further exposure analysis.

<u>Exclusions from the final calculations:</u> From final exposure assessment excluded: off-road units, sales and leasebacks, re-leases, re-bookings.

		Units	Exposure
PASS	< 1% OF CAP COST	142	7,156
	ROUNDING	10	0
		152	140,075

	Units	Billed To Date	Future Billings
Off Road	60	3,904	-
On Road	82	2,530	485
	142	6,435	485

	Period	Units	Billed To Date	Future Billings
OVERBILLING	AMORT	3	84	110
OVERBILLING	EVG	63	1,453	-
		66	1,537	110

Log	Period	Units	Billed To Date	Future Billings
UNDERBILLING	AMORT	9	272	253
UNDERBILLING	EVG	3	597	-
		12	869	253

Analysis confirmed overall impact from the on road units where insurance disconnect<1% of the cap cost to be immaterial. No further analysis or correction to be performed for these units.

Analysis of Overbilled units

<u>Exclusions from the final calculations</u>

- From final exposure assessment excluded: off-road units, sales and leasebacks, re-leases, re-bookings.
- From final exposure assessment excluded units for which documentation was no available … any re-booking activities//corrections should not be posted w/o appropriate documentation; unit level documentation was researched in all booking libraries, the Digital Repository System as well as in Toluca document storage.
- Added 1 unit with insurance charge significantly higher than the policy (identified in step "Annex A to Insurance Payments reconciliation").

		Units	Exposure
OVERBILLING	OVERBILLING	78	80,878
	RE-BOOKING	12	8,348
	RE-LEASE	2	1,704
	SALES AND LEASEBACK	43	41,988
		135	132,919

Documents available for 8 out of 18 units

Log	Period	Billed To Date	Future Billings	USD
8801411	AMORT	1,829	413	2,242
8831076	AMORT	8,872	5,323	14,195
9037364	AMORT	675	675	1,350
9105678	AMORT	269	336	606
9165675	AMORT	122	284	406
9184159	AMORT	617	772	1,389
9184892	AMORT	597	821	1,417
9214830	AMORT	110	173	283
		13,091	8,797	21,889

	Units	Billed To Date	Future Billings
Off Road	60	37,410	-
On Road	18	20,954	9,823
	78	58,364	9,823

Credit notes covering the full lease period (~22k) issued for 8 identified units.

Analysis of Underbilled units

Exclusions from the final calculations

- From final exposure assessment excluded: off-road units, sales and leasebacks, re-leases, re-bookings.
- From final exposure assessment excluded units for which documentation was no available … any re-booking activities//corrections should not be posted w/o appropriate documentation; unit level documentation was researched in all booking libraries, the Digital Repository System as well as in Toluca document storage.

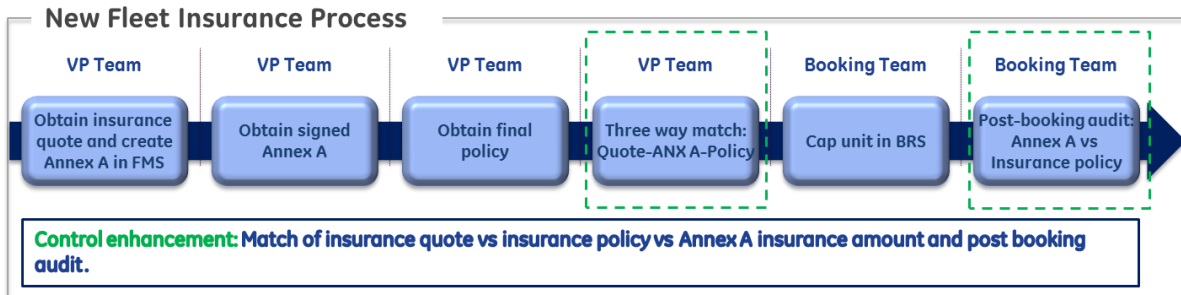|		Units	Exposure
UNDERBILLING	RE-BOOKING	23	57,171
	RE-LEASE	14	7,075
	SALES AND LEASEBACK	4	16,663
	UNDERBILLING	445	561,878
		486	642,787

	Units	Billed To Date	Future Billings
Off Road	365	298,629	-
On Road	80	185,074	73,242
	445	483,703	73,242

Documents available for 39 out of 80 units

4.2.5 New Enhanced Process

New Fleet Insurance Process

VP Team	VP Team	VP Team	VP Team	Booking Team	Booking Team
Obtain insurance quote and create Annex A in FMS	Obtain signed Annex A	Obtain final policy	Three way match: Quote-ANX A-Policy	Cap unit in BRS	Post-booking audit: Annex A vs Insurance policy

Control enhancement: Match of insurance quote vs insurance policy vs Annex A insurance amount and post booking audit.

5. Conclusions

Since Company ABC sale was announced in April 2015, uncertainty and doubt took over a lot of employees that for years served to maintain one of the biggest sources of money to Company ABC. For functions like Operational Risk this time moment was really a once-in-a-lifetime opportunity to learn because the global acquisition of the products demanded us to strive in accomplishing all the required improvements on time to maintain the franchise value before the sales were effective.

As it was demonstrated throughout the paper, governance functions are necessary in big companies because they integrate people, processes and systems in order to prevent or remediate issues along the organization. It is convenient to mention that most of the times workshop blindness or lack of visibility/understanding/knowledge of the wing to wing process prevents process owners of realizing the inherent or residual risks of their day-to-day work.

Results speak for themselves, as remediation's impacted positively the financial results of the business through savings and recoveries.

I consider that the continuous oversight and testing of the business processes and systems across the organization are key activities to ensure the continuity of the organization, regardless if companies are FED regulated or not.