A Report for Manitoba Public Insurance

Physical Damage Re-Engineering (PDR) Program Evaluation

26 May 2017

Engagement: 330041936

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Executive Summary

Context and Background

In response to an order from the Public Utilities Board (PUB) in 2016, MPI contracted Gartner to conduct an update of the Physical Damage Re-engineering (PDR) program.

PUB Order No. 162/16 dated December 15, 2016, states: In the 2018 GRA, MPI file an independent assessment on the development and roll-out of the PDR Project, including the progress of the pilots, the timing of full implementation, the costs of the project and the anticipated savings to be derived from the project. This project cost/benefit analysis shall incorporate all maintenance costs in the program evaluation.

Gartner is pleased to provide this update as requested by MPI.

Evaluation Approach

Gartner reviewed a number of key program artifacts and interviewed a number of key individuals. Gartner applied its proven risk and readiness methodology to address the five key questions raised in the PUB order.

The PUB order specified five key areas: Progress of pilots to date; Timing of full implementation; Project costs; Maintenance costs; and Savings / benefits to be realized.

Program Structure

The Physical Damage Re-engineering (PDR) program is in the process of introducing a number of changes to MPI's operating environment in order to enhance MPI's ability to manage and resolve physical damage claims effectively in the emerging marketplace environment. It continues to focus on addressing necessary business transformation in response to two key drivers:

- Significantly increased complexity in repairs management.
- Rising consumer expectations.

The PDR program has made significant progress over the past year. It has transitioned a number of projects into production and has simplified the overall program structure as follows:

- Eight PDR projects have been completed.
- Seven PDR projects have been cancelled. MPI determined that they are not strategic and do not add to the business case.
- Five projects now comprise the remainder of the PDR program.

Progress to Date and Timing of Full Implementation

In the past year, the program made significant strides in completing some projects, and reevaluating and cancelling others that would provide low value. While progress had been relatively slow prior to the last assessment, a number of significant components have now been put in place over the last year. A number of projects have been completed, gone into



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production, and transitioned to operations. This has enabled MPI to begin the transformation to the new business model with the launch of Direct Repair.

The PDR program has completed all but one of its pilots and moved the piloted solutions into production. The Remote Estimating pilot is nearing completion and will be moved into production in the coming months.

The MPI team is projecting that of the five remaining projects, four are tightly scoped and will be completed in the 2017/18 fiscal year, and the CCRS project will be completed in fiscal year 2019/20.

PDR Program Costs

The overall program budget has been consistently \$65.5M (in 2012 dollars) throughout all changes in direction and approach. While some projects required more than the original budget, others were under budget, and yet other originally planned projects were cancelled due to value projections being lower than originally projected.

Approximately \$43.4M has been spent on the program to date with \$18.1M remaining to complete the program. The PDR Program is currently projected to be complete by the end of fiscal 2019 / 2020, for a total projected spending of \$61.5M, \$4.0M less than the approved \$65.5M PDR budget.

Given the current constrained slate of five projects, the scope clarity for each of the five projects, and how far they are into their overall lifecycle, there is a high level of confidence in the projected spending. Prior concerns about the potential for additional cost, extended timeline and deferred benefits realization are much reduced.

Maintenance Costs

MPI has operationalized a large number of the PDR projects and the ongoing operations of the solutions are funded through existing MPI operating budget. There are a number of ways that MPI has addressed maintenance costs of the technical solutions which can be estimated in a number of ways.

First, solutions that are provided on a Software as a Service (SaaS) have no upgrade, support, or maintenance fees and the maintenance and upgrade charges are included in the SaaS subscription agreement.

Second, solutions which are acquired from a vendor require the customer to pay an ongoing license fee for ongoing support and maintenance and the rights to install any new versions or upgrades. MPI pays ongoing license fees for all such products.

Third, Gartner estimates that the cost for maintaining software that was custom developed within the PDR program is likely to be about \$300k per year. MPI budgets for ongoing support of custom developed software in its overall IT operating budget.

PDR has also introduces a set of solutions that not only have a software maintenance component, but also an ongoing need for development or a physical asset replacement cycle. MPI has budgeted for this kind of support in the operating budgets of the organizations most affected by production operations.

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Benefits

The PDR program is projected to deliver a number of qualitative and quantitative benefits. The MPI value management program has established a process for monitoring and measuring those benefits.

At a very high level, the Program is now structured as an investment of about \$65.5M over about 9 years, which will generate a steady flow of benefits starting in year 7 and ramping up to approximately \$13.65M starting in 2021/22 (year 12).

The latest projections show a slower ramp up of savings in the earlier years, and a delay of 1 year in getting to the more significant savings and achieving the projected steady state.

The Program, is currently showing a lengthy payback period, an Internal Rate of Return of 7% and a Net Present Value of \$13.7M (using a 3% cost of capital), over the period from inception (2010/11) until 10 years after go-live when benefits start to accrue in 2016/17.

The Program is on track with respect to the original approved budget, and is delivering measurable benefits.

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Report Context and Background

In response to an order from the Public Utilities Board (PUB) in 2016, MPI contracted Gartner to conduct an assessment of the Physical Damage Re-engineering (PDR) program. In its Order No. 162/16 dated December 15, 2016, the PUB summarized the Gartner feedback as follows:

"... Originally the PDR project was to be completed in 2017 but was reported last year to be delayed to 2020 due to changes in scope and direction to the project. MPI estimates that the PDR Project cost remains unchanged at \$65 million (based on 2012 dollars), and is now expected to be completed in 2021, which is a further one-year delay. ...Gartner had found that the overall total budget of the PDR Project had not been changed, but that costs had been reallocated among various components of the projects. Of the budget, \$32.8 million, or 50%, had been spent on the project. Mr. Geffen noted that Gartner has found that, in programs as large and complex as the PDR project, it is not unexpected to have a course correction, because at the outset of a project it is not unusual for an organization to expect to progress more quickly with a project than is the reality. With respect to the savings and benefits of the PDR project, Mr. Geffen noted that Gartner had determined the net present value benefit overall of the project of \$18 million. The cost/benefit analysis conducted by Gartner did not include the cost of maintaining the program. Gartner estimated the maintenance cost, based on industry standards, to be 18 to 20% per annum."

As part of the same document, the PUB ordered an update to the Gartner report as follows: *In the 2018 GRA, MPI file an independent assessment on the development and roll-out of the PDR Project, including the progress of the pilots, the timing of full implementation, the costs of the project and the anticipated savings to be derived from the project. This project cost/benefit analysis shall incorporate all maintenance costs in the program evaluation.*

Gartner is pleased to provide this update as requested by MPI. Gartner Consulting provides fact-based consulting services to help clients use and manage IT to enable business performance by bringing together research insight, benchmarking data, problem-solving methodologies and hands-on experience to improve the return on IT investment.

The Gartner report addresses the issues raised in the PUB and also provides an update to the project constraints / challenges identified in the previous report.

Evaluation Approach

Gartner reviewed a number of key program artifacts including the following:

- Update project status reports
- The original PDR Program Charter which documents program objectives.
- The original vision document which provides an explanation of problem and opportunities.
- The original PDR Business Case which clarifies business interventions and includes estimates of expected financial benefits and timing.
- A number of Change Requests which documented changes to the project structure and funding, added resources, confirmed completion or cancellation of some projects.

Gartner interviewed a number of key individuals including a number of the project managers and business relationship managers, and senior members of the MPI program and project organization including the Enterprise Architect, solution architects, the Business Transformation Office, Business Architecture, and Value Management.

Gartner applied its proven risk and readiness methodology, as described in the figure below, to address the key questions raised in the PUB order.



The PUB order specified five key areas:

- Progress of pilots to date
- Timing of full implementation
- Project costs
- Maintenance costs
- Savings / benefits to be realized

The following sections address these key issues in light of the key risk areas identified.

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Physical Damage Re-engineering Program

Overview

The Physical Damage Re-engineering (PDR) program is in the process of introducing a number of changes to MPI's operating environment in order to enhance MPI's ability to manage and resolve physical damage claims effectively in the emerging marketplace environment.

It continues to focus on addressing two key areas:

- Technology changes being adopted by vehicle manufacturers which are leading to significantly increased complexity in repairs management that drives a need for business and systems transformation by MPI and some of its partners.
- Rising consumer expectations which are driving MPI to not only have an online presence but also the ability to interact using mobile and on-line devices for key transactions.

Objectives

PDR continues to focus on satisfying MPI's business objective to deliver enhanced capabilities and levels of service in the following areas:

- Ensure vehicles are repaired in a safe and cost-effective manner
- Deliver and orchestrate the full lifecycle of physical damage claims management services, in partnership with the extended repair industry, to meet customers' evolving needs for quality, safety, cost control and service.
- Work with business partners to promote a local collision repair industry that is healthy and sustainable in both economic and environmental terms.
- Work with the global industry to foster safe and cost-effective vehicle repair and occupant protection.
- Be responsive to the needs and expectations of its customer base which is increasing in diversity and subject to unique geographic challenges and constraints. Ensure that customers are kept informed throughout the claim and repair process.
- Triage claims to involve Loss Prevention resources earlier in the process resulting in more denials/recoveries.

The PDR program expected outcomes have not changed since the previous assessment. It is expected to deliver the following:

- Reduction of 50% physical (PD) claims effort in Contact Centre activity.
- Direction of nearly 85% of estimates to distributed estimating (DE) shops
- Correct Repair shop will be identified 98+% of the time.
- Once a vehicle is at repair shop, claim is ready for repairs 98% of the time—no waiting for customer or shop.
- Customers and shops are not required to repeat work already performed, as measured by new process design and customer service experience
 - Measured by Number of abandoned sessions in First Notice of Loss (FNOL): less than 2% abandon rate
 - Measured by number of cross supplements in RepairCenter: less than 1% cross supplement rate



- Lower overall claims spend in comparison to current operations which will also preserve relative claims costs in relation to industry
- Less hands-on MPI involvement for most processes for simpler claims through a reduction in the amount of adjuster time and effort required for new First Notice of Loss (FNOL) claims
- Smaller MPI operational footprint achieved through decommissioning and / or repurposing MPI service centres
- Mitigation of leakage risks through ongoing claims financials management, forecasting, audit and monitoring
- Continued health of the overall Repair industry measured by the continued profitability of the Manitoba repair industry.
- Vehicle repairs meet relevant standards as defined and measured by quality of repairs standards and KPI's.

PDR Program Planning

The PDR program started in 2013. In late 2013 / early 2014 MPI conducted a comprehensive assessment to confirm that the program would still provide the projected benefits. A "Business Re-Visioning" project completed in early 2015 defined an approach which would focus on key outcomes which would drive achievement of the overall business case. Through the experience and knowledge achieved from execution and implementation of the various PDR projects, MPI has once again been able to refine the overall program.

As such toward the end of fiscal 2016/2017, MPI has restructured the PDR program in the following way:

- Eight PDR projects have been completed.
- Seven PDR projects have been cancelled. MPI determined that they are not strategic and do not add to the business case.
- Five projects now comprise the remainder of the PDR program. Some of these were components of the original PDR projects and some have been added to the program.

All of these changes to the PDR program have been documented in approved formal Change Request (CRs). These changes have had an effect on the timing, but not on the projected levels, of the benefits stream. They have not increased the budget, beyond the original \$65.5M. The program is currently projected to be completed well below the original approved budget.

Program Structure and Project Costs

The PDR program has made significant progress over the past year. It has transitioned from the relatively complex structure made up of five sub-programs (related groupings of projects) and 20 projects within those programs. The original five sub-programs and their related projects are described in Appendix A. The PDR program now consists of the following five projects:

- Appointment Manager The current Appointment Manager requires a technology refresh as well as the ability to be exposed to external partners over the internet and the ability to support customer self-service. This project will re-platform the application with the additional functionality to support the new requirements. This project will be completed in 2018/19.
- Customer Claims Reporting System (CCRS) The CCRS is a rebranding of the initial IFAM
 / FNOL project. It will include Optimized Adjusting, co-development of the Mitchell solution,
 building out the CARS solution, managing the change management for the delivered
 solutions, and building out the analytics tools to monitor and manage the new service
 delivery channel. This project will be completed in 2019/20.
- Enhanced Direct Repair Capabilities will complete what was originally known as
 Distributed Estimating. It will deliver the ability for certified shops to process a broader set of
 more complex claims and repair types. It also delivers the loss of use functionality, and the
 Car Parts Pro enhancements. This project will be completed in 2017/18.
- 4. Partner Portal will provide the technical platform for provisioning and management of authentication and authorization for external partner access to MPI services. This project will be completed in 2017/18.
- 5. Remote Estimating the completion of the project which will allow remote and rural repair shops to participate in a collaborative estimating process by equipping rural repair shops with technology to share digital imaging with MPI estimators. This project will be completed in 2017/18.

In addition, there will be some continuing costs for overall PDR Program Management, and the Centre of Excellence project will continue focused on changes to operating practices and processes. As of March 31, 2017, the ongoing costs for these five projects and program management are projected to be as follows:

Table 1. Ongoing PDR Projects

Project	Spend to Date	2017 / 2018	2018 / 2019	2019 / 2020	Total
Appointment Manager	\$1,849	\$1,524,537	\$46,830		\$1,573,216
Customer Claims Reporting System (CCRS) – previously FNOL	\$10,600,109	\$4,440,672	\$6,800,000	\$1,547,261	\$23,388,042
Enhanced Direct Repair	\$291,961	\$1,157,118			\$1,449,079
Partner Portal	\$290,535	\$1,397,982			\$1,688,517
Remote Estimating	\$124,658	\$1,031,418			\$1,156,076
PDR Program Management	\$5,203,718	\$238,690			\$5,442,408

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Total PDR Budget for Ongoing Projects	\$16,512,830	\$9,790,417	\$6,846,830	\$1,547,261	\$34,697,338
Related Project: Centre of Excellence	\$3,889,612	\$2,339,895			\$6,229,507

A number of projects which were on the portfolio for the last review have been completed, as described in the table below. With the successful completion of these projects, the PDR program has reached the point whereby significant components of the program have been moved into operations and MPI is starting the transformation to the envisioned Direct Repair model.

Table 2. Completed PDR Projects

Program / Project	As of March 31, 2017
Program Management	
Mitchell Data Services (Tableau) - MDS	\$150,600
Website Redesign and Portal Consolidation	\$4,557,631
Optimized Repair	
Collaborative Estimating (CE) & Autochex	\$10,801,062
Direct Repair (DR) – previously Distributed Estimating (DE)	\$5,159,184
Accreditation	\$1,117,032
Shop Support Administration (SSA)	\$1,702,326
Interim Shop Search	\$103,096
Physical Damage Support	
Shop Training Management	\$123,636
Parts	Partially complete – completion carried over into Direct Repair project
Others	
Predictive Analytics / Loss Prevention	Completed prior to previous assessment
	\$2,189,598
Autochex	Completed prior to previous assessment – spending included in the Collaborative Estimating costs above
Total	\$25,904,165

After completing further due diligence, planning and refined implementation costs projections, the following projects, which were on the portfolio for the last review, have been cancelled due to lack of contribution to the benefits as follows:

Table 3. **Cancelled PDR Projects**

Project	MPI Cancellation Rationale
Out of Province Estimating	An updated analysis determined that the volume of claims does not warrant implementation costs and effort.
FNOL – Self Service Analytics	 MPI has determined that it is not possible to determine requirements, or detailed benefits, without 18-24 months of history. A new business case will be created at that time to evaluate cost-benefit.
Towing	 Mitchell CCRS towing solution will not meet MPI's business requirements. Volume of claims do not warrant an MPI custom build solution.
Enhanced Registration Card	 Mitchell CCRS solution capabilities do not include document bar code scanning requirements at this time. MPI has elected to accept the Mitchell CCRS solution without MPI customizations.
Enhanced Accident Profiling	MPI has concluded that the 2,000 current Accident Profiles developed will meet PDR program requirements, and no further profiles are required.
Body Integrity Inspection Certificate (BIIC) and Certificates of Inspection (COI)	A positive return on investment would not be realized based on refined implementation costs projections

In summary:

- The program planning and revisioning activities were completed with a budget of \$3.1M
- The Predictive Analytics project, budgeted separately from PDR but tightly related to achieving PDR success, was completed with a cost of \$2.2M.
- A number of PDR projects were completed since the last review at a cost of \$23.7M. These projects were completed for \$73K less than the projected budget.
- The five remaining projects are projected to be completed within a budget of \$34.7M including costs for program management.
- The Centre of Excellence project, budgeted separately from PDR but tightly related to achieving PDR success, will be completed at a forecasted cost of \$6.3M (within budget).
- The PDR Program is projected to be complete by the end of fiscal 2019 / 2020, for a total projected spending of \$61.5M, \$4.0M less than the approved \$65.5M PDR budget.

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Given the current constrained slate of five projects, the scope clarity for each of the five projects, and how far they are into their overall lifecycle, there is a high level of confidence in the projected spending.

Progress to Date and Timing of Full Implementation

Projected Program Schedule

There have been a number of changes to vision, direction, and scope of PDR. However, given the scale of the PDR Program and the overall size, duration, budget, and complexity, MPI has demonstrated effective project and program management.

While progress had been relatively slow prior to the last assessment, a number of significant components have been put in place over the last year. A number of projects have been completed, gone into production, and transitioned to operations. This has enabled MPI to begin the transformation to the new business model with the launch of Direct Repair.

The narrowing of focus (through cancellation of projects as per Table 3 above, and through clearly defining the five carry-over projects) should enable an ability to maintain the pace of project completions and transition to operations.

The program has been restructured. There is no longer an Executive Director for the program, but it is being managed by an experienced Project Director charged with closing projects and focusing on expedited delivery of the remaining projects.

Under this leadership, and with the intensive oversight of the Director, Business Architecture and of the Director, Business Transformation Office, the MPI team has been very focused on completing projects, on ensuring that they moved into production to start generating benefits, and on structuring the remaining projects to expedite successful completion.

While the overall documented and approved Program Charter has not been updated, all changes have been documented in approved Change Requests.

The general Program approach has been to build out Project Plans for each of the identified projects which make up the overall Program. Detailed project plans and detailed schedules are currently in development for these projects.

The MPI team is projecting that the CCRS project will be completed in fiscal year 2019 / 2020. And that all the other projects, which are smaller in scope and effort, will be completed in this fiscal year – 2017 / 2018 or early fiscal year 2018/19.

Progress of Pilots

The PD Re-engineering program has completed all but one of its pilots and moved the piloted solutions into production. The Remote Estimating pilot is nearing completion and currently in vendor negotiations and planning for implementation stage.

During the pilots, the PDR team identified a number of opportunities for enhancement, and implemented them during the project phase, or has provided direction to the operations group for future enhancements that could be considered.

The pilot project implementation schedule is as follows:

Project/Initiative	Pilot Test Duration	Status
Collaborative Estimating (CE)	Mar 2014 – Jun 2014	Complete
AutocheX	Aug 2015 – Jan 2016	Complete

Distributed Estimating (DE) – Rebranded as Direct Repair	Jul 2015 – Dec 2016	Complete
Quality of Repair	Feb 2016 – Oct 2016	Complete
Remote Estimating	May 2016 – Feb 2017	Business Case Refinement & Implementation planning stage

Some of the key outcomes from the Pilots include:

- Collaborative Estimating
 - Established a refined implementation approach for all participating Repair Shops including operational procedures, training, and communications
 - Enabled the move to Distributed Estimating, now Direct Repair
- AutocheX
 - Enhanced effective communication to Repair Shops
 - Established automated reporting
- Distributed Estimating renamed Direct Repair in production
 - Distributed Estimating was rebranded the Direct Repair Program and moved from pilot to production launched on March 1, 2017.
 - All Distributed Estimating Pilot shops were converted to Direct Repair shops and MPI started offering the Direct Repair option to all qualifying claims and all qualifying shops.
 - Since going live, MPI has received applications from a number of additional repair shops interested in the program. As of May 31st, 53 shops have qualified for the program and have been scheduled into the on-boarding process, representing roughly 40% of the Manitoba repair capacity
 - The volume of claims becoming eligible for Direct Repair is on target at just over 30%.
 - The number of claims that are eligible for Direct Repair will grow with the release of the Direct Repair Plus program which will be introduced in three waves through the balance of 2017.
 - When offered the Direct Repair option, 45% of customers are accepting the offer.
 This acceptance rate is expected to go up as more shops become available and
 as communications with consumers increases through Direct Repair shop
 advertising, which begins in June 2017.
 - Direct Repair has started to have the effect of smoothing out appointment booking providing better experiences for consumers and shops.

Quality of Repair

Three repair shops were selected to participate

- The pilot leveraged remote estimating video capture and streaming equipment to complete a quality of repair inspection remotely without having to travel to the repair shop.
- The pilot demonstrated that MPI could effectively review the most relevant complex repairs through the use of technology rather than on site presence.
- Further due diligence is however required by the Physical Damage Management team to incorporate and define the specific utilization scenarios with respect to the Quality of Repair program implementation.
- Physical Damage Management will operationally roll-out Quality of Repair program in fall 2017.

Remote Estimating

- The project proved the technical and functional viability of the Remote Estimating concept using specialized video capture and streaming equipment, revised work processes, and enhanced communication and collaboration between MPI and shop staff.
- The business model will streamline processes for repair shops and for MPI estimators by eliminating the need to travel to repair shops to complete a repair estimate.
- At this time the project is working to negotiate agreements for the technology and also to develop formalized approaches to working with shops who could potentially register and be certified for this service.

Overall Progress

In the past year, the program made significant strides in completing some projects, and reevaluating and cancelling others that would provide low value. It has restructured and focused the overall program on five key projects. Four of them are tightly scoped and will start to deliver value by the end of the current fiscal year.

The fifth, CCRS, is projected to continue for three years and has the broadest scope and budget. A number of risks with CCRS (previously FNOL / IFAM) have been addressed. There is now a formal commitment by Mitchell to deliver on a detailed and well-defined set of requirements, to offer that to the market, and maintain it as part Mitchell's ongoing commercial offering.

There are, however, still a number of issues that MPI will need to monitor closely:

- There will continue to be a need to coordinate collaboration among several vendors Mitchell, DXC (formerly HP), IBM.
- Mitchell's ability to develop and deploy the product meeting MPI's requirements relatively complex and innovative requirements
- Mitchell's continued commitment to make the solution one that is supported as part of the standard commercial offering

To address these, MPI has implemented the following:

Mutually agreed upon, and formally signed off requirements by MPI and Mitchell;

- Amendments to the Master Services Agreement to include escalating financial penalties to be paid by Mitchell, if MPI does not have access to functionality at the agreed upon implementation milestones.
- Governance structure and escalation provisions to ensure visibility and intervention by MPI/Mitchell senior management
- Application of MPI standard practice to negotiate a 5 year vendor agreement, with a maximum increase in fees of CPI, and with an elective 5 year renewal term provision.

MPI continues to remain focused on completing the in-progress projects earlier than the current schedule. However, based on the current understanding of the availability of financial and human resources, it is unlikely that the project schedule can (or should be) further compressed.

PDR Program Costs

Project Cost

The overall program budget has been consistently \$65.5M (in 2012 dollars) throughout all changes in direction and approach. This excludes the re-platforming of the CARS application which was rejected as being costly and complex early in the discovery process.

While some projects required more than the original budget, others were under budget, and yet other originally planned projects were cancelled due to value projections being lower than originally projected.

Approximately \$43.4M has been spent on the program to date with \$18.1M remaining to complete the program. While the program is maintaining the original budget for contingency, it is projecting that it will be completed approximately \$4.0M under budget.

The program is unlikely to undergo further scoping with respect to functionality and business capabilities. Prior concerns about the potential for additional cost, extended timeline and deferred benefits realization are much reduced. Given that, there are a few risk areas related to cost as follows:

- The CCRS claim and accident profiles are innovative and fairly complex, and it is yet to be proven that Mitchell can deliver to the specifications, or that the approach will work in production.
- Some of the project plans and schedules for the remaining projects, and especially for CCRS will continue to change as they are planned in more detail.

Maintenance Costs

MPI has operationalized a large number of the PDR projects. The ongoing operations of the solutions are funded through existing MPI operating budget. The maintenance of the technical solutions can be estimated in a number of ways.

First, solutions that are provided on a Software as a Service (SaaS) should have no upgrade, support, or maintenance fees. These charges should all be included in the SaaS subscription agreement.

This includes solutions such as:

- Customer Claims Reporting System (CCRS) previously FNOL
- Enhanced Direct Repair



- Mitchell Data Services (Tableau) MDS
- Collaborative Estimating (CE)
- Distributed Repair (DR) previously Distributed Estimating (DE)
- Parts
- Autochex
- Remote Estimating

For each of these solutions MPI pays an ongoing fee (based on usage or number of users). The current fee, and projected future fees should be specified in the vendor agreement and should be completely transparent and accounted for in MPI's operating budget. Gartner has not reviewed each of these agreements to confirm that this is the case for all of these agreements and what the pricing amount and structure is for each.

Second, solutions which are acquired from a vendor will usually require the customer to pay an ongoing license fee which provides ongoing support and maintenance and the rights to install any new versions or upgrades. The industry standard cost for these licensing fees is usually 18% - 20% of the original license fees. There are also usually internal and external costs for the effort and services to apply upgrades or implement new versions. The PDR program has no applications in this grouping.

Similarly, we have seen that custom developed software has a life cycle cost which can be as much as 20% per year to maintain and enhance. The following solutions fall into this category:

- Appointment Manager
- Partner Portal
- Shop Support Administration (SSA)
- Interim Shop Search
- Shop Training Management

For the PDR projects, only some proportion of the overall spend was on the software development. The rest of the budget would have been process design, organizational change management (e.g. process design, training, communications, etc.).

Given that the budget for these projects is \$4.9M and assuming that 30% of the budget was for software design, development and deployment, then MPI should be budgeting \$300K per year for ongoing maintenance and enhancement of these solutions. MPI has included budget for this ongoing support and maintenance in its IT operating budget.

A third set of solutions not only have a software maintenance component, but also an ongoing need for development or a physical asset replacement cycle

- Remote Estimating: Will require software maintenance and support, which is likely to be part of a SaaS agreement with the vendor. However, it is dependent on physical assets such as high quality video capture and streaming devices. These will need to be replaced, likely on a three year cycle at a repair shops expense. MPI projects that that the repair shops will incur these initial and ongoing replacement expenses. As part of its ongoing planning, the project should ensure that these costs are identified, it is clear which organization(s) will be responsible for them, and that they have been accounted for in the plans of those organizations.
- Website Redesign and Portal Consolidation: Not only will the website and portal
 software need to be maintained and supported. In order for the web sites and portals to
 continue to deliver value, they will need to be continually refreshed and updated with

- new content. MPI reports that there is an existing operating budget allocated to both supporting the website and portal software, and also to updating and enhancing its content and functionality.
- Predictive Analytics / Loss Prevention: Similarly, the Predictive Analytics / Loss
 Prevention software needs to be maintained and supported. But the real value is in the
 assessment of model outcomes, conducting analyses, and either revising existing
 models or developing new models. MPI reports that there is an operating budget
 allocated to both supporting the software itself, and also to analysis and model
 development.

Finally, there are a number of PDR projects that have had little software development and thus, while they will require operating budget for ongoing support and benefits realization, they will have little or no maintenance and support costs. The PDR projects which fall into this category include:

- Centre of Excellence
- PDR Program Management
- Accreditation

Benefits

The PDR program documented a number of quantitative benefits. Some of these are currently being measured and reported on. Others are too early in the lifecycle to report on.

Of the benefits listed in the PDR Program Objectives section above, MPI reports that they are experiencing the following beneficial outcomes. These are all, at least to some degree, attributable to the PDR program:

- Smaller MPI operational footprint achieved through decommissioning and / or repurposing MPI service centres and the decommissioning of the Pembina Highway Service Centre
- Direction of nearly 15% of estimates to distributed estimating (DE) shops.
- Introduction of collaborative estimating and direct repair have reduced estimate effort and provided efficiencies for MPI and repair shops
- Delivered value to repair industry partners through improved processes and faster payments
- Vehicle repairs meet relevant standards as defined and measured by quality of repairs standards and KPI's.
- The new shop relationship management model and KPI's are now operational, and new Accreditation and estimating standards are in place.
- There is a continued health of the overall Repair industry measured by the continued profitability of the Manitoba repair industry.

Some of the projected outcomes that will require more time to surface include:

- Reduction of 50% physical (PD) claims effort in Contact Centre activity.
- Direction of nearly 85% of estimates to distributed estimating (DE) shops
- Correct Repair shop will be identified 98+% of time.
- Once a vehicle is at repair shop, claim is ready for repairs 98% of the time—no waiting for customer or shop.



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- Customers and shops are not required to repeat work already performed, as measured by new process design and customer service experience
 - Measured by Number of abandoned sessions in First Notice of Loss (FNOL): less than 2% abandon rate
 - Measured by number of cross supplements in Repair Center: less than 1% cross supplement rate
- Less hands-on MPI involvement for most processes for simpler claims through a reduction in the amount of adjuster time and effort required for new First Notice of Loss (FNOL) claims
- Claims severity per repair is stable for Direct Repair work relative to non-Direct Repair

At a very high level, the Program is now structured as an investment of about \$65.5M over about 9 years, which will generate a steady flow of benefits starting in year 7 and ramping up to approximately \$13.65M starting in 2021/22 (year 12).

The latest projections show a slower ramp up of savings in the earlier years, and a delay of 1 year in getting to the more significant savings and achieving the projected steady state.

The current projected benefit stream is as follows (in millions of dollars):

Program Component	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Internal Efficiencies / Process						
Improvements	0.38	0.23	0.38	0.75	2.04	2.65
Labour Rate / Repair Shop Savings		3	3	3	3	3
Parts Sourcing Savings	0.74	1.05	1.37	2.17	2.48	2.8
Loss Prevention / Predictive Analytics			0.5	1	1	1
Loss of Use				1.05	2.25	3
Total Loss Valuation with Salvage					1.2	1.2
Total	1.12	4.28	5.25	7.97	11.97	13.65

Program spending and benefits realization actuals are proceeding slower than the plan that was presented to, and approved by, the Board of Directors in 2012. The changes in the projections from the prior report are largely a result of delayed implementation of some of the functionality.

The overall Program spend and benefit stream is as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Fiscal Year	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Benefits							\$ 1,120	\$ 4,280	\$ 5,250	\$ 7,970	\$ 11,970	\$ 13,650
Cost												
Actual and Forecast	\$ 40	\$ 1,346	\$ 3,788	\$ 11,831	\$ 8,550	\$ 7,304	\$ 10,476	\$ 9,790	\$ 6,847	\$ 1,547		
Unallocated Budget										\$ 3,965		
Total	\$ (40)	\$ (1,346)	\$ (3,788)	\$(11,831)	\$ (8,550)	\$ (7,304)	\$ (9,356)	\$ (5,510)	\$ (1,597)	\$ 2,458	\$ 11,970	\$ 13,650

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Given the program duration and timing of benefits, the Program, is currently showing a lengthy payback period, an Internal Rate of Return of 7% and a Net Present Value of \$13.7M (using a 3% cost of capital), over the period from inception (2010/11) until 10 years after go-live when benefits start to accrue in 2016/17.

The projected return on the Program has reduced since the last assessment, when it had an 8% IRR, and an \$18.0M NPV over the same period.

Appendix A - Original PDR Programs and Projects

Program / Project	Description
Program Management	
Mitchell Data Services (Tableau) - MDS	MPI is taking advantage of an offering from a long-standing business partner, Mitchell International, that will allow MPI consistent, and quicker insight into the data partners collect from MPI business operations. The project entails the implementation of the Tableau product in two phases: 1. An external view which compares MPI to other jurisdictions in North America 2. An internal view which allows MPI management to better understand trends that drive their position on cost and productivity.
Website Redesign and Portal Consolidation	 This project includes the following: Amalgamating content from several web sites into one partner portal and decommissioning redundant technology and infrastructure Redesigning websites and migrating content to a supported version of SharePoint and to improve search functionality for Strategy & Innovation, Brokers Online, and the Intranet Updating all existing SharePoint 2010 environments to SharePoint 2013 Updating Authentication technology as it directly relates to Portal consolidation
Optimized Repair	
Collaborative Estimating (CE)	Bringing MPI and Repair Shops onto a common platform by implementing Mitchell's WorkCentre and Repair Centre product suite with the following capabilities: Creating an estimate that can be shared electronically between MPI and the repair shops Compliance checks at Repair Shops Streamlining the supplements process by allowing repair shops to work collaboratively with MPI Ensure customers and staff are kept informed of the repair status The automatic maintenance of a "gold copy" estimate which eliminates the need for manual reconciliation between repair shops and MPI, enabling the automation of payments to repair shops Implementing a robust and proactive quality assurance program to ensure quality repairs are being performed Increasing customer satisfaction by providing repair status to customers electronically
Distributed Estimating (DE)	 This project includes: Implementing a Distributed Estimating model allowing repair shops to assess the initial damage to a vehicle and produce estimates directly for MPI Customers Designing and implementing a proactive quality assurance program to ensure quality repairs are being performed Implementing required estimating standards for Repair Shops to follow to ensure consistent creation of the first estimate Loss of Use (LOU), which includes: Implementation of Repair Shop administration of loss of use (vehicle rental) for customers with repairable vehicles.

Program / Project	Description
	 Create and implement agreed upon processes and tools which provide repair shops a fixed level of funding based on the projected time for the repair. Provide repair shops with the incentive to not only meet projected timelines, but to shorten timelines since if they manage better, they can keep the excess and alternatively, if they manage poorly, they will be responsible for any shortfalls
Accreditation	 Support the accreditation and rates negotiation process with the repair shops. Develop, obtain agreement on, and implement tools and process which use mathematical models to determine different rate scenarios. By building these models, the project will be able to depict the impact to total spend created by the tiered accreditation model. Each tier and the composition of benefits accrued to the tier as well as capabilities will result in a potential rate change. Each likely rate change will be modeled with forecasts of the shops that are expected to be part of the tier.
Shop Support Administration (SSA)	This project includes: Implementing a robust system of key performance indicators to measure the abilities and success of Repair Shops Creating an internal team to work closely with Repair Shops to address ongoing needs and ensure success in the new Collaborative and Distributed Estimating model
Remote Estimating	 Allow remote and rural repair shops to participate in a collaborative estimating process. Largely achieved by equipping rural repair shops with technology to share digital imaging with MPI estimators. When vehicles are brought in for estimates at these locations, the shop will review the damage with an MPI estimator using digital imaging technology while the estimator writes the estimate. The shop will then be able to utilize this estimate to order the parts and proceed with the repair. Unlike Distributed Estimating partners, Remote Estimating partners will not have any authority to repair claims without express MPI approval.
Out of Province Estimating	Develop an approach to use existing solutions when dealing with out of Province repair shops and repair scenarios.
Interim Shop Search	Implement an online search functionality for repair shops that will assist customers in finding and choosing shops that can perform the required repairs based on their specific requirements including body type, location, satisfaction rating, etc. Shape customer and repair shop behaviour by ordering results based on a composite KPI score, so as to induce customers to choose repair shops that best meet MPI's goals.
Optimized Adjusting	
First Notice of Loss (FNOL) and Adjusting	This project includes the following: First Notice of Loss: Creating defined Accident profiles Implementing a profile-based mobile platform customer self-serve FNOL channel Implementing a profile-based FNOL into the contact centre



Program / Project	Description
	channel Adjusting Process Improvements: Leverage opportunities for efficiencies made available by profile-based FNOL Implementation of a customer self-serve total loss valuation solution to ensure vehicles are valued consistently and accurately Implementation of Repair Shop administration of loss of use (vehicle rental) for customers with repairable vehicles
FNOL – Self Service Analytics	Combination of internal analytics of data collected via interaction with MPI claims management system, and channel analytics provided from Mitchell indicating customer behaviour in the mobile FNOL channel
Towing	This project includes development of a solution interface for towing operators. Through this interface new work will be assigned to tow operators, tow incidents will be captured and recorded, for both contract and non-contract bases. The scope of the project may include changes to Vehicle Tracking and FNOL applications and processes.
Enhanced Registration Card	This project entails electronic capture and verification of customer contact information followed by the generation and imprinting of a barcode on the customer registration card based on the customer profile
Enhanced Accident Profiling	This project includes the enhancement of previously defined accident profiles to determine the amount and type of post FNOL effort (No Touch/Low Touch/High Touch).
Physical Damage Support	
Shop Training Management	This project provides support to the repair shops training program based on the Center of Excellence's (COE) defined training requirements. This entails development of training, scheduling and delivering the training to shops, and maintaining the shops training records.
Body Integrity Inspection Certificates (BIIC) and Certificates of Inspection (COI)- BIIC/COI	The development and deployment of a solution to digitally capture and store Body Integrity Inspection Certificates (BIIC) and Certificates of Inspection (COI) linked to online repair records.
Parts	Increase recycled parts usage through expansion of the recycler network by: Improving the recycled parts process through automation whereby recyclers provide their inventories online and repair estimates include those parts automatically Reducing administration required for recycled parts through process automation Expanding the catalogue of certified aftermarket parts
Others	
Autochex	A 3rd-party solution for the implementation of a survey tool which will collect data and provide specific and aggregate reports on customer satisfaction regarding their experience at particular repair shop
Predictive Analytics / Loss Prevention	Improve fraud detection and recoveries through the use of predictive analytics



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Program / Project	Description
Centre of Excellence (COE)	This project will setup the infrastructure and mechanisms (people & processes) to provide support and leadership to operational areas of MPI, as well as the Manitoba collision repair industry involved in the Automotive Physical Damage Claims Administration and Repair processes

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