



Manulife's Alignment of Data Analytics Initiatives with Pivots and Strategy And DELTA Framework-based Assessment

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Cover Photo Source URL: <https://webqram.life/hashtag/elevatorwraps>

1. Introduction

Manulife is Canada's largest¹ and oldest life insurer but it is not showing its age: recently, it has been *very* busy re-inventing itself from the top-down while keeping its customers and the landscape of rapidly evolving data innovations squarely in focus. Manulife is best described as an **Analytics Innovator**: the reasons are detailed throughout this paper which includes a DELTA Framework assessment.

Leading up to 2017, the senior management team seriously reflected upon its strengths contrasted against the increasingly-advanced technological landscape and ultimately, in October 2017, appointed Roy Gori as Manulife CEO and President who took the reins over from the aging Donald Guloein. Gori had been promoted from CEO of Manulife Asia² with that region notably being the fastest growth area for the company³. Within a year of Gori's appointment, the entire executive leadership team had been *updated*.

Internal "town hall" meetings now ring with reminders that Manulife's strong market position and 132-year history could *easily be disrupted and eroded* within a short timeframe by any of a variety of threats to any or all three of its traditional pillars: life insurance, annuities, and mutual funds.⁴ While barriers to entry to selling life insurance policies are high due to regulatory hurdles and capital requirements, disruption could still come in many ways. Refreshingly, management has considered openly that Manulife's future pillars *could* pivot to new ones yet unseen: management *is* listening *and* acting.

To stimulate ideas, Gori instituted a new mission statement and six core corporate values to inspire *how* things need to be done going forward with mantras like "*own it*", "*get it done together*", and "*think big*."

These empty-sounding catch phrases *have* actually been brought to life through *positive* waves of cultural

¹ See Illustration 1 in the Appendix, which shows Manulife's dominance in the Canadian Life Insurance space.

² Illustration 2 shows Manulife's influence throughout East Asia including China, India, Japan, and Southeast Asia.

³ Its presence in Asia - at first perhaps thought of only as a growth play - seems to almost act as a company-wide vaccine against over-confidence and complacency to which other Canadian insurer's staffs may yet be oblivious.

⁴ More accurately, 'funds' implies *asset management services* which extend well beyond simple retail mutual funds.

change at all levels via: encouragement to experiment and "fail fast" / hackathons, Manulife's incubators *LOFT*⁵ and *REDLab*⁶, and highly visible recognitions awarded to practitioners of graph databases, KPI-driven dashboards, and AI. Moreover, a surprising undertone that reflects a broader appreciation of data governance and an implicit *expectation*⁷ of increased data quality coming from *business* managers.

This paper submits concrete examples of data analytics initiatives which can pivot Manulife strategically to open new revenue streams - or to simply reduce waste - to enhance Manulife's competitive advantage. In lieu of interviews with management, I use public statements made by Roy Gori and other senior managers to make my case but I balance this with my micro perspective of data analytics that I am personally involved with. Illustration 4 enumerates the initiatives that Gori can observe versus those that I can directly observe; I use both in a combined DELTA Framework scoring before my parting thoughts.

2. The Macroscopic View: Using Data Analytics to Pivot

During a 2018 interview⁸ with Bloomberg BNN, CEO Roy Gori emphasized the need to pivot towards data-driven tech like behavioral insurance and digital banking. Another area he mentioned was capital redeployment from legacy businesses and I will revisit this later, in section 3. To help elucidate his remarks, I provide concrete examples which speak to how Manulife is leveraging data analytics and digital innovation to make decisions better across the enterprise, to help pivot the business, or to find new sources of revenue or improved profitability in line with strategic priorities.

Concrete Example #G1: Human Resource's KPI-driven Dashboards

⁵ LOFT stands for the Lab of Forward Thinking. See: <https://www.linkedin.com/company/lab-of-forward-thinking/>.

⁶ REDLab is a UX lab based in tech-rich Kitchener-Waterloo. See more at: <https://www.manulife.ca/redlab/>.

⁷ Once-obscure notions like data quality and governance are now expounded by more non-specialists each week.

⁸ The entire transcription of the BNN [interview](#) video can be found in the Appendix.

Dashboards have been around but may merely be a sexy-looking front end to unconnected reporting. However, a contrasting example is an effective KPI-based dashboarding solution that an analytics workflow team at Manulife made which received an industry award in 2018 for HR-related analytics:

"[The award-winning team] partners with an advanced analytics team and a group of data scientists and statisticians to help solve business problems and predict future ones using statistical models, algorithms and machine learning. ... We've developed a full set of people metrics that...are aligned to the overall company strategy...", according to Lisa Ryan, [Head of HR]. ... Also, "CEO Roy Gori, asked for a dashboard of each member of the executive leadership team, to track how they were doing on key people and culture metrics such as turnover, employee engagement and diversity. The dashboard was designed, built and tested within two weeks." ⁹

Thus, this one article speaks to the adoption of an industry-leading way to effectively use analytics in the pursuit of smarter decision-making tools that can support more agile business strategy and one that was embraced by senior leadership and even leveraged a center of excellence, the advanced analytics team. Employing digital innovations reinforce organizational strength and drives competitive advantage.

Concrete Example #G2: Pivot towards Behavioral Insurance

Major Canadian insurance players from Desjardins (auto insurance) to Manulife (health insurance) are pushing "wearables" - car-based accelerometers and smartwatch-based pedometers - to assess and reward lifestyle behaviors consistent with higher-margin insurance policies while also offering entirely new products that will be in high demand by a newer generation of tech-addicted, price-sensitive customers. Customers walking more steps or who correctly answer wellness surveys are rewarded with premium discounts as with Manulife's Vitality program, in Canada, and ManulifeMOVE¹⁰, in Asia.

⁹ Manulife looks to influence leaders with actionable people metrics: <https://www.hrreporter.com/article/38072-manulife-looks-to-influence-leaders-with-actionable-people-metrics-relevant-data-stories-national-hr-awards/>

The benefits for healthier living are marketed as tiered discounts on premiums which resonates with many customers¹¹. As a business pivot, behavioral insurance represent net-new products and revenue streams while also lowering cost through a better match of risk-based liabilities to premium income. These are in line with Manulife's strategy digital innovation leadership¹² that again drives competitive advantage.

Quick Aside: Lemonade Insurance's Disruption to Property Insurance

An interesting aside regarding younger consumer's purview of analytics-fueled insurance: US-based *insuretech*¹³ startup Lemonade Insurance is disrupting the *property insurance* market with its AI/bot-based, painless-to-use platform popular with millennials. CEO Daniel Schriber cites, "90% of our customers *never paid for insurance before*."¹⁴ Thus, he is not only getting in front of those consumers at the very beginning of their insurance lifecycle but, more subtly, his claim flies in the face of the ad narrative of "switching insurance providers to save X% with [GEICO]" which is tone deaf to younger consumers who *aren't* switching but are *entirely new* to insurance and seeking a frictionless experience.

Concrete Example #G3: Pivot towards Digital Banking

Returning focus to Manulife - and this time glancing at *Manulife Bank* - another pivot is underway: digital "*All-In Banking*". It provides low-cost, rewards-rich banking in exchange for sharing data about their buying and banking patterns; it also waives fees at high levels of savings and bundles memberships with Amazon Prime that again waives fees if making 10 or more purchase transactions per month. Like Lemonade Insurance, the program is tailored towards younger consumers that are attracted by low-fee/no-fee services. "*All-In Banking*" is in line with Manulife's strategy to establish new and independent revenue streams through digital innovation and using that new product development to drive value.

¹⁰ For more on ManulifeMOVE, see <https://www.manulifemove.hk/en/home/index.html>

¹¹ Including my 75-year old mother, in fact. So, it's not just millenials that behavioral insurance policies attract.

¹² Manulife 2018 Annual Report.

¹³ <https://www.wsj.com/articles/the-surprising-way-startups-are-disrupting-the-life-insurance-business-11560219000>

¹⁴ HBR Presents: Exponential View Podcast with Azeem Azhar, Episode Aug 14 2019, 18:40.

3. The Microscopic Perspective: Data Analytics and Data Lakes

I now provide some concrete examples of data analytics usage from my perspective as a Data Analyst contractor in the Manulife GWAM CDO's Data Management (DM) unit and from my role on the \$150MM Global Optimization (GO) Program which represented a large investment in data analytics.

Concrete Example #B1: Creation of Data Lakes for Analytics

The GO Program's initial goals have already been achieved as of Summer 2019: to simplify business operations not least by the reduction of accounting and trading systems to one, retirement of several legacy data warehouses and reporting systems, and the creation of an investments division data lake (IDDL) that delivers high quality and timely data for reporting, dashboards, and advanced analytics.

Concrete Example #B2: \$5 Billion in Capital Redeployment

Due to my technical background and business familiarity I have been involved in a number of other projects several of which overlap with those that Gori has mentioned. I am leading a GWAM Hackathon 2019 team that is seeking to optimize "legacy portfolio" capital recovery which is currently recognized at being too lag-intensive and top-heavy. This is the capital redeployment program that Gori told to BNN:

"The reality is we have got 50% of our business that is tied up in legacy businesses that consume a lot of our capital and quiet frankly don't generate the right level of return... ..Our goal that we set out was to free up \$5B dollars worth of capital..."¹⁵ - Roy Gori, 2018.

The takeaway is that our team designed smarter dashboard architecture to help a business unit recover and redeploy capital from lower-performing products to generate higher levels of return to shareholders. This role of hackathons in encouraging ideation, experimentation, and "failing fast" to converge towards worthy innovations is an important cultural pivot that helps Manulife enhance its competitive advantage.

¹⁵ Gori's BNN Interview, *Pivoting to Behavioral Insurance*.

Concrete Example #B3: Data Mining for Spend Reduction

Through a deep-dive data mining analysis into many thousands of vendor data requests, I identified and eliminated the source of \$500,000/year in data overspend and then designed a dashboard for its ongoing monitoring which hasn't yet been implemented, acutely echoed Gori's unenthusiastic observation:

"[Cost control] hasn't become a part of the culture of the organization... It was really viewed as a project with a "start date" and an "end date... [We] now have a much greater focus around cost... designed to improve our returns ...so that we can win in the marketplaces in which we operate." ¹⁶

Senior management is thus aware of challenges regarding expense governance and is seeking to instill changes in culture to help align expenses more directly with strategic business value: if successful, this helps Manulife's long-term profitability. In my case, the vision was only half-realized with the immediate and real spend reduction but then a lack of follow-up on the proposed spend monitor dashboard.

4. Measuring Data Analytics Maturity using the DELTA Framework

With these various points and examples from section 1 through section 3 in mind, I now present my DELTA¹⁷ Framework assessment before my final reflections and conclusions. To balance my scoring biases, I split my grading based on macro observations (*positively* biased) and micro observations (*negatively* biased, as I see how the sausage is made). My yardstick: an upper rating for Google/Amazon of 5.9, as today's supreme digital innovators. Conversely, "Manulife circa 2003" (my prior contract) was a modest 3.5. I gave macro a triple (3X) factor as CEO-observable initiatives deserved more weight.

DELTA Category	Macro (G#'s)	Micro (B#'s)	W'td Avg (3G+B)/4	Subjective Observations
Data	4.8	4.0	4.6	The quality of data is very good but the volume and velocity of acquiring and curating new data sources still feels like the bad old days of ETL and data warehousing, at

¹⁶ Gori's BNN Interview, *Pivoting to Behavioral Insurance*.

¹⁷ Analytics at Work: Smarter Decisions, Better Results. Davenport, Harris, and Morison, 2010.

				least at the micro level. At the macro level, the intent and capability is there and progress has been made in 2 years.
<u>Enterprise</u>	5.0	5.0	5.0	Centers of Excellence do exist throughout the company and locally I can see CDO's AA team being leveraged appropriately by other units too.
<u>Leadership</u>	5.4	4.0	5.1	Gori and his senior leadership demonstrate professionalism and a deep desire to hear and call for fresh ideas at every turn I've witnessed. Now, while local managers do definitely recognize the importance of quality data I find some managers are inconsistent with employee engagement and "need improvement" with mentoring and encouraging teams to work smarter and more effectively, together.
<u>Targets</u>	5.2	4.4	5.0	"Local" managers don't over-manage staff, allowing exploration and innovation to occur. However this can also lead to some waste when actions in the aggregate are not linked or made accountable through use of appropriate KPIs.
<u>Analysts</u>	5.2	5.2	5.2	The analysts I see around me are very skilled and confident. This is consistent with others I know from other segments within Manulife.
<i>Score:</i>	--	--	5.0 / 5.99	The score of 5.0 ranks it as an <u>Analytic Innovator</u>.

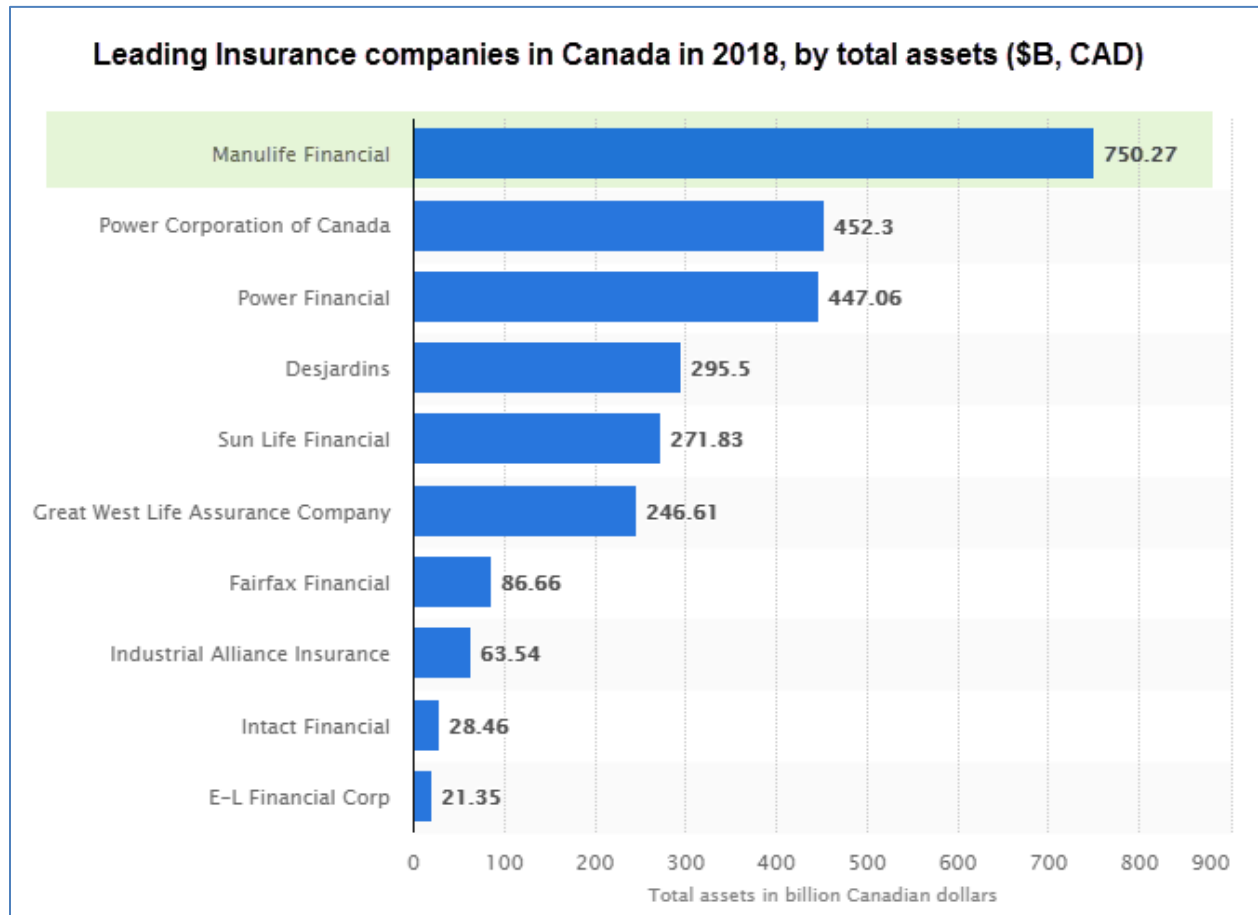
5. Final Thoughts

The tabulated scoring of "5.0" is unsurprising and ranks Manulife as an "**Analytical Innovator**". Manulife is clearly competent and competitively *capable* to use data analytics to advance its strategic initiatives, but as CEO Roy Gori pointed out it has "*a-way-to-go*" before pivoting to the point of fully displacing their traditional sources of revenue which are truly massive and still growing in key markets. Manulife needs some well-placed organizational prods but maybe they'd only be felt when disruption finally hits. Until then, management will continue to attempt to inculcate real cultural changes away from old habits and to seek *pivots that can scale well* to enhance or redefine its competitive advantage and help drive long-term value.

ILLUSTRATIONS

Illustration 1. Comparison of Manulife and Other Canadian Life Insurers (2018)

This illustration aptly demonstrates Manulife's dominant position in the life insurance market, in Canada.

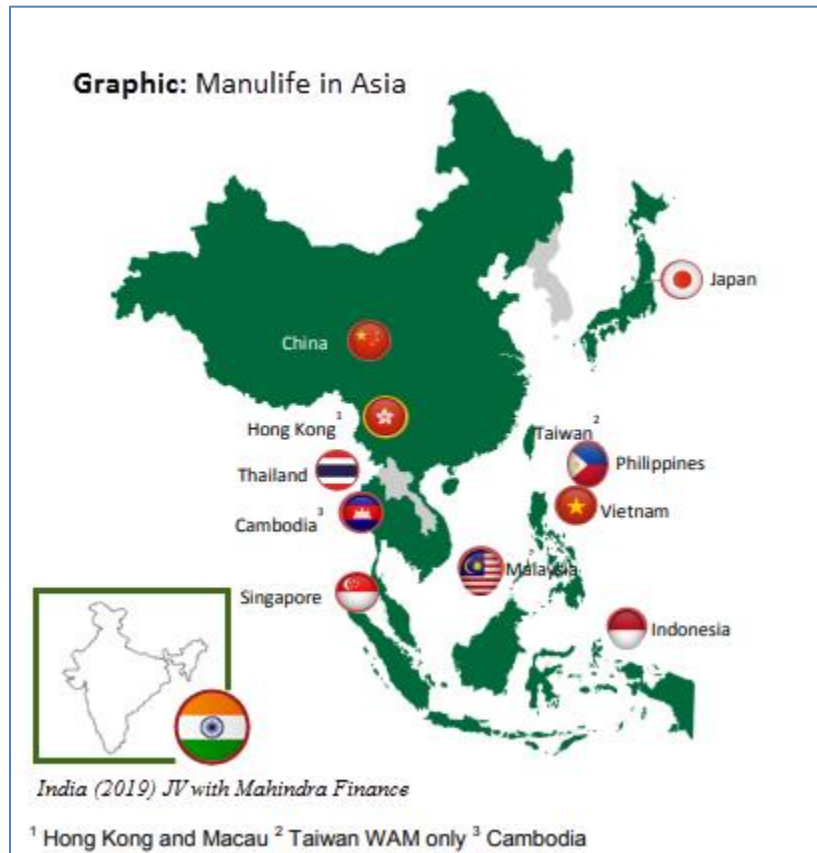


Source: Leading insurance companies in Canada in 2018, by total assets (in billions, CAD)

URL: <https://www.statista.com/statistics/431639/leading-insurance-companies-canada-by-total-assets/>

Illustration 2. Manulife in Asia (Updated for 2019)

This graphic shows the current spread of Manulife's influence in Asia which is also its fastest growing operating segment as a percent in both insurance products and asset management services. India is its newest market in Asia, after establishing a joint venture with Mahindra Finance earlier in 2019.

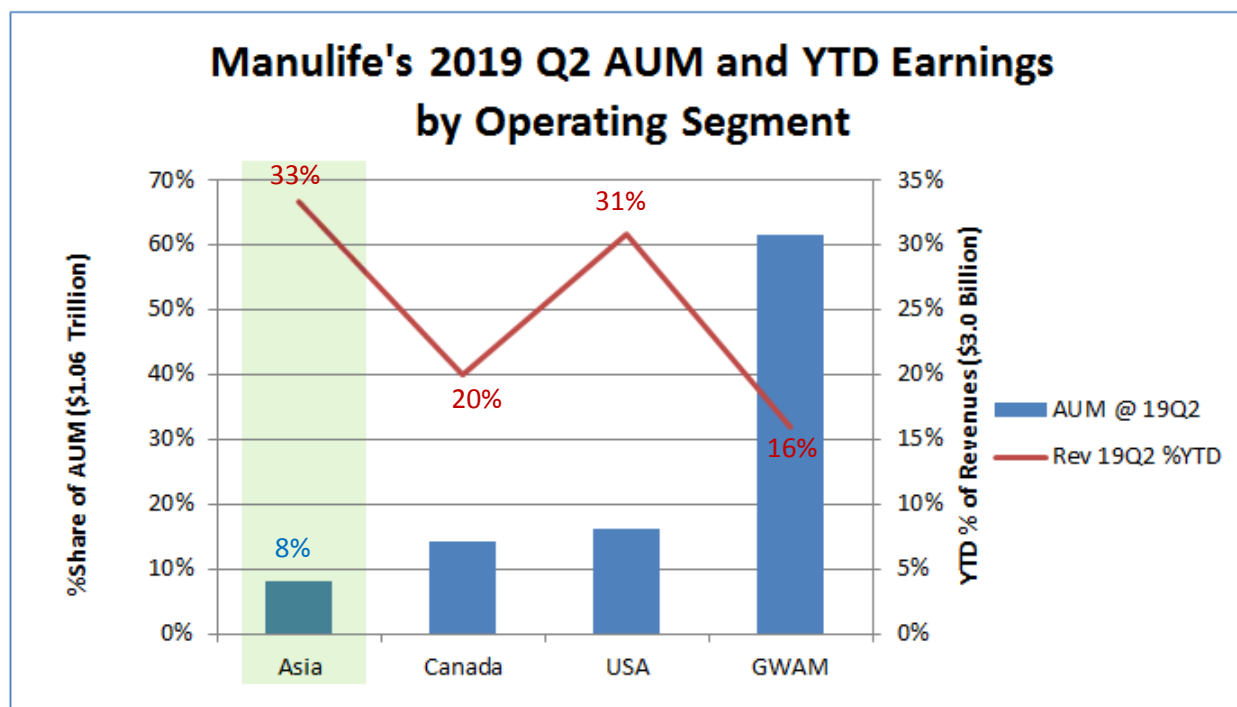


Source: Manulife - Asia Fact Sheet (Sept 2018). Graphic updated with India (2019) as inset.

URL: <http://manulife.force.com/servlet/servlet.FileDownload?file=00P5000000a57SMEAY>

Illustration 3. AUM vs YTD Revenue, by Operating Segment (as of 2019 Q2)

This graph indicates the large percentage of revenue coming from Asia as compared with the small percentage of total assets from that same region. The three regional operating segments are insurance business; GWAM (asset management and advisory) is not broken down by geographical region in this illustration.



Source: Manulife 2019 Q2 Shareholders Report

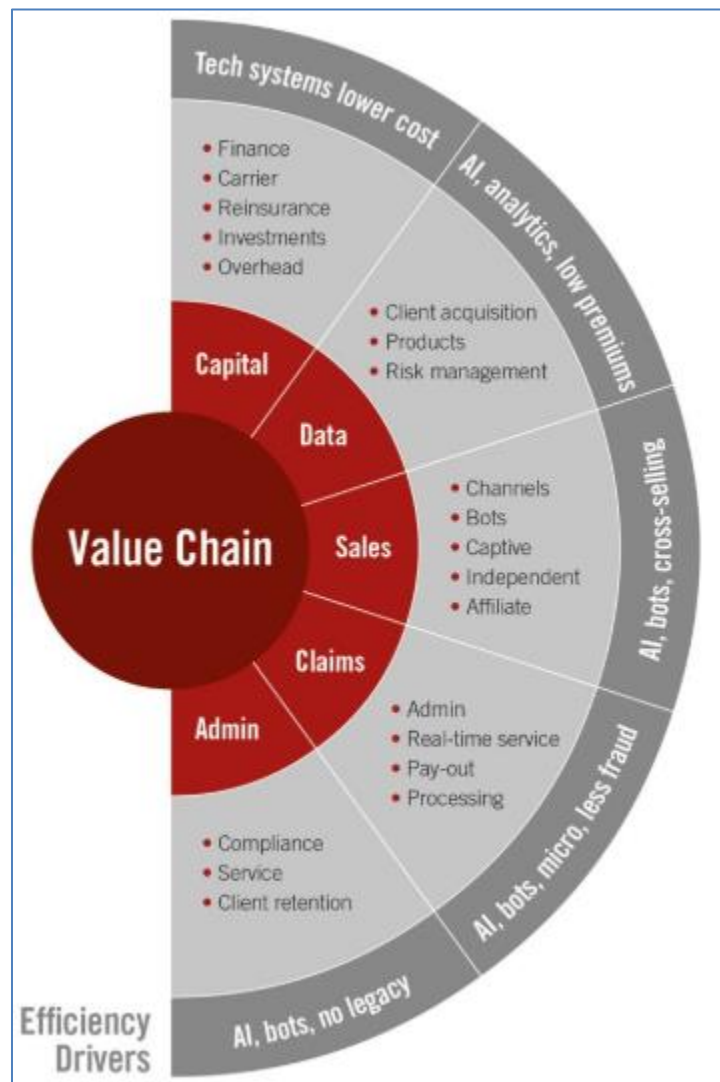
URL: https://www.manulife.com/content/dam/corporate/investors/MFC_SR_2019_Q2_EN.pdf

Illustration 4. Gori-visible Macro Programs vs. My Microscopic Perspective

Programs	Mentioned by Gori	Directly Visible by Me
Pivots that leverage Data Analytics		
Behavior Insurance ("Vitality", "MOVE")	YES	NO
Digital Banking ("All-in Banking")	YES	NO
Creation and Adoption of Data Lakes	YES	YES
Investment Management Services		
Liabilities-Driven Investments	YES	YES
Repackaging Alternative Investments	YES	NO
Automated Portfolio Rebalancing	NO	YES
Capital Redeployment		
"Legacy Portfolio" Optimization	YES	YES
Expense Reduction Related		
Organizational/Cultural Change	YES	NO
Bloomberg Data Spend Dashboard	NO	YES

Illustration 5: The insurance services value chain

The following illustration shows the value chain for the insurance industry in the context of distinct channels that could be disrupted through new technology start-ups specializing in data analytics and AI.



Source: "cfi.co" website. Inspired Digital Insurance — Full-Stack Insurtech Innovation is the Way Ahead


URL: <https://cfi.co/europe/2019/10/inspired-digital-insurance-full-stack-insurtech-innovation-is-the-way-ahead/>

Illustration 6: The DELTA Framework - Definitions

This table provides the scoring gradations of a company's use of data analytics, by category.

Analytical Maturity Model (DELTA)					
	DATA	ENTERPRISE	LEADERSHIP	TARGETS	ANALYSTS
STAGE 5 Analytical Competitors	Relentless search for new data and metrics	All key analytical resources centrally managed	Strong leadership passion for analytical competition	Analytics support the firm's distinctive capability and strategy	World-class professional analysts and attention to analytical amateurs
STAGE 4 Analytical Companies	Integrated, accurate, common data in central warehouse	Key data, technology and analysts are centralized or networked	Leadership support for analytical competence	Analytical activity centered on a few key domains	Highly capable analysts in central or networked organization
STAGE 3 Analytical Aspirations	Organization beginning to create centralized data repository	Early stages of an enterprise-wide approach	Leaders beginning to recognize importance of analytics	Analytical efforts coalescing behind a small set of targets	Influx of analysts in key target areas
STAGE 2 Localized Analytics	Data useable, but in functional or process silos	Islands of data, technology, and expertise	Only at the function or process level	Multiple disconnected targets that may not be strategically important	Isolated pockets of analysts with no communication
STAGE 1 Analytically Impaired	Inconsistent, poor quality, poorly organized	n/a	No awareness or interest	n/a	Few skills, and these attached to specific functions

Adopted from the Five Stages of Analytics Maturity developed by Tom Davenport and Jeanne Harris in their book, *Competing on Analytics: The New Science of Winning*, and the DELTA Model developed in 2010 by Tom Davenport, Jeanne Harris and Bob Morrison in their book, *Analytics at Work: Smarter Decisions, Better Results*.

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Source: The New Science of Winning and the DELTA Model; Davenport, Harris, and Morrison, 2010.

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<https://www.statista.com/statistics/431639/leading-insurance-companies-canada-by-total-assets/>

APPENDIX: Transcript of BNN's Interview with Manulife CEO Roy Gori

Source: Bloomberg Business News Network (BNN), Broadcast Oct 2018.

URL: <https://www.bnnbloomberg.ca/video/manulife-ceo-we-re-pivoting-to-behavioural-insurance-digital-solutions~1428817>

[Roy Gori, President & CEO of Manulife]:

...The reality is we have got 50% of our business that is tied up in legacy businesses that consume a lot of our capital and quiet frankly don't generate the right level of return.

This hasn't been a big focus for us historically and now with new leadership in that space - I have appointed Naveed Rishad who will run our legacy businesses - we're going to be much more deliberate about really delivering better returns and making sure that we're putting our capital to best use.

So, our goal that we set out was to free up \$5B dollars worth of capital and at the same time we need to be very focused on expenses and there our goal is to increase our efficiency quite significantly and cut cost and drive the digitization of the way we operate.

[BNN Host, Amanda Lang]

{Question about Hancock divestment, omitted}

[Gori]

{answering that they remain interested in the US market}...but we're going to pivot...

...We're going to pivot much more to "behavioral insurance" which is really where customers get the benefit of leading healthy lifestyles and where they are rewarded for their good behavior in terms of choices they make on a day-to-day basis.

We've got a partnership there with Vitality and that really is a pivot point for us and a driving force as we really try to evolve our business in the US to a much more focused solution around digital solutions for customers so we feel committed to that agenda and we feel very positive and optimistic about the opportunities that we have there.

[Host]:

{ There has been a cost-cutting initiative at this company for the past 5 years and I've seen concern from analysts that your profit growth may have been more about cost-cutting than revenue growth. Is that a legitimate concern that that was driving your results in the past? }

[Gori]

I think we've been focused on costs in the past but the honest truth is that it hasn't become a part of the culture of the organization. We had a program which was called E&E historically which was around trying to simplify our business and create operating centres and it was successful in many ways but it wasn't a cultural transformation. It was really viewed as a "project" with a "start date" and an "end date." What we're embarking on now has a much greater focus around cost so that we can actually embed this in the culture of this company. And, that cost focus is designed to (A) improve our returns, but more importantly it is [(B)] designed to ensure that our products can be as competitive as they need to be so that we can actually win in the marketplaces in which we operate.

[Host]:

{ You've also explored this concept of taking alternative investments you have and repackaging them as a way for customers to access them. Will we see more of that from you? }

[Gori]

Yeah, well, as a life insurance company our liabilities are very-long dated -- 30-plus years -- so we have had to look for asset classes that match the long dated nature of our liabilities and we found that long duration assets are a tremendous asset class for us and we have built a great capability in managing these

kinds of assets. What we are seeing now is that there is greater demand for these asset classes across the various geographies that we operate in. That is true institutionally, but it is also true from a retail perspective. So, we have now seen that this capability that we have used historically to manage our own business is of significant value for other organizations and retail customers so we are doing exactly as you say: we are now "packaging" that capability and offering it as solutions which is now a business in its own right.

[Host]:

{ Asia has also been a focus more so than even other Canadian insurance players. I've seen commentary that you can't just grow there because it's a growing market. You know Asia very well. How much focus will there be for you? How important will it be for you? }

[Gori]

Well, I think you are absolutely right. The biggest mistake that people make in relation to thinking about Asia is that it's a big growth opportunity and therefore they should just go and embrace Asia and be part of Asia. But you cannot put up your shingle overnight and do business there. You need to have been there through various economic cycles and built credibility to be able to have earned the right to do business.

Now we are fortunate in that we have been in Asia for 120 years. We have got a strong presence there as I mentioned. It represents about 1/3 of our earnings but at the same time Asia represents about 80% of our new business sales. So we have a phenomenal footprint, a fantastic franchise there, we have a great brand and that is a tremendous platform for us to build on so that we can actually capture the growing opportunity that is part of Asia.

[END OF RECORDING OF INTERVIEW]