A4S CFO LEADERSHIP NETWORK

IMPLEMENTING THE A4S ESSENTIAL GUIDE TO SOCIAL AND HUMAN CAPITAL ACCOUNTING **WORKED EXAMPLE**

MANULIFE FINANCIAL CORPORATION

THE PRINCE OF WALES'S CHARITABLE FUND

CPA CHARTERED PROFESSIONAL ACCOUNTANTS CANADA

THE CANADIAN CHAPTER OF THE A4S CFO LEADERSHIP NETWORK CFO MEMBERS

The Prince's Accounting for Sustainability Project (A4S) was established by HRH The Prince of Wales in 2004 to convene senior leaders in the finance, accounting and investor communities to catalyse a fundamental shift towards resilient business models and a sustainable economy.

In March 2017, the Canadian Chapter of the A4S Chief Financial Officer Leadership Network was launched in partnership with CPA Canada. The A4S CFO Leadership Network is a global network that brings together a group of leading CFOs from large organizations seeking to embed the management of environmental and social issues into business strategy and processes, and is currently the only Network of its kind.

For its first project, the Canadian Chapter members implemented learnings from the A4S Essential Guide to Social and Human Capital Accounting, which was published in May 2017 and is available on the A4S website.

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Philip Witherington, Chief Financial Officer, Manulife

MANULIFE FINANCIAL CORPORATION

Rapid advances in technology are fundamentally changing the financial services industry. At Manulife, we have set a bold ambition to become the most digital, customer centric global company in our industry. We need to transform our business to ensure that we deliver digital, customer focused solutions and services. Our people are at the heart of this digital transformation, and investing in them – building up our human capital – is vital to ensure that they are equipped with the skills needed to respond.

This worked example sets out a methodology to quantify the benefits to our staff of our investment in technology training. Our work on measurement of human capital investment was inspired by our involvement with the A4S CFO Leadership Network and the A4S Essential Guide to Social and Human Capital Accounting. We applied this guidance to our investment in technology training as a first step towards valuing human capital more fully. The approach adds quantitative rigour to decision making processes and supports our belief in the importance of investing in people. As we continue our transformation, I look forward to demonstrating the long term value this creates for Manulife, our people and the wider community.

Philip Witherington, Chief Financial Officer, Manulife Financial Corporation

"Our people are at the heart of this digital transformation, and investing in them – building up our human capital – is vital to ensure that they are equipped with the skills needed to respond."

Philip Witherington, CFO, Manulife Financial Corporation

EXECUTIVE SUMMARY

WHAT

Manulife is a leading international financial services group that helps people make their decisions easier and lives better. We provide financial advice, insurance, as well as wealth and asset management solutions for individuals, groups and institutions. We are a knowledge based, intellect intensive industry, and our people are one of our key capitals.

As Manulife is undergoing a transformation to become a digital, customer centric organization, we are addressing the skills gap through the technology training program delivered within this transformation. As part of this transformation, we wanted to demonstrate that investment in our talent increases the value of our human capital over time.

WHY

Through our technology training program, our target is to gain a substantial number of upskilled technology employees over the next several years through the combination of external recruitment and an immersive software engineering incubator.

HOW

We initiated a pilot valuation to estimate the human capital value from this specific training program. We took the employees' perspective, meaning we measured the value accruing to our employees in the form of upgraded skillsets that enhance earnings power. The Finance team led the project and engaged partners on the Human Resources, Analytics and Technology teams. We are sharing the learnings we have accrued at the end of this baseline valuation exercise. And, as such, in this worked example, we are sharing the methodology we created and will use to measure the effectiveness of the program once it is rolled out.

The valuation uses a framework based on an income based approach to estimate the earning power that accrues to the employees from upskilling:

Return on investment in training, the employee's economic perspective

$$\frac{\left[\begin{array}{c}\textbf{Post training value}\\ \textbf{of human capital}\\ \text{Present value of expected}\\ \text{future earnings of employee}\\ \text{cohort after training}\end{array}\right] - \left[\begin{array}{c}\textbf{Pre training value}\\ \textbf{of human capital}\\ \text{Present value of expected}\\ \text{future earnings of employee}\\ \text{cohort before training}\end{array}\right]}{\left[\begin{array}{c}\textbf{Cost of the}\\ \textbf{training program}\end{array}\right]} = \begin{array}{c}\textbf{Return on}\\ \textbf{investment}\\ \textbf{in training}\end{array}$$

NEXT STEPS

Upon completion of the training program, we will use the actual post training income figures to recalculate the human capital value and to estimate the return on investment from the training program. We will also combine the findings with traditional / existing productivity metrics to illuminate the value of human capital that accrues not only to the employee, but also the organization.

"The Finance team led the project and engaged partners on the Human Resources, Analytics and Technology teams."

BACKGROUND AND CONTEXT

ABOUT MANULIFE FINANCIAL CORPORATION

Manulife Financial Corporation is a leading international financial services group that helps people make their decisions easier and lives better. We operate primarily as John Hancock in the United States and Manulife elsewhere. We provide financial advice, insurance, as well as wealth and asset management solutions for individuals, groups and institutions. At the end of 2018, we had more than 34,000 employees, over 82,000 agents, and thousands of distribution partners, serving almost 28 million customers. As of June 30, 2019, we had over $1.1 trillion (US$877 billion) in assets under management and administration, and in the previous 12 months we made $29.4 billion in payments to our customers. Our principal operations in Asia, Canada and the United States are where we have served customers for more than 100 years. With our global headquarters in Toronto, Canada, we trade as 'MFC' on the Toronto, New York, and the Philippine stock exchanges and under '945' in Hong Kong.

ABOUT PEOPLE AT MANULIFE

We are a knowledge based, intellect intensive industry, and human capital is our key capital. At the end of 2018, we had more than 34,000 employees, over 82,000 agents, and thousands of distribution partners, serving almost 28 million customers.

ISSUE DESCRIPTION

As Manulife is undergoing a transformation to become a digital, customer centric organization, we are addressing the skills gap through the technology training program delivered within this transformation. Our target is to gain a substantial number of upskilled technology employees over the next several years through the combination of external recruitment and an immersive software engineering incubator.

The following highlights key challenges we face with respect to our changing environment:

Changing customer needs	Investment in talent	Training / upskilling
Business is changing – customers are embracing technology and are armed with more information than ever before; as a result, expectations are evolving and increasing quickly.	As we continue to innovate and use technology to serve our customers, make it easier to do business with us, reduce expenses and prepare our franchise for the future, investing in employees, new skill sets and approaches will be required to deliver on customer needs and expectations.	To achieve its digital ambitions, Manulife is actively retraining employees with the skills necessary to compete in the new economy. This includes skills that cover the full software development stack, from server and hosting expertise to data modelling, user interface design and user experience, in addition to customer journey experts and agile coaches and leaders.

The new training program allows us to transition away from traditional manual processes prevalent in the insurance sector, such as data entry, enabling more rapid development of digital solutions that capture and enhance customer experience.

TRIGGER FOR ACTION

We believe that defining, measuring and managing our human capital will enable us to keep our people engaged, retain key employees and attract new talent. The quality of our human capital is critical to our long term success.

The Manulife human capital valuation is inspired by our Chief Financial Officer's commitment to sustainability leadership with The Prince of Wales's Accounting for Sustainability (A4S) Project. Our valuation project is an integral part of the drive to help management address environmental and socioeconomic challenges through the quantification of nonmonetary capitals – human, social and natural.

> *"The quality of our human capital is critical to our long term success."*

APPROACH

The traditional measurement of human capital in economics focuses on productivity, where long term growth in productivity depends on investment in human capital. Analogous to hard assets traded in the markets, the economic value of people is reflected in their earnings power. As such, we believe that the economic value of our employees' productivity is enhanced through training and development.

An organization's investment in talent, such as training and development programs, increases the value of human capital over time. This value accrues to:

1. employees, in the form of upgraded skillsets which enhances earnings power;
2. the organization, in the form of greater productivity, net of higher compensation paid to employees; and
3. overall society, in the form of stronger economic growth.

The purpose of this worked example is to demonstrate the proof of concept and to provide an analytical framework for evaluating the benefit to the individual, i.e., the value of the upgraded skillset to the employee that the employer has provided through training and development programs.

To determine the baseline value of our human capital, we used an income based approach adopted by the UK Office of National Statistics.[1] This valuation methodology has been tested by several companies, including SSE plc, the British utility company and member of the A4S CFO Leadership Network. Its case study is highlighted in the *A4S Essential Guide to Social and Human Capital Accounting*,[2] with further context and detail available in their *Valuing People – Understanding SSE's Human Capital*[3] publication.

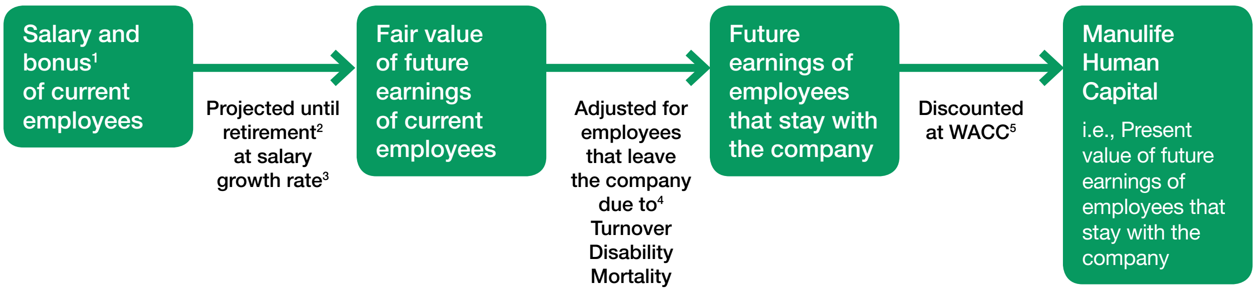
1 *Human Capital Estimates* – Office for National Statistics. Retrieved from **www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/humancapitalestimates/2015**

2 *A4S Essential Guide to Social and Human Capital Accounting. SSE: Understanding the value of our human capital and the impact it has on business performance.* Pages 88–92. Retrieved from **www.accountingforsustainability.org/en/knowledge-hub/guides/social-and-human-capital.html**

3 *Valuing People – Understanding SSE's Human Capital.* Retrieved from **http://sse.com/media/306295/SSE-Human-Capital_Final_For-Web.pdf**

Following the economic income based approach, expected future earnings are a proxy for the economic value of our people's productive capacity. Namely, salary and bonuses are measures of employees' economic value. The following diagram summarizes the key components of our human capital valuation methodology:

Income based approach to economic valuation of human capital

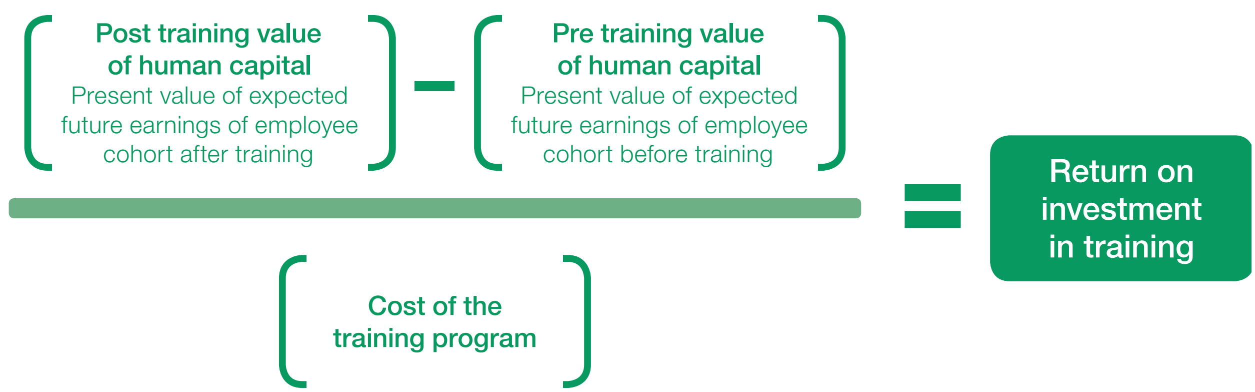


Notes

1. Targeted bonus percentage to reflect individual contribution to the profit pool
2. Number of years used for projection = Retirement age - Current age
3. Average salary growth rate per job level
4. Manulife's aggregate statistics
5. Weighted average cost of capital for the entire company

Using this valuation approach, it is possible to establish the baseline and calculate the return on investment for employee training programs. The following diagram shows the change in human capital value measured at the beginning and end of a training program, scaled to the investment amount.

Return on investment in training, the employee's economic perspective



Because the training program is new and evolving, we do not yet have the end values, i.e., the actual post training income figures. Upon the completion of the program, we will be equipped to estimate the return on investment into the training program. Ultimately, as data becomes available, we anticipate using the baseline valuation to track the growth in the value in Manulife's human capital, and the return on investment in people.

MANULIFE’S PILOTED HUMAN CAPITAL VALUATION

The pilot’s scope was the technological upskilling program. The Finance team was the owner and leader of the project and performed the valuation. We commenced with our Chief Financial Officer engaging internal stakeholders. We then worked together with our Human Resources partners and the Technology team to collect the data, pilot the valuation and interpret the results.

INTERNAL ENGAGEMENT PROCESS

Our Chief Financial Officer played a key role to secure high level engagement with the Head of Human Resources. Subsequently, the Financial Planning and Analysis and Investor Relations teams that drive the Accounting for Sustainability program collaborated with the Human Resources and Data Analytics teams early in the process to define the approach and incorporate feedback by consensus.

DATA NEEDS

To arrive at the pre and post training human capital value, we leveraged our Workday Human Resources system, which was key to gathering comparable data for analysis.

In our first iteration, and to get the order of magnitude estimate, we used an analysis that was completed by HAYS[4] to classify jobs, setting job bands and levels. The data we initially used included the following:

- By job band: age, tenure, salary, bonus
- Aggregate statistics: retirement age, turnover / mortality / disability rates, cost of capital

Job band	Aggregate statistics
age	retirement age
tenure	turnover / mortality / disability rates
salary	cost of capital
bonus	

Depending on the maturity of the company’s compensation tracking systems, the total compensation could include health benefits.

Eventual valuation would need to use employee specific information, subject to confidentiality practices of the Human Resources team.

4 HAYS Specialist Recruitment Canada. **www.hays.ca/about-hays/index.htm**

Training can be thought of in a range of higher to lower cost. This range can be measured (or grouped) as:

- Internal cost: on the lower end of the range, e.g., trainers' time plus cost of employee while in training
- External cost: on the higher end, e.g., a comparable external training program delivered as part of the transformation

Internal cost	External cost
Lower end of the range **e.g., trainers' time plus cost of employee while in training**	**Higher end of the range** **e.g., a comparable external training program delivered as part of the transformation**

NEXT STEPS – VALUE TO THE ENTERPRISE

For the valuation to be truly powerful, it needs to be combined with key performance indicators that measure the success of the training program. Therefore, we see the next iteration of the valuation, and by inference the return on investment, combine the employee perspective with traditional / existing productivity metrics to illuminate the value of human capital that accrues not only to the employee, but also the organization.

This is consistent with the economic notion of productivity, which is enhanced through the investment in human capital. This will allow us to track how the benefit from investment in training accrues not only to each employee, but also to the organization. We plan to use the following metrics over the course of the three year training program:

Key Performance Indicators	Description of the Measured Outcome
Number of individuals trained through the software engineering incubator	Completion of the training program
Number of Manulife trainers internally developed to lead the software engineering incubator	Effectiveness of the program whereby trainees take on trainers' roles
Percentage of engineering skilled resources (of total in house Technology headcount)	Upskilling of the workforce to support digitization drive
Percentage of employees that stay with the company post training	Improvement in retention
Percentage engagement score	Improvement in employee engagement
Percentage spend on third party contractors	Production savings / cost avoidance

POTENTIAL OUTCOMES

On completion of this project, achievement of the following outcomes would demonstrate successful delivery for each of the respective stakeholder groups:

Executive Management	The combination of valuation of human capital with productivity metrics helps manage questions from the senior management team, particularly on the return generated through investment in training programs.
Human Resources Management	The valuation of human capital provides a baseline measurement for decision making purposes. For example, it enables quantification of the impact of specific training programs. It can also be used as a quantified performance metric in various scorecards. Ultimately, it supports the business case for talent development.
Employees	Being able to quantify the “Return on Investment in Training” demonstrates the value of training programs and, in turn, has the potential to increase enrollment and engagement.
Society	Also, helps communicate the value of Manulife’s investment in people and support the long term productivity growth for the overall economy.

LEARNINGS

KEY LEARNINGS

An iterative process
Overall, we found the process was iterative, requiring exploration of several options and a changing number of internal stakeholders. It is worth noting though that this occurred during substantial changes to senior management and to both corporate and talent strategy.

Data limitations
For newly initiated training programs, data limitation is the key challenge. The valuation is challenged by a lack of data availability for programs that have recently commenced, are in development, or are being introduced at a fast pace.

Lack of guidance for external reporting
In the absence of accounting guidance akin to that in place for reporting on financial capital, it may be challenging to disclose actual valuation outputs publicly.

VALUATION CHALLENGES AND SOLUTIONS

Challenges	Solutions
Confidentiality: access to Human Resources data could identify salary of specific staff members.	Use data ranges, averages and leveraging HR staff to provide analyzed dataset.
Margin of error: simplifying assumptions can result in too high / too low a value.	Start with a pilot group / project, refine the model through multiple iterations and provide a range for value of human capital rather than definitive number.
Lack of accounting standard / guidance: no standards or benchmarks exist to validate valuation estimates or methodology.	Continue with the pilot to create the precedent.
Employee perspective: method focuses on the value that accrues to employees, not to the company per se.	The essence of the valuation is to highlight the value of human capital to employees. It will provide a quantified metric. The case that solid human capital development ensures resilient business performance has already been made: employees are our key stakeholders along with customers and investors, and team culture is part of our strategic priorities.
Not a corporate perspective: approach does not reflect future productivity improvements.	To take the employee focused valuation further, one could theoretically use an economy wide proxy to estimate future productivity increases, e.g., the gross value add statistics.[5]
Assumptions: model assumes salary and bonus is equal to an employee's market value.	This is a reasonable assumption in economics. Also, company specific compensation growth rates could be higher than inflation.

5 Gross Value Add – Office of National Statistics. Retrieved from www.ons.gov.uk/economy/grossvalueaddedgva

Challenges	Solutions
Timelines: assumptions had to be made about timing and size of post training compensation.	Longer term horizon may be needed to attribute investment in training to growth in human capital due to lag between investment and increase in salaries.
Context: lack of a relative context for the valuation.	Can be compared against replacement cost.
Pilot: limited in the scope of programs covered.	Going forward, approach could be applied to produce the company wide valuation of human capital.
Human Capital concept: not intuitive in a corporate context.	Education of internal stakeholders is needed.

Beyond Manulife, we look forward to greater adoption of the income based approach to human capital valuation. We also look forward to the uptake by accounting associations and standard setters on the development of initial guidance in this space. Our Finance team and the wider A4S project team welcomes your questions and recommendations.

APPENDIX OF DEFINITIONS

For the purposes of our worked example, we define the following terms:

Human capital	present value of employee's future earnings whilst they are with the organization
Employee earnings	market based compensation, such as salary and bonus
Training	upskilling program paid for by the organization
Return on Investment in training	post training change in human capital value scaled to the organization's investment in training

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DISCLAIMER

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