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THE UNIVERSITY DEGREE: SOCIETAL EXPECTATIONS VS. REALITY

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THE UNIVERSITY DEGREE: SOCIETAL EXPECTATIONS VS. REALITY

Prof. Janek Ratnatunga, CEO, CMA ANZ



Globally, and especially in Asia, there seems to be unwavering faith that higher education—especially a university degree—was a pathway to a good job and better lifestyle. ‘College’ or ‘University’ has been hailed by governments as a catalyst for social mobility and economic expansion.

However, in many countries, especially in the West, this faith in higher education appears to have begun to waver. Disenchantment is rising as tuition costs climb but graduation incomes remain flat. According to a survey conducted by the *Wall Street Journal* on March 31, 2023, 56% of Americans now think a degree is not worth the time and money spent on it.^[1]

Whilst for most students, and in most places, higher education continues to offer very substantial financial returns, earning a degree now carries more risk. Although both monetary and intellectual rewards (e.g., developing intellectual curiosity, having a sense of worth) for top performers are rising, a concerning large percentage of students experience unfavourable outcomes from their study.^[2]

The first blow to what was once the impenetrable degree edifice was the 2009 financial meltdown that destroyed most economies—aptly called the ‘global financial crisis’ (GFC). In its aftermath, by 2011, more than half of university graduates in the West were unemployed or working part-time.^[3] While a bachelor’s degree may have been a ticket to success for some, it was not of much value for many others. In fact, the value of a degree was seriously questioned in USA, where a ‘college degree’ came at an astronomical price, with some having to take loans that stayed with them for the rest of their lives.^[4] Too many Americans still struggle to pay for a university education due to the prohibitive costs and lengthy time requirements. Americans now prioritise affordability and jobs when it comes to higher education.

In Australia, whilst the cost of a degree is also substantial, and often required a loan from the government, it was nowhere near the USA costs. Also, the repayment was linked to ones’ income. If you lost your job, the loan repayments temporarily halted until a loan recipient found another job.

In the subsequent years post GFC, as the global economies recovered, this questioning of the value of a degree died down. Then it was dramatically brought back to life by Covid-19, the so-called “*once-in-a-lifetime worldwide epidemic*”. Those holding some university degrees, especially in the ‘Arts’ got more of a raw deal this time. Conversely, some degrees, especially in the health sciences and STEM (science, technology, engineering, and mathematics) became more resilient.

Therefore, making the appropriate subject choice was seen as essential to increasing earning potential. The *Economist magazine* reported that about 10% of men who study the creative arts, social work, or agriculture in Britain are likely to have negative returns. Music and visual arts seem especially prone to have negative returns. In contrast engineering, computer science, and business degrees were by far the highest-paying degrees.

The Value of a Degree

In the developed world, the 1980s saw the beginning of a boom in graduate salaries. The so-called “college-wage premium” started to rise during that time. In the 1970s, an American with a university degree made, on average, 35% more money than someone with only a high school diploma. That edge had increased to 66% by 2021.

Recently, post-Covid pandemic, this wage premium has either stalled or started to decline in several countries. Simultaneously, the course fees for degrees have increased. Arguably, the highest tuition in the developed world, at £9,250 a year, is now charged in England, where it was once free in the late 1990s. The average cost of a bachelor’s degree in America climbed from \$2,300 per year in the 1970s to almost \$8,000 in 2018. Students at private non-profit institutions may pay somewhat more; those at public universities frequently pay significantly less.^[5]

A 2019 survey by *Populace*, a nonpartisan think tank in the USA, found the value proposition of a ‘college degree’ was not what it once was. Whilst the data did not specifically indicate that degrees were not valuable, it appeared that ‘careers’ have taken precedence over ‘degrees’ per se in the search for fulfilling employment. For example, in the past, one might have picked ‘medicine’ as a degree choice, and then accepted whatever career (including long-hours) that came with it. Now many will pick a career with, say, flexible hours, and then choose a degree that will get the career with a work-life balance of their choice.^[6]

The *Populace* (2019) study also found that students in the USA wanted to develop “*practical tangible skills*” like managing money and cooking – which were ranked high as the most desired skills. Using ‘*critical thinking*’ to solve problems and making ‘*ethical judgements*’ were other highly regarded skills. The sixth-highest ranking desire, up from rank 27 prior to the epidemic, was “*career readiness*”.

Professional Qualifications – The ‘Career Ready’ Pathway

Historically, ‘*career readiness*’ has been the domain of professional qualifications in fields such as *medicine*, *engineering*, *law*, and *accountancy*. All these professions initially had alternative pathways to a career that did not involve a university degree. American medical schools of the early and mid-nineteenth cen-

tury were generally doctor-owned institutions that varied widely in their standards and methods of education. The *Institution of Civil Engineers* in the UK – the world’s first professional engineering body – did not require a degree to enter the profession. One had to go through a period of ‘*apprenticeship*’. In the United Kingdom, law was developed as a profession by specialized legal societies in London called the *Inns of Court*; and through lectures and apprenticeship, individuals were admitted to practice before the royal courts.

The modern profession of the accountant originated in Scotland in the nineteenth century. The world’s first accounting professional body, *Institute of Chartered Accountants of Scotland*, does not require a degree to obtain membership. In fact, most UK accounting bodies still have alternative pathways to membership that do not require a degree to obtain membership. One undertook exams conducted by the professional body itself, and then undertook a period of ‘*articles*’ in a professional firm before being admitted as a member.

Australia was one of the first countries that required a degree to be admitted to the accounting profession. One of the driving forces behind this change was the desire for accountancy to be seen as a profession rather than a trade. Unfortunately, most accounting graduates are now not ‘*career ready*’ upon graduation, and thus have to undertake a further period of training and examination, and also obtain relevant practical experience, prior to being able to use the ‘*chartered accountant*’ title.

Whilst accounting, legal and engineering professional education in many Commonwealth countries still have non-degree pathways; the profession of medicine has only an arduous degree pathway. Unfortunately, even after 5-years or more of university study, medical graduates are not ‘*career ready*’, and need to have significant further education and internship training to be career ready.

The Transformative Nature of a Degree

Traditionally, universities helped students broaden their horizons and experiment with various career possibilities. This is still an essential and beneficial step before embarking on a career.

Analytical thinking, active learning, and sophisticated problem solving are just a few of the ‘*power skills*’ (formerly referred to as “*soft*” abilities) that universities excel at developing. For many individuals – especially first-generation university students – such power skills can be transformative. Furthermore, research in the area shows that those with a university degree typically have a stronger sense of identity than those with merely a high school diploma. They also tend to earn more money and have better employment rates. In contrast to individuals with only a high school diploma or less, a 2023 *Pew Research Centre* study found that workers with postgraduate degrees or bachelor’s degrees feel that their occupations offer them a sense of identity.^[7]

At a time in history when hopelessness and pessimism seem to be the cloak that is worn too frequently, *identity and purpose* are not ideals to be laughed at. In reality, however, there are numerous methods to develop identity and purpose – acquiring a college degree is just one.



University recruitment campaigns today focus on higher education as a means of working “smart” rather than “hard,” featuring pictures of a grubby plumber next to a gleaming university graduate. However, such advertisements fail to consider the cost of tuition as well as the time and abilities required to obtain a degree.^[8]

But not everyone needs to spend two or four years in school, just as not everyone is cut out to be a doctor or a plumber. Further, even if earning a degree is not just about getting a job, it is still important for students to find stable employment after spending four years and thousands of dollars on a university education. Also, too many students drop out and are unable to find excellent employment afterwards.

In the USA, about 38% of students who enrol in a college or university do not complete it, leaving them with debt and an unfinished education (no degree).^[9] Dropping out without any credentials is a clear-cut method to lose a lot of money. Additionally, taking longer than typical to graduate reduces value because it takes years away from time that could have been spent working.

The primary causes for dropping out are expenses, worry, uncertainty, employment pressures and becoming parents. College students in the USA must manage job and study because one-fifth of them are parents and about 40% of them are employed. Universities can do a lot better at assisting those who begin a degree in completing it, including having shorter exit paths with lesser level qualifications.

In Australia, there are many exit paths such as *Undergraduate Certificate, Diploma, and Associate Degree* so that undergraduate students do not leave empty handed. Further, Australian post-graduate students have *Graduate Certificate* and *Graduate Diploma* exit options if they need to drop out before completing a *Master’s degree*.

Up until recently, questionnaire surveys were the main tool used by economists looking to pinpoint the winners and losers in the higher education sector. However, new big data sets, like tax and social security records, can be used in the future by governments to monitor the earnings of students who enrol in particular courses in particular universities. The publication of such information for public consumption will enable students to avoid the worst outcomes and take advantage of the best.

Current research indicates that the choice of the degree program and timely graduation are very important; whilst institution choice is less important. With such focused information, Governments can crack down on “low-value degrees” and stop funding them with taxpayer money. Disaggregated data in the UK and Norway show that a large percentage of students earn degrees that are not worth the money they spent on them.^[10]

Interestingly, the return from a degree in Britain is normally higher for South Asian students than for white students because they frequently study business-related disciplines. Asian students in America appear to have the easiest time repaying their student loans when compared to white and black students.^[11]

Marks to Market

What effects does all of this analysis in the higher education sector have? There are indications that the higher education market is changing globally. Students at various educational levels are already independently seeking out higher returns. Between 2011 and 2021, there was a roughly one-third decrease in the number of English and History degrees awarded each year in the United States. In that time, the number of Computer Science degrees more than doubled. *[More on the value of tech degrees later]*.

Programs in ‘Humanities’ are being eliminated as institutions change to cater to market conditions. English, History, Philoso-

phy, and Theology are programs that are being considered for elimination in many universities. Among the universities that have given up on classics are Calvin University in Michigan and Howard University in Washington, D.C. The future of archaeology at the University of Sheffield in Britain also appears bleak.

Some would say this is a very worrying trend. Universities dating back 1,000 years used to focus on these ‘Humanities’ areas. They underpin *civil* society. It was believed that a knowledge of philosophy and history is much more likely to produce a well-rounded person who will make a worthwhile contribution to society.

Do governments need to promote these trends? The Australian government aims to guide students to make socially useful choices by giving financial incentives. In 2021, the cost for students to study communications, political science, law or social sciences (including accounting) was doubled as these were seen as less socially desirable, while the cost for undertaking a nursing or teaching degree was cut in half. However, due to Australia’s generous student loan payback arrangements described earlier, students have resisted taking careers that are perceived as more ‘challenging’ at the coalface. Another example of social engineering is that of the British government which believes that by providing everyone in England with an online account that details the maximum amount of money they are permitted to borrow from the state for educational purposes throughout their lifetimes, it can change behaviour. Making school-leavers more frugal is the goal.

Value of Tech Degrees

Students graduating with computer science (tech) degrees^[12] from top universities in the world most often wanted to work for “faang” companies, which stand for *Facebook (now Meta), Apple, Amazon, Netflix, and Google*. Then there were layoffs in late 2022.

The time is not right to enter the tech job market right now. Career fairs are where Job seekers go with a stack of resumé to hand out to prospective employers. But by the end of 2022 none of the faang businesses were present at these fairs. *Spotify, Salesforce, Uber, and Microsoft* were also not present.^[13] In just January and February 2023, there were 120,000 tech layoffs in the Tech sector; 10% of those jobs were lost at Alphabet, Google’s parent firm. Meta had 10,000 layoffs.

The tech sector has long combined enormous earnings with significant investments in growth. Big tech went on a hiring binge during the pandemic, intoxicated by its own success: In a short period of time, Meta increased its workforce significantly. The enjoyable moments are now over. The digital titans are facing harder economic conditions, including manufacturing shortages and high interest rates, as well as fiercer competition. The tech businesses have shed almost 300,000 personnel over the past 1.5 years, the biggest since the dot-com crash two decades ago. Job offers from Amazon and Meta have been withdrawn. The sector is under pressure from investors to embrace foreign concepts like “*fiscal responsibility*” and “*long-term growth*”.^[14]

All around the world, tech graduates from universities are experiencing similar effects. For example, in career fairs in Europe, the German software behemoth SAP was the only big name in technology having a booth. Others that had set up booths were

financial institutions, government organisations, transportation companies and smaller specialised digital firms. These less glamorous suitors have benefitted by the absence of the biggest personalities in technology.

As a result, tech graduates have toned down their goals and are now accepting any company that will hire them. The *Economist magazine* reports a case of a graduate accepting a job in network security. This person in the past would never have chosen a job as dull – as unsparkly! – as security.^[15]

MBA's are also Changing.

The Graduate School of Business (GSB) of Stanford University takes pleasure in providing the most exclusive MBA programme in the world. Its 420-student cohort is less than half the size of its fiercest rival, *Harvard Business School*, and just 6% of applications are accepted, as opposed to 10% or so at HBS. Many of them will follow alumni like Asia’s richest man, Mukesh Ambani, or Detroit’s most powerful woman, Mary Barra of General Motors, into corporate fame. Of course, its alumni Rishi Sunak, became Britain’s prime minister.^[16]

The GSB is therefore the ideal location to get a peek of management’s future. The most crowded courses in the MBA curriculum may be the best lens through which to see it.

The GSB’s MBA curriculum comprises *compulsory* classes in accounting, finance, and computer modelling, which must be finished within the first two of the program’s six terms of instruction. In these courses students wade through multiple case studies, studying financial figures, and creating complex spreadsheets. The three most popular elective courses at the institution, however, paint a more intriguing picture of the manager of the twenty-first century. All three do not really involve any number-crunching. Instead, they seek to develop in students a mixture of *ruthlessness, self-awareness, and tact*. The future MBAs seem to be indicating that these triad of qualities—rather than any technical knowledge—will determine success. The fourth quality is “*selfless ambition*”, but no course can teach steely determination—not even at the GSB.

At the GSB, “*Paths to Power*” is the course name of the triad’s first component. The course syllabus’s introductory paragraph laments that “*insufficient sensitivity to, and skill in, coping with power dynamics*” have prevented many competent people from receiving promotions and even losing their jobs. Interestingly, “*avoiding grooming successors*” is one strategy taught to students for retaining power.

How can you avoid cunning competitors? The course says that holding “*multiple overlapping roles*” within an organisation is one approach, because multiple teams reporting to you make it more difficult for you to be ousted by competitors. Although it is unknown if Australia’s former Prime Minister, Scott Morrison—who secretly appointed himself to five ministerial positions without the knowledge of the public or his own government—had attended the GSB seminar, he appears to have internalised its lessons.

The second component of the triad, “*Touchy Feely*” tells students to focus on their own reputation. Its purpose of the course is to assist students in determining how they desire to be seen. Unstructured group discussions of 12 students make



up the majority of the class, and there is also a weekend retreat. Nothing is off limits; past relationships, mental health, and political views are all fair game. Students are told to watch each other's behaviours, including their ability to communicate their emotions and solve problems. This exercise in *brutal love* has also the potential for *self-discovery*. Students can only take steps to lessen their shortcomings only if they are aware of them. This can require some people to speak more firmly. For others, it can entail smiling more and frowning less.

The third component of the triad is a well-liked course, "*Managing Growing Enterprises*". This is not about small-business accounting as its name may imply. Instead, the emphasis is on how to behave *diplomatically* in delicate circumstances, when many prospective managers stumble due to a lack of the appropriate phrases. How do you terminate a person? How can you tell a big investor no to their unwanted and useless advice? What do you say to a snooping journalist? Role-playing is a major component of the curriculum. Asian applicants, many of whom have been raised to avoid conflict, seem especially interested in the lesson, taking detailed notes as the role actors in the classroom attempt to be courteous but tough.

In the MBA program at *Calwest University* (an institution sponsored by the Institute of Certified Management Accountants), CMA Certified members need to do only four compulsory subjects: *Critical Thinking, Global Issues, Business Ethics and Philosophy*. As one can see, these are not courses that are included in more traditional MBA programs.

Alternative Non-Degree Career Choices

Today, there is the ability for individuals to pursue a range of interests outside of a traditional university degree. We must recognise that this variation is a strength, not a weakness, if we want them to thrive in society. In the West, parents today

also want more opportunities for their children, and they want a wider range of outcomes. Their children also are in favour of more action, possibly because trying new things helps them figure out the type of work they want to undertake.

The renewed need for skills in most Western nations is supported by structural factors as well. Because of the extraordinarily tight labour market post Covid-19 in Western economies, companies are less likely to insist on degrees. Clearly, many jobs do not require a bachelor's degree at all.

In 2022, *Harvard Business Review* predicted that in the next five years, 1.4 million jobs will be open to people without college degrees.^[17] In fact, President Barack Obama himself tweeted about "unnecessary college degrees".^[18] Conversely, the Australian government is currently saying that the country will need many more degree qualified people to do the jobs of the future given the rise of AI etc.^[19]

Other Non-Degree Options

Decades of 'Social Engineering' in Asia have championed higher education – especially in Medical and STEM degrees – whilst stigmatising vocational alternatives. In these societies, the value of the person was based on the degree earned. Although not to the same extent, these value systems also prevail in USA, UK and Australia. But not all Western countries subscribe to this value system. About half to two thirds of students in Germany^[20] and Switzerland^[21] enrol in vocational programmes.

Today, the options for learning and training that are currently available are much more varied than they once were. For example, *Coursera* – an organisation that offers online courses, certifications, and degrees in a variety of subjects – used to add roughly two million new students every quarter prior to the Covid-19 pandemic. After the outbreak, that number has

climbed to five million every quarter, with 113 million students currently enrolled. This platform offers courses on everything from computer science to the secrets of happiness. Over 50% of degree searches in 2022, according to Google's own search statistics, were for non-traditional pathways.^[22]

Summary

Globally, there has been an unwavering faith that a university degree was a pathway to a good job and a better lifestyle. Going to college or university has been hailed by many as a catalyst for social mobility and economic expansion.

However, in many countries, especially in the West, this faith in higher education appears to have begun to waver. Disenchantment is rising as tuition costs climb but graduation incomes remain flat. The value of a degree is now being seriously questioned in the USA, where a 'college degree' means having to take massive loans. Too many Americans still struggle to pay for a university education due to the prohibitive costs and lengthy time requirements. Clearly, the value proposition of a 'college degree' was not what it once was.

There are arguments put forward that what one earns upon graduation should not be the only indicator of success because universities are there to prepare people for their future lives and to make a worthwhile contribution to the greater good of society. Moreover, these have been studies to show that university-qualified people on average are more likely to take on important roles in society such as public office, live healthier lives, be more progressive in their views, and exhibit less of the undesirable attributes such as not being open to change, being racist etc.^[23]

Despite these laudable societal outcomes, most higher education students now want to develop practical tangible skills; use critical thinking to solve problems; and make ethical judgements. They also want to be 'career ready.' Getting individuals 'career ready' has been the domain of professional qualifications, but in more recent times these require a university degree as an entry criterion. Today, there is also the ability for individuals to pursue a range of interests outside of a traditional university degree.

Prof Janek Ratnatunga is CEO of ICMA (Australia & New Zealand)

The opinions in this article reflect those of the author and not necessarily that of the organisation or its executive.

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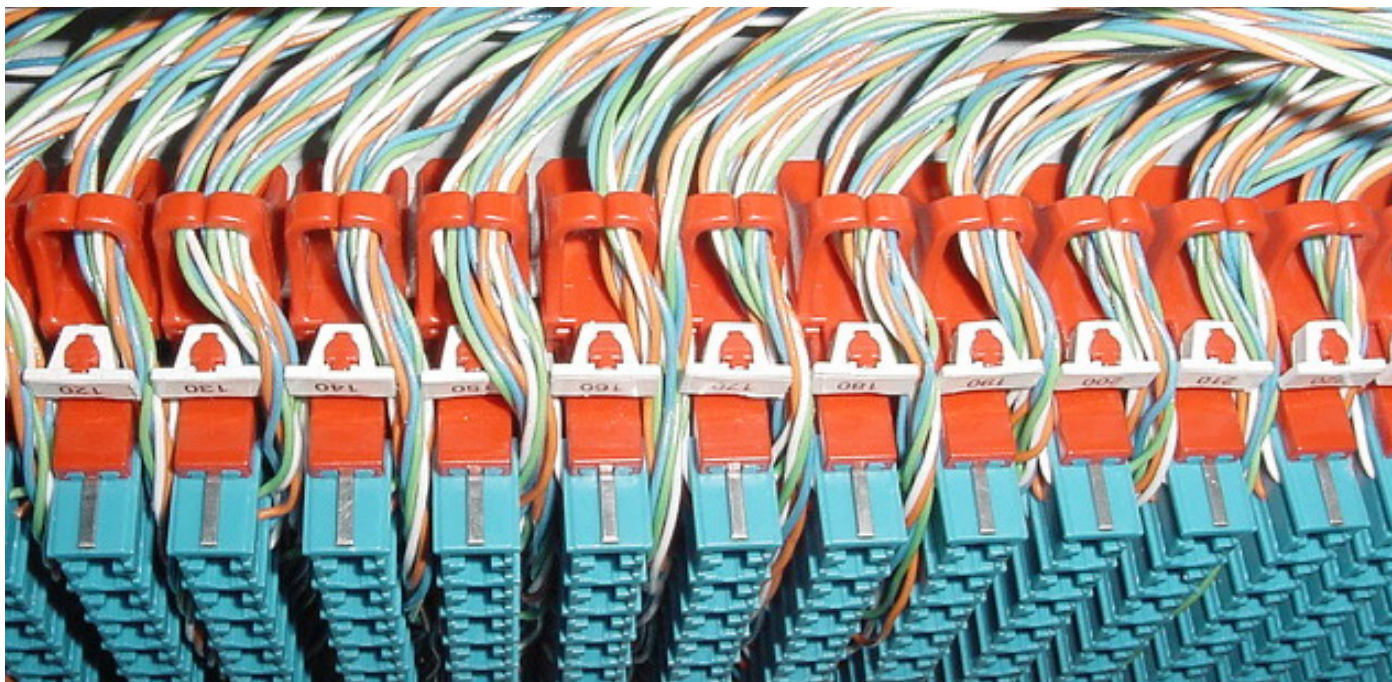
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GRANULAR COSTING: THE NEW FRONTIER OF COST MANAGEMENT SYSTEMS

Prof. Janek Ratnatunga, CEO, CMA ANZ

The rapid development of *information and communication technology (ICT)* means that on the one hand, information gathering gets cheaper and easier, and on the other, the cost of making mistakes based on poor or late information tends to grow. For example, a costly project implementation program may spell trouble for a company if the project fails due to faulty costing or pricing that does not recognise fluctuations in demand that impact the level of resources required to deliver the project during implementation phase.

A good example of an activity for which resources can be added or removed in real-time based on the demand for services is that of *Amazon Web Services (AWS)*. The resources provided by the company can be increased by increasing the capacity given to a customer on its 'cloud based on the web-traffic of the customer who demands its services. This volatility in resource demand and service delivery affects the cost and price of delivering those services in real-time. Thus, the demand for cost management systems that are capable of making use of organisational ICT capacities to deliver cost and price information in real-time continues to grow as global competition gets more and more tough.

The optimum accounting system today would: (a) require more information; (b) process more data; and (c) have more analyses available in real-time. Two real-time cost management systems that are very dependent on advanced technologies are *Resource Consumption Accounting and Granular Costing*.

Cost Attachment vs. Cost Allocation

Today's cost accounting and cost management systems have various systems of attaching direct costs and allocating indirect costs to cost objects at various *segmental levels* such as: (a) products and services; (b) customers and marketing segments; (c) white-collar departments; (d) divisions and territories, etc.

It is in the cost allocating of indirect (shared) costs that most problems arise.

Only *direct costs* at each segmental level were '*attached*' to the cost objects. To get a full picture of costs being incurred, the indirect costs had to be '*allocated*' to the cost objects (e.g., products or services).^[1]

'*Traditional*' cost allocation systems allocate indirect costs using volume-based cost drivers such as '*direct labour hours*' or '*direct material costs*'. In contrast, '*Activity-Based*' cost allocation systems use both volume and non-volume cost drivers based on activities undertaken.

However, due to the lack of sophistication in available technology, resource costs and activities were often captured at the macro level (in '*Activity Pools*'). This then required the use of '*cost drivers*' to allocate indirect costs to cost objects.

With the advent of sophisticated ERP applications, it is now possible to attach more resource costs to cost objects as direct costs, rather than classify them as '*indirect costs*' and then use a cost driver to allocate to cost objects.^[2]

Resource Consumption Accounting (RCA)

One technologically driven costing approach is called *Resource Consumption Accounting (RCA)*. RCA is a sophisticated approach at the upper levels of the continuum of costing techniques with the ability to derive costs directly from operational resource data, or to isolate and measure unused capacity costs.^[3]

The RCA model has been developed as a costing model for use with comprehensive computer-based *Enterprise Resource Planning (ERP)* systems. In the RCA approach, resources and their costs are considered as foundational to robust cost modelling

and managerial decision support because an organisation's costs and revenues are all a function of the resources and the individual capacities that produce them.

ERP systems can obtain real-time resource costs and activities data at a much more transactional (foundational) level.

Granular Costing

This is an extension of RCA where the resource costs and activities data are collected at a more granular level than even the transactional (foundational) level. The term '*granular costing*' refers to the practice of breaking down costs into smaller, more detailed components. This approach allows for a more precise understanding and analysis of both direct and indirect expenses within a particular project, product, or business process. By examining costs at a granular level, organisations can gain insights into the factors that drive expenditure and make informed decisions about resource consumption, pricing, budgeting, and profitability.

The exact methods and techniques used in granular costing can vary depending on the context. It may involve identifying and categorising various cost elements, such as direct materials, labour, overhead, or specific cost drivers, to better track and allocate expenses.

Granular Costing in Project Management

Analysing costs and revenues at a granular level of detail can help organisations identify areas of inefficiency, cost-saving opportunities, or understand the true costs associated with different activities. Take the case of '*project management*'. Breaking up a project into granular activities involves a process called '*Work Breakdown Structure (WBS)*'. The steps to create a detailed breakdown of project activities are as follows:

- *Identify the Project Deliverables*: Start by understanding the project's overall objectives and deliverables. These are the final outcomes or results that the project aims to achieve.
- *Decompose Deliverables into Major Components*: Break down the deliverables into major components or phases. These are the high-level divisions of work that contribute to achieving the project's objectives.
- *Break Down Major Components into Subcomponents*: Take each major component and further break it down into smaller subcomponents or tasks. These tasks should be distinct and manageable units of work.
- *Continue Breaking Down Tasks*: Keep breaking down the tasks into smaller, more specific activities. The goal is to reach a level where each activity can be easily understood, estimated, assigned, and tracked.
- *Define Activity Descriptions*: Provide clear descriptions for each activity to ensure a shared understanding of what needs to be done. Include information such as task objectives, inputs, outputs, and any specific requirements or constraints.
- *Estimate Duration and Effort*: Estimate the time and effort required for each activity. This can be done using historical data, expert judgment, or by consulting team members familiar with

the work. This information will also be available in the ERP system for those companies with significant experience in project management.

- *Sequence Activities*: Determine the logical order in which the activities should be performed. Identify dependencies between tasks, such as tasks that need to be completed before others can start (predecessor tasks) or tasks that can run in parallel.
- *Assign Resources*: Identify the resources (e.g., individuals, teams, equipment) required for each activity. Assign responsibilities and determine who will be accountable for completing each task.
- *Use a Hierarchical Structure*: Organise the activities in a hierarchical structure, with major components at the top level and progressively detailed tasks at the lower levels. This structure helps in visualising the project's scope and dependencies. Note that at this granular hierarchical level, the activities the resource costs will be direct to the associated cost object at that hierarchical level.
- *Develop a Project Schedule*: Use the activity breakdown, durations, and dependencies to create a project schedule or timeline. This will help in visualising the overall project timeline and critical paths.
- *Review and Refine*: Review the work breakdown structure with stakeholders and team members to ensure completeness and accuracy. Make adjustments as necessary based on their feedback and insights.

It is important to note that the level of granularity in breaking down activities may vary depending on the project's complexity and the level of detail needed for effective planning and management. The WBS should provide enough information to facilitate estimation, scheduling, resource consumption, and tracking of progress throughout the project lifecycle. An ICT driven granular costing system will enable the organisation to track resource consumption in real-time and obtain demand related prices when required.

Granular Costing in Asset Register Management

Traditionally, purchased assets were recorded as a single entity in the Assets Register, either as a tangible asset (e.g., motor car) or an intangible asset (e.g., goodwill), and the depreciated or amortised over its "*useful life*". However, with today's technology, an asset can be broken down into its granular components; and then recorded separately with each component having a different '*useful life*'. For example, a car's engine would clearly have a different useful life to its tyres. [*More on this later*].

Such a level of granularity typically involves analysing the various elements and expenses associated with a particular asset. The exact approach may vary depending on the type of asset and the specific context, but here are some general steps that can be taken:

- *Identify the asset*: Determine the specific asset that the organisation wants to break down into its components. This could be a physical item, such as a piece of machinery, or an intangible asset, like software or intellectual property.

- *Determine the major cost categories:* Identify the major cost categories or cost drivers associated with the asset. For example, if a piece of machinery is being analysed, the major cost categories might include: (a) purchase cost; (b) maintenance expenses; (c) energy consumption; and (d) disposal costs.

- *Break down the cost categories:* For each major cost category, further break it down into smaller components. This involves identifying the specific expenses that contribute to the overall cost in each category. For instance, if maintenance expenses are a major cost category, the cost accountant might identify labour costs, spare parts, repair services, and preventive maintenance as the granular components.

- *Assign costs accurately:* Assign the identified costs to the corresponding components. This may involve estimating or using available data to allocate costs based on usage, time, or other relevant factors. For example, if the cost of a software asset is being analysed, the cost accountant might allocate costs based on licenses, development hours, support services, and infrastructure requirements.

- *Analyse and evaluate the components:* Once costs have been identified and assigned, analyse each component to gain insights. Evaluate the significance of each component in relation to the total cost of the asset and assess how it impacts the overall expenses. This analysis can help identify areas where costs can be reduced or optimised.

- *Track and monitor:* Implement a system to track and monitor the granular components of the asset over time. This enables ongoing analysis and allows an organisation to assess the effectiveness of any cost-saving measures or changes made based on the breakdown.

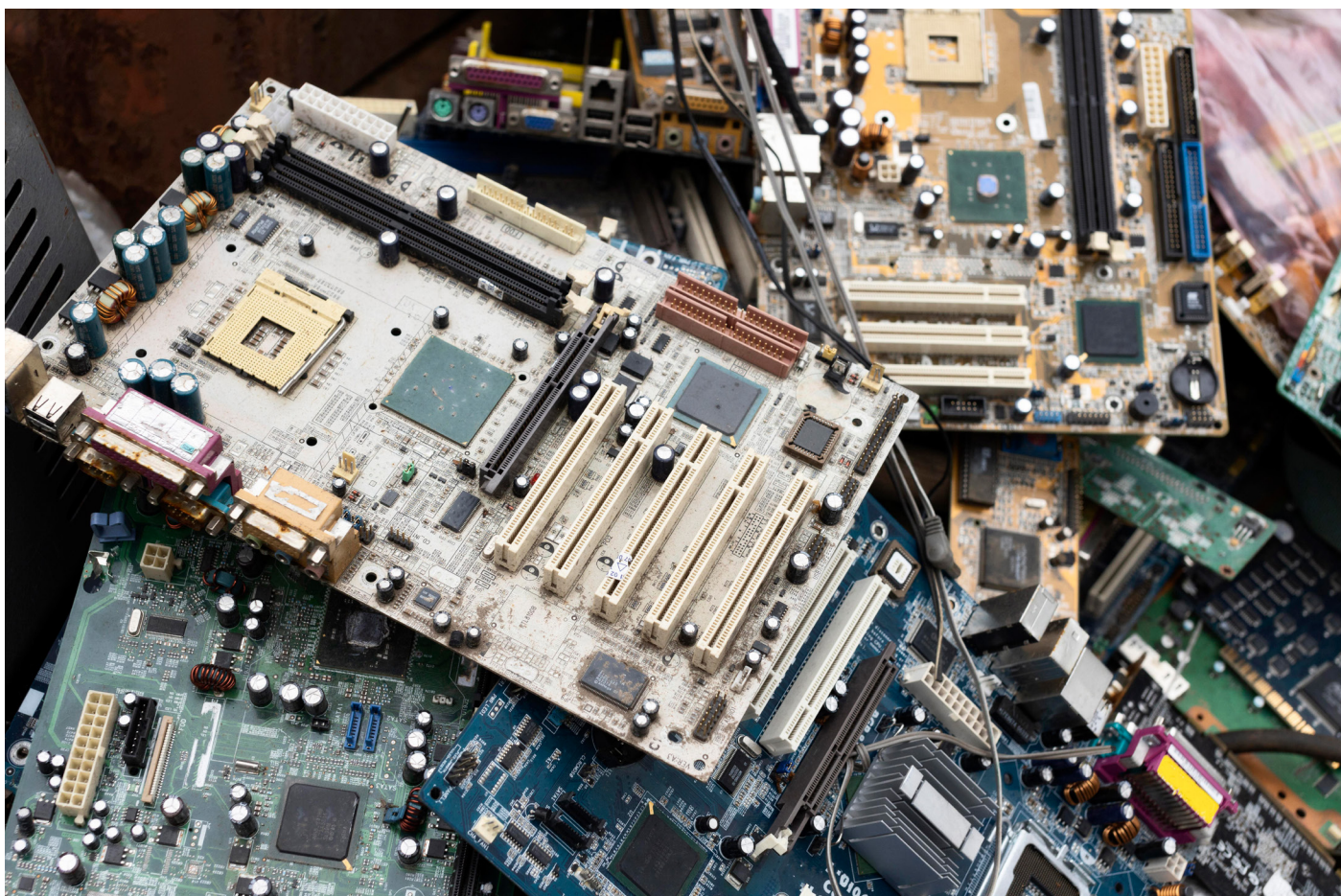
Granular Level Depreciation of Tangible Non-Current Assets

The portion of the cost (or other value) of an asset charged to an accounting period is called depreciation where tangible assets are involved. The purpose of charging depreciation is to allocate the cost (or other value) of plant, (less any salvage value), over the periods during which it contributes to the organisation's revenue-earning activities. The depreciation charge is treated either as an expense of the period or as part of the cost of products manufactured in a period.

The conventional practice has been to base the depreciation charge on the cost of the asset. However, some firms revalue at least some of their assets from time to time and base their depreciation charges on these revalued amounts. In this way, expenses and revenues would both be expressed in current terms.

The *depreciation method* chosen to allocate the cost (or other measure of service potential) of an asset should be the method which best reflects the rate of decline of future service potential. As a result, some depreciation methods are based on the passage of time and others are based on the output, or use, of the asset. Some of the more typical ways of allocating depreciation are the following: (a) *straight-line method*; (b) *reducing-balance method*; (c) *'sum-of-the-years-digits' method*; (d) *production-units method*; (e) *appraisal or inventory method*; and the (f) *annuity method*.^[4]

It must be noted that the charging of depreciation is a process of allocation of the cost of a non-current tangible asset; it is not a process of valuation. As non-current assets such as *'plant and equipment'* are used in the activities of a firm, a portion of its cost should be charged against the revenue for each period.



If a plant is more heavily used in the current period than was expected, for example, by a change from one-shift to three-shift operation, the depreciation method should be flexible enough to increase the charge for depreciation, because the service potential is being used up more rapidly than was originally estimated. The flexibility of the depreciation charge is also required in a period in which management recognises that the life of the plant (its service potential) has been shortened by changes in technology or customer demand; adjustments which are material in amount need to be reported as an abnormal item in the financial statements.

Whilst this level of 'flexibility' in the depreciation charge is a step in the right direction, it is still based on a charge on the totality of the asset (e.g., a motor car) rather than its granular components whose 'service potentials' are being used up at different rates.

Granular Components of a Motor Car

Take for instance the granular level components of a motor car. Some common examples of granular components found in motor cars are given below, although it should be noted that the service potentials of the components can vary depending on the specific make, model, and design:

Engine: The engine is a major component of a car and can be further broken down into various parts such as the cylinder block, pistons, crankshaft, camshaft, valves, fuel injectors, and intake/exhaust systems.

Transmission: The transmission system includes components like the gearbox, clutch, torque converter, drive shafts, and differential.

Suspension: The suspension system comprises components such as shock absorbers, springs, control arms, sway bars, and bushings.

Braking System: The braking system includes components like brake pads, brake discs/rotors, brake callipers, brake lines, and the master cylinder.

Electrical System: The electrical system consists of components such as the battery, alternator, starter motor, ignition system, wiring harnesses, and various sensors.

Fuel System: The fuel system includes components like the fuel tank, fuel pump, fuel filter, fuel injectors, and the fuel lines.

Exhaust System: The exhaust system comprises components like the exhaust manifold, catalytic converter, muffler, and tailpipe.

Cooling System: The cooling system includes components such as the radiator, water pump, coolant reservoir, hoses, and thermostat.

Steering System: The steering system consists of components like the steering wheel, steering column, power steering pump, tie rods, and steering knuckles.

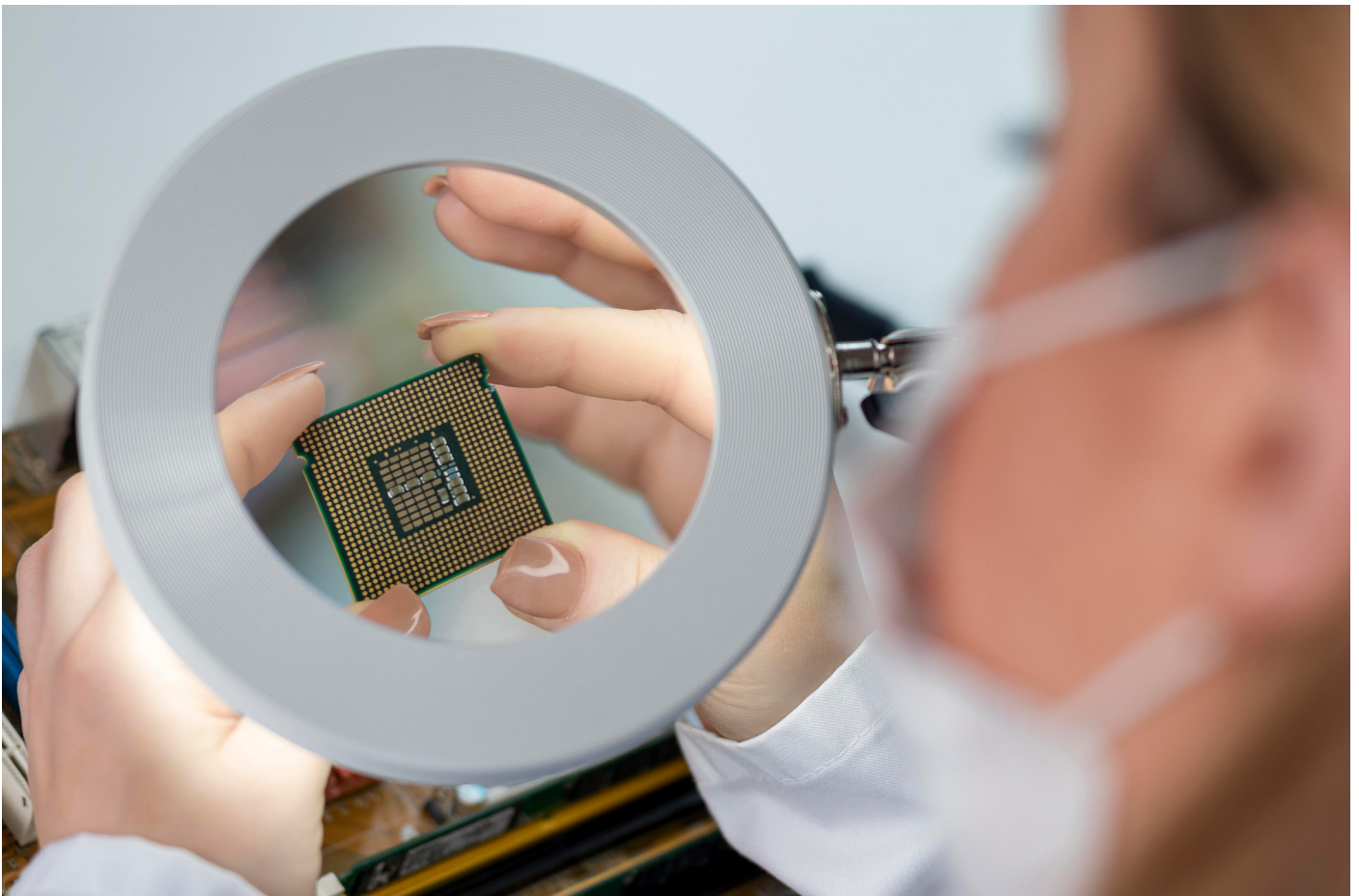
Interior Components: These include components such as seats, dashboard, steering wheel, pedals, controls, audio system, air conditioning system, and various interior trims.

Exterior Components: These include the car's body panels, doors, windows, windshield, headlights, taillights, mirrors, grille, and other exterior features.

These are just some examples of the granular level components found in a motor car. Each component can be further broken down into smaller parts or subsystems. The specific components and their arrangement can vary depending on the car's design, technology, and manufacturer.

However, we are very familiar with the concept that these very different components depreciate at different rates. Organisations recognising this, would have much better insights into their product (and services) costing and pricing decisions.





Granular Components of a Laptop or Desktop Computer

The granular level components of a laptop or desktop computer can vary depending on the specific model and manufacturer. A general list of components commonly found are:

Processor (CPU): The central processing unit, which performs most of the calculations and executes instructions in the computer. Examples include Intel Core i5 or AMD Ryzen 7.

Memory (RAM): Random Access Memory, which temporarily stores data that the CPU needs to access quickly. Typical sizes range from 4GB to 16GB or more.

Storage: Hard Disk Drive (HDD) or Solid-State Drive (SSD) to store data, programs, and the operating system. SSDs are becoming more common due to their faster performance and reliability.

Display: The screen or monitor that displays visual output. It can be an LCD (Liquid Crystal Display) or OLED (Organic Light Emitting Diode) panel, with various sizes and resolutions.

Graphics Processing Unit (GPU): Handles rendering and displaying graphics, videos, and other visual content. Laptops may have integrated GPUs (part of the CPU) or dedicated GPUs (separate chip), such as Nvidia GeForce or AMD Radeon.

Motherboard: The main circuit board that connects and allows communication between various components, including the CPU, RAM, storage devices, and peripherals.

Keyboard and Touchpad: Input devices for typing and controlling the cursor on the screen.

Battery: A rechargeable power source that allows the laptop to operate without being connected to an electrical outlet.

Power Supply: An adapter or charger that supplies power to the laptop and charges the battery.

Wireless Network Adapter: Enables wireless connectivity, such as Wi-Fi and Bluetooth.

Audio Components: Speakers and audio processing hardware for sound output.

Ports and Connectivity: USB ports, HDMI, audio jacks, Ethernet port, SD card slot, etc., for connecting external devices and peripherals.

Operating System (OS): The software that manages the computer's resources and provides a user interface. Examples include Windows, macOS, or Linux.

Enclosure and Chassis: The external casing and structural frame that houses and protects the internal components.

Cooling System: Fans, heat sinks, and thermal management components to dissipate heat generated by the CPU and GPU.

These days organisations like *Dell Technologies* (a pioneer in mass customisation) allows a prospective customer to design his or her own computer from a list of 'component options' (akin to a 'Bill of Materials') on its website. Once a prospect designs it, Dell will price it. Clearly, Dell's costing systems are accessed by the company at the granular level when it quotes a price. If the prospect accepts the price, he or she becomes a customer.

Unfortunately, whilst many customers of Dell select from a list of 'options' in designing their laptop, they do not depreciate the

components at different rates. In many jurisdictions, the laptop can be written-off fully in the first year. Whilst this may be negligible in small organisations, such write-offs can seriously distort product costs (cost of goods sold) and period costs (expenses) in large organisations. That is why it is emphasised that financial accounting calculations should not be considered in management accounting cost calculations.

Bill of Materials in Large Asset Purchases.

Unlike a laptop computer or even a motor car, in the case of large asset purchases, there will definitely be a *Bill of Materials (BOM)* that will be carefully considered prior to purchase. Let us take the example of a purchase of a local area 'Electronic Telephone Exchange' (asset) – also known as a *telephone switch or private branch exchange (PBX)*, – by a telecommunications company.

The bill of materials (BOM) for an electronic telephone exchange, , can be quite complex and extensive. It involves various components and subsystems to enable the routing and switching of phone calls. A generalised list of components found in a BOM of an PBX are:

Main Control Unit: The central processing unit (CPU) or main control board that manages the overall operation of the telephone exchange.

Line Cards: Interface cards that connect the exchange to external telephone lines, such as analogue trunks (POTS) or digital lines (T1/E1, ISDN).

Switching Matrix: A component that facilitates the switching and routing of phone calls within the telephone exchange. It connects incoming and outgoing lines, allowing calls to be directed to their destinations.

Signalling System: The signalling subsystem responsible for call setup, routing, and teardown. This may include protocols like Signalling System 7 (SS7), ISDN (Integrated Services Digital Network), or Session Initiation Protocol (SIP).

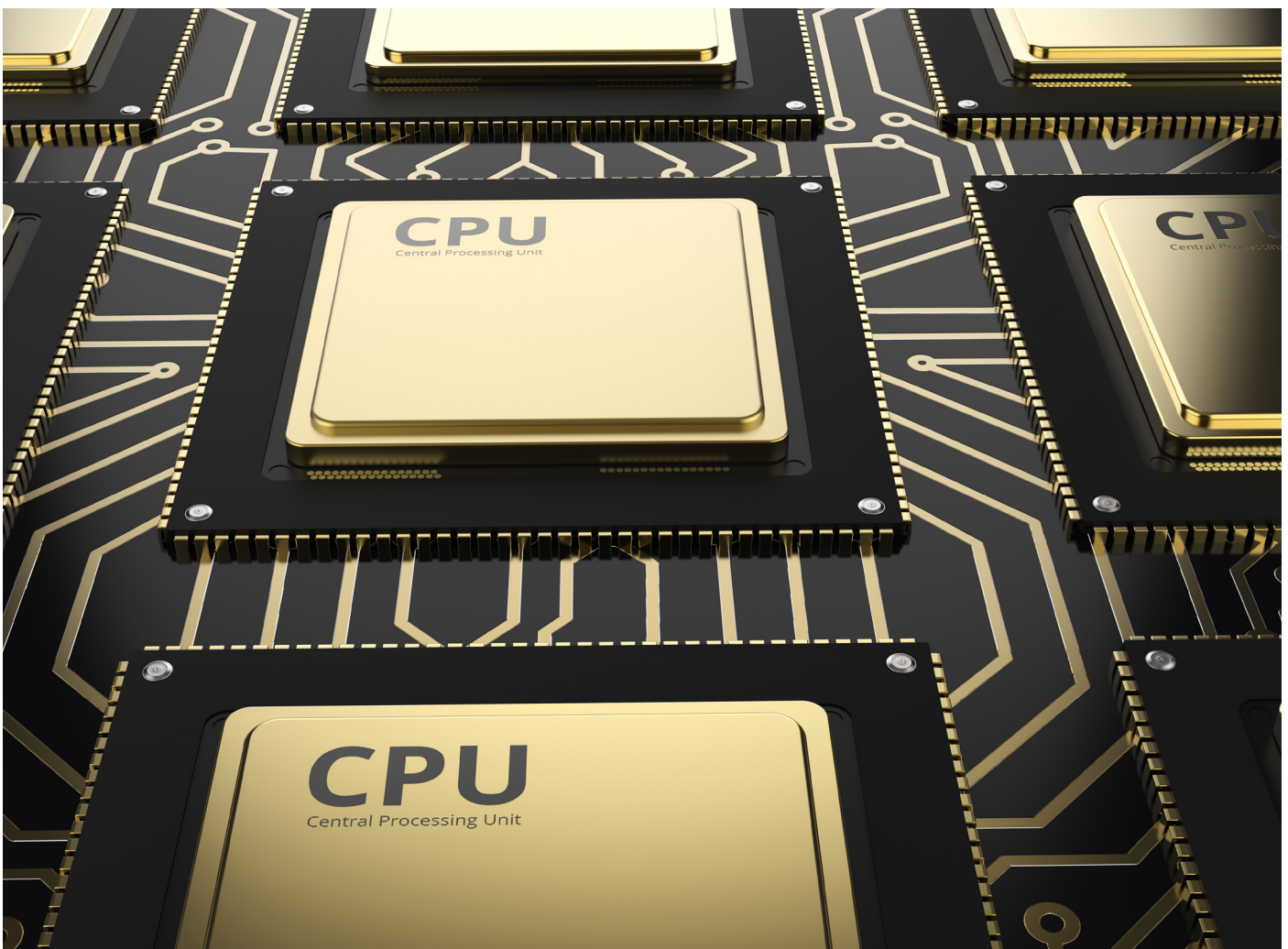
Control Software: The software responsible for call management, routing algorithms, and other functionalities of the telephone exchange.

Power Supply Unit: Provides power to all the components within the telephone exchange.

Voice Processing Units: Hardware modules or boards that handle voice processing tasks, such as analogue -to-digital and digital-to-analogue conversion, echo cancellation, voice compression, and voice quality enhancement.

Digital Signal Processors (DSPs): Specialised processors designed to handle real-time voice processing tasks, such as voice compression (e.g., G.711, G.729) and echo cancellation.

Redundancy and Failover Components: Systems and components that provide redundancy and failover capabilities to ensure high availability and fault tolerance of the telephone exchange.



Control and Management Interfaces: Interfaces and components that allow administrators to configure, manage, and monitor the telephone exchange, such as a web-based management interface or a command-line interface.

Enclosure and Chassis: The housing and structural frame that houses and protects the internal components of the telephone exchange.

Cooling System: Fans, heat sinks, and thermal management components to dissipate heat generated by the active components.

Network Interfaces: Ethernet or other network interfaces for connecting the telephone exchange to external networks or IP-based communication systems.

Peripheral Interfaces: Interfaces to connect to external devices or systems, such as alarms, paging systems, or computer telephony integration (CTI) interfaces.

System Documentation and Manuals: Documentation and user manuals that provide instructions for installation, configuration, and maintenance of the telephone exchange.

Rather than bring the purchase cost in at the asset level and use a single rate of depreciation, by using a BOM the asset can be broken in its granular components listed above. These individual components can then be depreciated according to the actual consumption of each component. This can then be compared with the revenues that come from minutes of talk, megabytes of data transfer, or an end-to-end successful service over those same granular-level components.

Summary

The rapid development of ICT enables organisations to develop technology-enabled '*Real-Time Cost Management Systems*' for product costing and pricing purposes. Two cost management systems that are capable of utilising advanced ICT are *Resource Consumption Accounting (RCA)* and *Granular Costing*.

In the RCA approach, ERP systems are used to obtain real-time resource costs and activities data at a much more transactional (foundational) level than traditional and ABC cost allocation systems. *Granular Costing* is an extension of RCA where the resource costs and activities data are collected at a more granular level than even the transactional (foundational) level.

By breaking up assets into its granular components and analysing the associated costs, organisations can gain a more detailed understanding of the expenses involved. This information can inform decision-making processes, budgeting, resource consumption, and optimisation efforts.

Prof Janek Ratnatunga is CEO of ICMA (Australia & New Zealand)

The opinions in this article reflect those of the author and not necessarily that of the organisation or its executive.

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GEN-ZS: THIN WALLETS, EXPENSIVE TASTES, AND A SOCIAL CONSCIENCE

Keshan Warakaulle

Earlier generations find the next generations baffling. Those belonging to the *Generation Z (Gen Zs)*, are no different. Due to a tight job-market, they have limited disposable income, but still have expensive tastes. They also desire seamless and customised purchasing experiences, and value social consciousness.

Gen Zs look for authenticity in their digital and real experiences with people and brands. Brands are attempting to grasp what these walking paradoxes desire and how they shop when these young people begin spending seriously. The next phase of consumerism will be defined by the answers.

GenZs, also known as Zoomers, is the demographic cohort succeeding *Millennials* and preceding *Generation Alpha*. Researchers and popular media use the mid-to-late 1990s as starting birth years and the early 2010s as ending birth years for Gen Zs. Most members of Gen Zs are children of Gen Xs or younger Baby Boomers. The older members may be the parents of the younger members of Generation Alpha.

Their total numbers are impressive. In the USA 110 million Gen Z and Millennials make up one-third of the population in America, and spent \$2.7 trillion annually in 2021, or about 30% of all spending. Although American Gen-Zs (those born between 1997 and 2012) currently have the lowest spending power per capita, by 2026 they may make up the majority of the nation's consumers.

A good place to start in examining the psychology of the youthful Gen Z and Millennials is the economy that has shaped them. On the older end of the spectrum, the recession that followed the global financial crisis of 2007–09 and the coming of age of today's 30-somethings. Their younger contemporaries had a little more luck because they started their careers at a period of rising pay due to tightened labour markets. However, the Covid-19 pandemic upended many of their lives.

The two major shocks that these young people have gone through have made them more pessimistic than their parents who are Gen Xs and younger Baby Boomers. These Gen Z parents had a more prosperous economic period between 1990 and the middle of the 2000s. According to a 2022 survey by the consulting firm McKinsey, 25% of Gen-Zs were unsure whether they would be able to afford to retire, with less than half thinking that they would never be home owners.^[1]

Future uncertainty can encourage impulsive use of their present's scarce resources. More than previous generations, the young were negatively impacted by COVID, and they are now appreciating the recovery. According to McKinsey, American millennials will spend 17% more in the year ending in March 2022 than they did in the year prior. Although they have temporarily recovered from the pandemic's darkest days, their long-term prospects are less favourable. At the same age, American millennials and Gen-Zs have less wealth than GenXs or Boomers.

The availability of simple payment plans such as 'buy now, pay later' (BNPL) apps may also encourage extravagant spending. Whilst baby boomers, those born between reject such frivolity, most Gen Zs have little self-control when it comes to shopping—until the bill shows up.^[2]

The '*attention economy* – in which purchasing items has been made significantly easier without making a trip to the store, – has shaped young people's shopping patterns and, in many respects, their lives. With the spread of social media, there are numerous fresh approaches of grabbing customers' attention. Most millennial shoppers have never experienced life without smartphones. More than two-thirds of Americans between the ages of 18 and 34 use their gadgets for at least four hours each day. Being raised in the Airbnb, Amazon, and Uber era comes with an increased expectation of convenience. Young folks de-

sire a completely seamless and trouble-free purchasing experience.

Long delivery periods appear to be less tolerated in the lightning-fast online age. According to Forrester, they are more likely than the general population to use their phones to pay for purchases and are turned off if the variety of payment options is restricted.

These *'always-on purchasers'*, as McKinsey has dubbed them, frequently forego weekly shopping in favour of more expedient repairs for everything from furniture to clothing. They prefer shared access to products over outright ownership and enjoy subscription services. Online rental websites and streaming services have benefited from this. Investors may no longer be in love with Netflix, but the video streaming service is still one of the most well-liked in in the western world and in more affluent Asian countries for those in the Gen Z age group.

Additionally, the internet has altered how young people discover brands. Social media has replaced traditional forms of advertising like billboards, TV, and print. The young look for inspiration on Instagram, which is a part of Meta's empire, and TikTok, a Chinese-owned video-sharing app, particularly for products where appearance matters, such clothing for sports, beauty, and fashion. The user-generated videos on TikTok may quickly catapult even small firms to viral prominence. These applications are rapidly introducing capabilities that let customers shop without ever leaving the application. Also, by combining the opportunity to shop with live-streamed entertainment, some are emulating the *'social commerce'* trend popular in China.

But for now, young Western shoppers prefer to make purchases without being influence by social media and frequently search websites like Amazon for deals on the brands they've discovered. A study by the investment bank Cowen found that young people's expenditure on subscriptions to Prime, Amazon's home delivery and entertainment service, comes in fourth behind phone bills, food, and travel.^[3]

Physical stores are tolerated to some extent as long as the experience is intimate and, ideally, combines the virtual and real worlds. For instance, *Nike* effectively attracts young customers by letting them create their own sneakers on its website, pick them up in-person after taking a dancing class in-store, and then encourage them to mention the company in a review on TikTok or Instagram.

The modern shopping experience has also enabled young people to create more educated opinions about the businesses they patronise. Information saturation brought on by the attention economy has not dimmed children's sensitivities. Instead, it seems to have heightened their sensitivity, particularly to any company that makes a false claim. Gen-Zs usually fact-check statements made in advertisements. Forrester has started referring to young consumers as "truth barometers" after citing survey data that indicates some teenagers have quit using particular brands as a result of their dubious business practises.

Brands that fall short of the extensive list of requirements had better be on the lookout. Children are willing to attempt new things if they do not receive what they want or how they want it. Gen-z and millennial Europeans were found to have changed

their shopping habits, locations, and brands nine out of ten times in the previous three months.

There is little doubt that the young shop is changing. Their purchases are also evolving. Wellness and luxury, which were once considered discretionary by previous generations, have now become necessities. Self-care is extremely popular. The youth are choosing upscale brands at an ever-younger age in search of apparel that would make them stand out. The average Gen-z consumer makes their first luxury buy when they are 15 years old, according to the consulting firm Bain, whereas their counterparts in their 30s made their first purchase when they were 19 years old. Some people invest in expensive goods because they think they will keep their value even in hard times. Fortunately, items may now be easily traded on websites for used goods sales like Vinted and Vestiaire Collective.

Young consumers generally claim to be more value-driven than older generations. According to Forrester research, this mindset is even more prevalent among young adults in their 20s and teens than it is among their slightly older peers. Some of these ideals are identity-based (race, gender, etc.). Others are related to issues that are important to young people, like climate change. According to research by the accounting firm KPMG, the Gen-z group is the one that is most concerned about climate change and natural disasters across 16 different countries. A bank's survey by Credit Suisse found that young people in emerging nations are even more anxious.

Unfortunately, some very *un-green* purchasing practises are also being fuelled by young people's desire for rapid pleasure. For example, If meals are delivered in small quantities by a courier on a petrol-powered motorbike, the environmental advantages of eating plants rather than animals can be soon undone. Despite being lambasted for waste, Shein, a Chinese clothing company that is the fastest in fast fashion, leads surveys as a Gen-z favourite in the West. Its fashionable clothing is affordable enough to buy once and then discard, often ending up in landfills.

Clearly Gen Zs are as paradoxical as earlier generations because they are simply human.

Keshan Warakulle is Social Media Manager at ICMA(ANZ)

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HERE'S HOW WASTEWATER FACILITIES COULD TACKLE FOOD WASTE, GENERATE ENERGY AND SLASH EMISSIONS

by Melita Jazbec, Andrea Turner & Ben Madden

Most Australian food waste ends up in landfill. Rotting in the absence of oxygen produces methane, a potent greenhouse gas. While some facilities capture this “landfill gas” to produce energy, or burn it off to release carbon dioxide instead, it’s a major contributor to climate change. Valuable resources such as water and nutrients are also wasted.

Composting food waste is the most common alternative. In the presence of oxygen, microbes break down food and garden organics without producing methane. The product returns nutrients to farms and gardens. But composting facilities are limited and struggling to cope with contamination from plastic.

We analysed the capacity of three wastewater facilities in Sydney to process organic wastes from surrounding households and businesses.

We found processing at the wastewater treatment plants could cut 33,000 tonnes of emissions and capture 9,600 tonnes of nutrients. All 14 wastewater facilities in Sydney could be modified to accept food waste, reducing emissions, and producing renewable energy.

Why process food waste at wastewater facilities?

Most wastewater facilities in Sydney use “anaerobic digestors” to treat sewage. Along with producing energy, this type of processing produces nutrient-rich biosolids that can be used for soil conditioning and as fertiliser.

Wastewater facilities are normally built with excess capacity to meet future demand and so could be used to handle food waste.

When the New South Wales government recently assessed the infrastructure needs to process food waste for the Greater Sydney Area by 2030, it identified an additional 260,000 tonnes per year of anaerobic digestion capacity is needed, on top of additional new composting infrastructure.

Currently, there is only one commercial anaerobic digestion plant in Sydney with a processing capacity of 52,000 tonnes per year.

Our study estimated just three wastewater facilities could fill 20% of the identified anaerobic digestion capacity gap required for Sydney by 2030.

Overseas, it is common for wastewater facilities to handle food waste, and in some cases generate more electricity than needed for their operation. These facilities give the excess electricity to the communities from which the food waste is collected and the nutrients back to local farms, creating a circular economy.

While industrial-scale composting facilities are normally located on the outskirts of Sydney, wastewater facilities are distributed throughout the city. This provides an additional benefit as food waste can be processed closer to where it is made, saving on significant transfer infrastructure and transport costs.

Although some changes are required to enable wastewater facilities to accept and process food waste, there are great returns on investment. As a recent economic study for Western Parkland City has shown, upgrading facilities brings wider economic benefits and creates jobs, along with the environmental benefits.



Separate food waste at the source

To maximise anaerobic digestion at wastewater facilities, food waste needs to be separated from other wastes. This is because contamination and non-compatible materials in the waste stream can hinder the microbial processes driving anaerobic digestion.

NSW targets require all businesses making large amounts of food waste to separate it from other waste by 2025. Similarly, all households will need to separate food waste by 2030.

Currently most councils in Sydney offer a garden waste collection service. Only a few provide food waste collection and mostly in FOGO bins (combined Food Organics and Garden Organics waste service). However, the garden organics component of FOGO cannot be easily digested with sewage and would need significant additional pre-treatment before it can be processed.

Urban food organics are normally collected by trucks. This waste stream could potentially be piped to the wastewater treatment plant, with or without sewage. But piped networks were not considered for food waste collection in this study. It's an interesting area for future research, especially in dense urban areas.

Achieving net zero targets while reducing waste

The three wastewater facilities we studied could generate an estimated total of 38 billion litres of methane a year. This could replace the natural gas used by 30,000 households.

The bioenergy potential of the organic wastes from the study areas was estimated to be 126,000MWh. That is four and a half times more than the energy generated from solar panels installed in the area.

This study shows methane generated by anaerobic digestion can play an important role in the renewable energy mix. It can be used to generate electricity, as transport fuel, or as a natural gas replacement.

The wastewater facility at Malabar in Sydney is the first project in Australia injecting biogas into the gas network, demonstrating its feasibility.

The waste, energy and water sectors are all expected to achieve net zero targets. Reducing food waste and redirecting to more beneficial use works towards these targets.

Harnessing the full potential of anaerobic digestion of food waste at wastewater facilities will require collaboration between these sectors. But as we have shown, it will be worth it.

Melita Jazbec

Research Principal at the Institute for Sustainable Futures, University of Technology, Sydney, University of Technology Sydney

Andrea Turner

Research Director, Institute for Sustainable Futures, University of Technology Sydney

Ben Madden

Senior Research Consultant at the Institute for Sustainable Futures, University of Technology Sydney

Source : <https://theconversation.com/heres-how-wastewater-facilities-could-tackle-food-waste-generate-energy-and-slash-emissions-210560>

REGIONAL OFFICE & BRANCH NEWS

Indonesia

Second Post-Covid CMA Program in Jakarta

The second Post-Covid Face-to-Face program was conducted at Ciputra Hotel in Jakarta on Aug 5-12, 2023. This was the 8th CMA intensive program organised by Dr Ana Sopianah of *RAD Indonesia* who was joined for the second time by Mr. Daniel Godwin Sihotang of *PT Lean Visi Indonesia*. The program was facilitated by Professor Janek Ratnatunga, the CEO of ICMA Australia and Dr Chris D'Souza, ICMA COO/CFO.



The main organisers and presenters and students of the 8th CMA Intensive Program. In the picture seated from 6th from left are Mr. and Mrs. Daniel Godwin Sihotang of *PT Lean Visi Indonesia*. Dr Chris D'Souza, ICMA Deputy CEO, Prof Janek Ratnatunga, ICMA CEO, and Dr Ana Sopianah of *RAD Indonesia*. Ibu Rere, the program coordinator is seated on the far right.



The participants of the 8th CMA Intensive Program undertaking the manufacturing simulation game.

Continuing Professional Development (CPD)

CPD Training was also conducted for ICMA members. They undertook the *Certified International Business Analyst (CIBA)* and *Certified Pricing Specialist (CPS)* programs provided by the *Academy of Finance and Management Australia (AFMA)* organised by Dr. Ana Sopanah of *RAD Indonesia* and Mr. Daniel Godwin Sihotang of *PT Lean Visi Indonesia*. Dr Chris D'Souza, ICMA COO/CFO conducted the *Certified International Business Analyst (CIBA)*; and Prof Janek Ratnatunga, ICMA CEO, conducted the *Certified Pricing Specialist (CPS)* seminars. They were undertaken by CMAs as part of their CPD requirements.

International Management Accounting Conference (IMAC) 2023

The Indonesian Branch of ICMA Australia & New Zealand and the School of Business and Management Petra University will be hosting the *International Management Accounting Conference (IMAC) 2023* at Surabaya, Indonesia on **20 November 2023**. The ICMA Australia's Indonesia President is Mr. Daniel Godwin Sihotang, CMA and the Dean of the School of Business and Management Petra University is Dr Josua Tarigan. Prof Janek Ratnatunga and Dr Chris D'Souza will be giving presentations at the conference.



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Zoom Webinars

Throughout the Covid-19 pandemic, ICMA Australia Indonesia Branch continued its commitment to facilitate the capability development for CMA Members, professionals and academics in the fields of accounting and finance. In the July-August 2023 period, 4 more webinars were held. ICMA facilitated the events, which were moderated by ICMA Australia's Indonesia President, Mr. Daniel Godwin Sihotang, Dr Ana Sophana, Mr. Nursakti Niko Rosandy, the Branch Treasurer.

CMA Professional Forum

Series 47

Redefining the Role of the CFO:
Reinventing Logistic Business For Sustainable Success
Sunday, 9 July 2023 | 13:00 WIB

Nursakti Niko Rosandy, CA, CPMA, CMA, CIB, ACPA
Honorable Treasurer of ICMA Australia NZ Indonesia

Rudy Pinem, MBA, CA, CPA (Aust), CMA (Aust), ASEAN CPA
CFO and Director at PT Satria Antarana Prima Tbk. (SAP Express)

Register to:
bit.ly/rolecfologic or
ICMAAustralia.Indonesia@gmail.com

Online Meeting with
CLOUDX **SAP** **CMA**
SELAYU MELAKSANAKAN ONLINE
Express Course
The Institute of Cost Accountants of Australia

CMA Professional Forum

Series 48

Global Mobility Services:
A Seamless Transitioning Strategy To Support Mobile Workforces
Sunday, 16 July 2023 | 13:00 WIB

Nursakti Niko Rosandy, CA, CPMA, CMA, CIB, ACPA
Honorable Treasurer of ICMA Australia NZ Indonesia

Ivan Kanel, SE, MAk, CPA, CA, CPI, CPMA, CMA, ASEAN CPA
Accountant, Consultant, Auditor, and Lecturer

Register to:
bit.ly/globalmobilityservices or
ICMAAustralia.Indonesia@gmail.com

Online Meeting with
CLOUDX **PrimeGlobal** **CMA**
SELAYU MELAKSANAKAN ONLINE
The Institute of Cost Accountants of Australia

CMA Professional Forum

Series 49

Maximizing Performance
in the F&B Industry:
Unleashing the CFO's Strategic Role
Sunday, 23 July 2023 | 13:00 WIB

Nursakti Niko Rosandy, CA, CPMA, CMA, CIB, ACPA
Honorable Treasurer of ICMA Australia NZ Indonesia

Ervina Waty, SE, MM, CA, CPA (Aus), CMA (Aus), ASEAN CPA
Group CFO at Ateria

Register to:
bit.ly/rolecfob or
ICMAAustralia.Indonesia@gmail.com

Online Meeting with
CLOUDX **Ateria** **CMA**
SELAYU MELAKSANAKAN ONLINE
The Institute of Cost Accountants of Australia

CMA Professional Forum

Series 50

M&A 101:
Mergers and Acquisitions as Inorganic Growth Strategies
Saturday, 5 August 2023 | 10:00

Nursakti Niko Rosandy, CA, CPMA, CMA, CIB, ACPA
Honorable Treasurer of ICMA Australia NZ Indonesia

Audi Rifqi, S.Mn., CIR
Senior Financial Planning Analysis and Business Partner at INDICO

Register to:
bit.ly/mergeracquisition101 or
ICMAAustralia.Indonesia@gmail.com

Online Meeting with
CLOUDX **INDICO** **CMA**
SELAYU MELAKSANAKAN ONLINE
The Institute of Cost Accountants of Australia

Thailand

For the first time in more than 10 years, *The Federation of Accounting Professions (TFAC)* organized this *CFO Conference 2023* on the topic of *"Embracing Changes & Unveiling the Path to Business Resilience and Success"* on Thursday, August 3, 2023, at the InterContinental Hotel, Ballroom in Bangkok.

Our Deputy CEO & CFO Dr Chris D'Souza spoke to an audience of over 120 CFOs about the *Role of the International CFO in Balancing Conformance and Performance*. He was able to meet and share his views on the importance of CMA ANZ on the international stage with prominent Thai C-suite executives including the CEO's and Managing Directors of major Thai and multinational companies in Thailand.



Dr Chris D'Souza, ICMA Deputy CEO, was one of the speakers at the CFO Conference 2023 in Bangkok, Thailand. The above shows the participants at the conference.



Dr Chris D'Souza, ICMA Deputy CEO, in full flow when presenting a dinner talk on *"The International CFO: Balancing Conformance and Performance"* at the CFO Conference 2023 in Bangkok, Thailand.

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Anwaruddin, Anwaruddin
Artates, Darius
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Bari, Mohammad
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De Silva, Dimanthi
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Dongoran, Shan
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Eslit, Arvin
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Febrianto, Arie
Feng, Zhuoan
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Kochipally Marimatakath, Abdul
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Wei, Lining
Yebra, Julius Rey
Yeung, Kelvin
Yu, Tsens
Zafar, Faisal

CMA EVENTS CALENDAR

August 5-11, 2023:

CMA Program Workshop, Jakarta, organised by RAD Indonesia and Lean Visi Indonesia.

August 17-18, & Aug 21-25, 2023:

CMA Program Workshop, organised by Unicity International Education Hub (UIEH), UIEH Pierrefonds Campus, Mauritius.

September 2-4, 9-10 & 16-17, 2023:

Seventh CMA Global Zoom Program in Strategic Cost Management & Strategic Business Analysis, Syme Business School, Australia. (Zoom).

September 23-25, 2023:

Certificate of Proficiency in Strategic Cost Management, SMU Academy, Singapore (10th Intake).

September 29- Oct 2, 2023:

Certificate of Proficiency in Strategic Business Analysis, SMU Academy, Singapore (10th Intake).

October 6-8 and October- 27-30, 2023:

The first CMA Program Workshop, Bangkok, organised the Thai Federation of Accountants (TFAC)

October 14-22, 2023:

CMA Program Workshop organised by Academy of Finance, Sri Lanka.

November 4-12, 2023:

28th CMA Program Workshop organised by SMART Education Group, Dubai.

November 4-12, 2023:

28th CMA Program Workshop organised by SMART Education Group, Dubai.

November 20, 2023:

International Management Accounting Conference (IMAC), organised by the CMA Indonesia Branch, and Petra University, Surabaya, Indonesia.

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Syme Business School, Australia

Academy of Finance, Sri Lanka

IPMI (Indonesian Institute for Management Development), Indonesia

Singapore Management University Academy (SMU Academy)

Business Sense, Inc. , Philippines

HBS for Certification and Training, Lebanon

SMART Education Group, UAE

Institute of Professional and Executive Management, Hong Kong

AFA Research and Education, Vietnam

Segal Training Institute, Iran

Business Number Consulting, Indonesia

RAD, Indonesia

STRACC Learning LLP, India

Ra-Kahng Associates Ltd, Thailand

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ICMA AUSTRALIA

Global Head Office

CMA House
Monash Corporate Centre
Unit 5, 20 Duerdin Street
Clayton North, Victoria 3168
Australia

Tel: 61 3 85550358
Fax: 61 3 85550387
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OTHER CENTRES

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OVERSEAS REGIONAL OFFICES

BANGLADESH

Dr. Chris D'Souza
Country Head – Bangladesh (Pro-Temp)
Email: Chris.dsouza@cmaaustralia.edu.au
Website: <http://www.cmaaustralia-bd.org/>

CAMBODIA

Mr. Sok Sophal, CMA
Country Head- Cambodia
Email: soksophal@lolc.com.kh
Website: www.cmacambodia.org

CHINA

(including Hong Kong and Macau)

Prof. Allen Wong, FCMA
Regional Director and CE - Greater China
Email: info@cmaaustralia.org
allen.wong@cmaaustralia.org

CYPRUS

Mr. Christos Ioannou BA (Hons), MBA, CMA
Regional Director-Cyprus
Email: chioanou@cytanet.com.cy

EUROPEAN UNION

Mr. Rajesh Raheja CMA,
Branch President-EU
Email: rajesh@cmaeurope.net
<http://www.cmaeurope.net>

FIJI

Dr. Chris D'Souza, CMA
Country Head – Fiji (Pro-Temp)
Website: <http://www.cmafiji.org>

INDIA

Mr N Muralidharan, CMA
Country Head – India
Email: muralidharan@unnayan.co.in
Website: <http://unnayan.co.in/portal/>

INDONESIA

Special Capital Region
(Jakarta) Regional Office
Ms. Arum Indriasari – Jakarta Centre
IPMI Business School
E-mail : arum.indriasari@ipmi.ac.id

West Java Regional Office

Mr. Daniel Godwin Sihotang, FCMA
Regional Director - West Java
Email: Daniel.GodwinSihotang@bekaert.com

East and Central Java Regional Office

Dr. Ana Sopanah, CMA
Regional Director - East Java
Email: anasopanah@gmail.com

IRAN

Mr. Alireza Sarraf, CMA
Regional Director- Iran
Email: sarraf@experform.com

JAPAN

Mr. Yoichiro Ogihara
Country Head – Japan
Email: yoichiro.ogihara@cmajapan.org
Website: <http://www.cmajapan.org>

LEBANON

Dr. Fawaz Hamidi, CMA
Regional Director - Lebanon
Email: hbs@cmamena.com
www.cmamena.com

MALAYSIA

Mr. Jensen Tan, CMA
Country Head – Malaysia
Email: j.tanjensen@gmail.com
Website: <http://www.cmamalaysia.com>

West Malaysia Regional Office

Dr. Ridzwan Bakar, FCMA
Deputy Regional Director - West Malaysia
Email: ridzwan.bakar@mmu.edu.my

NEPAL

Mr. Kumar Khatiwada, CMA
Regional Director – Nepal
Email: kumar_kha@hotmail.com
Website: <http://www.cmanepal.org>

MYANMAR

Mr. Maung Soe Naing, CMA
Country Head – Myanmar
Email: SoeNaing.snaing64@gmail.com
Phone: +959 42100 5519 (WhatsApp)

NEW ZEALAND

Mr. Richard Miranda
New Zealand Academy of Management (NZAM)
Regional Director – New Zealand
Email: info@cmanewzealand.org
Website: www.cmanewzealand.org

PAPUA NEW GUINEA

Dr Thaddeus Kambanei, CMA
Regional Director – PNG
Email: Thaddeus.Kambanei@yahoo.com
<http://www.cmapng.com>

PHILIPPINES

Mr. Henry Ong, FCMA
Regional Director - Philippines
Email: hong@businesssense.com.ph
<http://www.cmaphilippines.com>

SINGAPORE

Dr Charles Phua, CMA
Country Head – Singapore
Email: charles_phua@solarisstrategies.com
Website: <http://www.cmasingapore.com>

SRI LANKA

Mr Kapila Dodamgoda, CMA
Regional Director - Sri Lanka
Email: kapiladodamgoda@yahoo.com
<http://www.cmasrilanka.com>

THAILAND

Mr. David Bell, CMA
Regional Director – Thailand
Email: david.bell@rakahng.com
Website: <http://www.cmathailand.org>

UNITED ARAB EMIRATES

Mr. Shakeeb Ahmed, CMA
Regional Director - U.A.E. & GCC Countries
Email: shakeeb@smarteducationgroup.org
Mobile: +971-55-1062083
Website: www.cmadubai.org

VIETNAM

Mr. Long Phan MBusAcc, CPA, CMA
Regional Director- Vietnam
Email: longplt@afa.edu.vn

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