LEARNING TEAM ASSIGNMENT #1:

#1 In the first study Arie de Geus did in his book, "The Living Company", he discovers 90% of organizations does not survive their 40th birthday.

The Living Company

(Not as part of the assignment. Left as additional notes)

In his research based in the 1980s, de Geus found that the average life expectancy of European and Japanese companies is 12.5 years. For large multi-nationals, it is between 40 and 50 years. Why then, are some able to last hundreds of years? De Geus argues that all have a potential life of 200 to 300 years, and he set out to learn the secrets of those who have achieved it.

His principal conclusion is simple. The problem is profits. Or, more accurately, it is a ***short-term focus on building profits***, ***at the cost of a longer-term focus on <u>all</u> aspects of the business***. Chief among the long-term aspect, de Geus highlights the need to nurture people. How a long life, a business needs to prioritize human capital over financial capital.

The title of his book arises from two hypotheses de Geus sets out:

1. A company is (in some ways) a living being
2. The decisions made by the company are a result of a learning process

Therefore, for the living being to thrive, it must continually learn, and build on what it has, rather than constantly seek to throw out the old, and with it, the organism's accumulated wisdom.

Other factors he found, which characterize the long-lived companies he studied, are:

1. sensitivity to their environment
2. cohesive, with a strong sense of identity
3. tolerant of experimentation
4. frugal financing decisions

He uses these to carry forward his metaphor of companies being like living organisms, in suggesting that these characteristics also represent successful survival strategies for real living creatures.

Short Biography

Arie de Geus was born in 1930, in Rotterdam in the Netherlands. While studying for his doctorate in Business Administration at the Nederlandse Economische Hoogeschool (now, Erasmus University) in Rotterdam, he started working at Royal Dutch Shell to support himself through his studies.

His career at Shell was long and successful. Over 38 years he took a number of regional and corporate roles. They culminated with leadership of Shell's Group Planning Department, famous for its innovations in Scenario Planning. There, he focused his attention on Portfolio Analysis and Organisational Decision-making. He concluded that organisational learning was a key to successful decisions and corporate longevity.

He developed this theme in a Harvard Business Review article in 1988, 'Planning as Learning'. When de Geus retired from Shell in 1989, he rapidly got involved with the newly founded Center for Organizational Learning, at MIT, joining Chris Argyris, and Edgar Schein among its advisors, and Peter Senge, as its first Director. In 1997, he wrote the book that has brought him most prominence: *'The Living Company'*.

In a more recent study, Arie de Geus discovers that average number of years has changed. What is the new number? Which year was the study conducted?

The average number of years has reduced to fifteen years. The information was a part of a paper Arie de Geus had prepared (see attached) for Dutch Pensioners Magazine in September 2000.

What is the longest surviving organization that you can find in your search?

Kongo Gumi

Kongo Gumi, established in 578 AD, is the oldest, continually operating company in the world. Its headquarters are located in Osaka, Japan. This construction company was founded by an immigrant, who was commissioned by Prince Shotoku to build the Shitennō-ji Buddhist temple. This was a family-run company for around 1,400 years until 2006, when the company struggled financially and became a subsidiary of Takamatsu. Before the merger, it employs over 100 individuals and has an annual budget of around $70 million. It continues to specialize in Buddhist temples today.

https://www.worldatlas.com/articles/the-oldest-companies-still-operating-today.html

What three things do you notice allowed these organizations to grow for as long as they have and still continue doing so today?

Consider what these organizations have had to learn both as individuals, team as well as organizations in order to grow? What had allowed them to breathe life into their organization?

Organizations that had not only survived but grown over hundreds of years had to learn **how to learn to**:

1. **Make meaning of their current realities** and to learn to not only work with the challenges of the day but to get ahead of them. That way they were not swallowed up by the challenges or taken for a ride by them. This allowed them to become sensitive of their environment.

2. **Keep an eye on defining the future**. They were leaders at creating the future that can be. They were not led by the pictures of futures as defined by others. That way they did not have to be the one to resist or to learn about it or the run the risk of being left behind in the past as the current moves into the future. They were forerunners of changes that left others following them. They had imagined alternative futures and had therefore opened themselves up to experimentation. They were led by inspiration to (as opposed to feeling a sense of desperation as one would experience as one tries to keeps up with changes that are happening ahead of them) lead from the front of the pack.

3. **Build the capacity to learn from perspectives or views that were different from one's own**. That capacity allowed them to stay *flexible* rather than become rigid in one way of seeing and therefore doing things. This allowed them to become sensitive to their environment, become cohesive and tolerant of experimentation.

   Articulate your thoughts on a one-page response stating your reasons clearly and post on the Google Drive shared folder, marked as 'Team Assignments'.

#2 The disciplines of mental models and team learning allow teams to create generative conversations? What distinct characteristics do these disciplines possess that allows such conversations to happen?

What are generative conversations? Generative conversations are conversations that would allow me to see more than what I could have by myself or of from my personal viewpoints. I would come out of such conversations seeing and understanding more about the reality than I would have before I had entered the conversation.

Mental models (or the ways our mind has been set) are deeply ingrained pictures that we hold in our minds that influences the way we understand (and see) the reality around us and therefore the actions that we take.

We are not born with mental models. These (ruts) become ingrained over time and become pictures that we hold in our mind. Think, training a bucket of water to create ruts. River beds are "bucket loads" of water trained to flow (as a result of the shape of terrains) in a particular speed and direction over thousands of years. Likewise, ruts in our minds become deeply entrenched (mindsets) as a result of experiences we had gained over our lifetime.

Mental models are not intended to be "bad". They are designed with a view to protect us. If we did not have the capacity to create mental models, a truck could be lunging at us, and we could react by saying, "let me see what it will do to me!". We might not live to see that means.

Because I have the capacity to create the mental models or pictures and carry their meanings in my mind, I step away from the path of the truck and save myself. Mental models are intended to save us from life and death situations. Sometimes, our reptilian brain takes over and makes those decisions for us in flight or fight situations. For our survival. Any tribe secluded from civilizations continues to behave today in the same way to the civilized world.

Mental models become trickier when they become deeply entrenched to a point that I am not able to see what they are, surface or even suspend them. These were ingrained by cultures, norms, habits and practices over long periods of times, sometimes decades long. Typically these experiences are rigged with fears, one or more of three kinds: be they either the fear of death or of failure or rejection. Over time, they become a natural part of my life. I continue to look through the lens (in whatever shade of colour they are framed as) and assume the world is like that. The world is red, we conclude.

Turning the mirror to notice our frames / lenses (the discipline of mental models using "I adopt belief" rung of the Ladder of Inference to uncover the fear that couches our mental models/ mindsets) is the first step to noticing we have a frame before we can learn to suspend (place them aside) while I listen to someone whose frame is different from mine. We do not throw mental models away or attempt to change them. They represent an identity a truth about a life that had existed for us till that point. They present an opportunity to see into a window about a part of reality that another frame (the discipline of team learning) is not able to see and understand about it.

All of us can hold more than one mental model, in our minds, depending on the roles that we play. Roles that we would play either as a child, an adult, a parent, a community leader and, so on.

Different mental models when lined up (team learning) allow us to see the different parts of a system archetype and therefore allow all of us to see the entire circle of causality. When combined with the discipline of team learning, teams can learn to align their respective personal visions so as to eventually build shared visions (imagine a picture of the future reality much bigger (like one built up by pieces of the jigsaw puzzle) than one's own personal vision, even that of the leader).   The bigger is the vision, the more powerful becomes its pull.

These represent occasions where teams have conversations that allow them to see and understand more (generative) about their realities than they could have before it had entered in the conversation with each other. Hence, the two disciplines when used together help teams learn to have generative conversations. Both, in wanting to understand their realities as well as to build shared aspirations.

#3 I had mentioned male mammals that became sexually more active in a system, tend to produce female progeny (more females are born in the population). What causes it to happen? (Tip: Conduct online research)

Females determine the time of conception of an offspring.

Males determine the gender of their offsprings. While, females produce eggs that have only X-chromosomes, males can produce sperms that carry either the X or the Y-chromosomes. When a fetus is created by the X-chromosome from the egg released by the mother that merges with the Y-chromosome carried by the sperm by its father, the fetus becomes a male offspring. When they are both X-chromosomes, it is a female offspring.

When males have been at rest before their next sexual intercourse, they produce more of the faster-moving sperms that carry the Y-chromosomes. When he has not been at rest (as in a polygamous instances or the couple or the male has been sexually active), he now produces more of the slower-moving sperms carrying the X-chromosomes.

The Turpin Family / A polygamous family

LEARNING TEAM ASSIGNMENT #2:

#4 Reinforcing (RL) and Balancing (BL) loops represent the build blocks of any one of the system   archetypes.

What would the RL loop like when it plays itself out? Plot it as a graph over time.

(For discussion in detail at Session #3)

#5 What would the BL loop like when it plays itself out? Plot it as a graph over time.

(For discussion in detail at Session #3)

LEARNING TEAM ASSIGNMENT #3: Paper Fold Exercise

#6 What happens when you fold (in your mind) a paper in half by 40 times? How high will it go?

It goes all the way to the moon.

What is the significance of this exercise to understanding the building blocks of Systems Thinking?

(For discussion in detail at Session #3) – End of Assignment