Why be just an Entrepreneur when you can be an Astropreneur?

Building a New Venture in the NewSpace Economy

(Dr. G, 29 July 2021)
The Golden Circle:

Why?

How do you do what you do? What is the purpose?

What?

What do you do?
think different.

By Seeing Differently...
The Overview Perspective
The Overview Effect

https://www.linkedin.com/posts/interestingengineering_the-overview-effect-it-will-transform-how-activity-682324931294484896-owch

SOURCE: INTERESTING ENGINEERING
Invotech presents:

SmartCity HK

A forum on building Hong Kong into a global Smart City
What is a Smart City without Data?
Why’s and How’s

1. Why is the Space Economy one of the fastest growing industries despite COVID-19? (US$ 420 B in 2020 and forecast trillion by 2030)

2. Why can’t Hong Kong become a Space Portal by 2030, when there will be bases on the moon and Mars by 2025?

3. Why is the 14th 5-year Plan gearing to put massive investment into digital and space related businesses and technologies?

4. Why should you build a new venture that will likely be obsolete in the NewSpace Economy?

5. How might we help prepare your mindset for the New Space Economy?
How might we develop global systems leaders who can help solve the world’s many wicked problems?

How might we leverage the wisdom of our global leaders, the uniqueness of our universities, Industry 4.0, and challenges confronted by entrepreneurs and Smart Cities?
Space Economy for HK is about the activities of downlinks, data, and products and services deliveries at a distance, for another time, and to be used on demand.
Opportunities Await the Prepared Mind

- Tele-Communication and next Gen IOT
- Compliance, Climate Change, Big Data and AI Applications
- Digital Mastery, Geo Space Intelligence
- Frictionless Machines and Robots
- Asteroid Mining
- Capital Raising for Space Tech
- Space Law and International Relations
- Space Arbitration
Space technologies are everywhere if we know where to look

- Is it raining tomorrow?
- Where do I dry to? Does my car know?
- GPS and Beidou locational
- 5G and 6G

Source: Lincoln Yoon and Richard Lee
Tracking pollutants, monitoring landslides and flash floods

Source: NBJ and Macau Photo Agency
Broadcasting and Telecommunication
Time Stamping for Global Financial Transactions
Avoiding Maritime Disaster, Underwriting Insurance, and Smoothening Logistics
Did you know that space tourism has arrived in Hong Kong?
But “How” do I become an Astropreneur?
What do angels and VCs like to invest in?
Case: Space Capital’s Systematic Investment Philosophy

Investing in Tomorrow’s Star Businesses

• **Alignment:** Thesis and Value Driven (Investor <=> Investee)

• **Diligence:** Intentional and Diverse (360 view of the Investee - board, management team, customers, products and services, perceived risks)

• **Synthesis:** Quantifiable an Comparable:
  • Team (30%), Deal Dynamics (12%), Product and Services (12%), Board/Governance (9%), Business Model (9%), Market (9%), Competition (9%), and Financial (9%).

• **Decision:** Unanimous

Source: Space Capital, 2021.
Young "Digital" Marco Polo™  @ City U

Beginning in September 2022?
The Landscape
What does the program do?

• The Young Marco Polo Program™ is a Leadership Development Lab for Corporate Social and Business Innovation using the platform of the NewSpace Economy. The program helps companies in the Space Economy articulate and reframe a business issue, and leveraging on the creativity and research of students, building a case for change that the executive would find support back at work. Winning students are offered internships and continue to explore their interests and problem-solving abilities, supported by global mentors and a global community.

• The challenge is to take the various contexts in deriving “a learning journey” to their problem solving:
  • VUCA and COVID-19
  • the NewSpace economy and new technologies
  • Border trade and digitalisation
  • Environment, Society, and Governance (ESG)
  • Entrepreneurship and initiatives
What is the Young Marco Polo Program™?

Roles and Accountabilities

• One Process, Three Stages, and Seven Elements over One Semester or Three Semesters

• The Young Marco Polo Program involves 5 parties linked together by OASA:
  • This University,
  • An OASA Corporate Member (SME, NGO, or MNCs),
  • The students, the challenge or problem-to-be-solved proposed by the executive of the corporate member
  • The global mentors (global executives, scientists, the government institutes, and international organisations such as the UN.)
  • OASA HQS and OASA Interns

• The Young Marco Polo Program is administered by students, guided by older students interned at OASA, and powered by OASA headquartered in Hong Kong. OASA provides overall coordination, competency workshop, project overview and continuous quality improvements, new business and science know-how, and links to incubators and accelerators.
Are You Ready to be a Young Marco Polo?
Are you or your new start-up worth investing in?

- **Market Mindset**: How well do you understand your markets? What do you hear? Do you truly listen?
- **Character**: Grit? History and Habits. Do you give up easily?
- **Customers**: Would they love you? How do you give back?
- **Control**: What to hold and what to give?
- **Are you ready?**
Concluding Remarks

Are you ready?

• The NewSpace Economy has arrived.
• Do you want to manage a 7-11 as a business or do you want to change the game?
• Reach out to OASA if interested to be a Young Marco Polo or set up a Space Investment Camp by Joining as the first 100 free student members of OASA.
• Speak with Miki and Linus, former City U students.
I. What is the Orion Astropreneur Space Academy (OASA)?
Homemade in HK
GRAND OPENING | 20 FEB 2021
VISION

HONG KONG AS A SPACE PORTAL BY 2030

KEY MISSIONS

DELIVERY OF THREE MISSIONS

1. SPACE “XCCELERATORS”
2. SPACE READY
3. SPACE PIONEERS AND AMBASSADORS
 External Activities Since Sept 2020

1. Quarterly Entrepreneurial Symposium @ Cyberport
   - Prof. Quentin Parker, Ms. Rosana Wong, Prof. Hui Lin, and Mr. Furuzonfar Zehni (Q4, 2020)
   - Astronaut Dr. Chris Altman, Mr. Joe Juang (Q1, 2021)
   - Upcoming: Dr. Josef S of NASA (cancelled).

2. Monthly Bilingual Space Economy @ Wave with HKU Academy
   - CubeSat, Space Food, Space Data, Space Tourism, 3D Printing
   - Upcoming: Hybrid with Pre-college crowd

3. Mission Moonshot Monthly Taster on One Skills
   - Upcoming: Mission MoonShot MasterClass One, 31 July at the Consumer Council. MMM2. MMM3.

4. Invitational and Out-Reach
   - HKEIE (Feb), CUHK Distinguished Speakers Series (Mar), AAMA (Apr), HKT (May)
   - KPMG Smart City (May)
   - CUHK Space Tourism (May)
   - Upcoming: Dutch Chambers, American Chambers, SME Chambers

5. University Courses, Secondary School Courses
   - HKU, Space Entrepreneurship in Masters of Space Science
   - CUHK, Space Tourism Intro
   - HKU, BEST
   - Upcoming: Self branded Short Fun Games for Secondary School Students.
II. OASA’s Approach

The Young Marco Polo Journey on CityU’s NVC
Deliverables of the Program

Discovery questions are the hard questions; and wicked questions are the hardest of them all.

- To articulate the problem, form hypothesis, conduct experiment using multi-interdisciplinary innovative problem-solving approaches.
- To work together and leverage the strengths of teamwork.
- To reference wisdom across space-time (asynchronous and tailored learning platform).
- To consider others’ viewpoints and convince others with data.
- To put together a sound proposal and convince sponsors to action.
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One Process. Three Stages. Seven Elements

- **One Process:** The Social Innovation Lab Process (On the Space Economy)
- **Three Stages:** co-sensing, co-inspiring, co-creating with a company, over 3 - 12 months.
- **Seven Elements:**
  1. reframing with a space context,
  2. forming hypotheses,
  3. embarking on a learning journey,
  4. sense-making with global team mentors,
  5. testing and data validation,
  6. creating prototypes and minimum viable products, processes, or service (MVP), and
  7. demonstrating a pitch to the sponsors.
Key Offerings

- **The Approach**: To identify, explore, then ground new business opportunities for companies through applications in digital transformation, big data, cross-border e-commerce in the NewSpace Economy. Best use-cases are honoured and shared. Process begins with ideation, evolves to rapid prototyping, and ends with demo day to the bosses and potential investors. The young executives and company handle the actual execution.

- **The Challengers**: Companies seeking to redefine their value proposition for new customers or new segments, through new digital means. As clients, the companies receive guided consulting services from teams of student consultants, supervised by OASA mentors. This work will be organised into a three-month engagement that includes in-depth research and analysis, regular touch points between client and team, and the development of a pitch for demo day.

- **The Students**: to work as a team of 3 to 5, reframe and co-create feasible digital business model for the challengers, within one semester. The Program can be extended into our Moonshot Program if they pass the first challenge where students are put into the real situations at work.

- **OASA’s Global Executives as Team Mentors**: To challenge, guide, probe, inspire, and provoke paradigm shifts in business models, while incorporating UN’s SDG and enhancing a company’s ESG. Global Executives act as Team Mentors.

- **The OASA Student Chapter at Your University**: Powered, guided, and seeded by OASA to self manage their career as a troubleshooter, entrepreneur, and solution provider.
Articulating and Reframing the Problem Statement

A problem that can be framed, can be solved. The challenge is how to articulate a moving and complex problem that has many evolving parts and many stakeholders.

Creating and Considering a Problem-Solving Approach

Learning to formulate a roadmap, being mindful of the risks along the way and the limited capabilities and resources of the team for example, and coming up with a process that would arrive at the mission, is the real test. Like a Space Mission, once engaged, there is no turning back. Key contingencies and risks must be mapped and mitigated away.

Presenting and Convincing Power-brokers

No one wants to be solving the wrong problem or one where few are willing to commit resources, energy, or time to resolve. Our process allows the problem solvers to present and justify their challenge to the sponsors.
Sample Subjects and Applications

What Students May Learn Over One Semester

Innovation and Entrepreneurial Subjects and Tools:


Consulting and Six Sigma Tools:

- DMAIC (Define, Measure, Analyze, Improve, Control), DMEDI (Define, Measure, Explore, Develop, Implement), Gap Analysis, Change Management, and Agile Innovation.

Space Technology Subjects and Tools:

- UN 17 SDG Goals, ESG, Quantum Technology, Miniaturisation, Remote Sensing, Kessler Syndrome, Space Law, Space Insurance, Long Distance Communications, Humane Technology, and 3D Printing.

Leadership Development Subjects and Tools:

- Executive Coaching, Team Mentoring, Problem-Based Learning, Competencies, AI-Assisted Learning, Chatbots, Cross Cultural Team Development, and Project Management and Governance.