

Business Decision Making in New Startup

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Startup Challenges

A unicorn shines!

But how many startups could even survive?



Business Plan

- Research
- Team formation

Funded

- Start operating
- Spending
- Teamwork

Risk/ Opportunity

- Proactive/ Reflective
- Optimistic/ Pessimistic
- Resilience

Success?

- Get more funding?
- Pivot?
- Positive cash flow?
- Negative? Bankrupt?



Top Reasons Startups fail

CBINSIGHTS: https://www.cbinsights.com/research-12-reasons-why-startups-fail

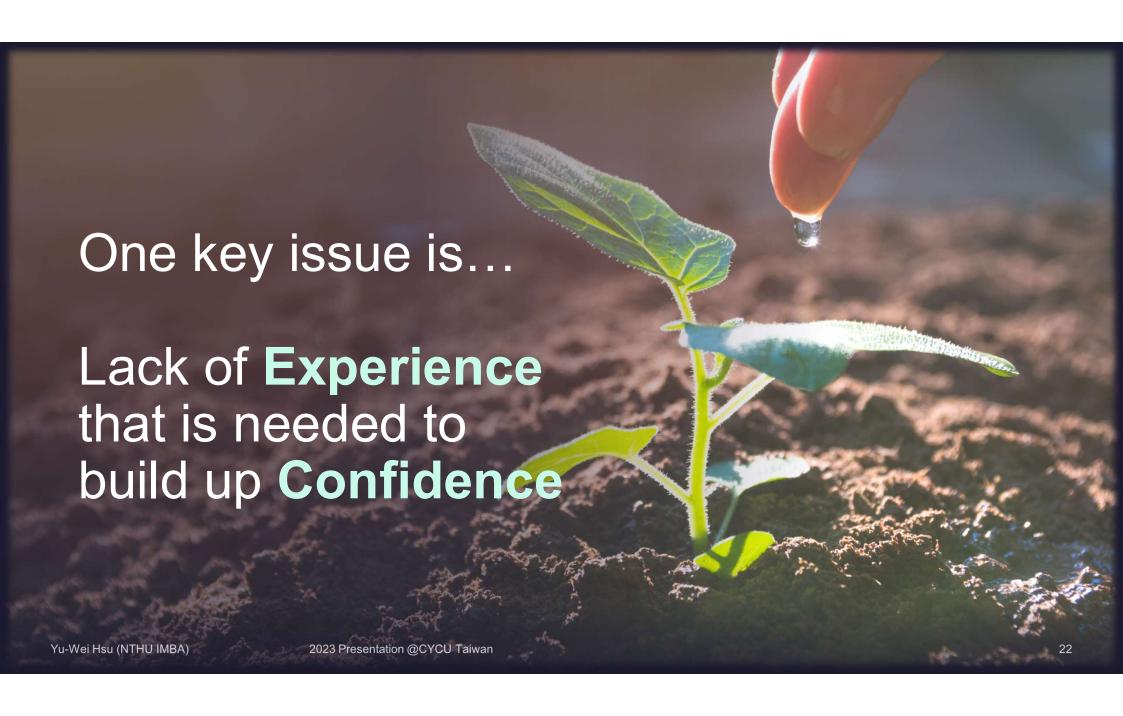
- Ran out of cash/failed to raise new capital
- No market need
- Got outcompeted
- Flawed business model
- Regulatory/legal challenges
- Pricing/cost issues

- Not the right team
- Product mistimed
- Poor product
- Disharmony among teams/investors
- Pivot gone bad
- Burned out/lacked passion

CBINSIGHTS

Top reasons startups fail



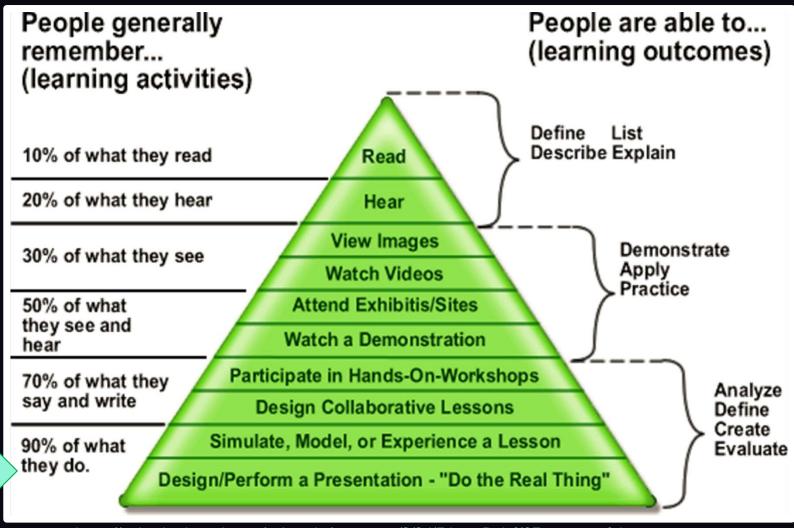


Why Simulation?

We want to experience failures and learn from them. But it's better to fail and learn in the simulation than in the real world!



Learning Pyramid



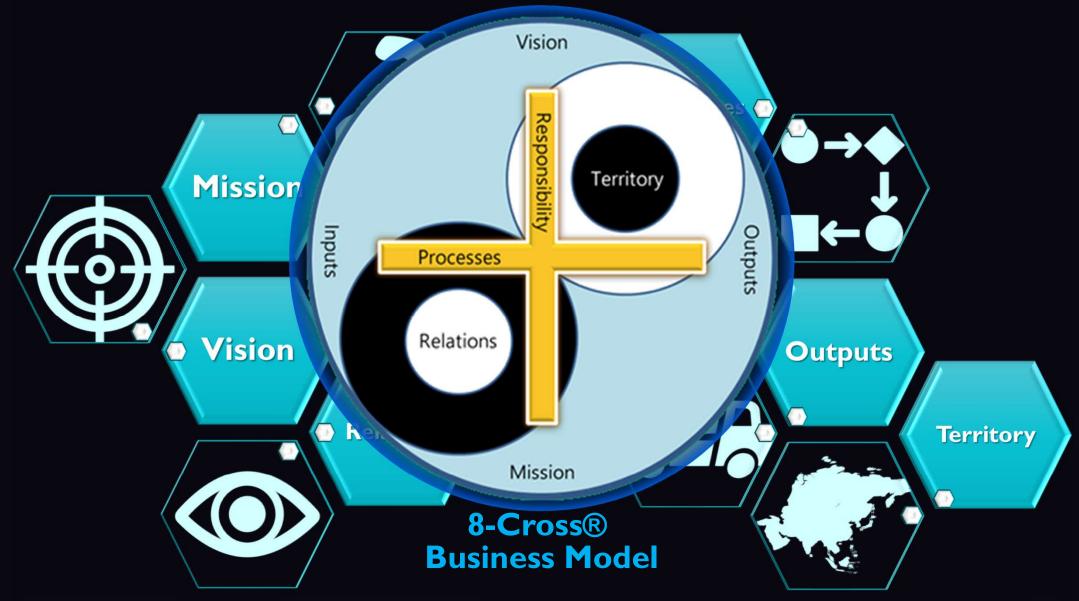
Simulation with Presentation

https://upload.wikimedia.org/wikipedia/commons/3/3d/Edgar Dale%27s cone of learning.png

8-Cross® Business Model

A locally developed Business Model in Taiwan

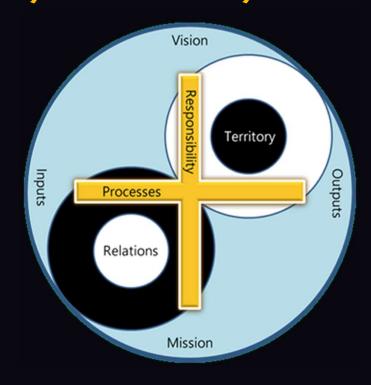




8-Cross® Business Model

8十事業法則®

To check and balance how the organization grows both vertically and horizontally directions:



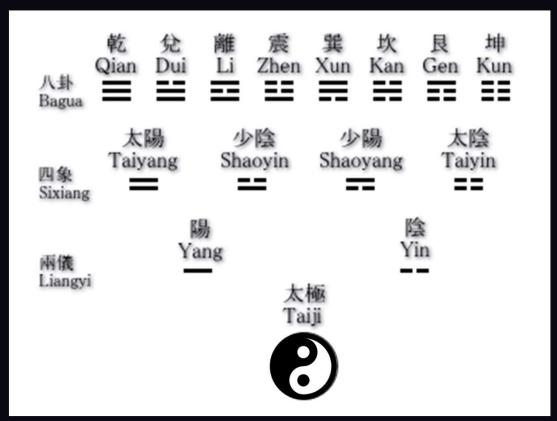
The whole Decision Making is a continuous and dynamic process. It goes on and on, such that when new problems arise from solved problems, new adjustments will be needed.

Book of Changes "I-Ching"





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Book of Changes "I-Ching"

Prehistory

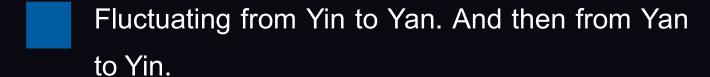
- Through the history, human decisions are guided by interpretations of entrails, smoke, dreams, and the like;
- Hundreds of Chinese rely on poetic wisdom and divination instructions compiled in the I Ching.
- The Greeks consult the Oracle of Delphi.
- Prophets and seers of all kinds peer into the future.
- A brief history of decision making (HBR)

TAIJI YIN YAN

Opportunity <> Risk Risk <> Opportunity



THE WORLD KEEPS CHANGING NATURALLY



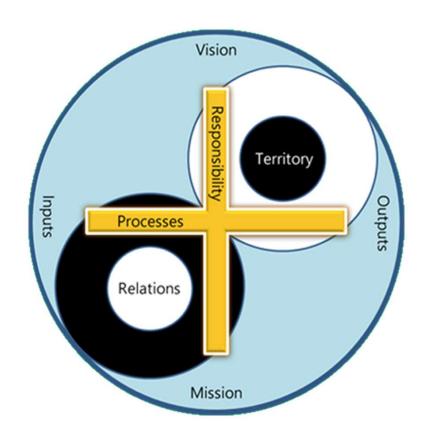
(The sun falls, then night or moon comes up. Then the daylight coming up...)

Within such dynamic cycle, when it looks to be totally Yan (YAN), there is always a minor part of Yin (yin). And it's the same in the opposite case.

8 Decisions (Crossroads)

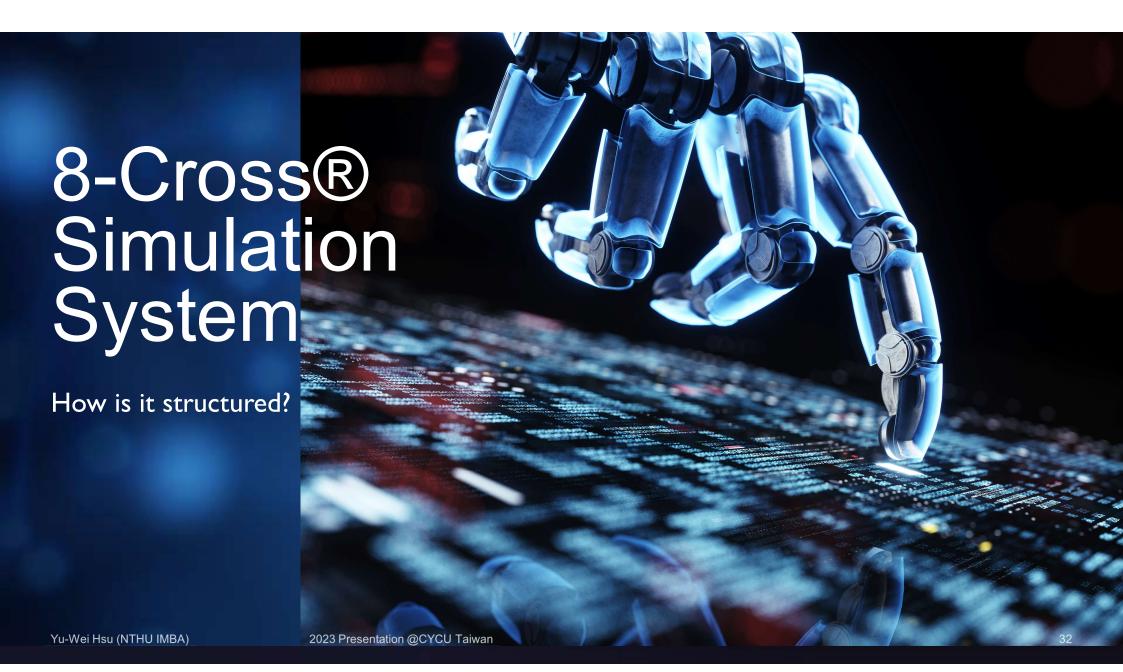
Vision
Responsibility
Mission
Relations

Inputs
Processes
Outputs
Territory





The Changing dynamics – especially in Territory & Relations



Business Simulation System

8-Cross® Business Decision Making Simulation System

8-Cross® Decision Making System (Game 26)



CEO AMP Demo















Bulletin Board

The Competition - till the end of M18 (Yr2 M6)

2022 Summer Business Simulation - Simulation code : E

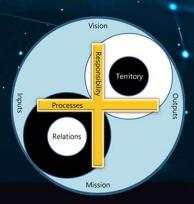
Company name : C01 Code : B-26-2101-2801-C0





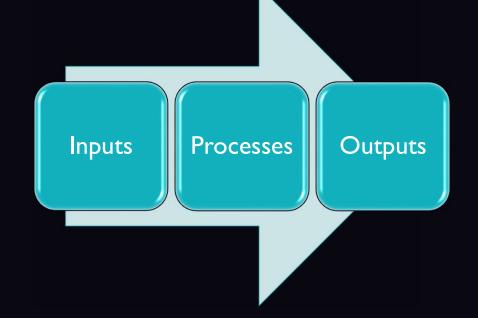


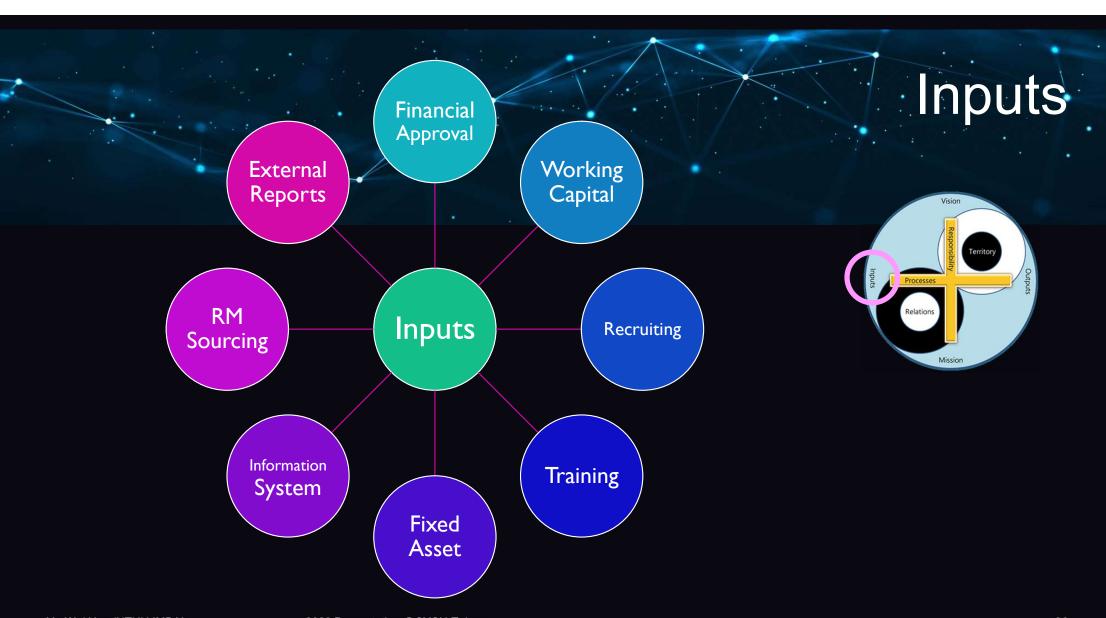
The vertical responsibility setup & The horizontal value creation



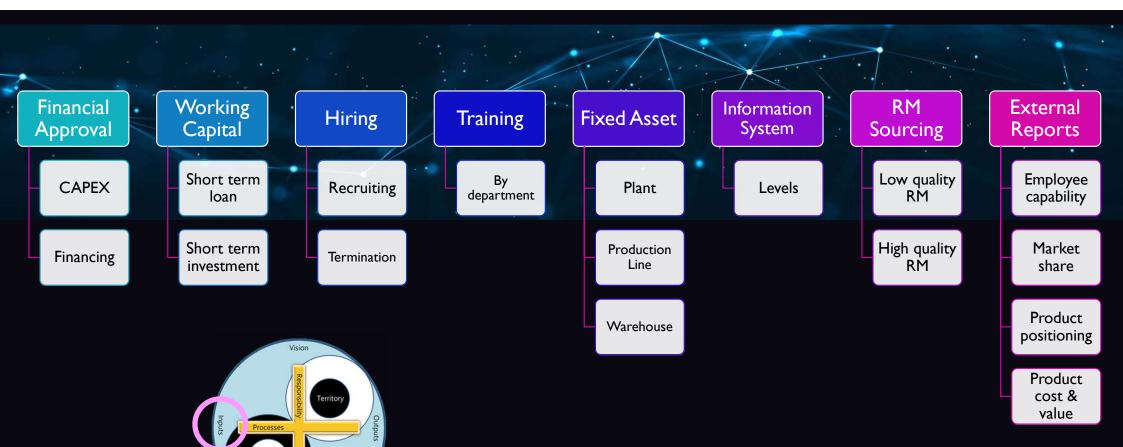
Vision
Mission

Responsibility





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Inputs - drill down

Relations

Processes

Outputs

Production deployment

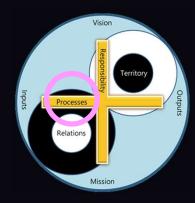
Operators

Production Volume

RM Feed

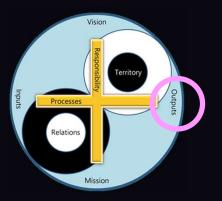
Production Process

Improvements

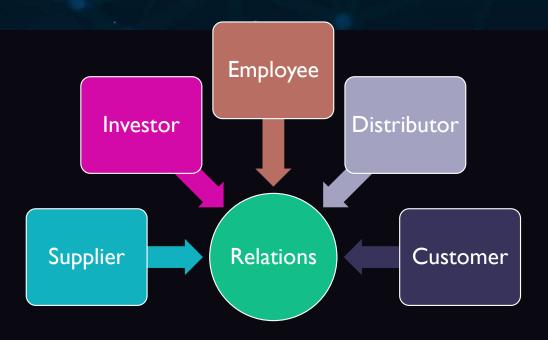


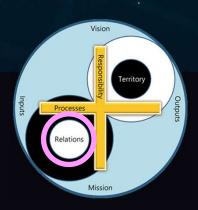
Product Quality

Continuing Improvement



Relations

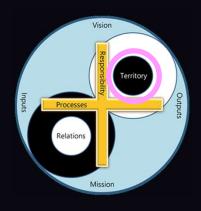


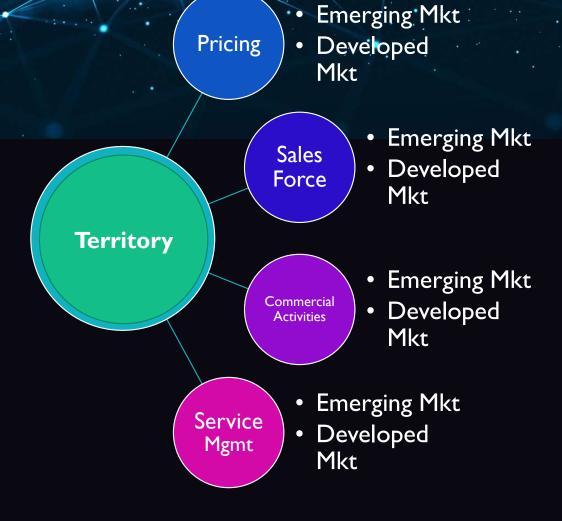


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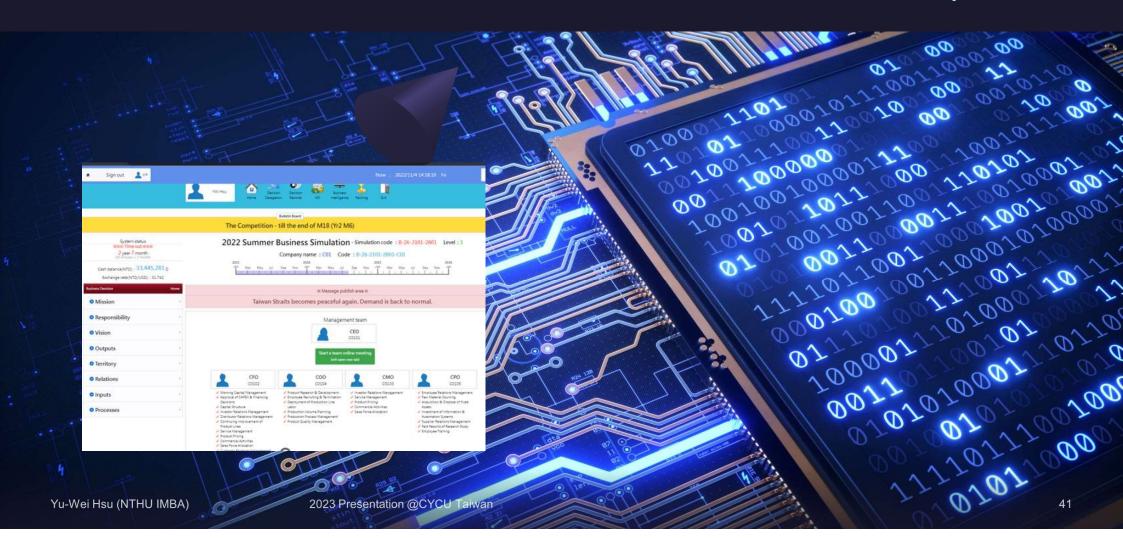
Territory





Let's do it!

Let's work on the business decision simulation for a few "months" in different simulated companies!



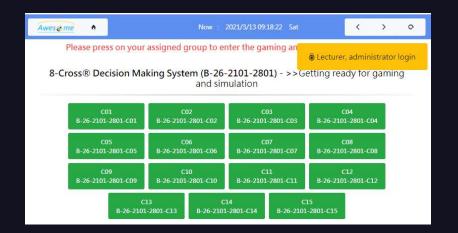
8-Cross® Business Decision Making

Website: http://28.awbmi.com/



• Press "Enter"

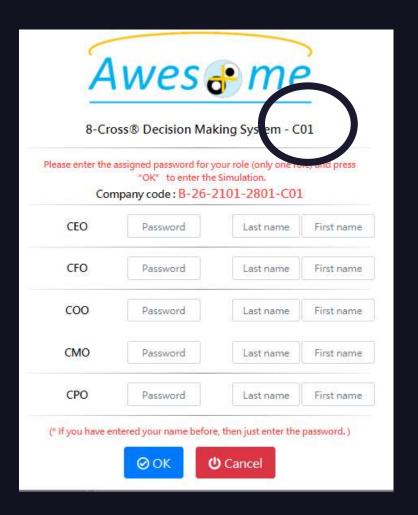
Select your company



Log in to your role

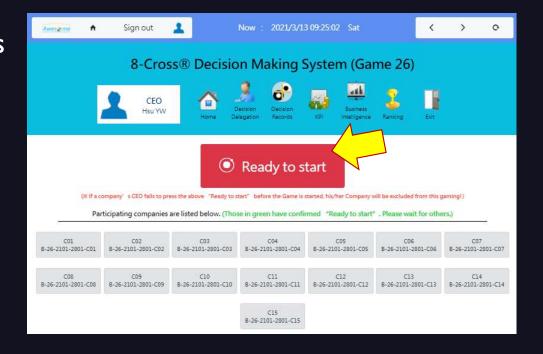
Make sure it's your company

 Key in the password relative to your role.



"Ready to start" - CEO's role

After making sure
 that all the members
 have logged in
 successfully to the
 company, the CEO
 needs to press
 "Ready to start"

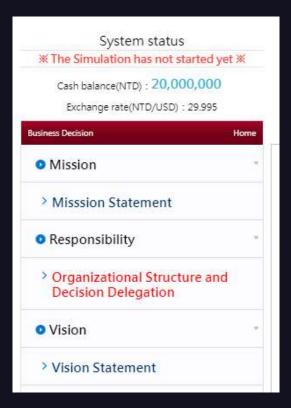


• Then wait for the other companies.

Vision & Mission

- Spend some time to discuss your
 Vision and Mission of your team.
- You can enter these two statements respectively.

 For Responsibility, don't change any decision rights at this moment. (Retain as Default setup)





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Y1M1 (Year 1 Month 1) Suggested decisions

- Initiate Prod-A R&D with 1 month expediting (COO)
 - Expected to be ready in M3.
- Build 1 Plant (CPO)
- Build 1 Warehouse (CPO)
- Approve CAPEX of the above 3 items (CFO)

Initiate Prod-A R&D with 1 month expediting (COO)
 Expected to be ready in M3.

Build 1 Plant (CPO)

Build 1 Warehouse (CPO)

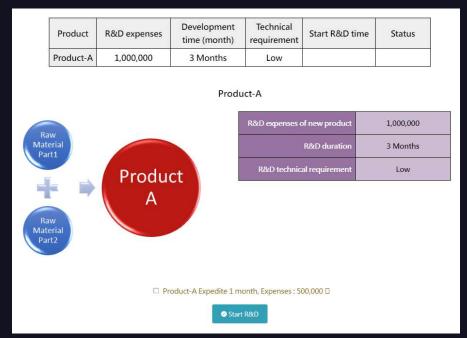
Approve CAPEX of the above 3 items (CFO)



- Initiate Prod-A R&D with 1 month expediting (COO)
 Expected to be ready in M3.
- Build 1 Plant (CPO)
- Build 1 Warehouse (CPO)
- Approve CAPEX of the above 3 items (CFO)

Initiate Prod-A R&D + expediting (COO) Outputs>Product Research & Development

- Prod A
 - 2 RM to make 1 Prod A
 - Basic R&D cost:
 - \$1,000,000
 - Duration:
 - 3 months
 - Example: initiated M1, ready at M4
 - Expedite cost:
 - Another \$500,000
 - Expedite 1 month => Ready at M3
 - To be initiated along with basic R&D investment



Action (by COO):

- Initiate Prod A R&D
- Initiate Expedite Expenses

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- Initiate Prod-A R&D with 1 month expediting (COO)
 Expected to be ready in M3.
- Build 1 Plant (CPO)
- Build 1 Warehouse (CPO)
- Approve CAPEX of the above 3 items (CFO)

"Decisions pending list"

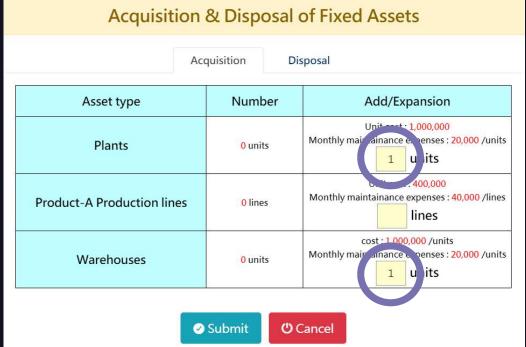
Action (by COO):

- Initiate Prod A R&D
- Initiate Expedite Expenses

Decisions pending list								
Pending	Initiate Prodcut-A R&D at \$1,000,000,with duration of 3 months	2021-03-14 09:24	YW Hsu	X				
Pending	Expedite Product-A R&D 1 month at \$500,000	2021-03-14 09:24	YW Hsu	×				

- In the Decisions pending list, the initiated action should be listed.
- They are in the "pending list": Awaiting CAPEX approval
 - Awaiting CAPEX approval (by CFO)
 - Can be canceled if found submitted wrongly by clicking the respective "x" at the right.

Build 1 Plant (CPO) Build 1 Warehouse (CPO) Inputs>Acquisition & Disposal of Fixed Assets



- Initiate Prod-A R&D with 1 month expediting (COO)
 Expected to be ready in M3.
- Build 1 Plant (CPO)
 - Build 1 Warehouse (CPO)
 - Approve CAPEX of the above 3 items (CFO)

 Decisions pending list

 Pending
 Add Number of Plants: 1 units, Cost: 1,000,000
 2021-03-14 09:35
 YW Hsu X

 Pending
 Add Number of Warehouses: 1 units, Cost: 1,000,000
 2021-03-14 09:35
 YW Hsu X

Awaiting CAPEX approval

Action (by CPO):

- Key in "1" for Plants
- Key in "1" for Warehouses

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50

- Initiate Prod-A R&D with 1 month expediting (COO)
 Expected to be ready in M3.
- Build 1 Plant (CPO)
- Build 1 Warehouse (CPO)

Approve CAPEX of the above 3 items (CFO)

Approve planned Capital Expenditure (CFO) > Inputs>Approval of CAPEX & Financing Decisions

Approval of CAPEX & Financing Decisions

Awaiting CAPEX approval

Decisions Pending list

~	×	Initiate Prodcut-A R&D at \$1,000,000,with duration of 3 months	2021-03-14 09:24	YW Hsu
1	×	Expedite Product-A R&D 1 month at \$500,000	2021-03-14 09:24	YW Hsu
~	×	Add Number of Plants : 1 units, Cost: 1,000,000	2021-03-14 09:35	YW Hsu
1	×	Add Number of Warehouses : 1 units, Cost: 1,000,000	2021-03-14 09:35	YW Hsu

Action (by CFO):

- CAPEX and Financing decisions (loans, shares,..) need further approval here otherwise the Decisions listed <u>will NOT be executed!</u>

(In other words, CFO needs to check on this at least before going into next month)

Y1M1 (Year 1 Month 1) Suggested Decisions Completed

- Initiate Prod-A R&D with 1 month expediting (COO)
 - Expected to be ready in M3.
- Build 1 Plant (CPO)
- Build 1 Warehouse (CPO)
- Approve CAPEX of the above 3 items (CFO)
 - A few other things to highlight before going into M2...



Take a look on decisions made Decision Records



Decision item	Name	Summary	Decision maker
Vision	Product Research & Development	Initiate Prodcut-A R&D at \$1,000,000,with duration of 3 months	P380723857
Vision	Product Research & Development	Expedite Product-A R&D 1 month at \$500,000	P380723857
Inputs	Acquisition & Disposal of Fixed Assets	Add Plants 1 units · Expenditure increase : 1,000,000	P380723857
Inputs	Acquisition & Disposal of Fixed Assets	Add Warehouses 1 units · Expenditure increase : 1,000,000	P380723857

• You may look at other information under BI (Business Intelligence), such as Financial reports

Y1M2 Decisions suggested

- Build 3 Prod A Production Lines (CPO)
- Approve CAPEX of the above (CFO)
- Recruit people (COO)
- Raw Materials Sourcing (CPO)

- Build 3 Prod A Production Lines (CPO)
- Approve CAPEX of the above (CFO)
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- Raw Materials Sourcing (CPO)

Build 3 Prod A Production Lines (CPO)

Approve CAPEX of the above (CFO)

Recruit people (COO)

Raw Materials Sourcing (CPO)

Build 3 Prod A Production Line (CPO) Inputs>Acquisition & Disposal of Fixed Assets

Acquisition & Disposal of Fixed Assets						
Acquisition Disposal						
Asset type	Number	Add/Expansion				
Plants	1 units	Unit cost : 1,000,000 Monthly maintainance expenses : 20,000 /units units				
Product-A Production lines	0 lines	Unit cost : 400,000 Monthly main anance expenses : 40,000 /lines 3 lin es				
Warehouses	1 units	co. 1.000 do /units Monthly maintainance expenses: 20,000 /units units				

Maximum 10 Lines can be installed in a Plant. But here please use 3 for subsequent illustration!

Action (by CPO):

Build 3 Prod A Production Lines



- Approve CAPEX of the above (CFO)
- Recruit people (COO)
- Raw Materials Sourcing (CPO)

Approve planned Capital Expenditure (CFO) Inputs>Approval of CAPEX & Financing Decisions

Approval of CAPEX & Financing Decisions

Decisions Pending list



Awaiting CAPEX approval

Expansion Number of Product-A Lines: 1 lines, Cost: 400,000

2021-03-14 10:38

YW Hsu

Action (by CFO):

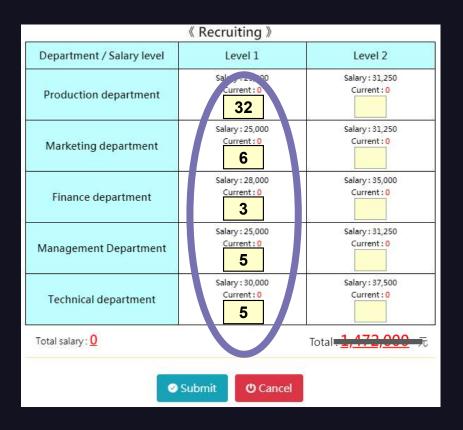
- Click on the ✓ to approve listed CAPEX (should have 1 item here)
- CAPEX and Financing decisions (loans, shares,..) need further approval here otherwise the Decisions listed will NOT be executed!)

- Build 3 Prod A Production Lines (CPO)
- Approve CAPEX of the above (CFO)



Raw Materials Sourcing (CPO)

Recruit employees (COO) Inputs>Employee Recruiting & Termination

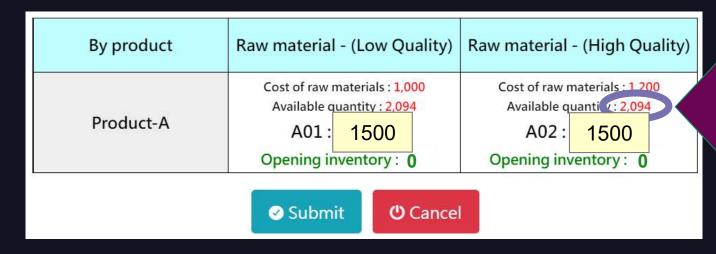


Action (by COO):

- Decide to recruit new employees
- However, new employees onboard may not be 100% as planned!!
- Production people affect production volume
- The others affect sales capability.

- Build 3 Prod A Production Lines (CPO)
- Approve CAPEX of the above (CFO)
- Recruit people (COO)
- Raw Materials Sourcing (CPO)

Buy Raw Materials (CPO) Inputs>Raw Materials Sourcing



Might be constrained by Available quantity!

- Prod A unit consumption: 2 RM/Prod.
- Buy 1500 for Low Quality and another 1500 for High Quality

Action (by CPO):

- Buy 1500 Low Quality RM
- Buy 1500 High Quality RM

Y1M2 Suggested Decisions Completed

- Build 3 Prod A Production Lines (CPO)
- Approve CAPEX of the above (CFO)
- Recruit people (COO)
- Raw Materials Sourcing (CPO)

• A few other things to highlight before going into M3...

Sales Supporting Capability

(see pg 49 in Handbook)

- Actual sales that can be achieved is capped by the Sales Supporting Capability.
- It is the Minimum of Departmental Sales Supporting Capability (Production department not included).
- Departmental Sales Supporting Capability =
 Base Capability x Number of employees x Average employee ability index₁
- Base Capability:
 - Marketing: \$1680K; Finance: \$4200K; Management: \$2520K; Technical: \$2016K

^{*} index₁ for untrained, non-incentive provided employees will start from lower rates depending on the recruited employee levels: Level1 from 0.5, Level2 from 0.6 and Level3 from 0.7. Their maximum achievable levels will be capped differently.

Sales Supporting Capability

Departmental Sales Supporting Capability =

Base Capability x Number of employees x Average employee ability index

Department	Base Capability (NT\$/head)	Number of Employees	Average employee ability index*	Departmental Sales Supporting Capability	
Marketing	NT\$1,680,000	7	0.50	NT\$5,880,000	Lowest
Finance	NT\$4,200,000	3	0.50	NT\$6,300,000	
Management	NT\$2,520,000	5	0.50	NT\$6,300,000	
Technical	NT\$2,016,000	6	0.50	NT\$6,048,000	
Sales Supporting	Capability (defin	ed by the low	est department)	NT\$5,880,000	

- Minimum of the four Departmental Sales Supporting Capability is at \$5,880k.
- This sets the overall Sales Supporting Capability of the company.
 - Reminder: This is in NTD basis while Sales Revenue in USD basis!

Please use your actual "Number of Employees" to evaluate!



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Y1M3 Decisions suggested

- Deploy Production Manpower (COO)
- Production Planning (feed Raw Materials) (COO)
- Price setting (CMC)
- Sales Force allocation (CMO)
- Raw Materials sourcing (CPO)

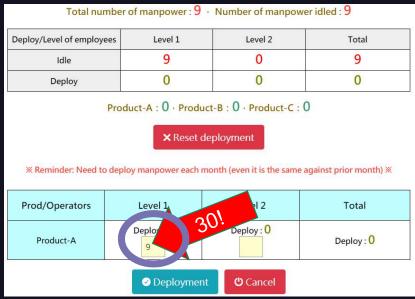
- Deploy Production Manpower (COO)
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- Deploy Production Manpower (COO)
- Production Planning (feed Raw Materials) (COO)
- Price setting (CMO)
- Sales Force allocation (CMO)
- Raw Materials sourcing (CPO)

Deploy Production Manpower (COO) Processes>Deployment of Production Line Labor

Deployment of Production Line Labor						
Property List						
Asset type	Number	Capacity				
Plants	1units	Max production lines per plant:10lines Upper limit:10lines				
Product-A Production lines	1lines	Basic productivity per month : 500 Max number of manpower per line : 10 Upper limit : 10				
Warehouses	1units	Inventory space per w/h/units:5,000 Upper limit:5,000 Inventory Finished goods:0 Raw materials:792 Total:792				



Maximum 10 manpower per Line can be deployed. We planned to recruit 32 production employees (Operators) in M2. But actual onboard could be less!

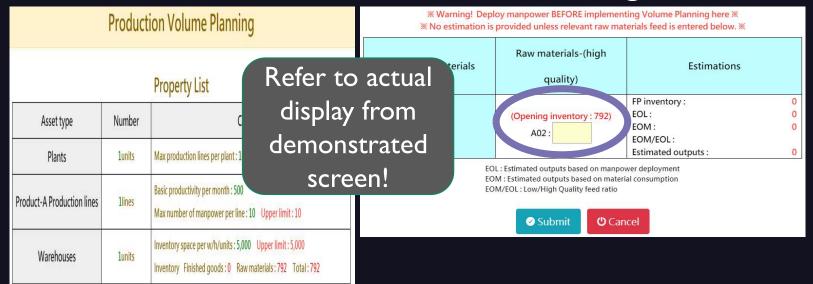
Action (by COO):

Deploy Production Manpower



- Deploy Production Manpower (COO)
- Production Planning (feed Raw Materials) (COO)
- Price setting (CMO)
 - Sales Force allocation (CMO)
 - Raw Materials sourcing (CPO)

Production Planning (Feed RM) (COO) Processes>Production Volume Planning



Prod A consumes 2 units of RM per product. This decision needs to be made each month.

Here, we should feed 1500/1500 for Low/High Quality Raw Materials.

Action (by COO):

Feed RM for Prod A Production

- Deploy Production Manpower (COO)
- Production Planning (feed Raw Materials) (COO)



- Price setting (CMO)
- Sales Force allocation (CMO)Raw Materials sourcing (CPO)

Selling Price Setting (CMO) Territory>Product Pricing



Pricing range is set and capped by the System

Action (by CMO):

- Pricing: Emerging mkt \$300
- Pricing: Developed mkt \$360

Or somewhere near the maximum price~

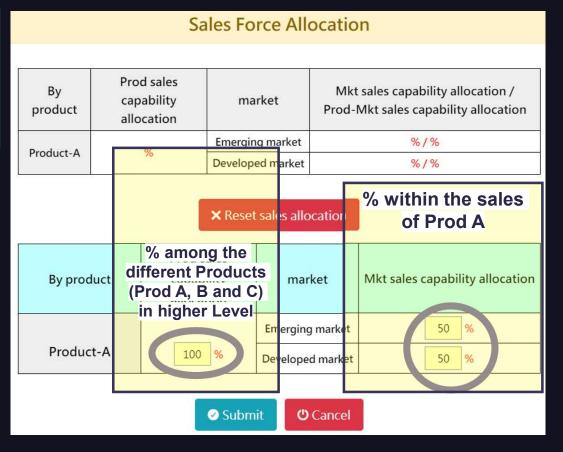
- Deploy Production Manpower (COO)
- Production Planning (feed Raw Materials) (COO)
- Price setting (CMO)
 - Sales Force allocation (CMO)
 - Raw Materials sourcing (CPO)

Sales Force allocation (CMO) Territory>Sales Force Allocation

Action (by CMO): Allocate:

- Prod A: 100%
- Emerging mkt 50%
- Developed mkt 50%

If not adjusted, it will retain the same allocation as prior month from subsequent months forward



- Deploy Production Manpower (COO)
- Production Planning (feed Raw Materials) (COO)
- Price setting (CMO)
- Sales Force allocation (CMO)
 - Raw Materials sourcing (CPO)

Raw Material Sourcing (CPO) Inputs>Raw Material Sourcing

Raw Material Sourcing By product Raw material - (Low Quality) Cost of raw materials: 1,000 Available quantity: 2,094 A01: Opening inventory: 750 Raw material - (High Quality) Cost of raw materials: 1,200 Available quantity: 2,094 A02: Opening inventory: 1,312

Capped by Available quantity!

Need to buy each month!!

But also beware of potential

high inventory!

Action (by CPO):

Buy each Low Quality and High Quality RM of 1500 or the capped Available quantity

Y1M3 Suggested Decisions Completed

- Deploy Production Manpower (COO)
- Production Planning (feed Raw Materials) (COO)
- Price setting (CMO)
- Sales Force allocation (CMO)
- Raw Materials sourcing (CPO)
 - A few other things to highlight before going into M4

Summary – Basic steps needed to reach making sales of Prod A in 3 months

ΜĪ

- Product R&D (expedited), (COO)
- Build Plant and Warehouse (CPO)
- Approve CAPEX (CFO)

M2

- Build Production Line (CPO)
- Recruitment (COO)
- Approve CAPEX (CFO)
- Raw Materials sourcing (CPO)

M3

- Deploy Production Manpower, Production planning feed RM (COO)
- Price setting, Sales Force allocation (CMO)
- RM sourcing (CPO)



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Y1M4 Onwards

- You are free to make your decisions
- Reminder: Some Decision items need to be made every month onwards:
 - Raw Materials sourcing to get RM delivered next month
 - Deploy Production Manpower to enable production current month
 - Production Planning to enable products made current month
- And of course, there are other decisions to be made...

Thank You

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