How entrepreneurial motivation affects teamwork in Academic spin-offs

Team SK-Ⅱ, Kim seminar, Tohoku Univ.

Harushi S.

Takuya K.

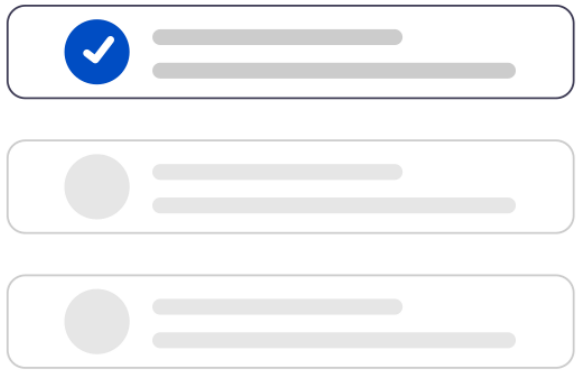
Syuya K.

Have you had **any problem**
when you working **with your teammates**
in this **hard competition?**

Good teamwork is difficult to achieve !!
Morning style vs Midnight style

Outline

1. INTRODUCTION
2. LITERATURE REVIEW
3. METHODOLOGY
4. FINDING
5. CONCLUSION



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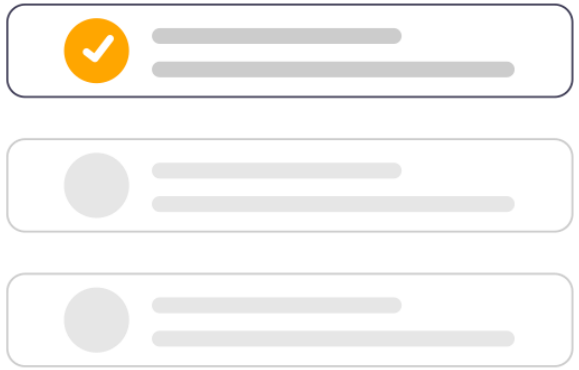
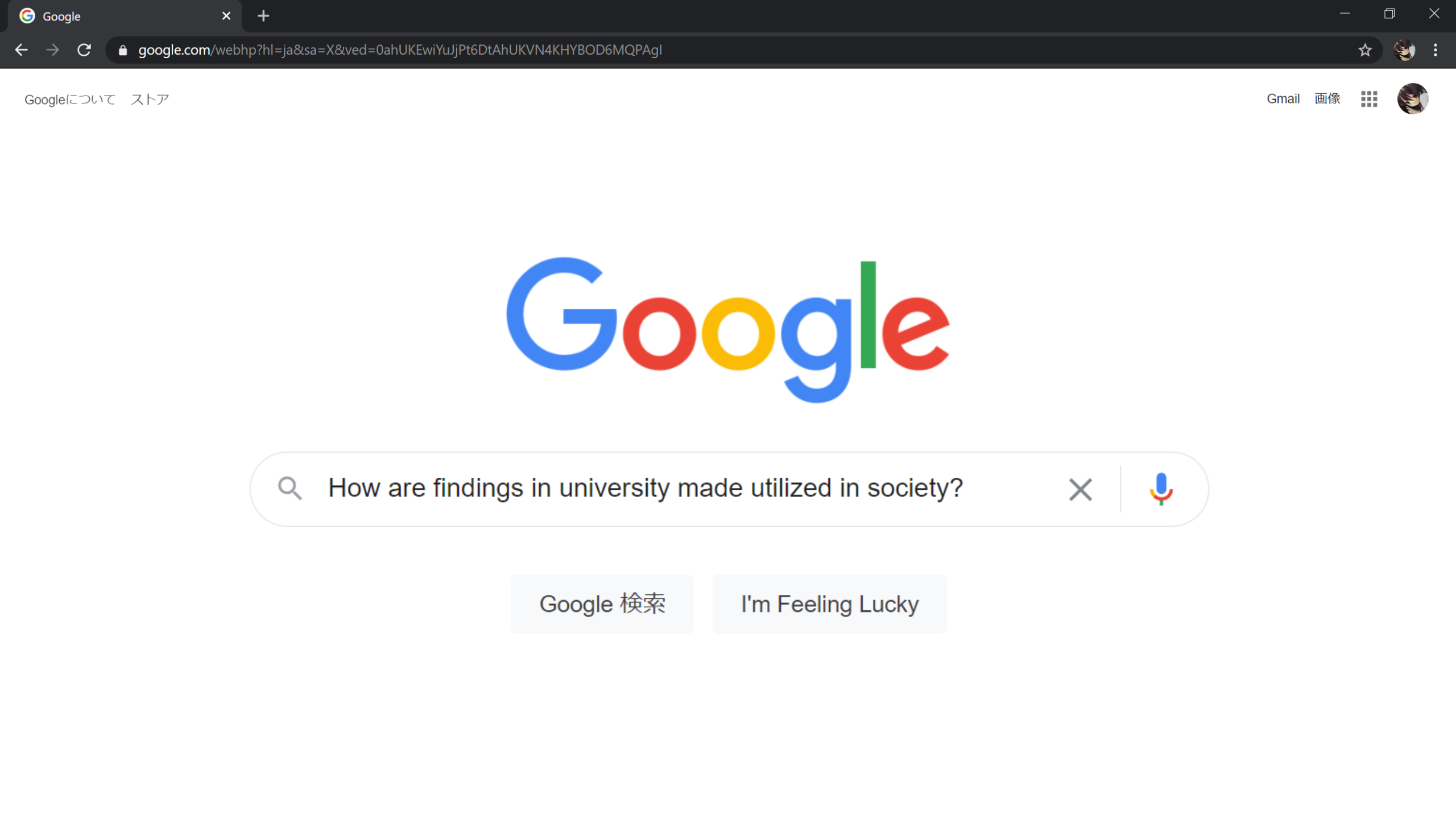


Innovation promotes our lives.

Academia
Industry
Government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約 352,000,000 件 （0.48 秒）

Did you mean：Academic Spin-off ？

www.nationalmssociety.org › Research このページを訳す

How and Why Do Scientists Share Results | National Multiple ...

“Peer reviewed” means that the paper is analyzed by fellow scientists, who evaluate the methods **used** and identify any ... projects in peer-reviewed journals enables the scientific and medical community to evaluate the **findings** themselves. ... Researchers' publication records carry a great deal of weight when they apply for **academic** posts or research grants, and in ... By accepting ...

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Scientific Writing Made Easy: A Step-by-Step Guide to ...

2016/10/03 — The Bulletin of the Ecological **Society** of America ... However, the ability to effectively communicate research **findings** is crucial for success in the biological sciences. ... that undergraduate students receive a solid foundation in scientific writing early in their **academic** careers. ... (2004) offers plenty of examples of effective communication strategies that are **utilized** ...

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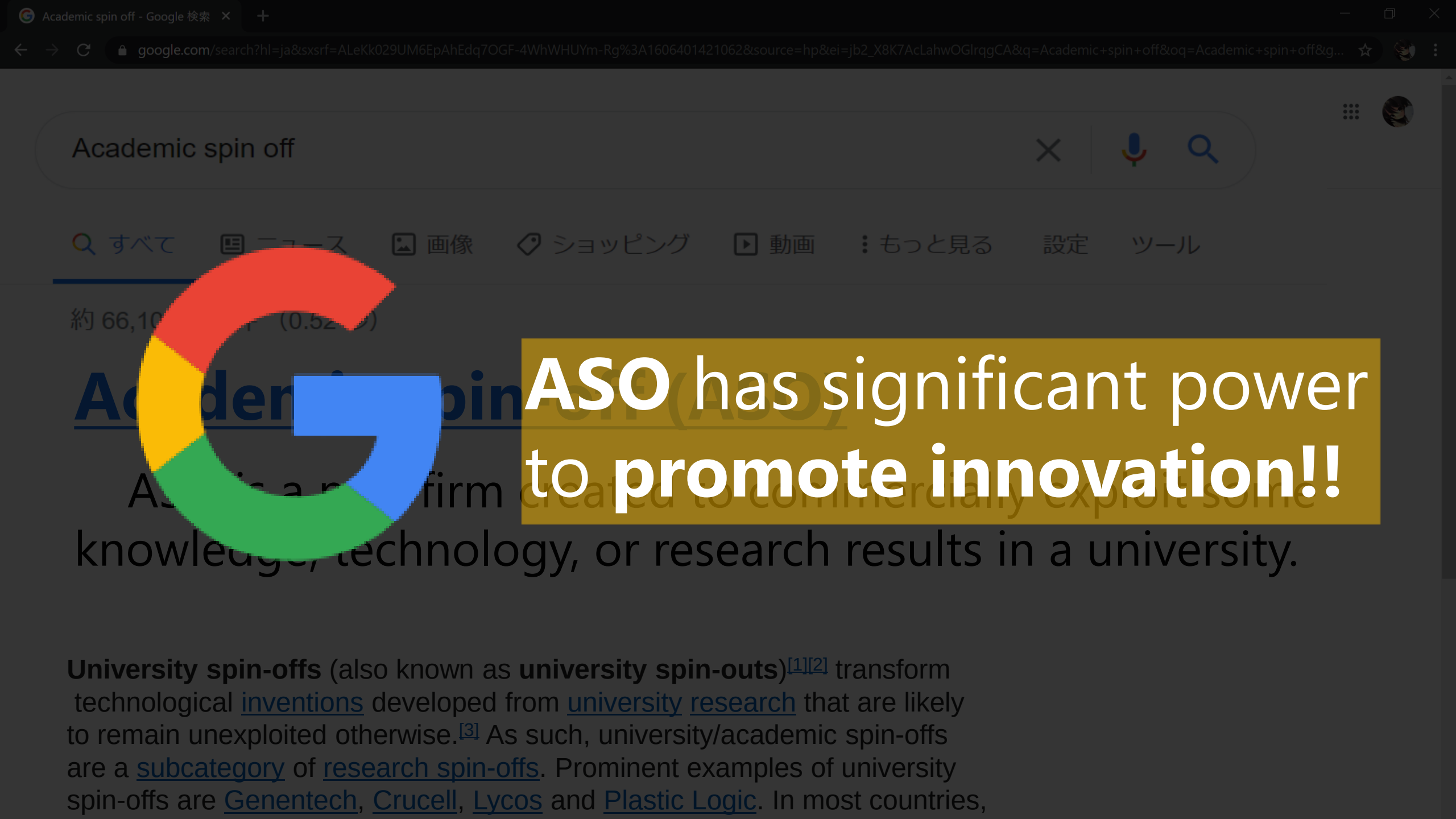
Qualitative research methods: when to use them and how to ...


Academic spin off - Google 検索
google.com/search?hl=ja&sxsrf=ALeKk029UM6EpAhEdq7OGF-4WhWHUYm-Rg%3A1606401421062&source=hp&ei=jb2_X8K7AcLahwOGlrqgCA&q=Academic+spin+off&oq=Academic+spin+off&g...
Academic spin off
すべて
画像
ショッピング
動画
もっと見る
設定
ツール
ASO has significant power to promote innovation!!
knowledge, technology, or research results in a university.
University spin-offs (also known as university spin-outs)[1][2] transform technological inventions developed from university research that are likely to remain unexploited otherwise.[3] As such, university/academic spin-offs are a subcategory of research spin-offs. Prominent examples of university spin-offs are Genentech, Crucell, Lycos and Plastic Logic. In most countries,

Outline

1. INTRODUCTION
2. **LITERATURE REVIEW**
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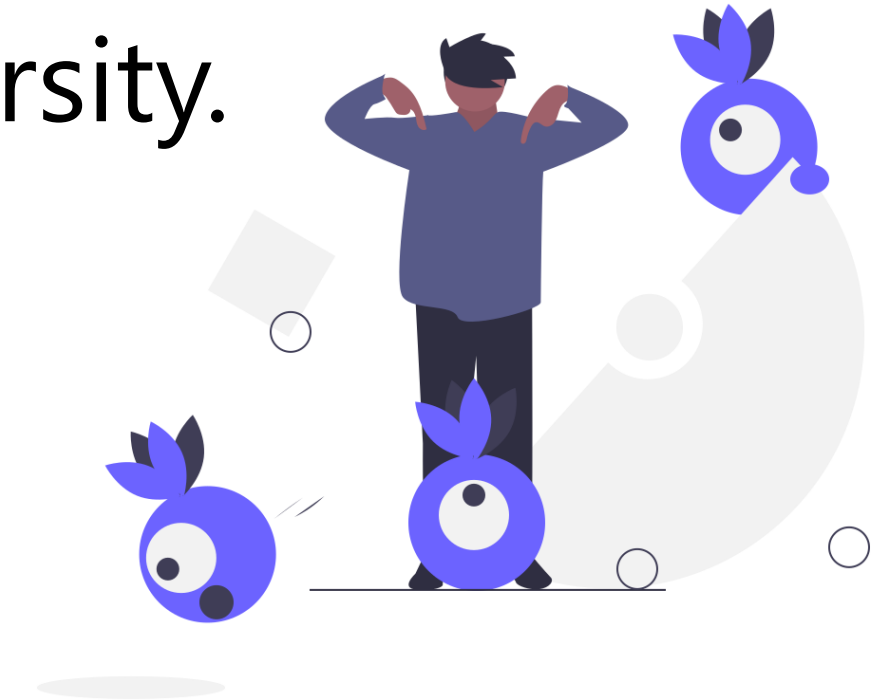
4. FINDING
5. IMPLICATION

ASO is **unique**

because it derives from University.

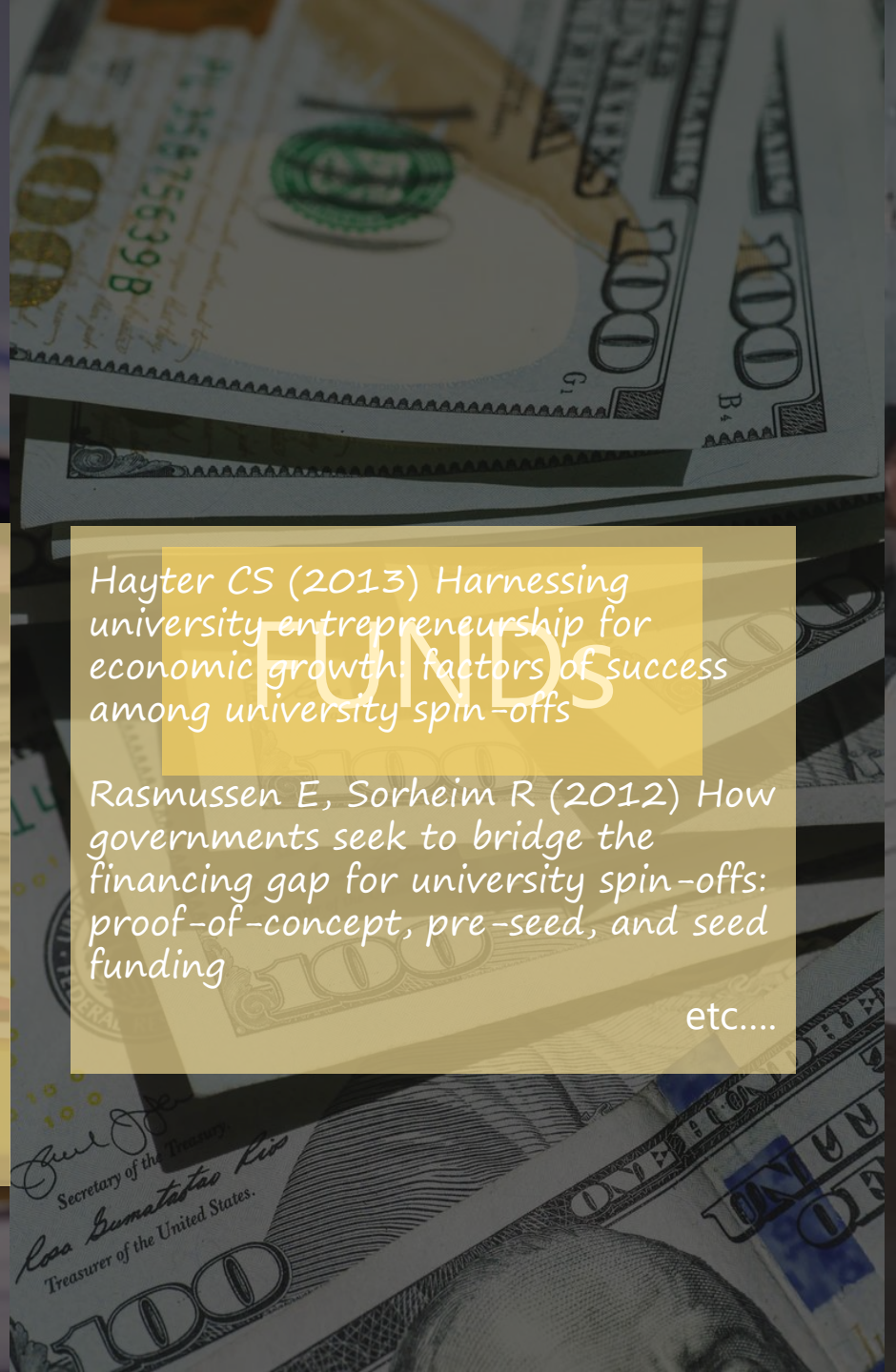


PATENTS

Ferri S, Fiorentino R, Parmentola A, Sapio A (2018) Patenting or not? The dilemma of academic spin-off founders.

Grimm HM, Jaenicke J (2012) What drives patenting and commerzialisation activity at East German universities? The role of new public policy, institutional environment and individual prior knowledge

etc....



FUND's

Hayter CS (2013) Harnessing university entrepreneurship for economic growth: factors of success among university spin-offs

Rasmussen E, Sorheim R (2012) How governments seek to bridge the financing gap for university spin-offs: proof-of-concept, pre-seed, and seed funding

etc....

Human Resource

a UNIQUE CHARACTERISTICS

Academic x Industry in one team

Team-building process in ASOs is still **unclear**

(Yamada 2015)

Outline

1. INTRODUCTION
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Research Flow

1st Interview

2 Venture Capitals

2nd Interview

5 Academic spin-offs

Research Flow

1st Interview

2 Venture Capitals

2nd Interview

5 ASOs

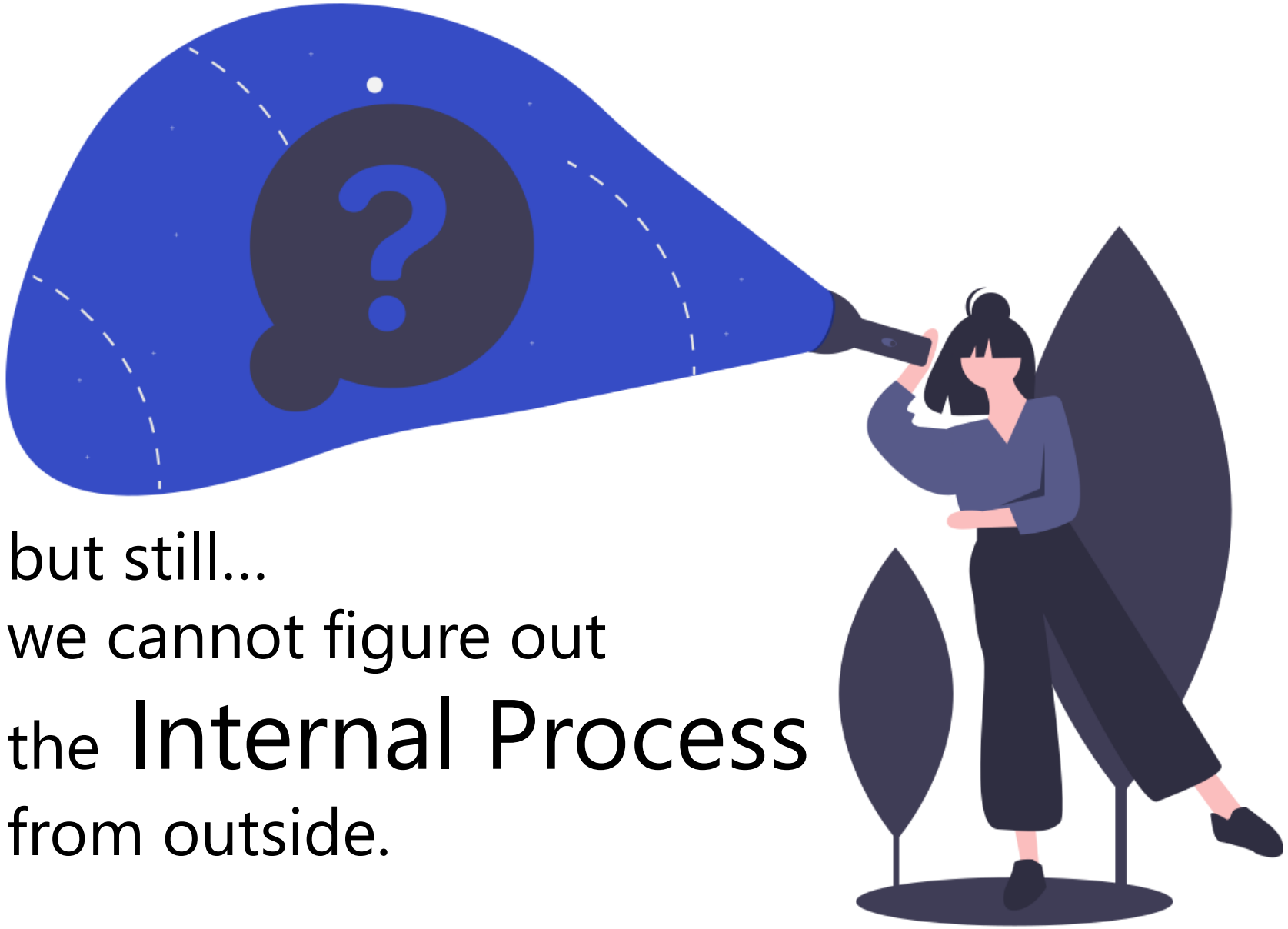
Invester A

- Company A (VC)
- 2020/8/5
- 10:00～12:35
- Online

Invester B

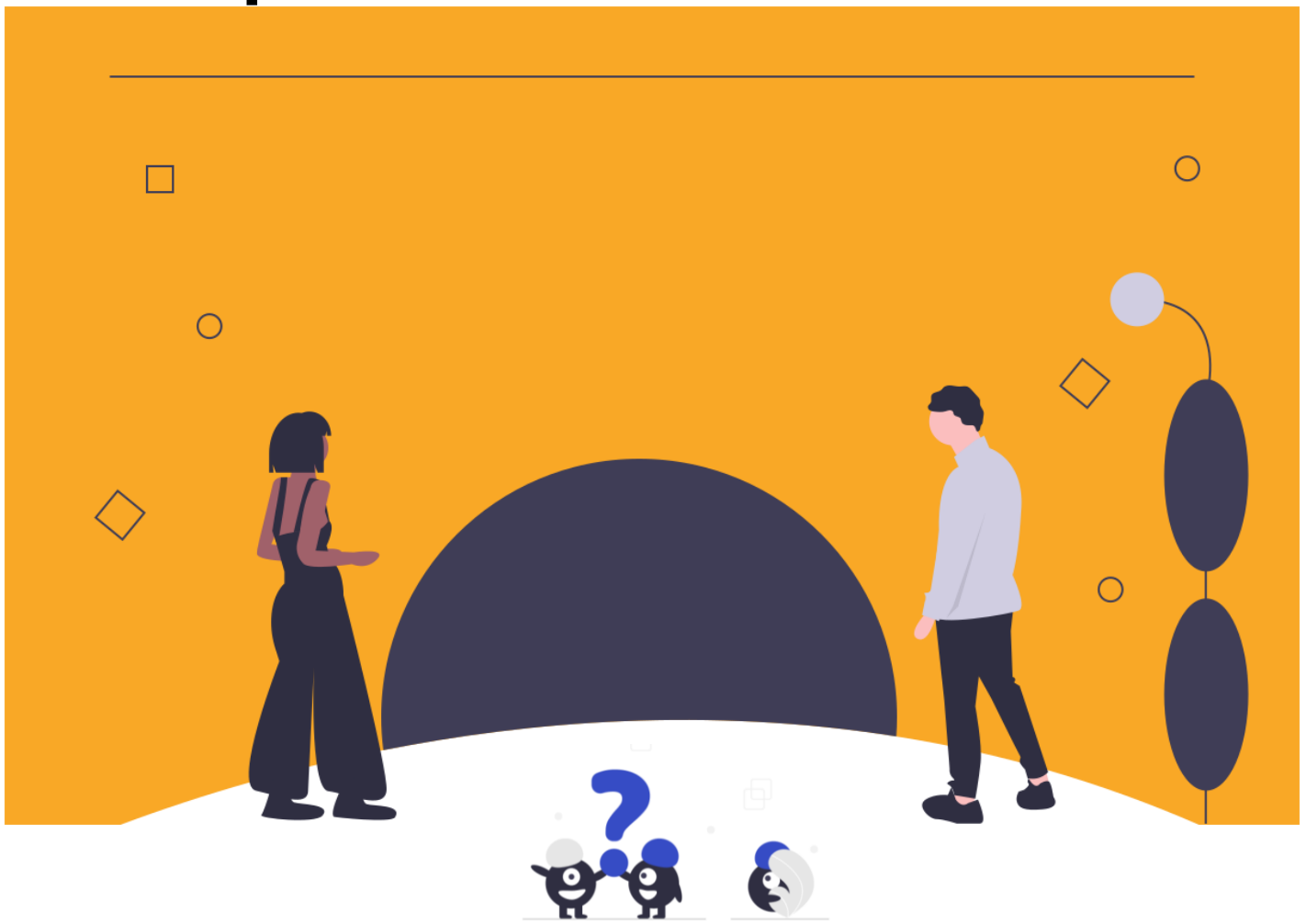
- Company B (VC)
- 2020/8/17
- 10:00～12:00
- Online

There is **difficulty**
in balancing between **academia** and **industry.**



but still...
we cannot figure out
the Internal Process
from outside.

Let’s explore into real ASOs!!



Our Research Flow

1st Interview

2 Venture Capitals

2nd Interview

5 ASOs

Reseacher P

- Company A
- 2020/8/3
- 15:00～19:00
- Company office

Manager R

- Company A
- 2020/9/18
- 13:00～15:00
- Online

Resercher U

- Company D
- 2020/8/26
- 10:00～12:00
- Company office

Reseacher & Manager T

- Company C
- 2020/8/21
- 10:00～11:30
- Company office

Reserchер & Mnager S (Manager U)

- Company B (Company E)
- 2020/9/17
- 15:00～12:00
- Online

Outline

1. INTRODUCTION
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4. **FINDING**
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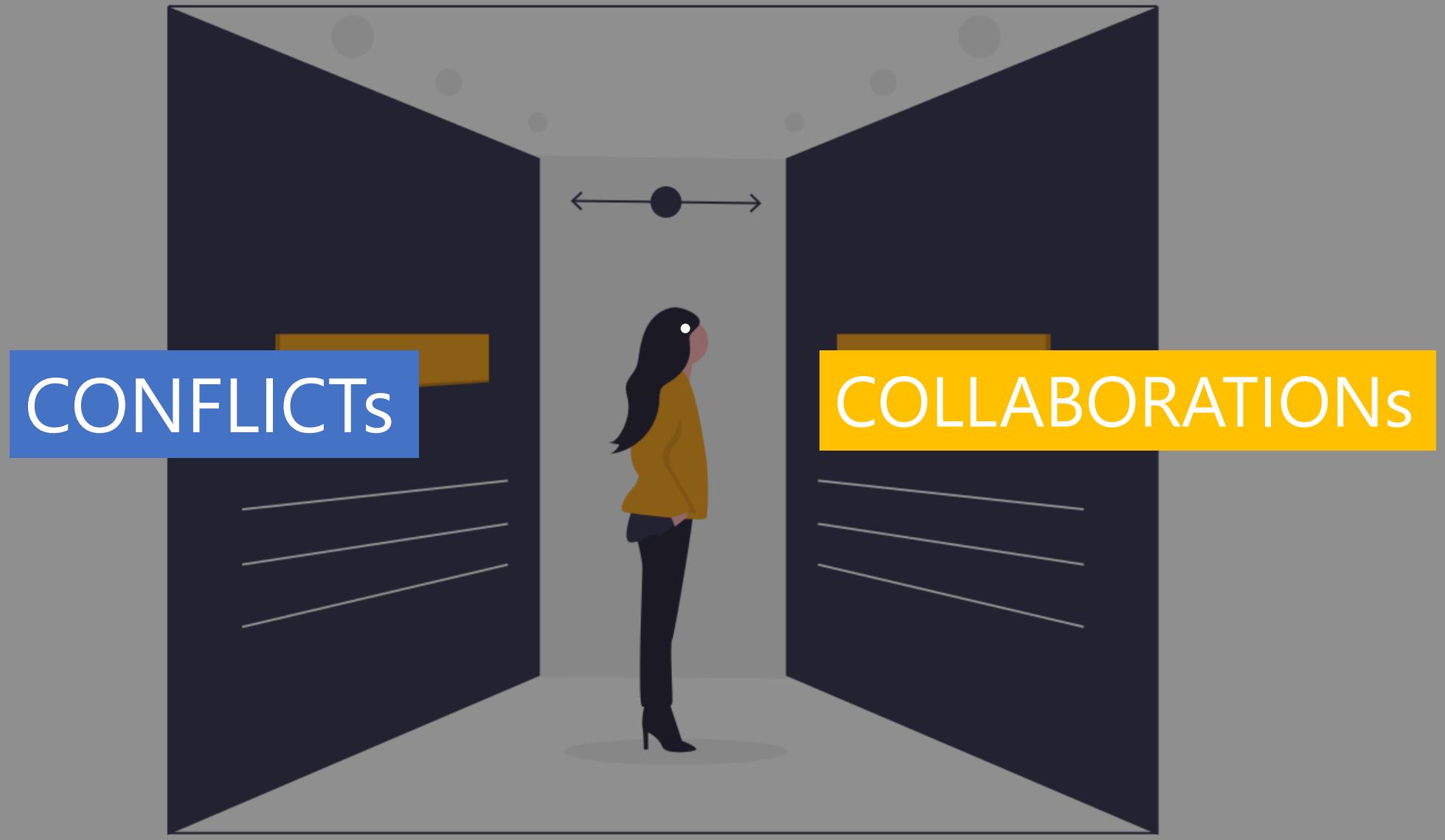
There are actually
CONFLICTs!!

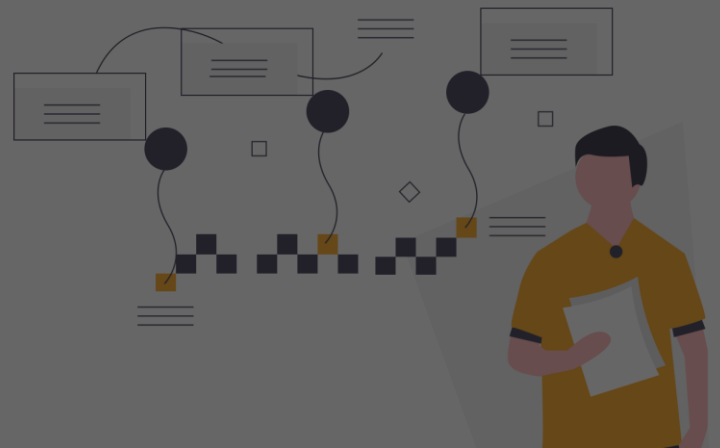

CONFLICTs
COLLABORATIONs

3rd STEP

?

?

Team Work

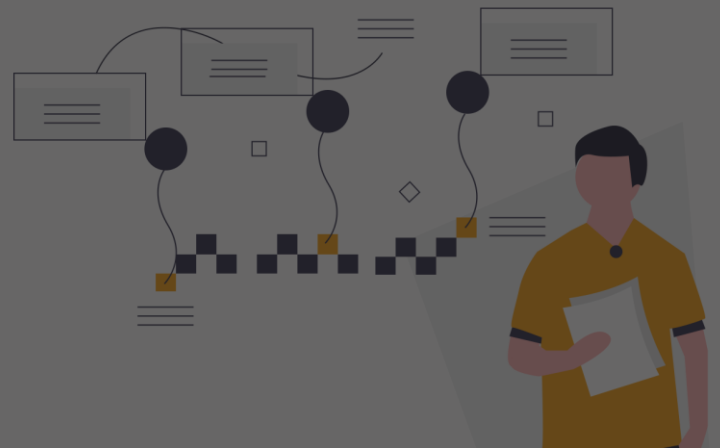


3rd STEP

?

?

Team Work

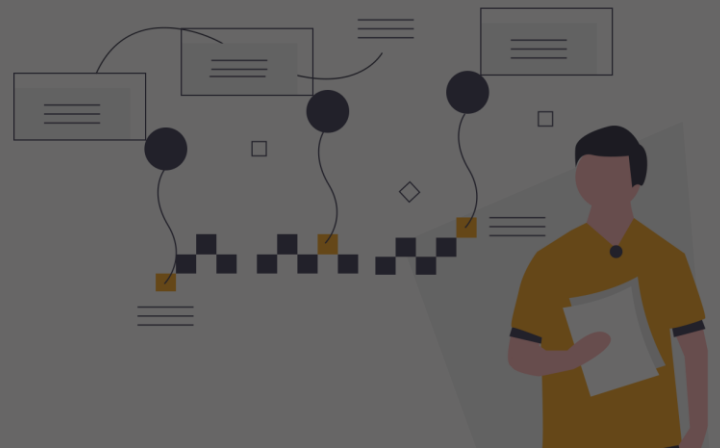


3rd STEP

?

?

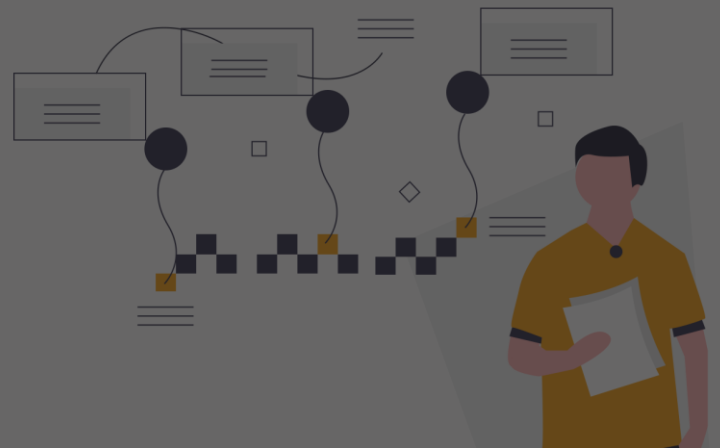
Team Work



1st STEP

3rd STEP

Team Work



1st STEP

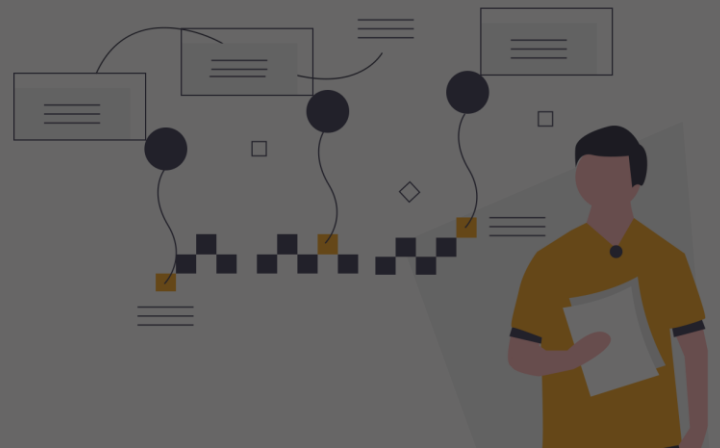
Entrepreneurial Motivation

?

3rd STEP

Team Work

the reason of establishing an ASO



1st STEP

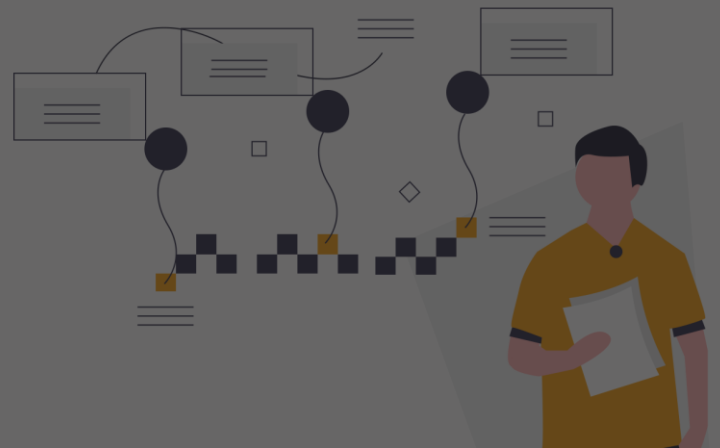
Entrepreneurial Motivation

2nd STEP

?

3rd STEP

Team Work



1st STEP

Entrepreneurial Motivation

2nd STEP

Team Formation

what kind of HRs make up the team

3rd STEP

Team Work

1st STEP

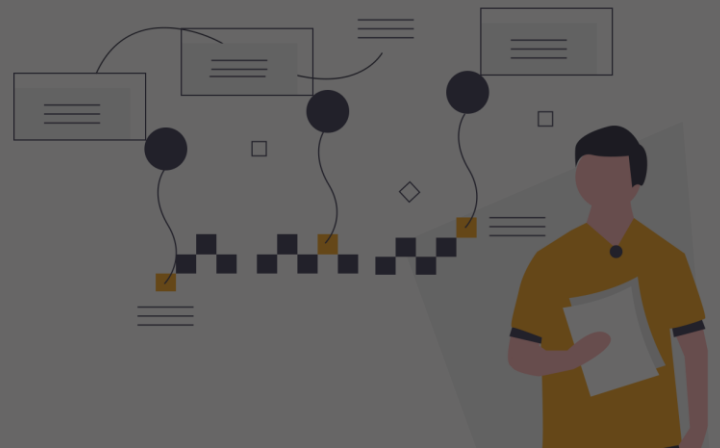
Entrepreneurial Motivation

2nd STEP

Team Formation

3rd STEP

Team Work



1st STEP

Entrepreneurial Motivation

2nd STEP

Team Formation

Team Work

Conflict

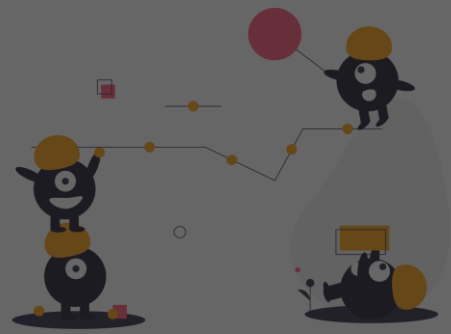
Collaboration

1st STEP

Entrepreneurial Motivation

2nd STEP

Team Formation



Team Work

Conflict

Collaboration

Entrepreneurial Motivation

?

?

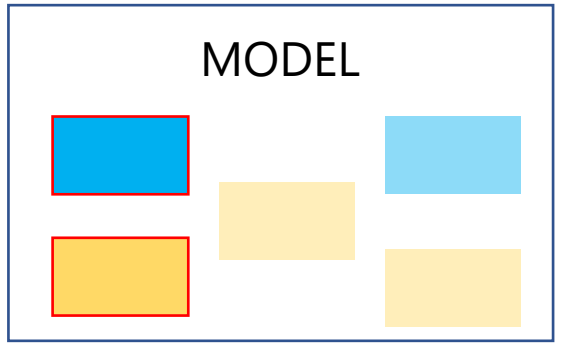
2nd STEP

Team Formation

Team Work

Conflict

Collaboration

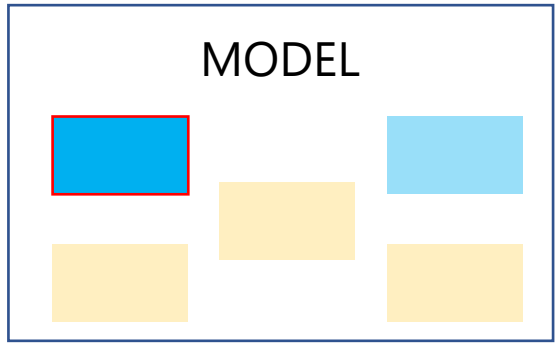


Two Types of Motivation

Aggressive motivation

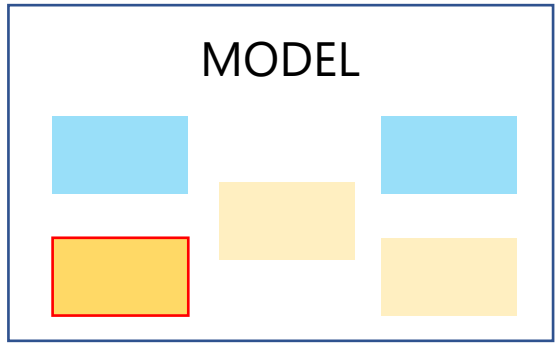
Defensive motivation

Aggressive motivation



- **High-evaluated** potential of the core tech
- Proactively seeking **business opportunity**

Defensive motivation



- **Low-evaluated** potential of the core tech
- In order to **protect the canceled research projects**

Entrepreneurial Motivation

Aggressive Motivation

Defensive Motivation

2nd STEP

Team Formation

Team Work

Conflict

Collaboration

Entrepreneurial Motivation

Aggressive Motivation

Defensive Motivation

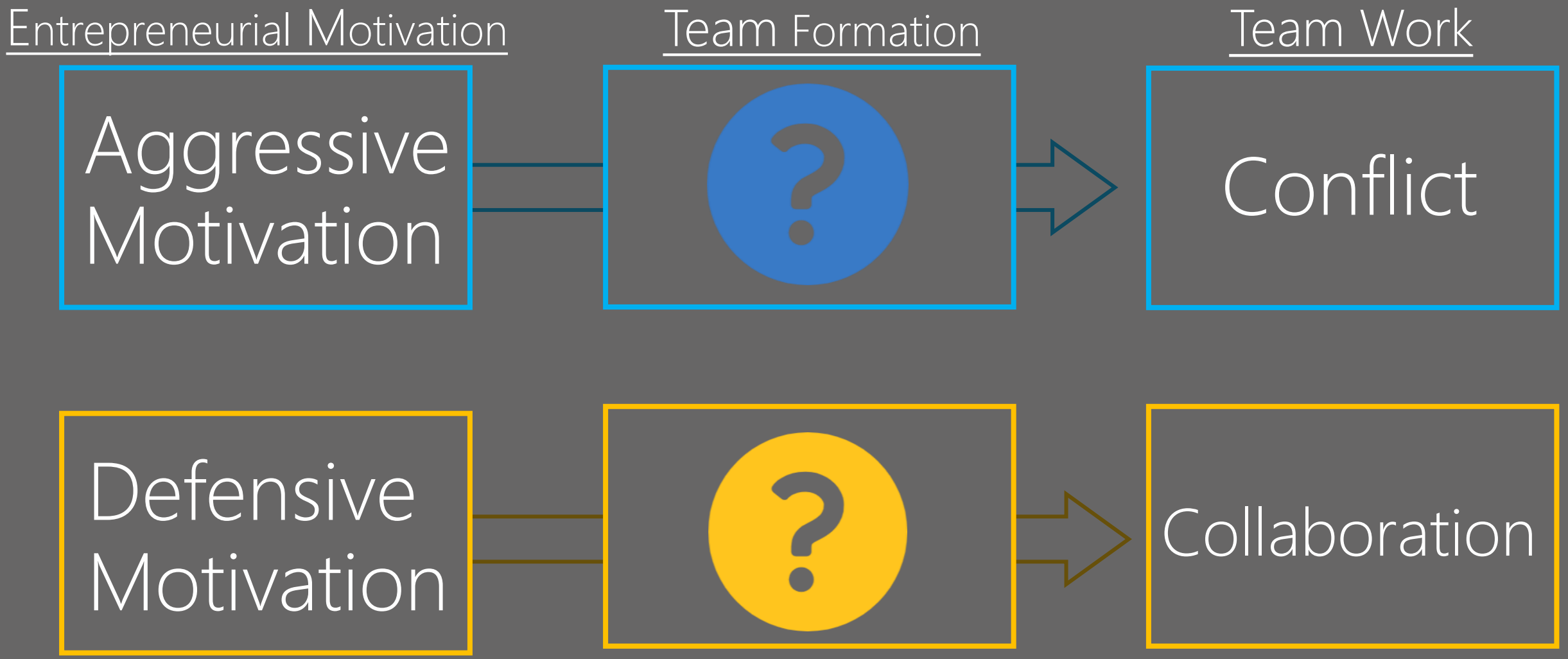
2nd STEP

Team Formation

Team Work

Conflict

Collaboration


Entrepreneurial Motivation
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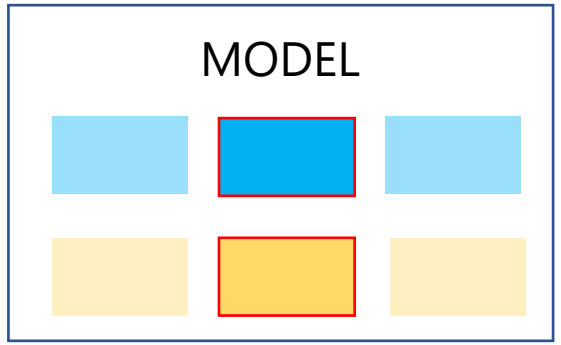
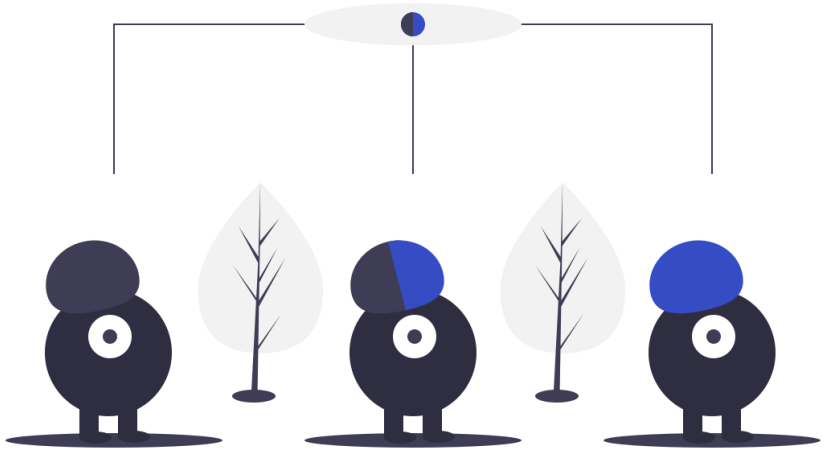
Team Work
Aggressive Motivation
?
Conflict
Defensive Motivation
?
Collaboration



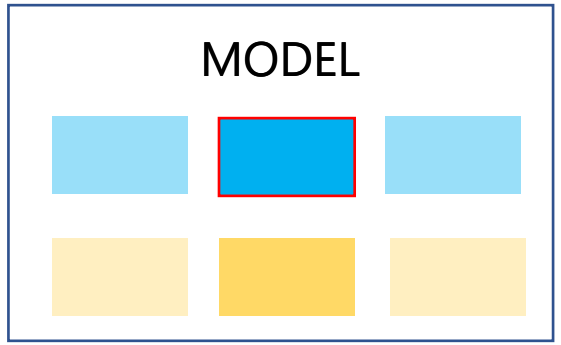
Two Types of Formation

Heterogeneous team

Homogeneous team

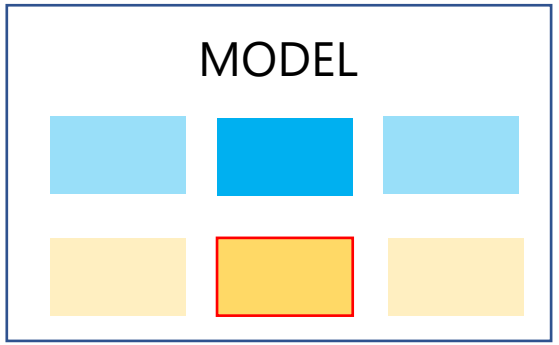


Heterogeneous team



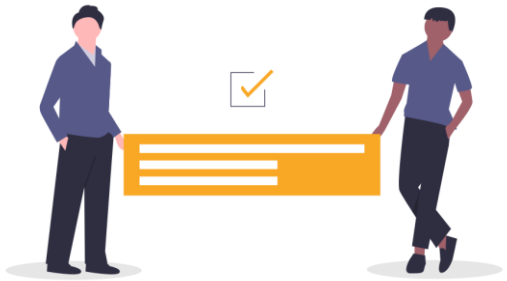
- Composed of people both **academia and industry:**
- Selected from people **in various companies**

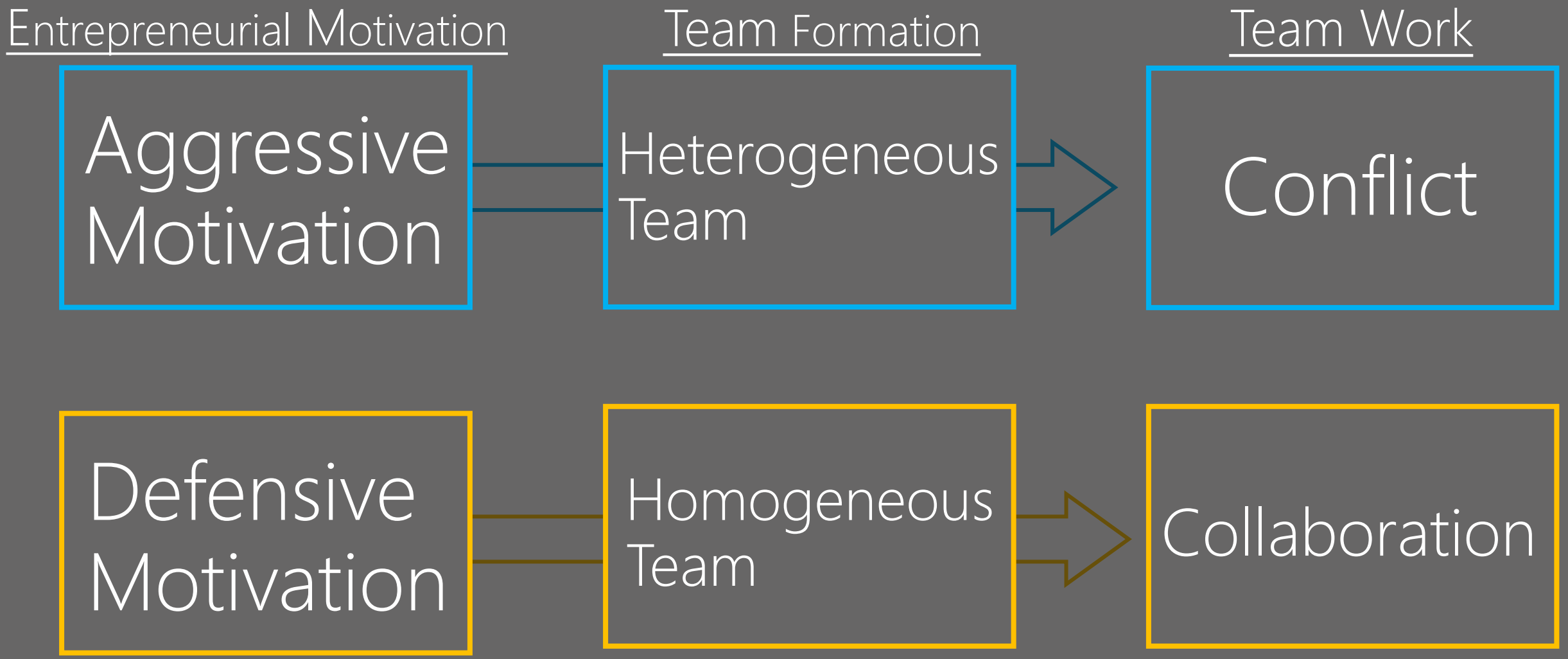
Homogeneous team



- Composed of people **sharing an academic background**

- Selected from people who **have previous relationship**

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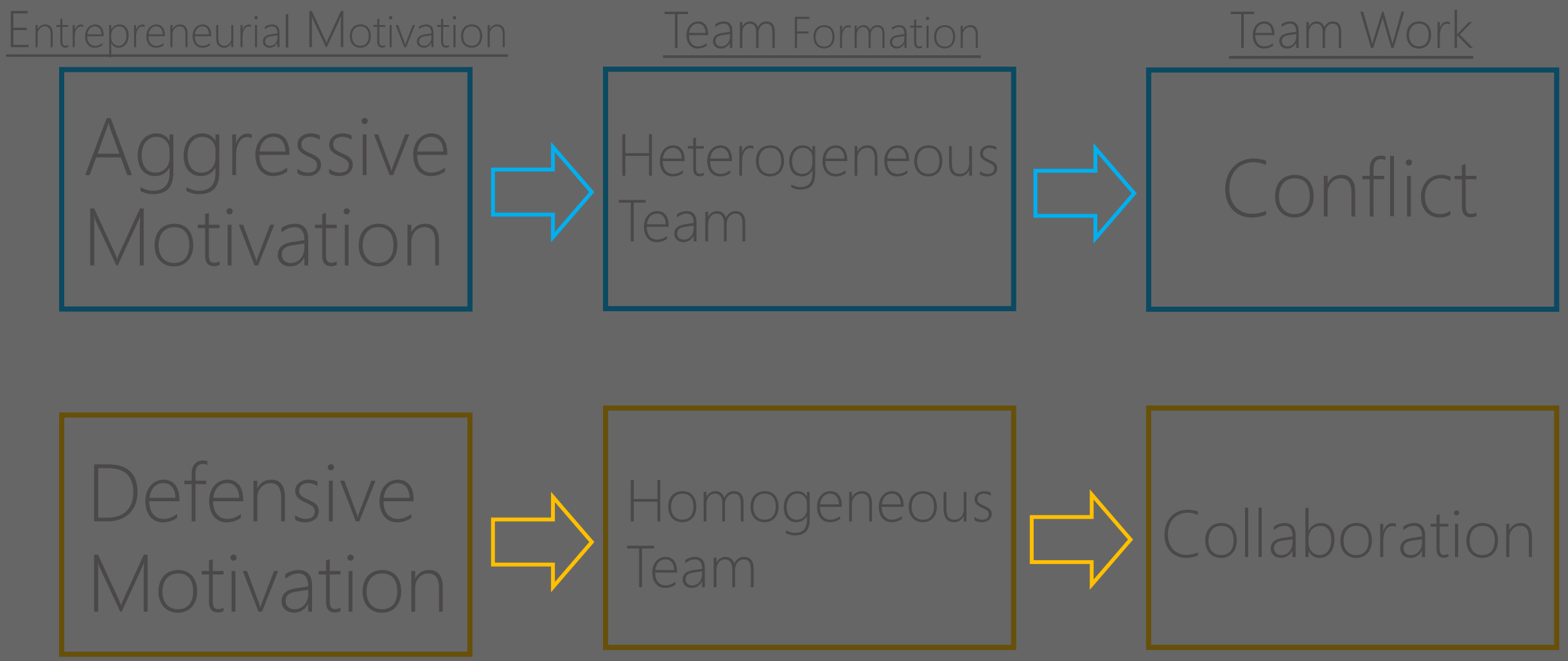
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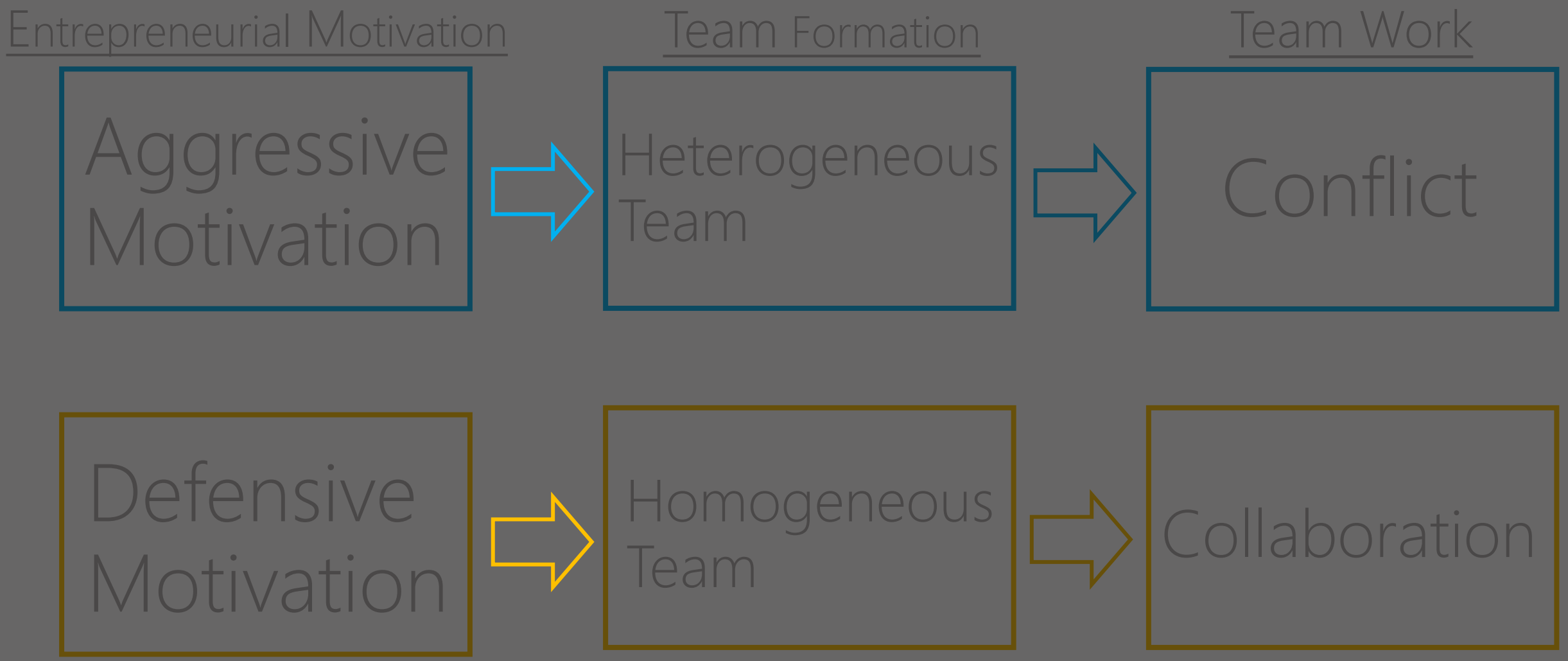
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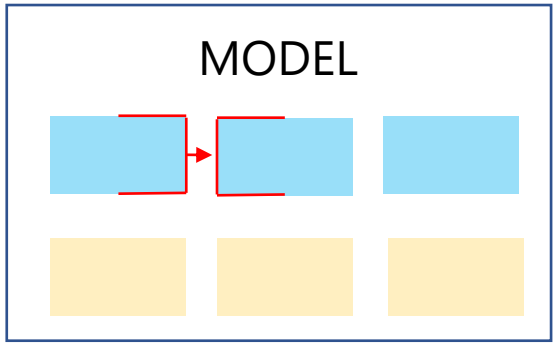
The motivation

How to Selects the HRs

The formation

Based on aggressive motivation,

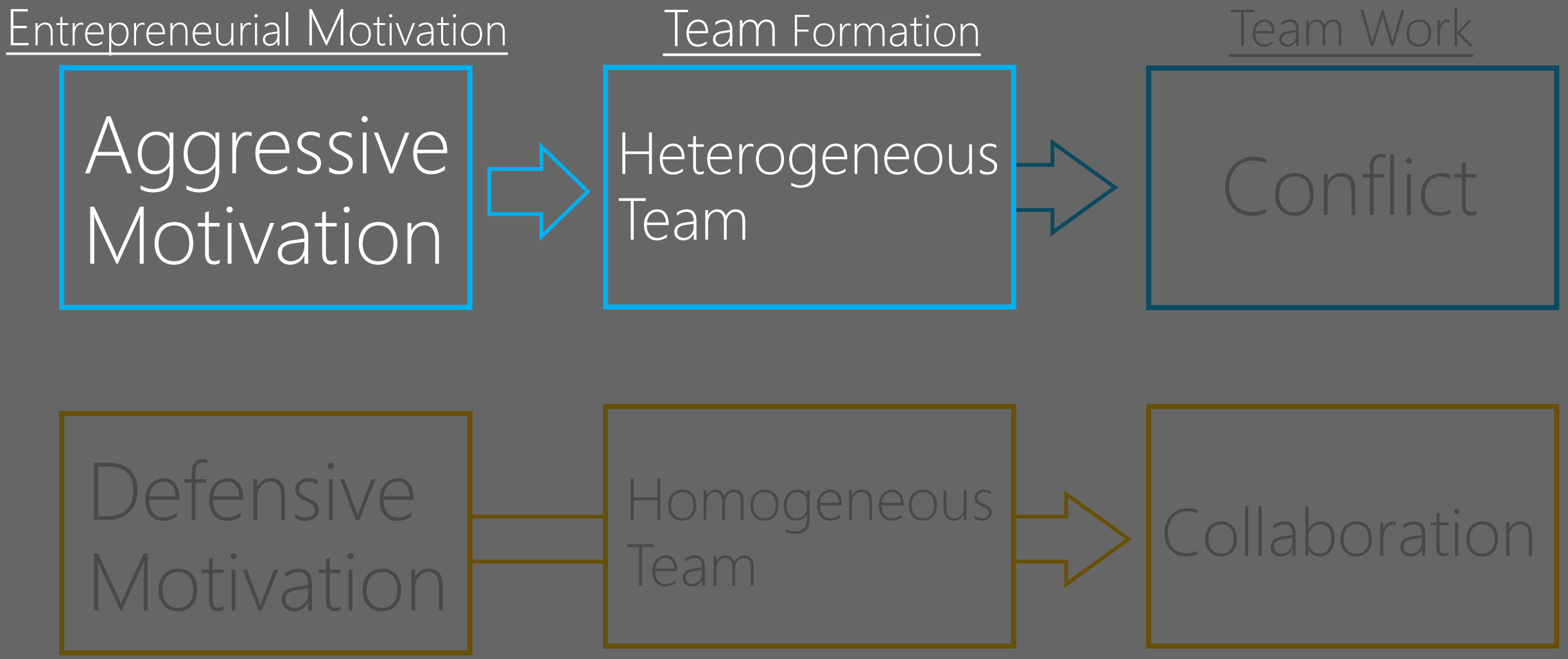
how the HRs are selected?



Various **business professionals**

join the team from industry

in order to **ensure the successful business**.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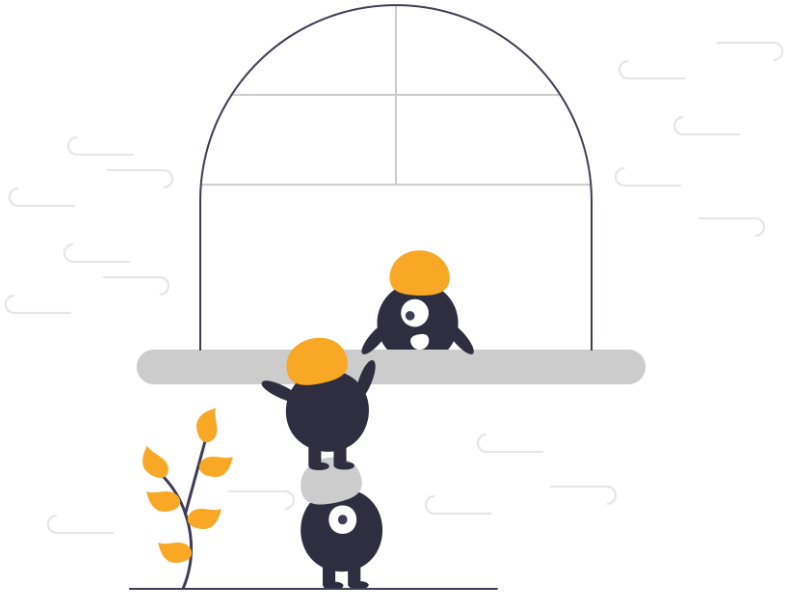
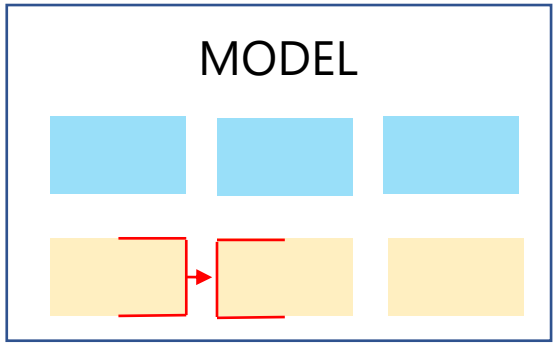
Based on defensive motivation,

how the HRs are selected?

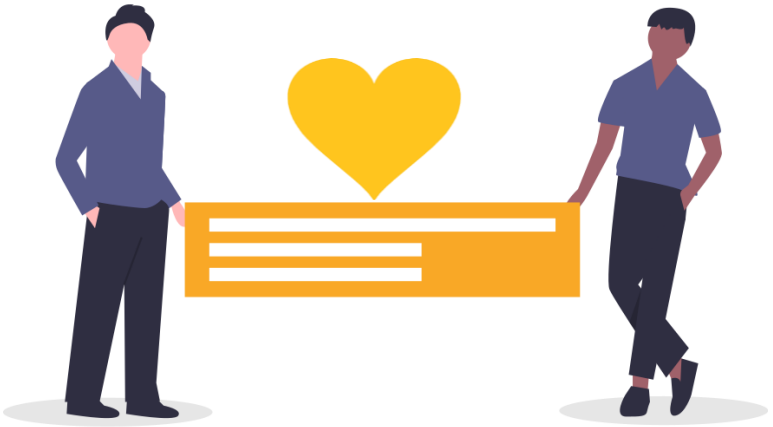




Originally involved people

join the team from academic field

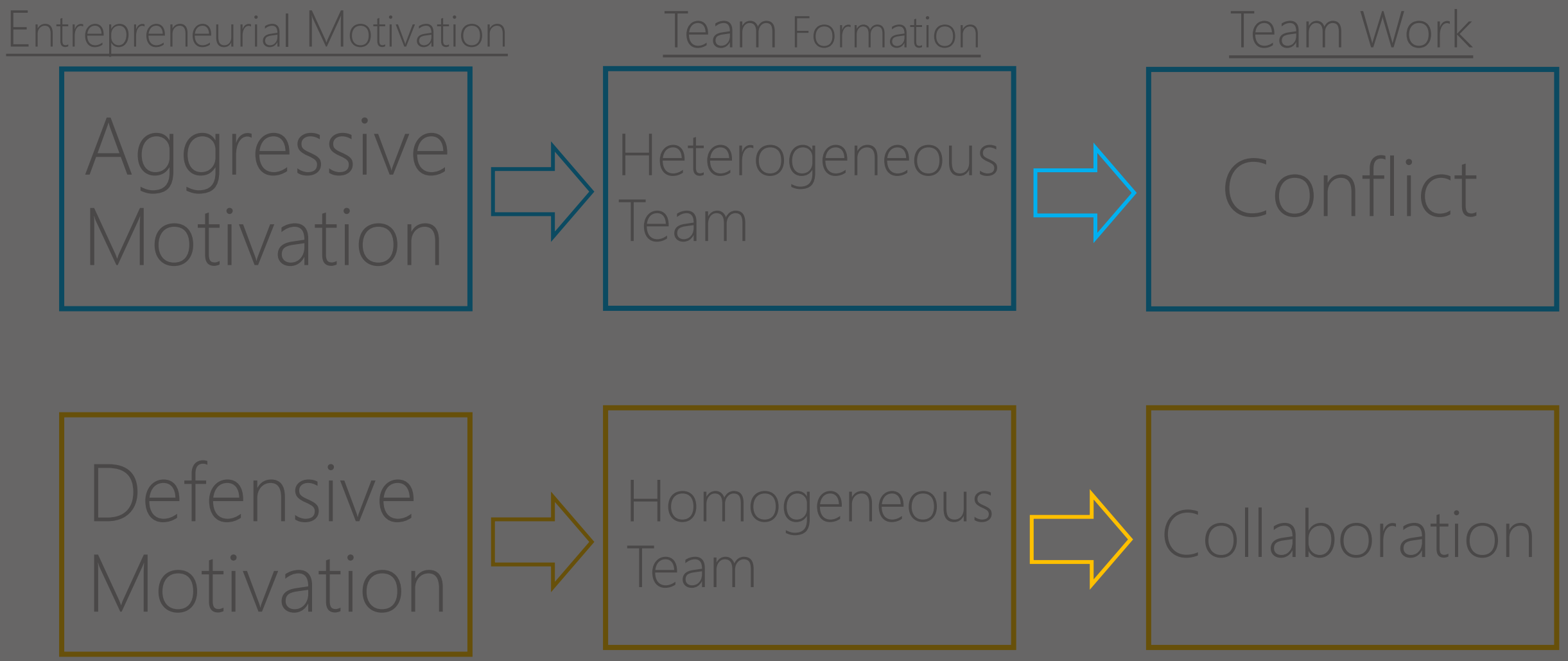
in order to **protect the core tech** from abandoned.



Selection based on

rational plan

emotional commitment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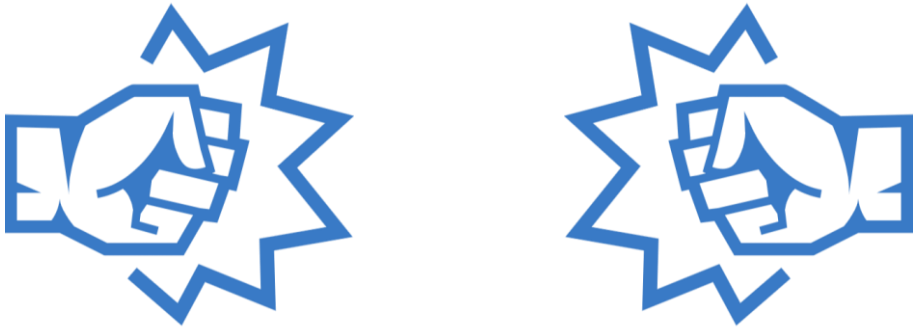
Collaboration

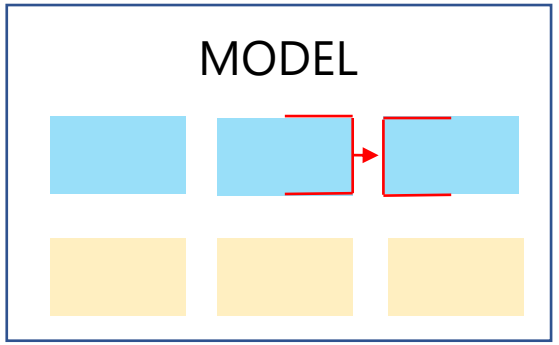
The formation

Cognitive Gap

The teamwork

How Heterogeneous Team ended up in Conflict?





Wide Gap of **Priority** in business.

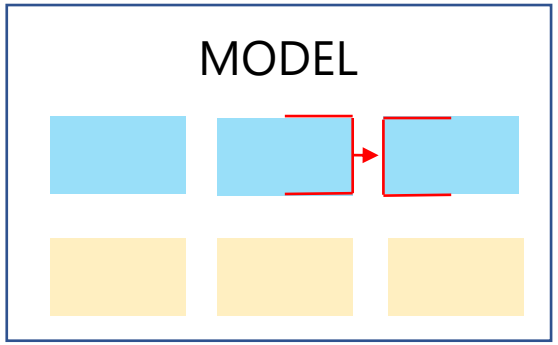
Minimizing risk & Maximizing profit

VS

Achieving Scientific Goal

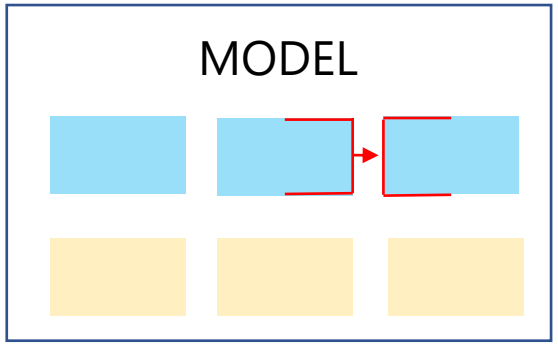
Manager

Researcher



When other company have the producing know-how that they don't have,

outsourcing is…?

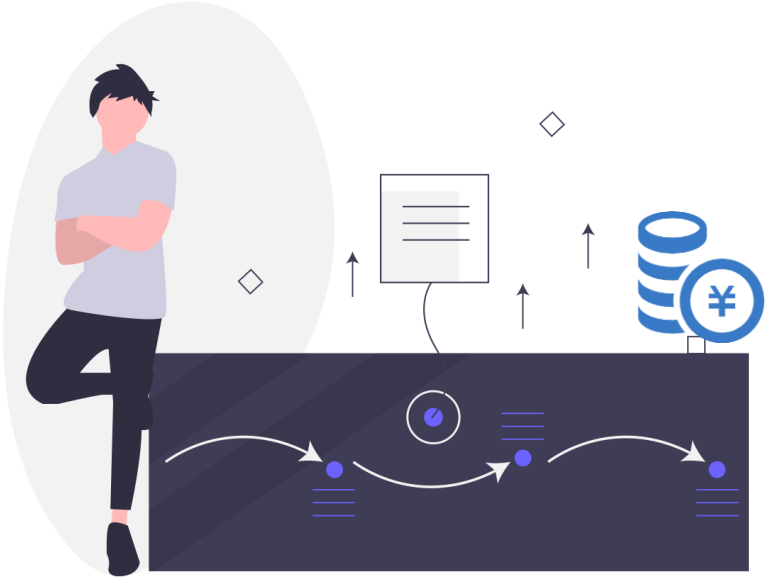


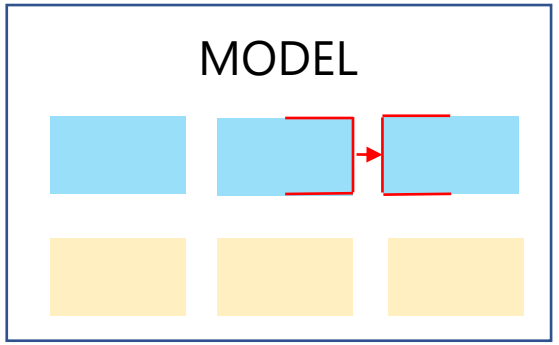
In terms of business

Great RISK of loosing the company's superiority, stability, and profits,

so we should develop **by ourselves**

even if it takes a lots of time and cost.



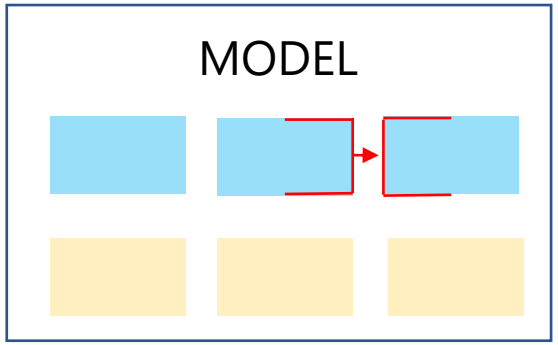


In terms of academic science

The **Quickest way** of making the findings into products,

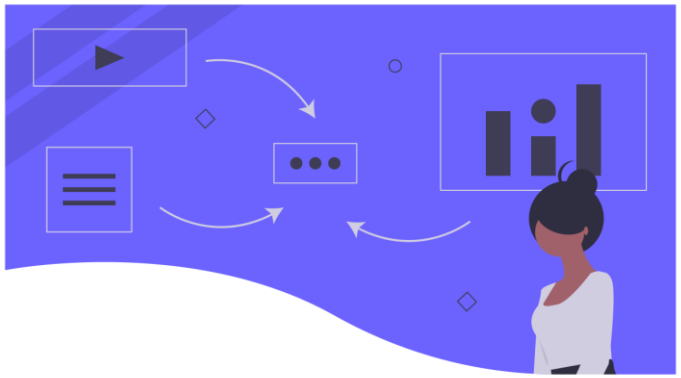
so we should **ask others to produce**

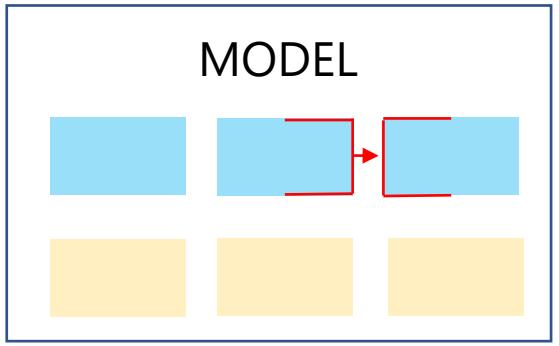
without the waste of resource.



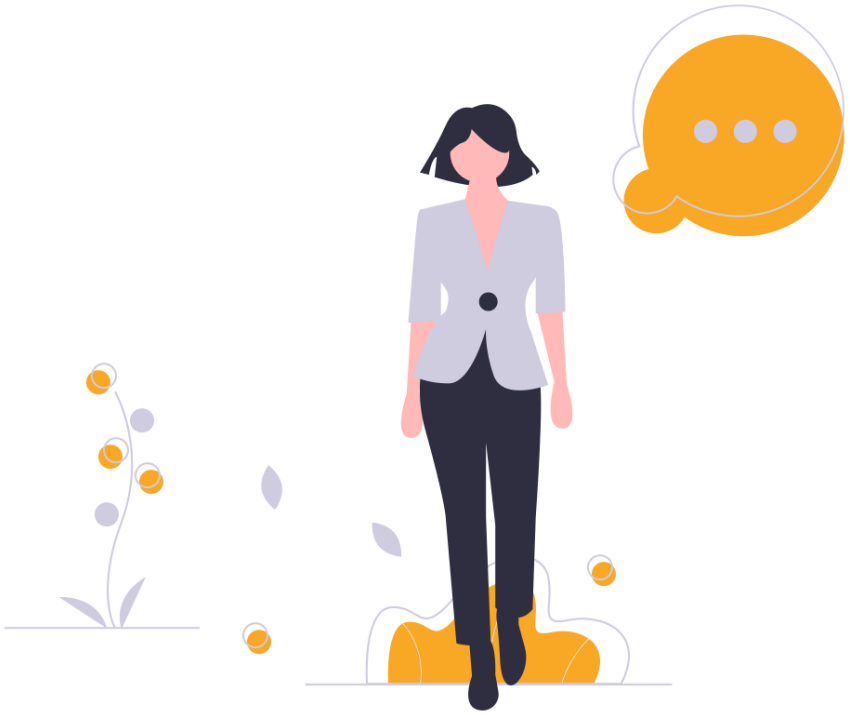
Such **cognitive gap** make the team less united,

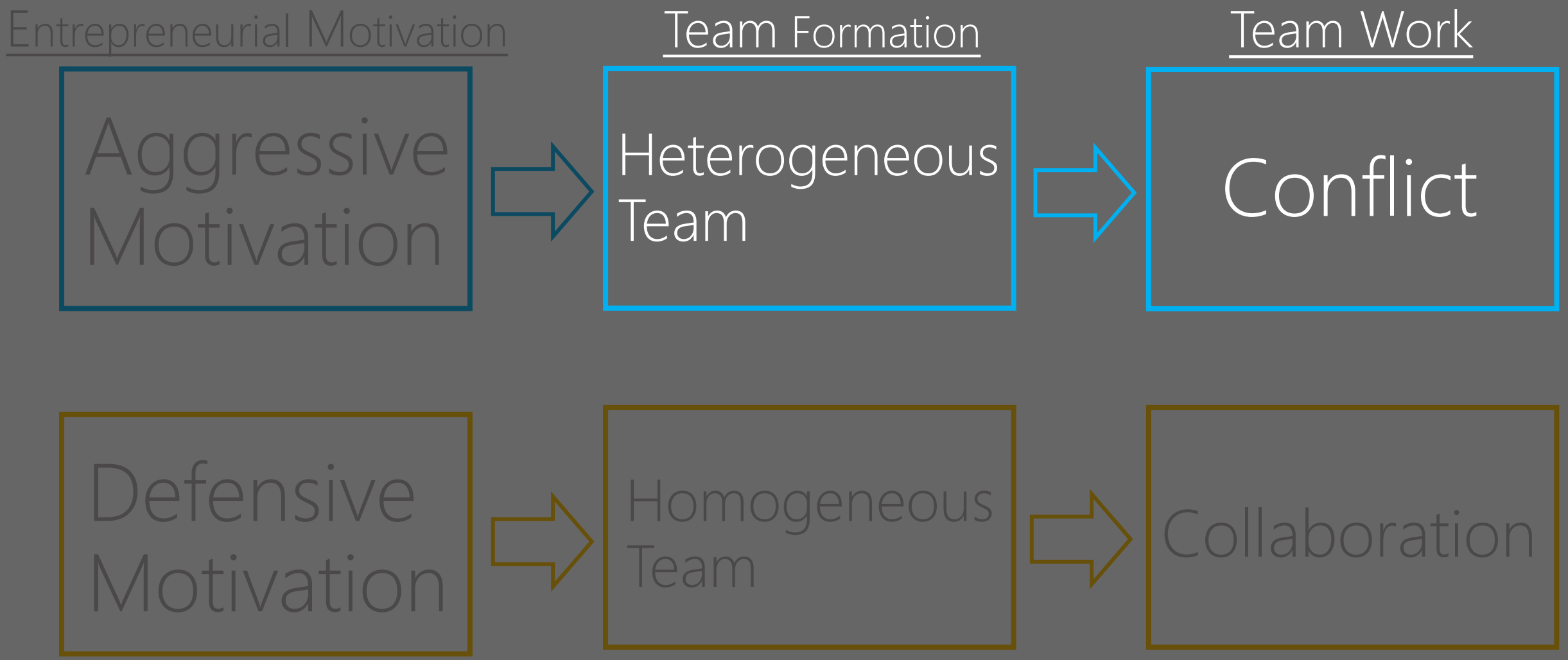
and make the researcher **feel discouraged**.



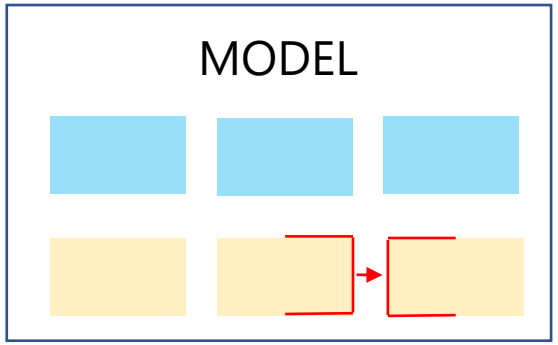


Finally, the researcher **quit** the further **help** for R&D
that is essential for business.




Entrepreneurial Motivation
Team Formation
Team Work
Aggressive Motivation
Heterogeneous Team
Conflict
Defensive Motivation
Homogeneous Team
Collaboration

How Homogeneous Team achieve Collaboration?



Common understanding to the core tech

and previous **Relationships of mutual trust**

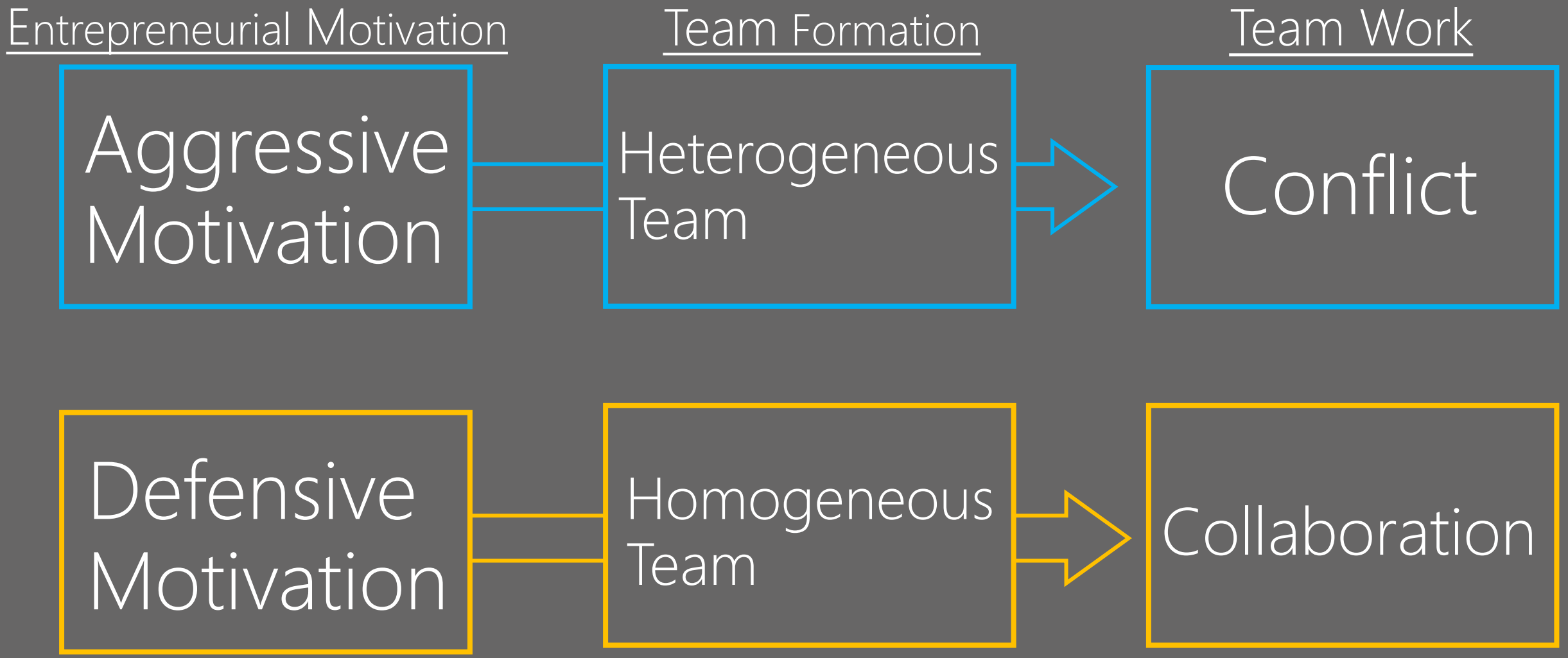
make the cognitive gap **small enough to solve** easily.

Emotional commitment to the core tech itself is the **strong driving force** to overcome every challenge.

Cognitive Gap is

so wide to break up the team

narrow enough to fill up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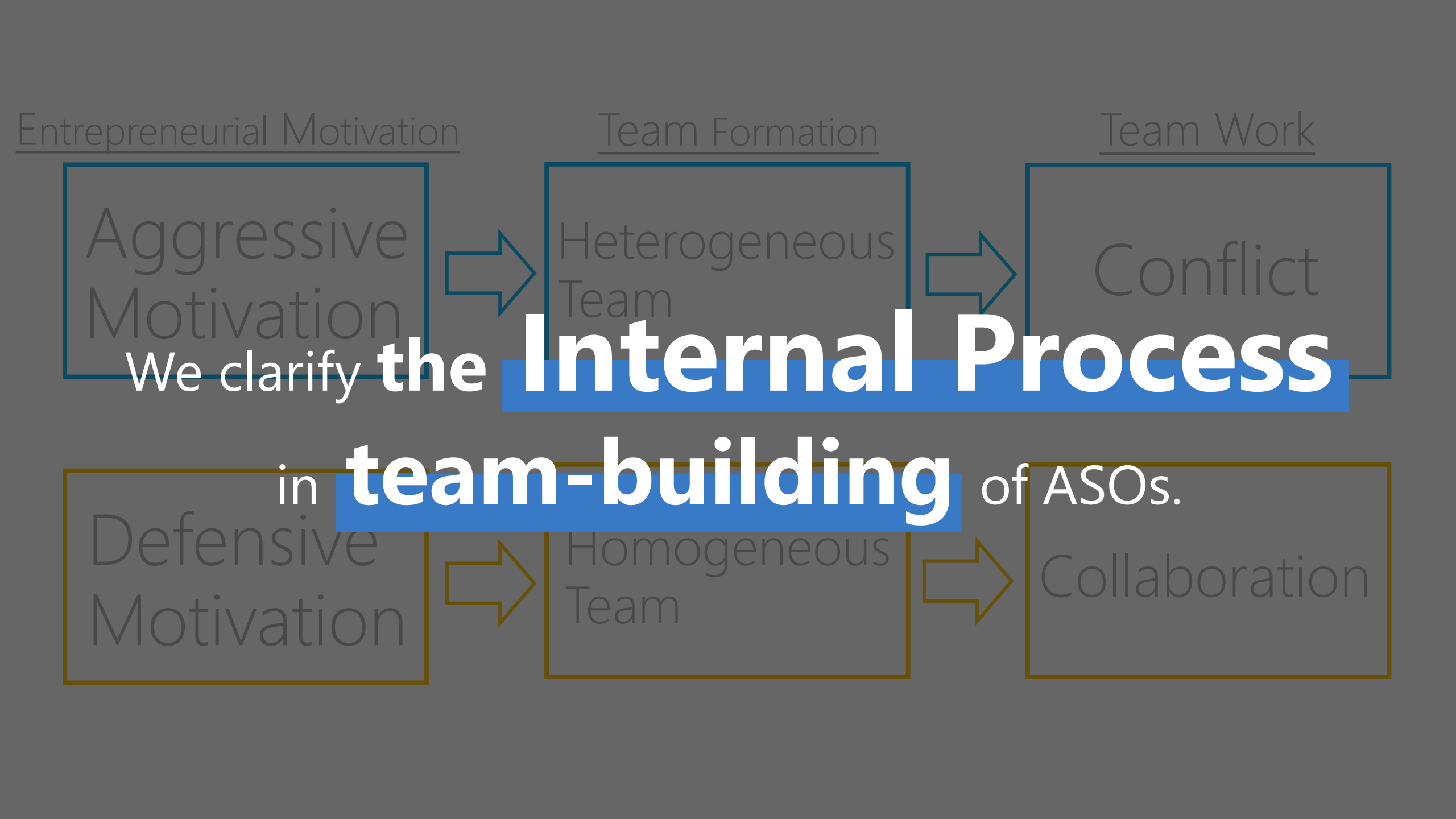
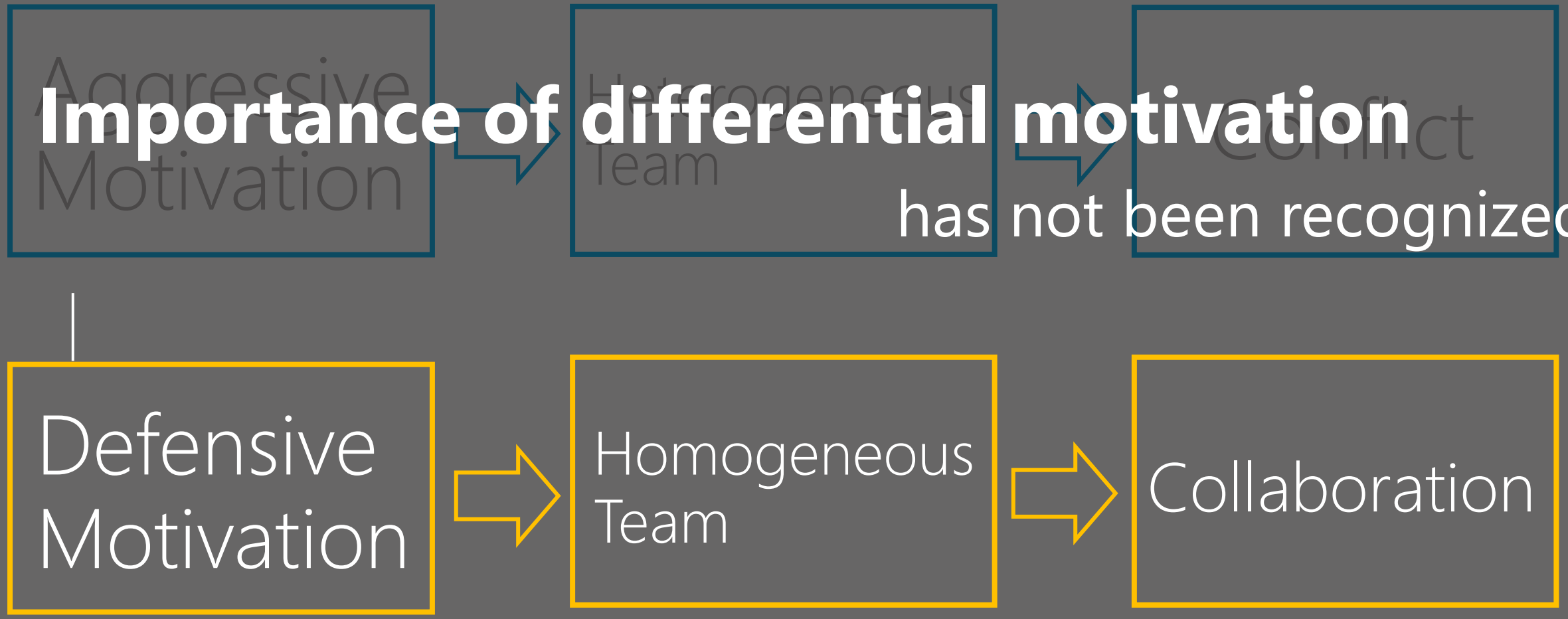
Outline

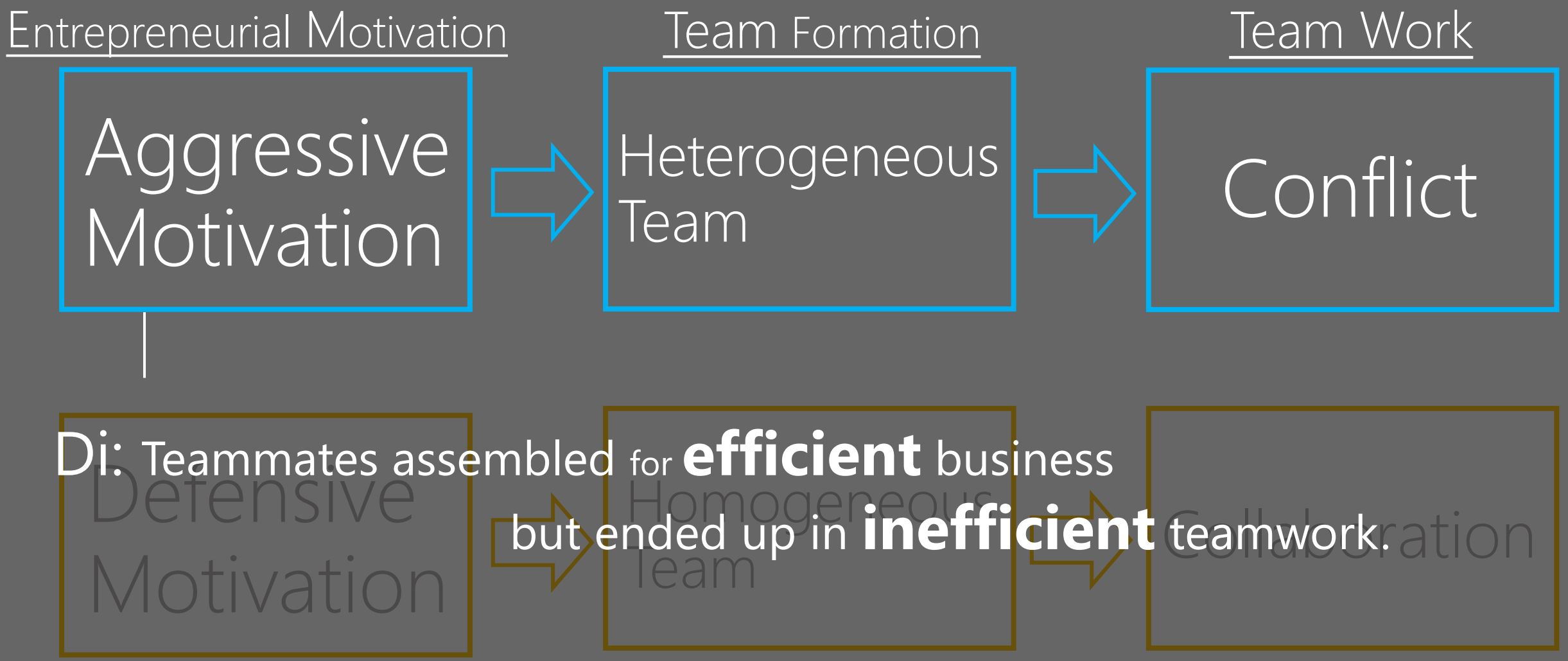
1. INTRODUCTION
2. LITERATURE REVIEW
3. METHODOLOGY
4. FINDING
5. CONCLUSSION



We clarify **the Internal Process** in **team-building** of ASOs.

Importance of differential motivation has not been recognized.





Di: Teammates assembled for **efficient** business but ended up in **inefficient** teamwork.

Thank You!