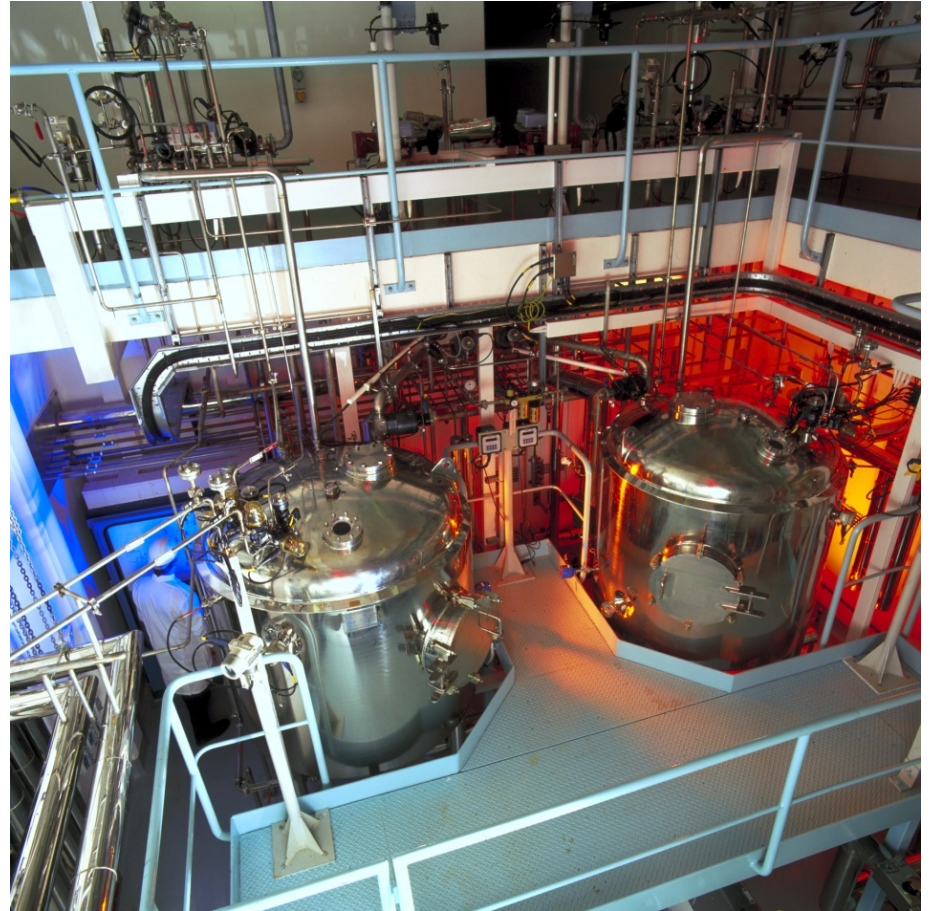


Technology Transfer: Practical insights for researchers and aspiring entrepreneurs

Dr Gavin Clark
Green Crop Network Workshop,
Montreal, Canada.
July 11th 2008



Emotional status

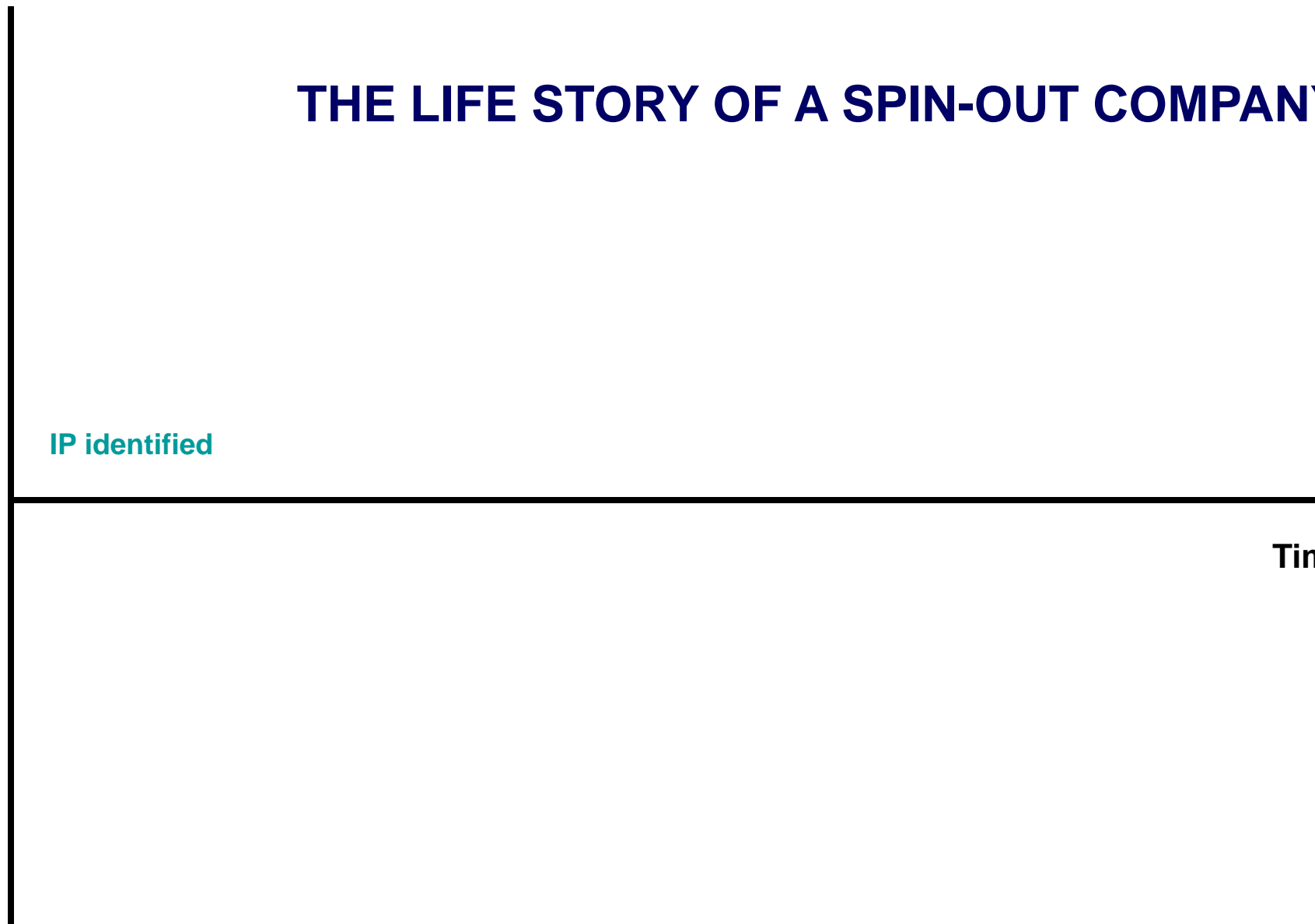
+

THE LIFE STORY OF A SPIN-OUT COMPANY

IP identified

Time

-



Emotional status

+

Prototype business plan targeting pharmaceutical industry

Time

-



Emotional status

+

Passes basic commercial due diligence

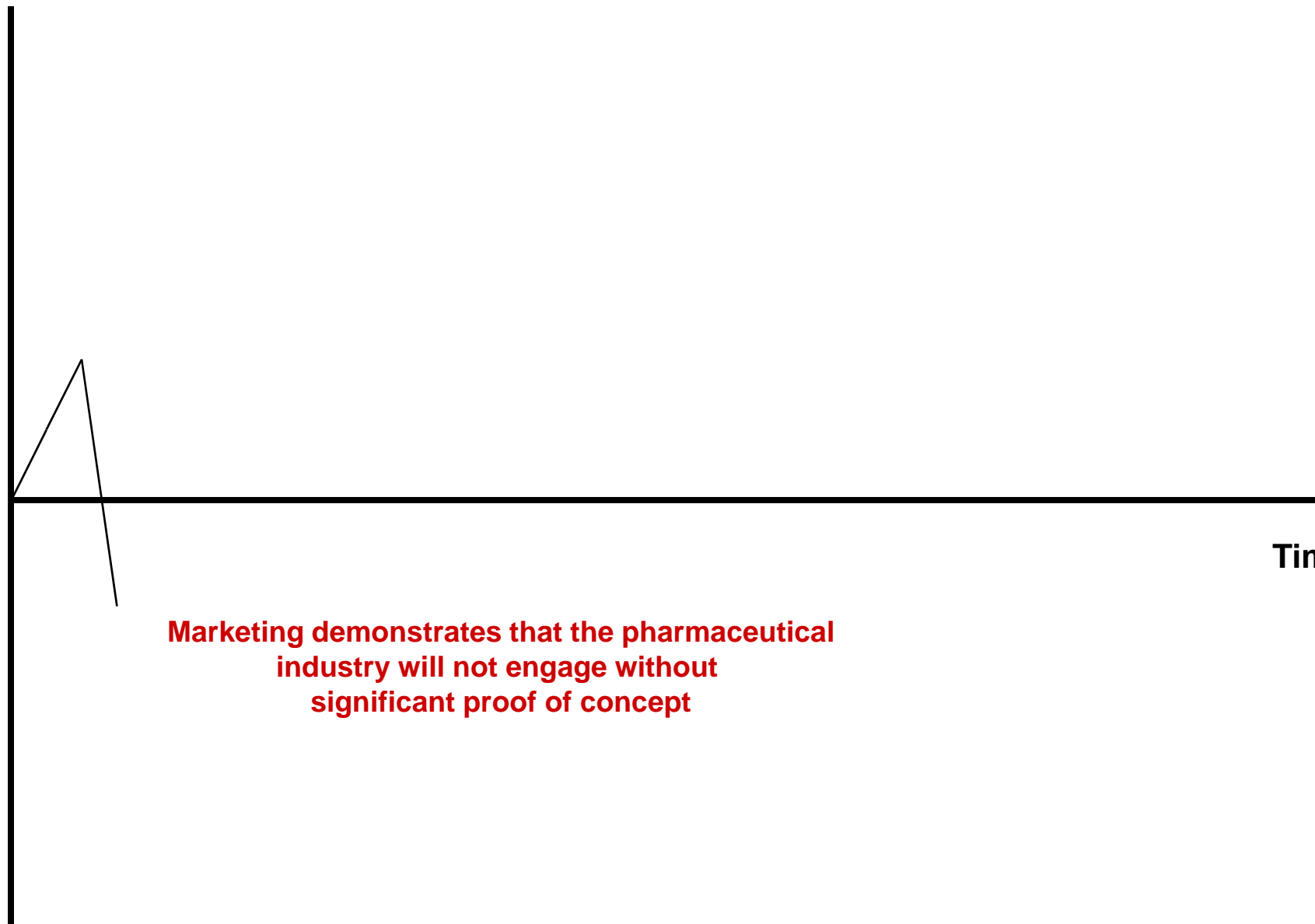
Time

-



Emotional status

+



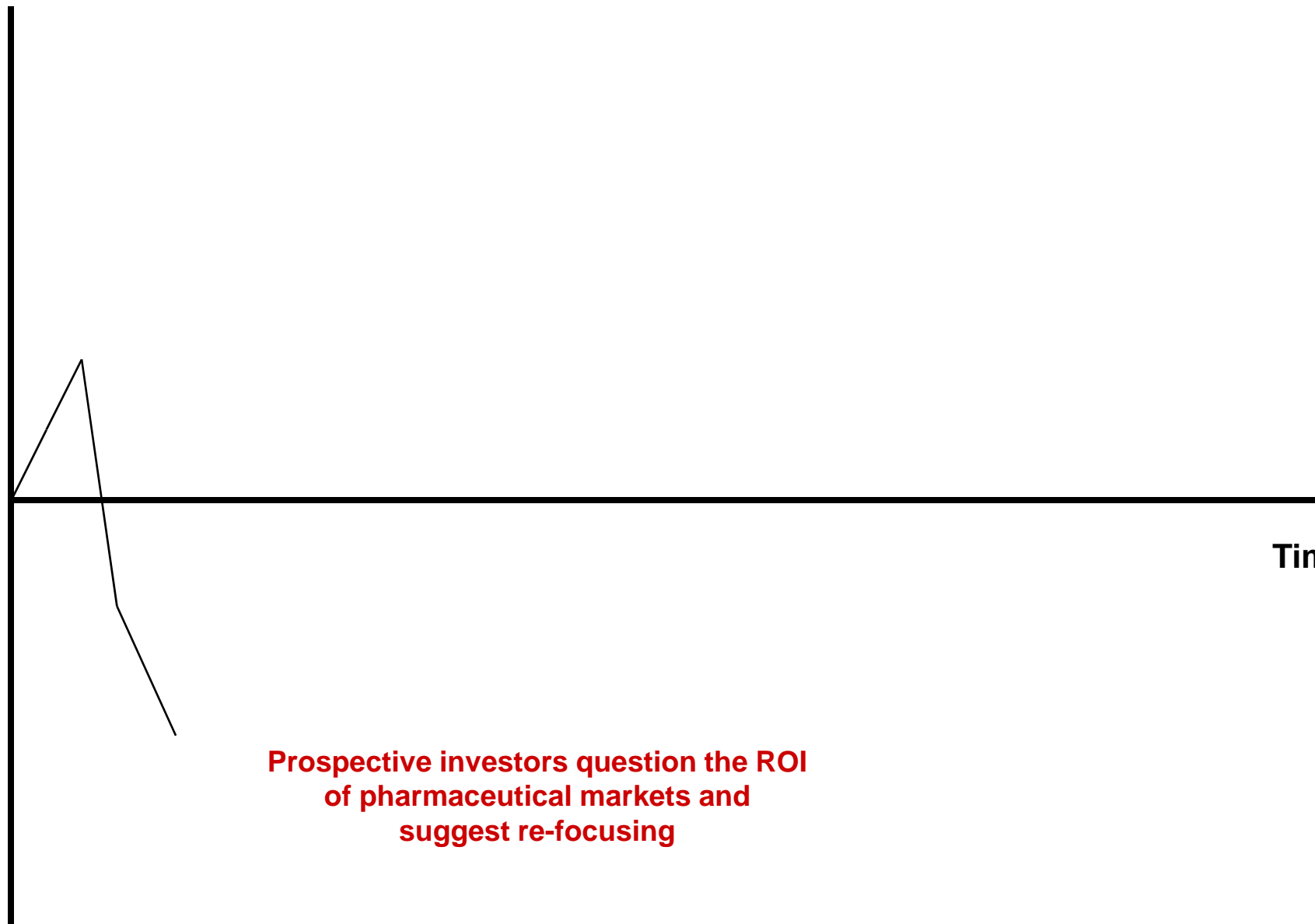
Time

Marketing demonstrates that the pharmaceutical industry will not engage without significant proof of concept

-

Emotional status

+



Time

**Prospective investors question the ROI
of pharmaceutical markets and
suggest re-focusing**

Emotional status

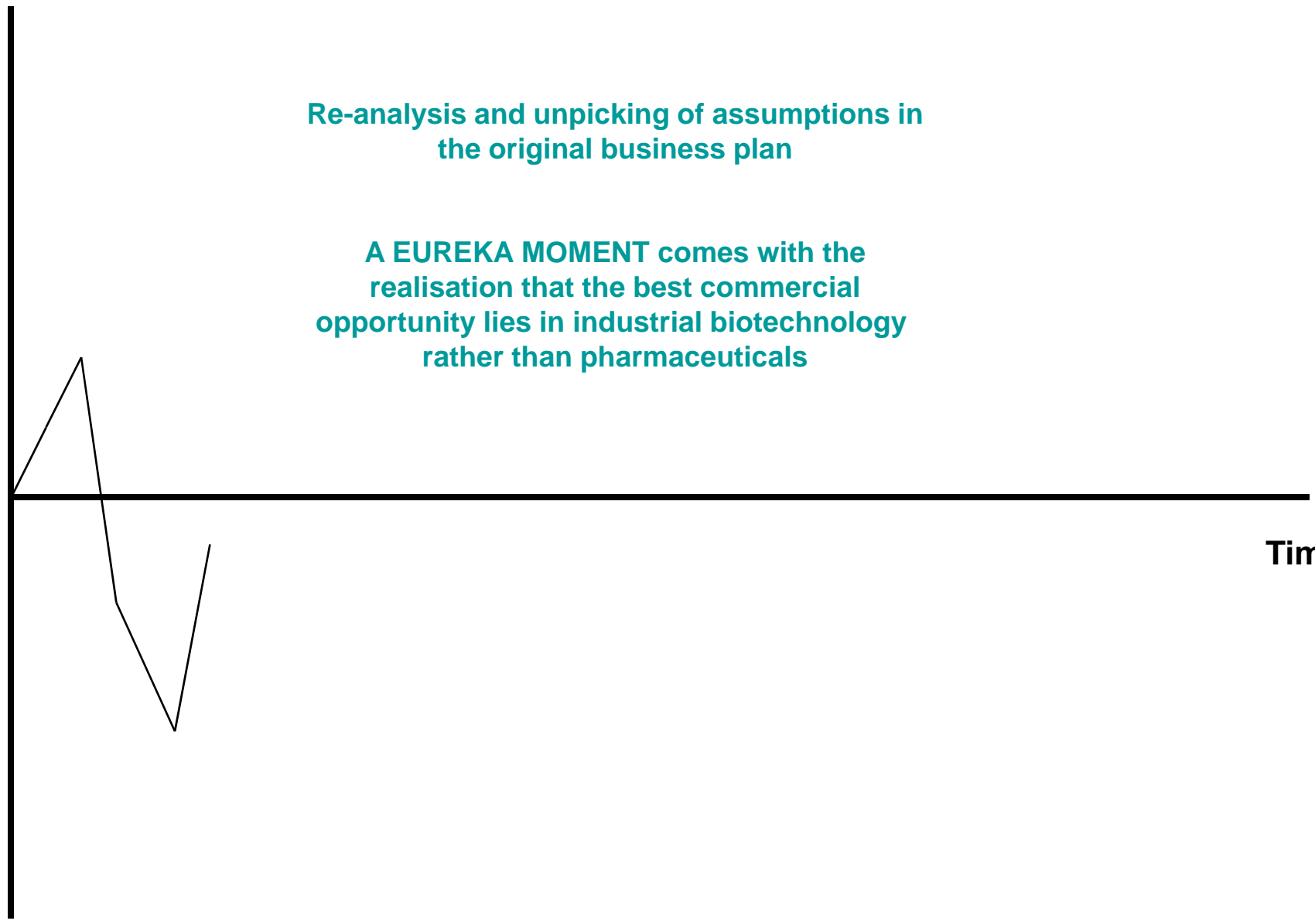
+

**Re-analysis and unpicking of assumptions in
the original business plan**

**A EUREKA MOMENT comes with the
realisation that the best commercial
opportunity lies in industrial biotechnology
rather than pharmaceuticals**

-

Time



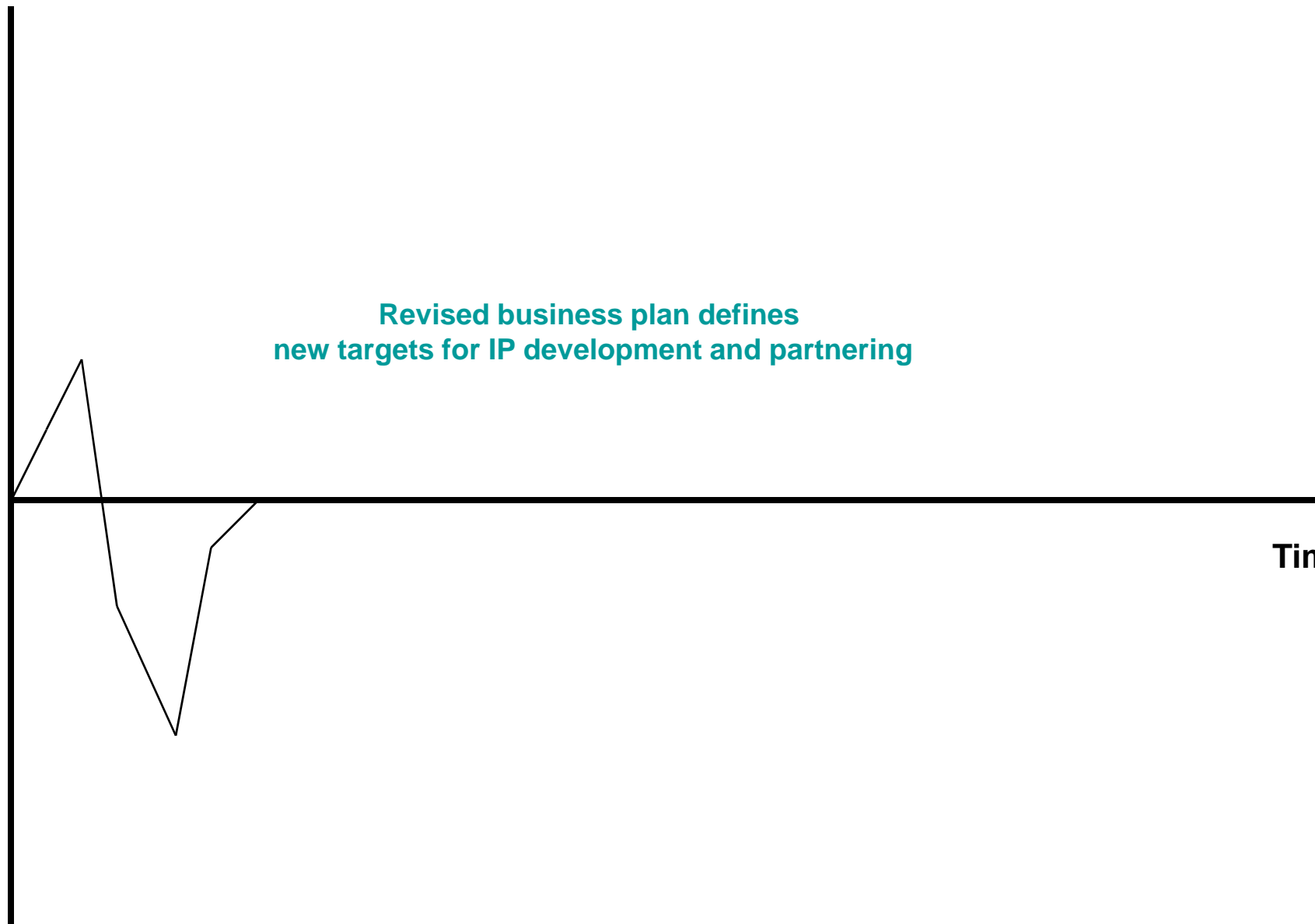
Emotional status

+

Revised business plan defines
new targets for IP development and partnering

Time

-



Emotional status

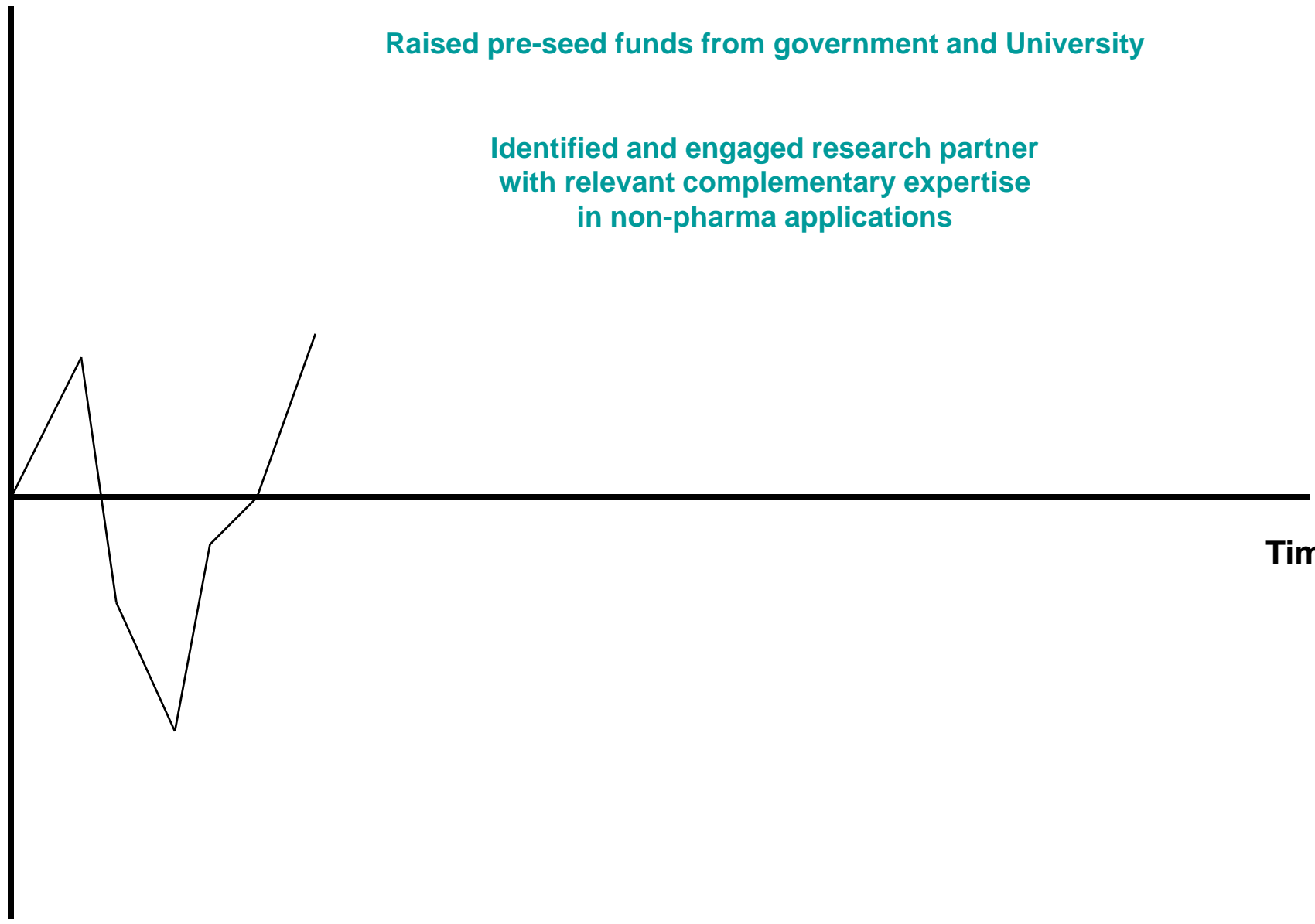
+

Raised pre-seed funds from government and University

**Identified and engaged research partner
with relevant complementary expertise
in non-pharma applications**

-

Time



Emotional status

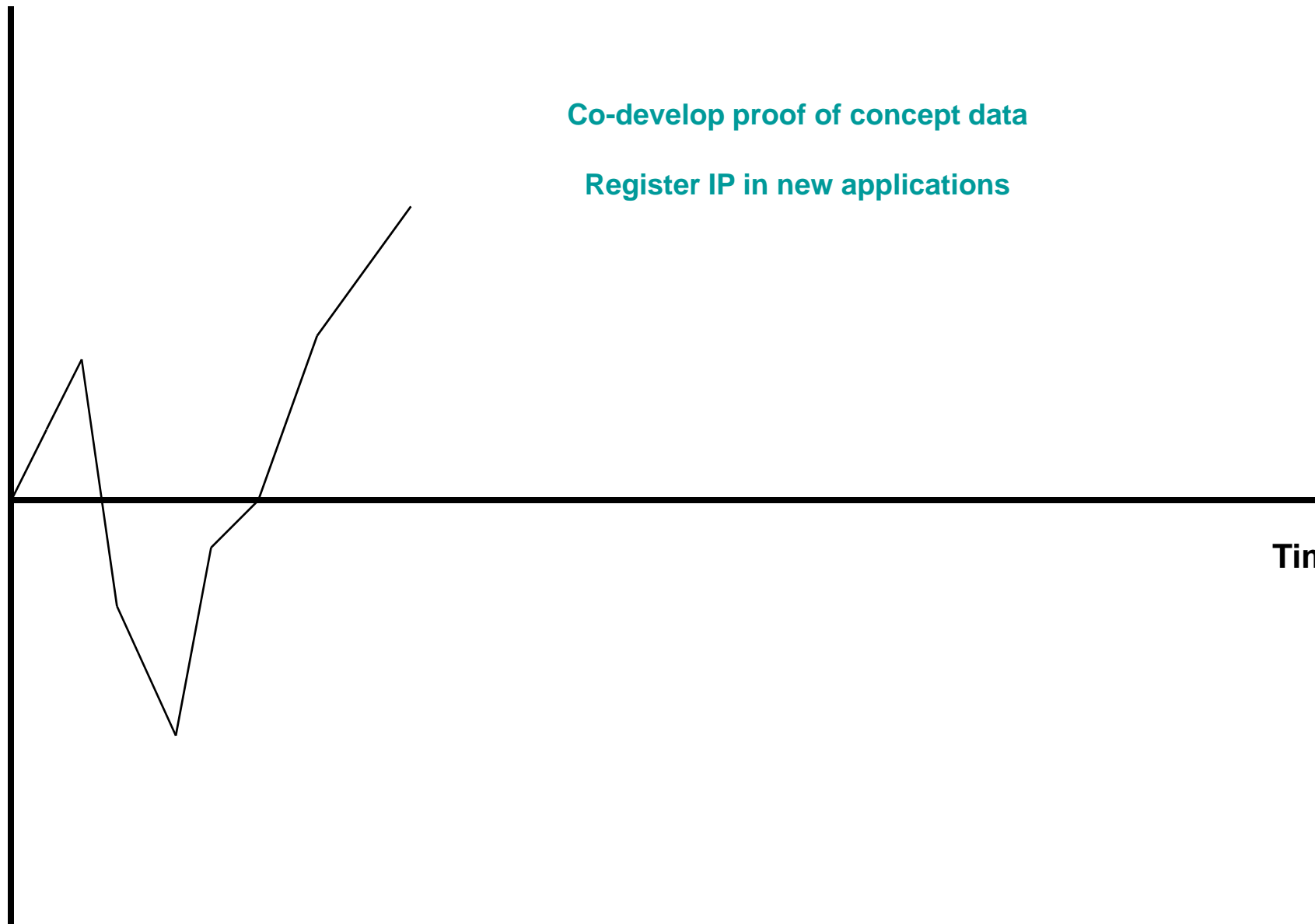
+

-

Co-develop proof of concept data

Register IP in new applications

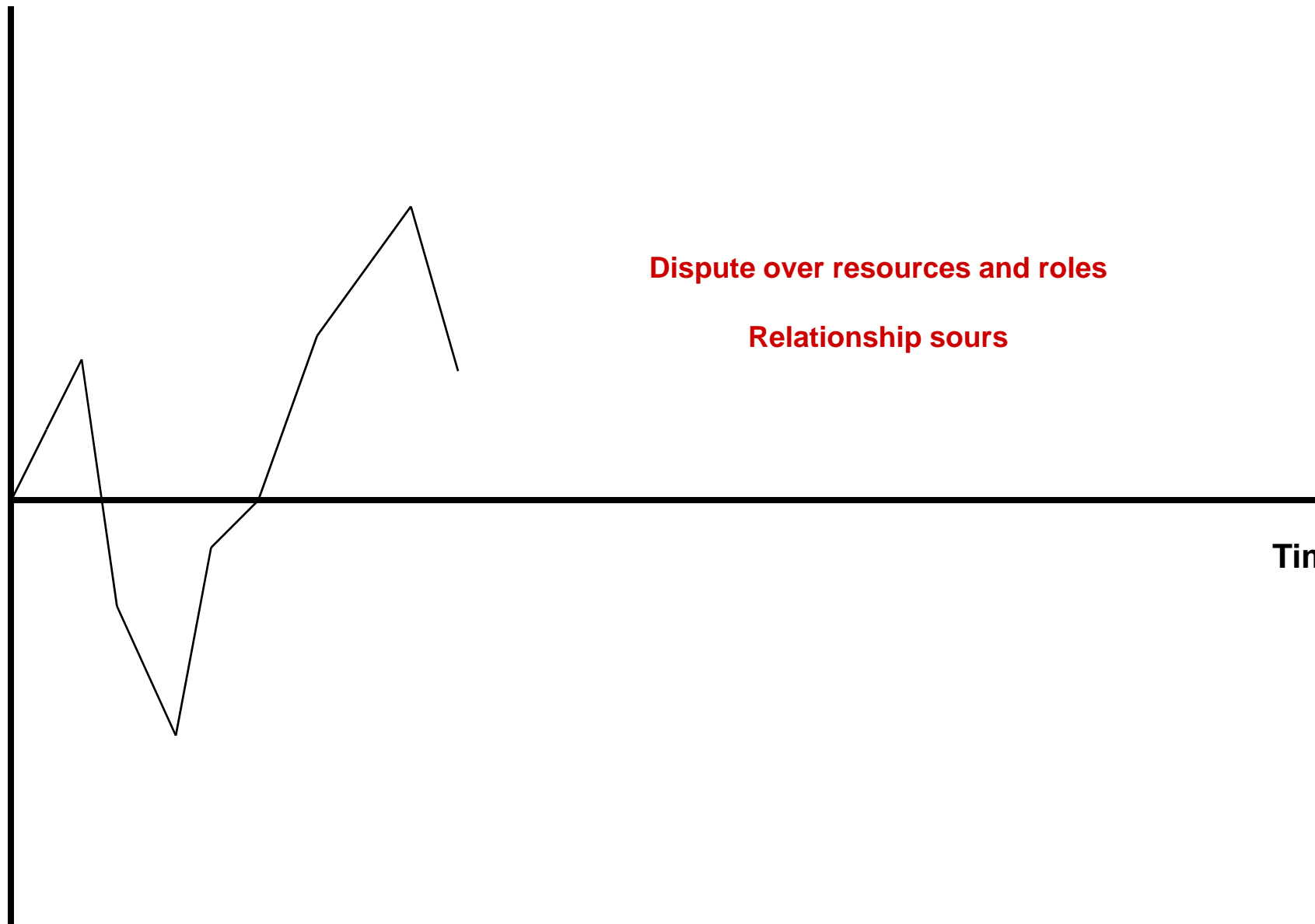
Time



Emotional status

+

-



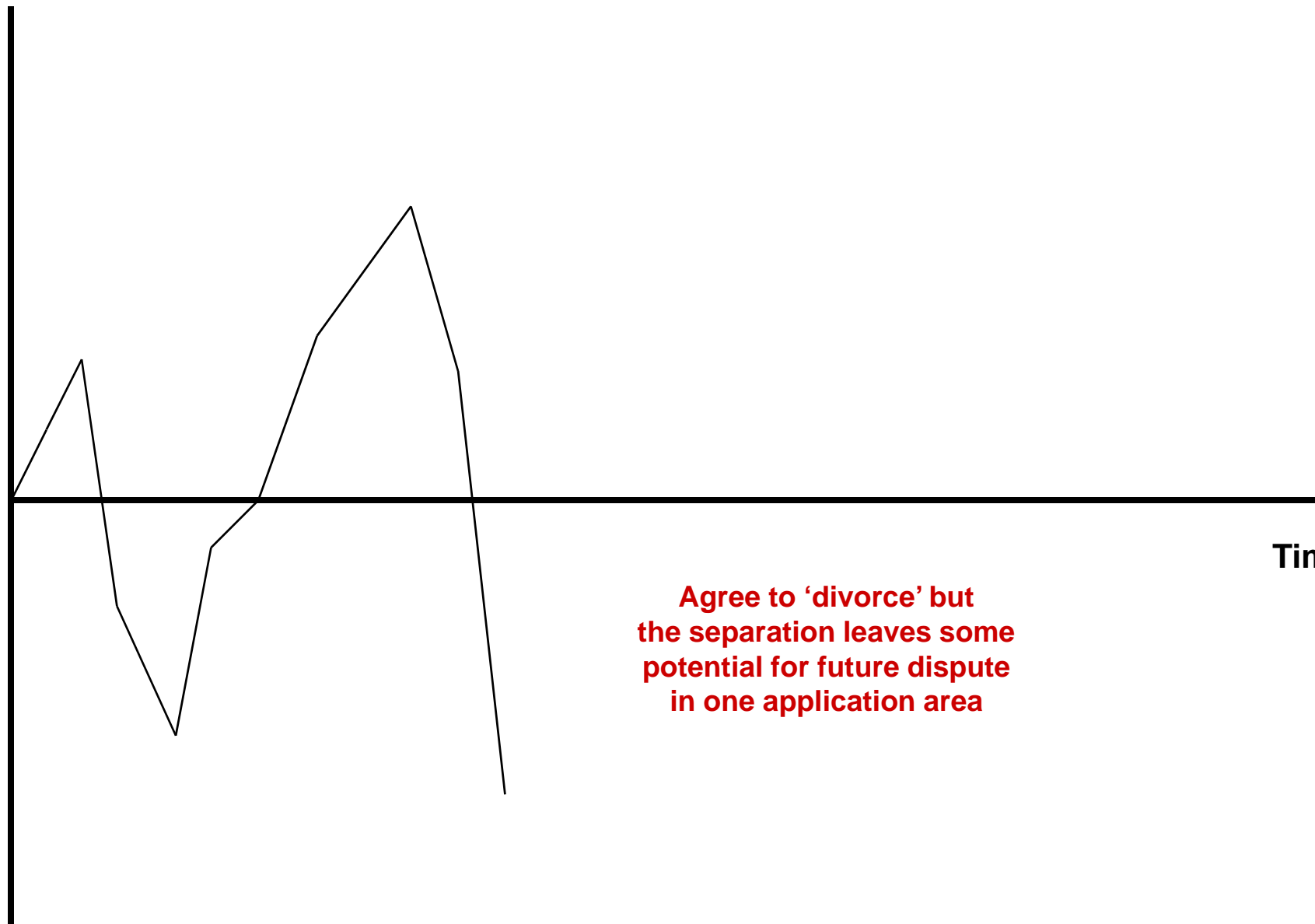
Dispute over resources and roles

Relationship sours

Time

Emotional status

+



Time

**Agree to 'divorce' but
the separation leaves some
potential for future dispute
in one application area**

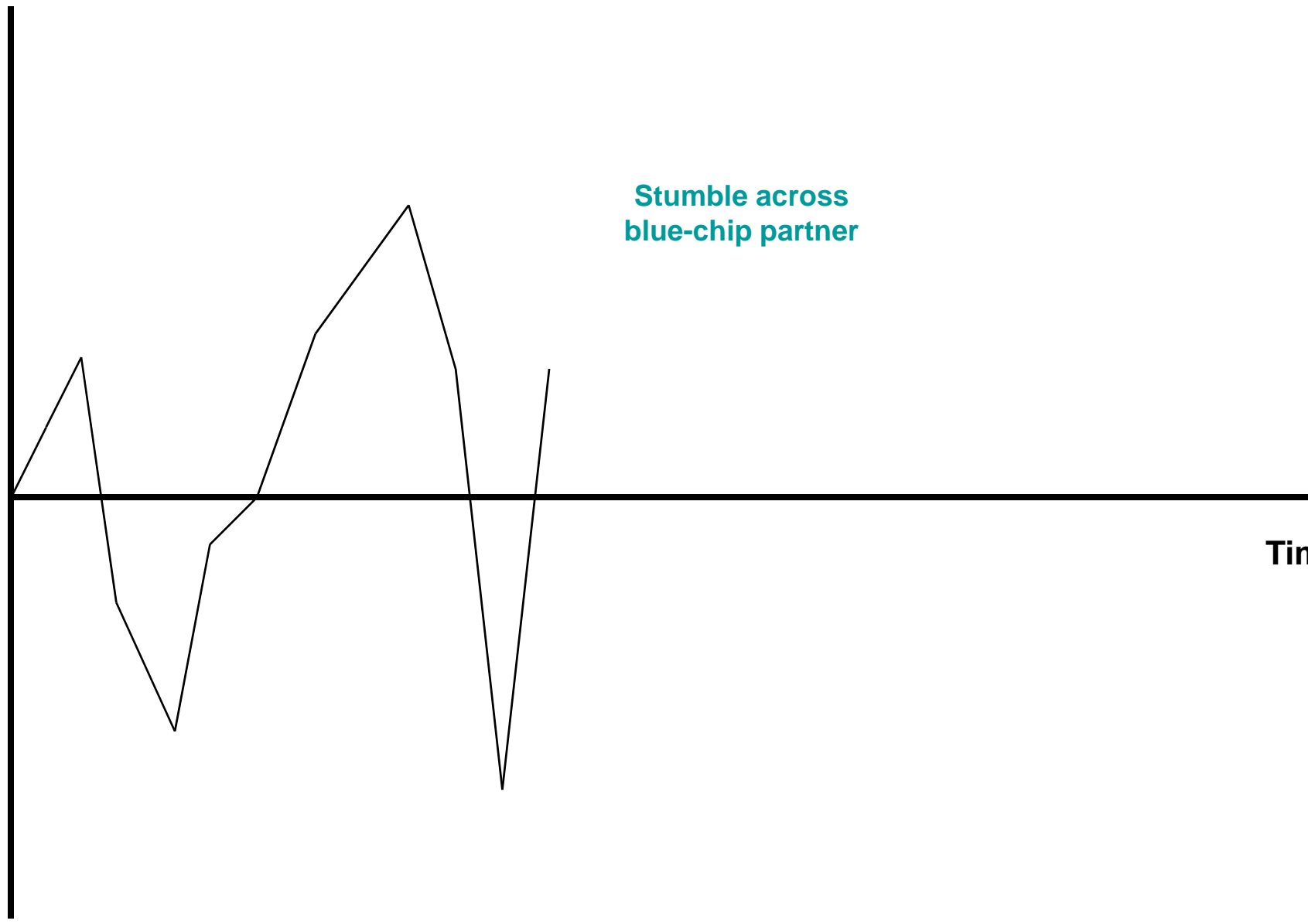
Emotional status

+

-

Stumble across
blue-chip partner

Time



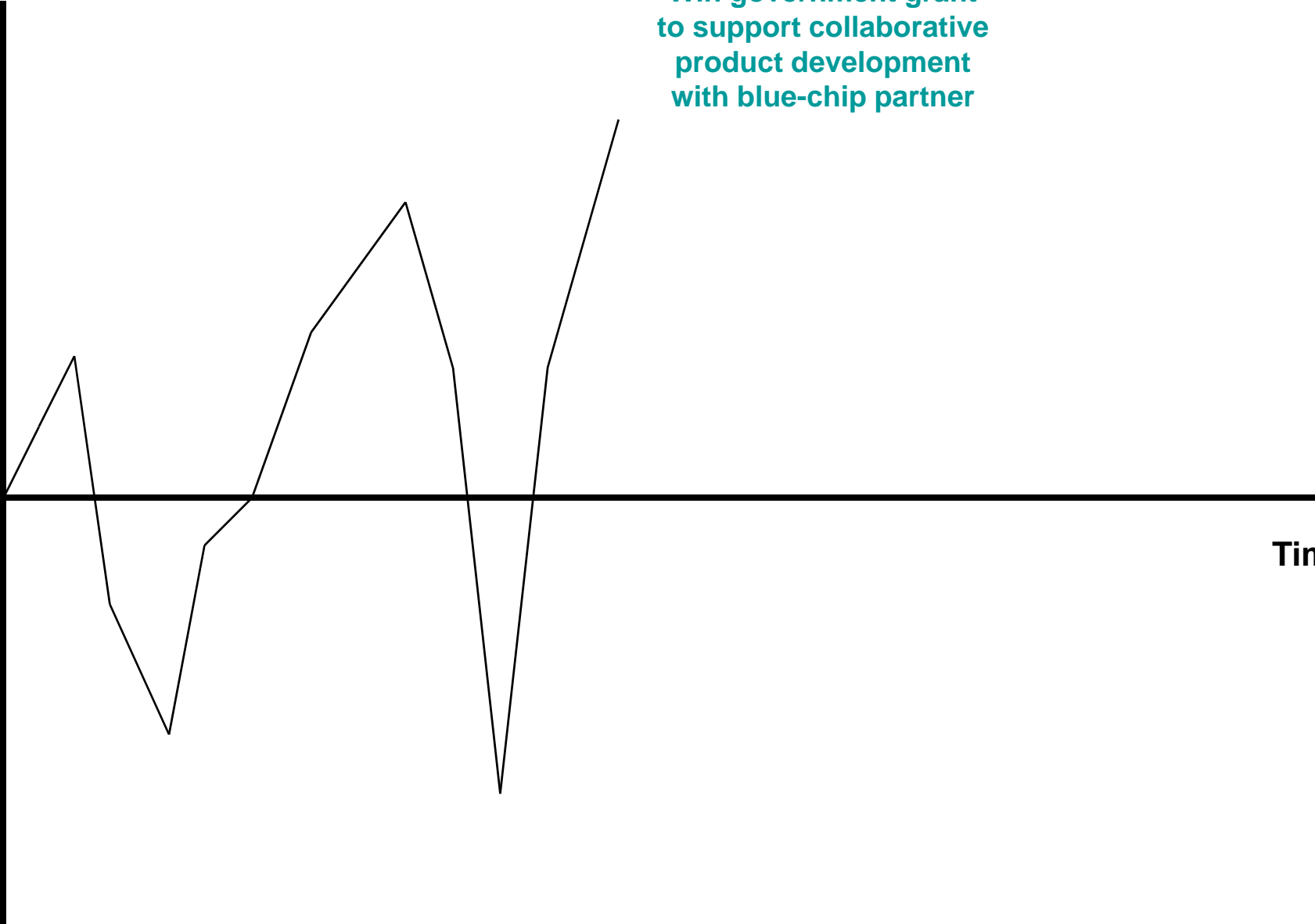
Emotional status

+

-

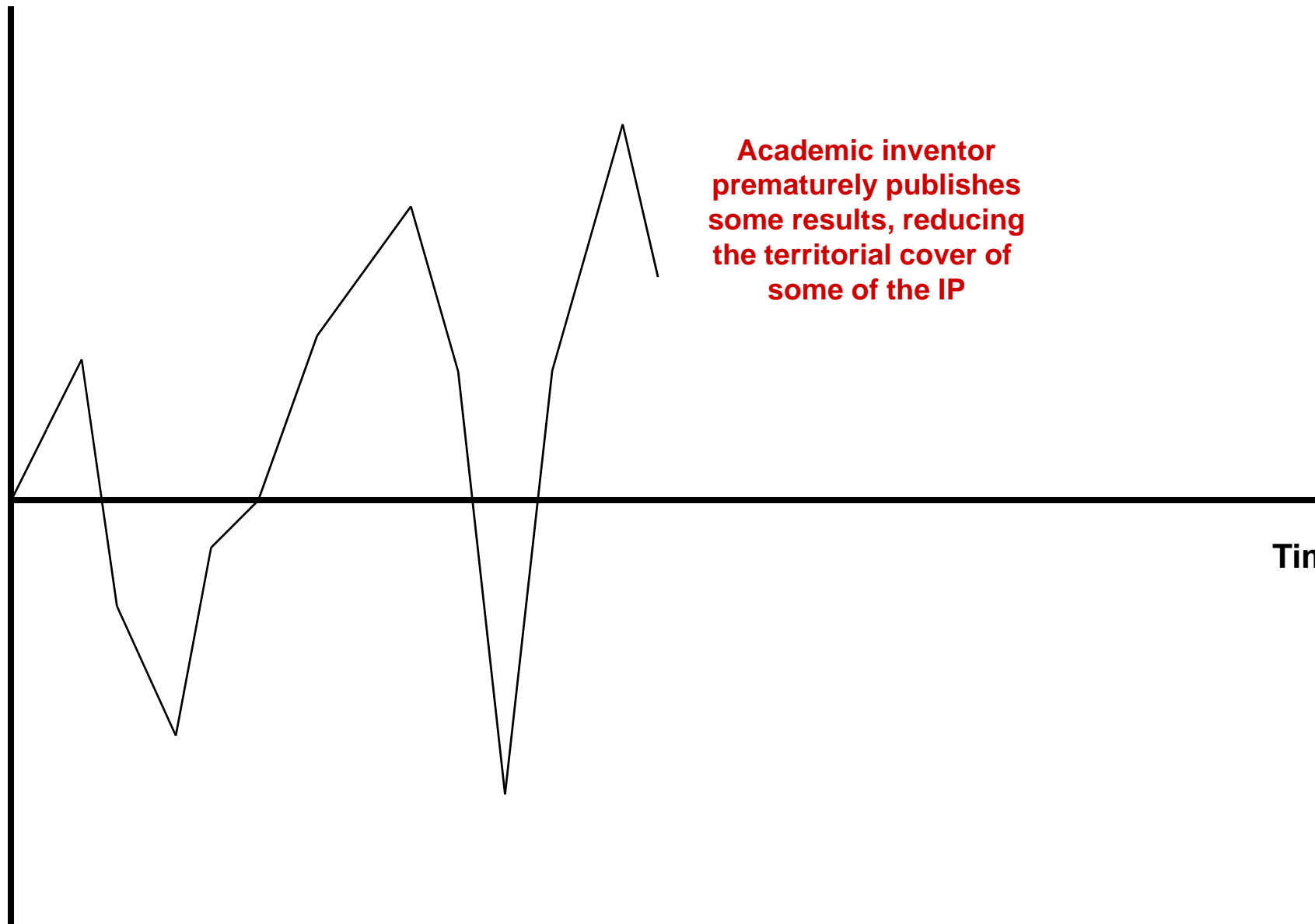
**Win government grant
to support collaborative
product development
with blue-chip partner**

Time



Emotional status

+



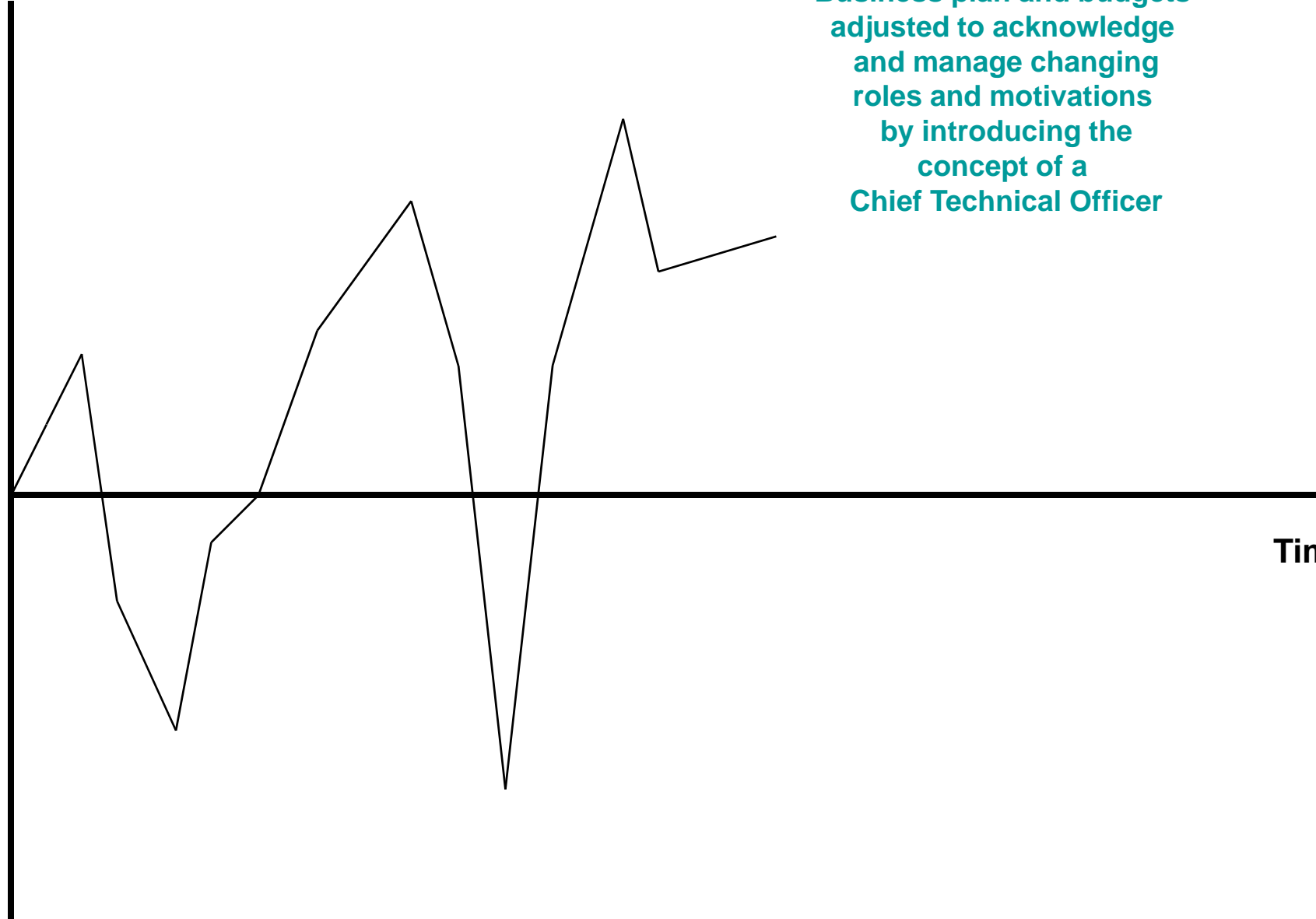
**Academic inventor
prematurely publishes
some results, reducing
the territorial cover of
some of the IP**

Time

-

Emotional status

+



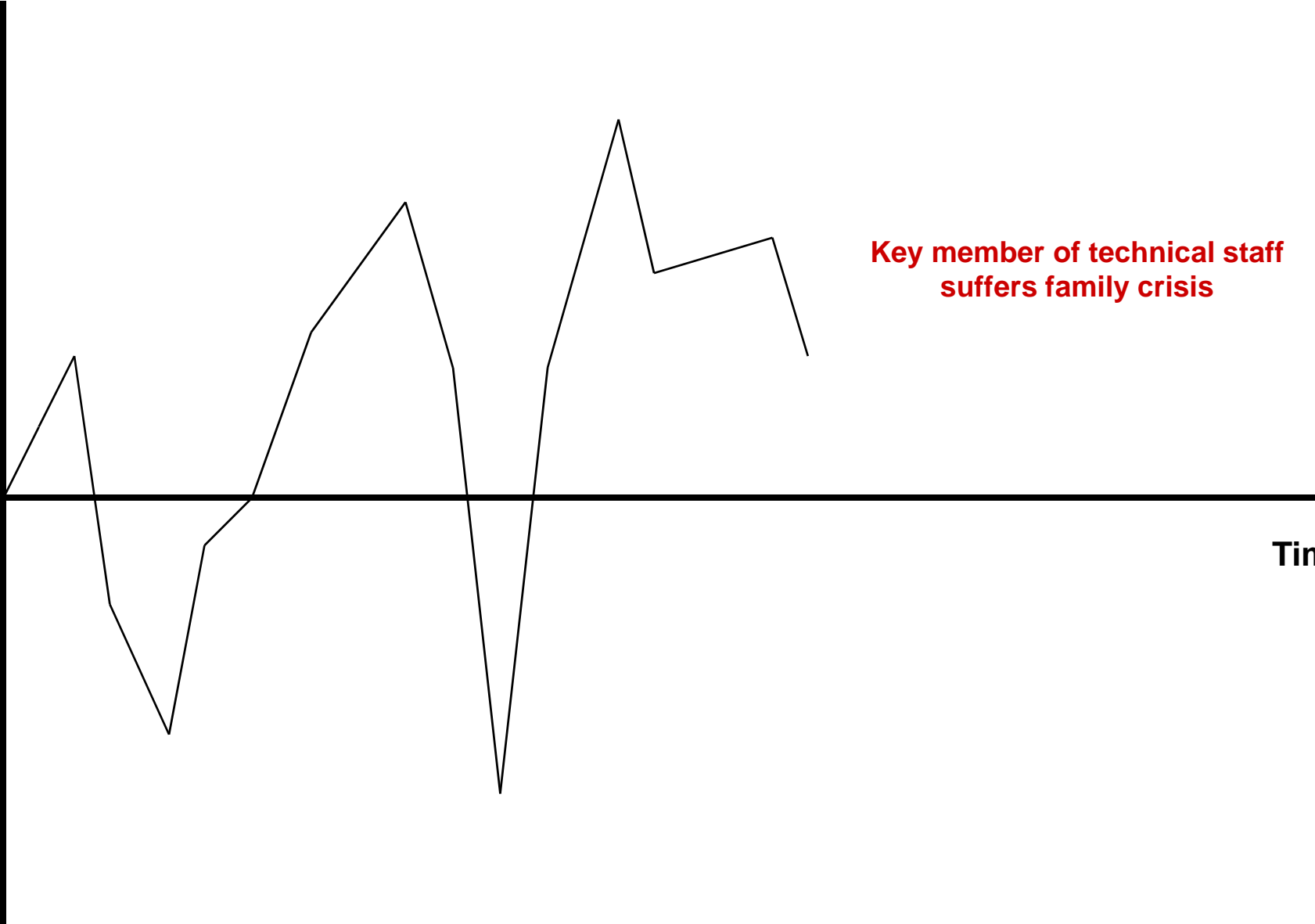
**Business plan and budgets
adjusted to acknowledge
and manage changing
roles and motivations
by introducing the
concept of a
Chief Technical Officer**

Time

Emotional status

+

-

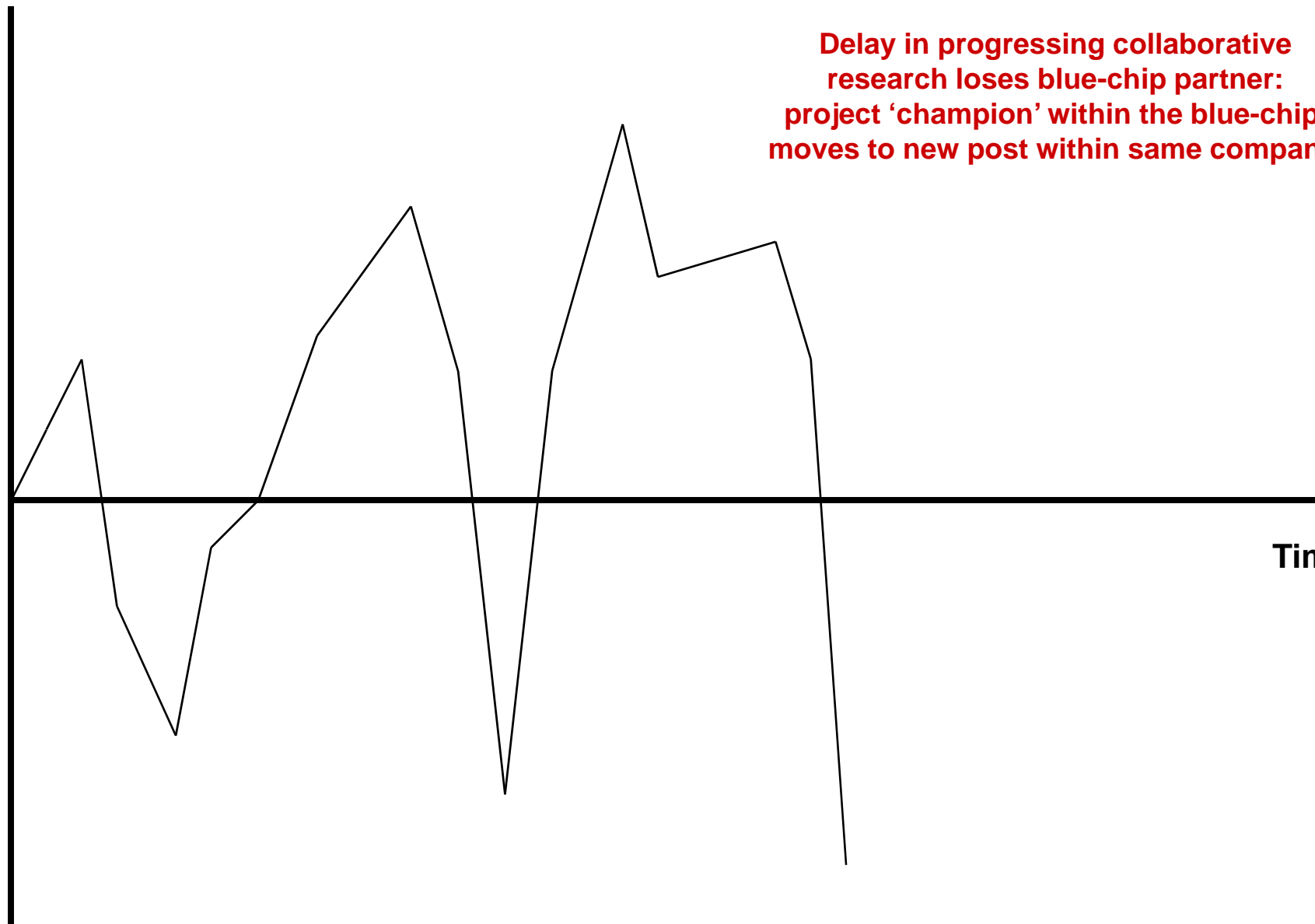


Key member of technical staff
suffers family crisis

Time

Emotional status

+



Delay in progressing collaborative research loses blue-chip partner: project 'champion' within the blue-chip moves to new post within same company.

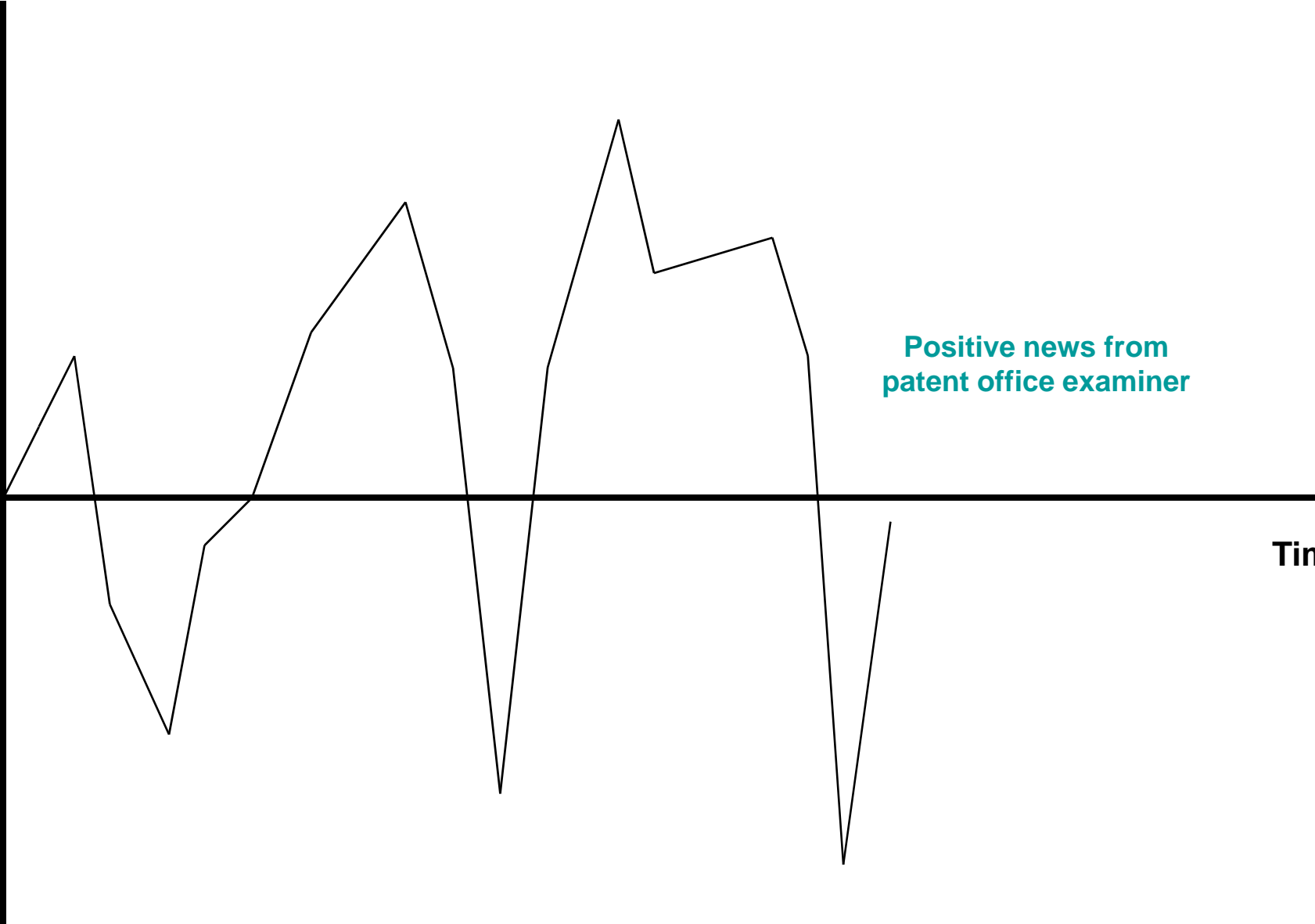
Time

-

Emotional status

+

-

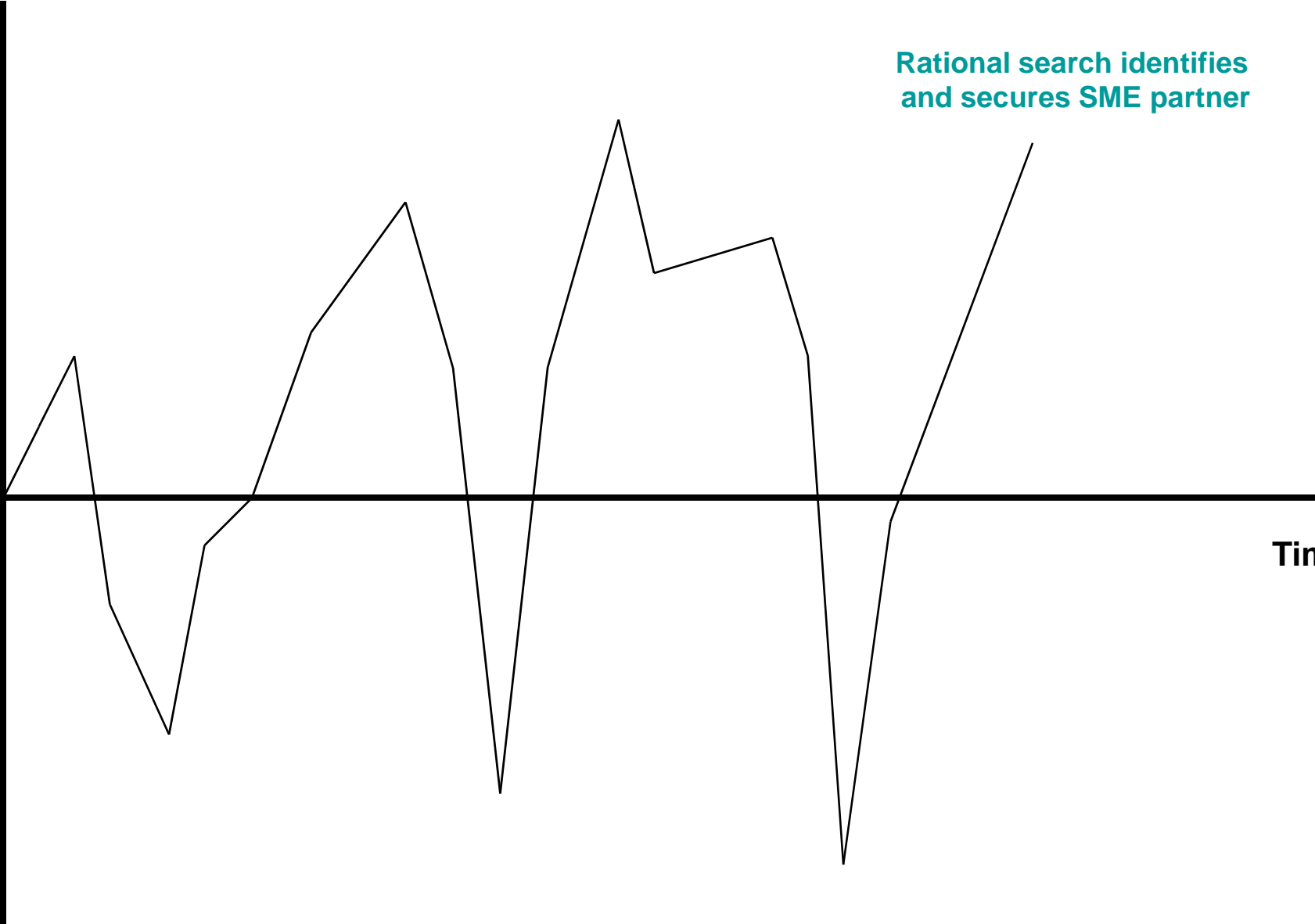


**Positive news from
patent office examiner**

Time

Emotional status

+



**Rational search identifies
and secures SME partner**

Time

Emotional status

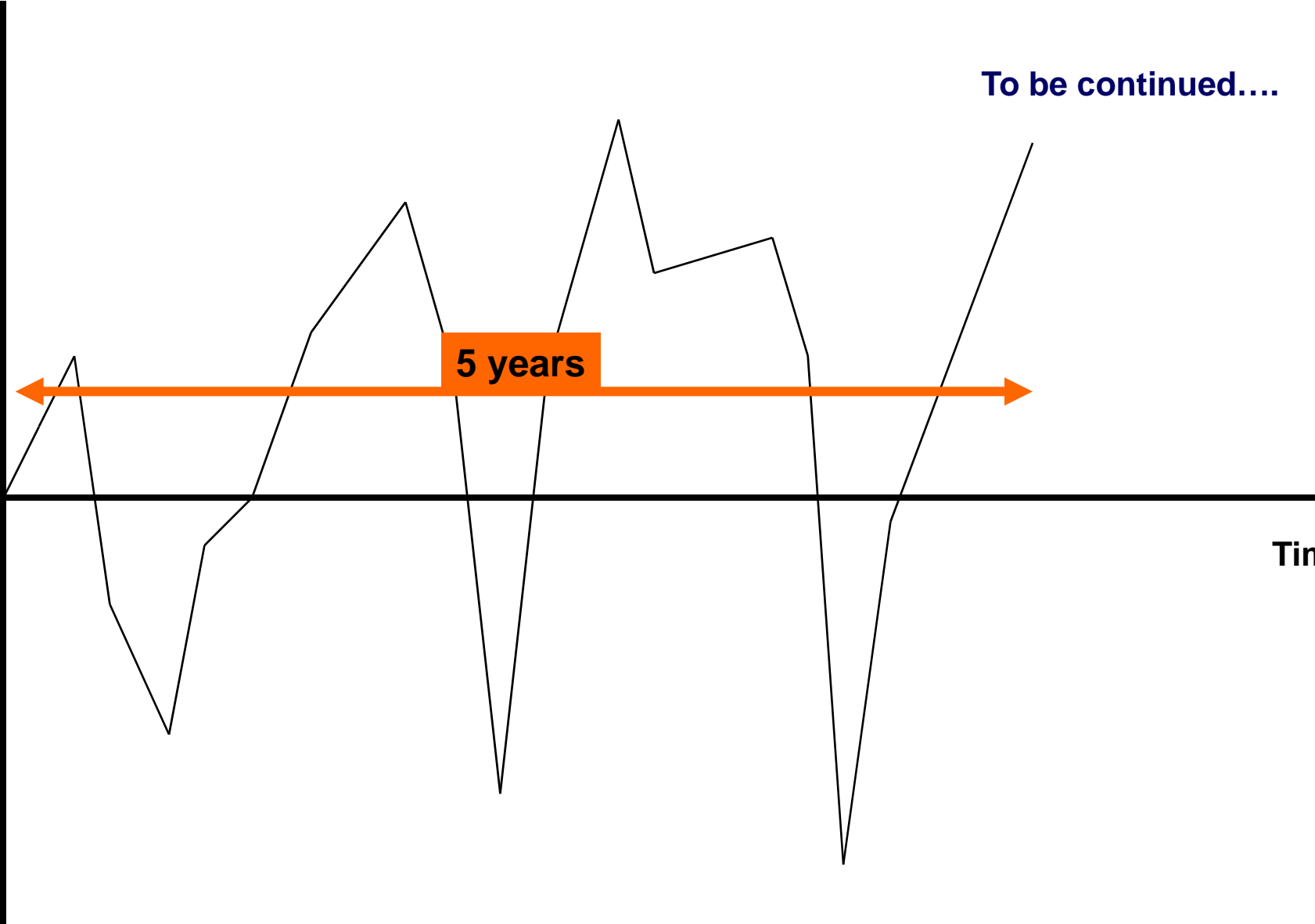
+

To be continued....

5 years

Time

-



Some Tips for Technology Transfer

- **Expect a long ride with highs and lows**
- **Expect good and bad luck**
- **Enjoy the process and keep going.**

- **Expect to devote a lot of time and effort to writing grants...being an entrepreneur won't spare you**
- **Test your market opportunity with prospective partners and investors (but do it safely)**
- **Stay open-minded about where the value lies... business plans are creative processes, not end-points.**

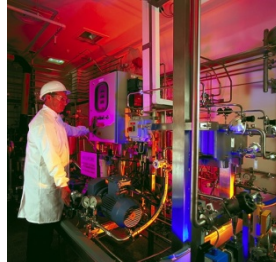
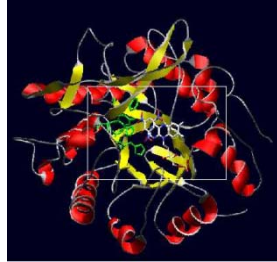
- **Recognise personality traits and divergent motivations and manage them proactively and positively**
- **Be clear about your own motivations and commitment and use that knowledge to build the right team.**
- **Look for 'chemistry' in people.**



Bit of a climb, but the view has got to be worth it

Thank you

gavin.clark@biosciencektn.com



Bioscience for Business is a UK Knowledge Transfer Network and the UK's most important conduit for bio-based technology business to engage with Government, other business, research & trade organisations.