A Framework for Internationalization

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Founder of Product Teacher

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Agenda

- Who are you?
- What is internationalization?
- General principles for roadmapping
- How to evaluate initiatives
- How to evaluate internationalization
- Derisking internationalization initiatives
- Lecture summary

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Who are you?

Name	Clement Kao
Mission	To make product management easier for everyone
Education	Graduated UC Berkeley in 2014 ● Majors: Molecular Cell Biology & Business ● Scores: 3.9 GPA, 770 GMAT, 168 GRE Math, 169 GRE Verbal
Career trajectory	Management consulting → user research → analytics → product mgmt
Accomplishments	● Shipped 10 multi-million dollar B2B products in 5 years ● Promoted from associate PM to group PM within 1.5 years ● Founder of Product Teacher, a PM education company ● 4 books, 100+ articles, 12+ videos, 20+ speaker events, 10+ podcasts (https://tinyurl.com/clement-kao-press-publications)

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Who are you?

Clement has published multiple books on Amazon:
- **Refining Your Product Skills** at
  https://www.amazon.com/dp/B08SQRL61T
- **Excellent Execution as a Product Manager** at
  https://www.amazon.com/dp/B08BWGPR8D
- **Breaking Into Product Management** at
  https://www.amazon.com/dp/1670792714

If you're looking for 1:1 coaching or other career services, check out Product Teacher at https://www.productteacher.com/

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What is internationalization?

Internationalization: "designing a software application so that it can be adapted to various languages and regions without engineering changes" ([Wikipedia](#))

Localization: "adapting internationalized software for a specific region or language by translating text and adding locale-specific components" ([Wikipedia](#))

Two step process
1. Platform-level investment (internationalization)
2. One-off work per region (localization)

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What is internationalization?

Part of a company's product strategy is to decide whether to go international - and if so, when

But, internationalization is *not* just translating languages!
- Information security
- Infrastructure
- Legal/compliance
- Business development and partnerships
- Marketing, sales, and relationship management
- Support and deployment

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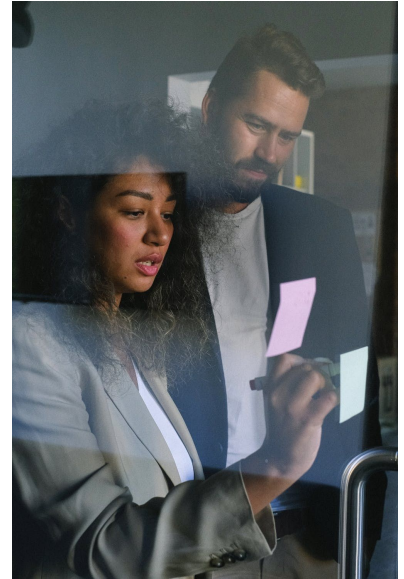
What is internationalization?

Keep the following gotchas in mind

Different regions exhibit **different market landscapes**, and shouldn't be bundled into just "global" opportunity
- E.g. China, Japan, Korea are very different from each other
- E.g. US, Canada, Britain, Australia, are very different from each other

The region you start in will heavily influence the next region you tackle next, since some regions (e.g. EU, ASIA, AMEA, etc.) will share similar attributes
- Legal frameworks
- User behavior
- Languages

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General principles for roadmapping

Before we decide whether to internationalize or not, let's first take a step back and look at general roadmapping principles

After all, "internationalization" is just one of many possible initiatives you could take!

Two core roadmapping principles
1. Tackle the highest ROI (return on investment) initiative first
2. Learn cheaply and quickly

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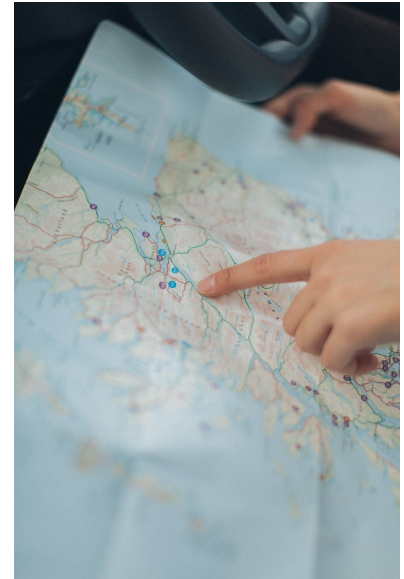
General principles for roadmapping

Tackle the highest ROI (return on investment) initiative first

Before we can do this, we need the following information
- What are the different initiatives that we're interested in?
- What is the benefit of each initiative?
- What is the cost of each initiative?

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How to evaluate initiatives

Return on investment is calculated as **"benefits" divided by "costs"**

Problematically, many times "benefits" can be quite squishy
- How do you quantify synergy?
- Or brand name?
- Or development velocity?
- Or platform stability?

And the same goes for costs
- Reputation risks?
- Competitor reactions?
- Unknown unknowns?

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How to evaluate initiatives

In an ideal world with perfect information, we could get monetary values for both "benefits" and "costs"

But since the important thing is just to *sequence*, that means we don't need exact numbers

Orders of magnitude are fine! In other words, we can use rough guesses to compare initiatives against each other
- T-shirt sizes: XS, S, M, L, XL
- Orders of magnitude: 1, 10, 100, …
- Fibonacci: 1, 2, 3, 5, 8, 13, …
- Powers of 2: 1, 2, 4, 8, 16, 32, …

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How to evaluate initiatives

How do we use orders of magnitude to sequence initiatives?

1. Grab all of the roadmap items that you're already aware of, and put them into a table
2. Set a standard definition for "benefits" so that you measure apples to apples
   - It helps to pick a past initiative and say "the benefit of that was X" so people all agree
   - Benefits aren't just linear; don't forget *synergies* across your platform
3. Do the same for "costs"
   - Similarly, pick a past initiative as the definition
   - Don't forget: engineering cost, partnership cost, enablement cost, legal/compliance time, etc.
4. Calculate ROI for each initiative: benefit / cost = ROI

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How to evaluate initiatives

Initiative	Benefit	Cost	ROI
Chat integration	1	1	1
Blockchain implementation	2	8	0.25
Technical SEO	8	4	2
Clean up home page	4	1	4
Refactor infrastructure	16	16	1

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How to evaluate internationalization

Internationalization is a bit different from our other initiatives though, because there are a couple of curveballs

The following context dramatically changes both "costs" and "benefits" analysis

- How many regions?
- Over what period of time?
- Which specific regions?
- How different are those regions from us?
- What does the competition look like in those regions?

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How to evaluate internationalization

You want to compare apples to apples, so don't analyze getting every single country at once

- Launching in a new region takes at least 1 year
- You can't tackle too many regions simultaneously

For roadmapping, pick the "easiest" next region to go after, and evaluate the costs and benefits over the next 1 year

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How to evaluate internationalization

To analyze benefits, look at total addressable market (TAM), e.g. number of applicable users X opportunity per user

- Don't forget the competitive landscape!
- Is it highly consolidated or fragmented?
- How much market share could you realistically take away in 1 year?

To analyze costs, be sure to also include setup costs

- Information security
- Legal/compliance
- Marketing/branding
- Operations

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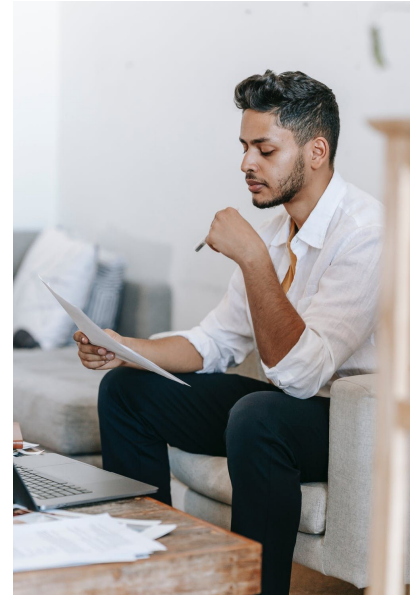
How to evaluate internationalization

Depending on your exercise, you'll have one of two outcomes
- Internationalization is a top priority (e.g. top 1 or top 3 in terms of ROI)
- Internationalization is not a priority

If it's not a priority, set it aside and put in "decision triggers" to decide when to evaluate it again

If it is a priority, then it's time to visit our second roadmapping principle: "learn cheaply and quickly"

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Derisking internationalization initiatives

It's not safe to fully build out internationalization platform investments, because they can be incredibly expensive

You can quickly test demand and validate your hypotheses about both the benefit and the cost

- Fake door testing
- Hardcoding

Always prioritize "cheap testing" over "full implementation", because speed of learning is crucial!

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Derisking internationalization initiatives

Fake door tests

You can build out the "entry point" into a new experience without actually building the whole thing

- Country / language switcher
- Map of available regions
- Homepage for a new region, but without other pages

Then, if a user clicks into your "fake door":

- Be transparent - let them know that you're testing demand and that the feature doesn't exist yet
- Be helpful - offer to sign them up on a mailing list

You can quickly test demand in < 2 weeks this way!

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Derisking internationalization initiatives

Hardcoding

The "right" way to internationalize is to make your platform more robust and enable componentization

But, that's expensive, so hardcode your first 1-3 regions outside of your initial launch region

Hardcoding means lots of messy "if-then" logic that is non-scalable, but it teaches you the following

- How expensive is this really going to be?
- What are the places where we need more abstraction?
- Where can we get away with more hardcoding in the future?

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Derisking internationalization initiatives

Once fake door tests validate "benefits" and hardcoding validates "costs", move forward with internationalizing

Work through the tradeoffs of "short term" vs. "long term"
- More hardcoding?
- Or actually time to "formally" internationalize?

Don't forget: launching in new regions is *inherently non-scalable* because each region has fixed costs
- Uber and Google failed to break into China
- eBay failed to break into Japan
- McDonald's failed to break into the Caribbean
- Starbucks failed to break into Australia and Israel

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Bonus insights: localization companies

If you are a localization vendor, you can increase internationalization priorities for potential customers

Increase potential benefits
- Demonstrate market demand for their products in other countries, e.g. market reports
- Help them run fake door tests to validate demand

Decrease potential costs
- Remember that translation isn't the hard part, internationalization is
  - Demonstrate *engineering* thought leadership in how to implement internationalization platform-wide changes (e.g. Oracle, MIT, ICU, Lokalise, Phrase, Transifex, Localazy)
  - Demonstrate *legal/compliance* thought leadership such as privacy (GDPR), encryption, EULAs, infosec, etc.
- Understand build vs. buy mentality; focus less on "monetary costs" and more on "opportunity costs"
- Get procurement standards, e.g. infosec, legal/compliance, reliability and disaster recovery, etc.

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Lecture summary

Internationalization is just one of many potential initiatives you can take to make your product more valuable
- Assess all of your initiatives for ROI (benefit / cost)
- Only the sequence matters, so orders of magnitude are okay
- Measure apples to apples for the "time horizon" of each initiative
- Pick a specific region to focus on, and not all at once

If it's the highest priority, then derisk it
- Run fake door tests to learn about benefits
- Hardcode your first 1-3 regions to learn about costs

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Q&A

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Appendix: selected talks by Clement Kao

[The Nuances of B2B Product Analytics](#) (Product School)

I discuss why B2B product analytics are much harder to tackle than standard B2C analytics, and how to think through various assumptions and workarounds

[How to Manage Uncertainty](#) (Fidelity Investments)

I provide a framework for managing and reducing uncertainty, and I also dive into how to deal with the emotions that come with uncertainty

[Stakeholder Empathy](#) (Cyclemeets)

I discuss how to establish empathy with stakeholders as a product manager

[Breaking Into Product Management](#) (Florian)

I reveal how to think like a hiring manager to help you to break into product

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