



prosUS

Edtech: Transforming Education through Technology

Larry Illg | CEO Edtech and Food

Disclaimer - Forward looking statements

Shareholders and noteholders are advised that the information, including the constant currency and pro forma financial information in this presentation has not been reviewed and reported on by the Company's external auditors and does not constitute a profit forecast.

This report contains forward-looking statements as defined in the United States Private Securities Litigation Reform Act of 1995 concerning our financial condition, results of operations and businesses.

These forward-looking statements are subject to a number of risks and uncertainties, many of which are beyond our control and all of which are based on our current beliefs and expectations about future events. Forward-looking statements are typically identified by the use of forward-looking terminology such as "believes", "expects", "may", "will", "could", "should", "intends", "estimates", "plans", "assumes" or "anticipates", or the negative thereof, or other variations thereon or comparable terminology, or by discussions of strategy that involve risks and uncertainties.

By their nature, forward-looking statements involve known and unknown risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Prosus cautions that forward-looking statements are not guarantees of future performance. These forward-looking statements and other statements contained in this report regarding matters that are not historical facts involve predictions. No assurance can be given that such future results will be achieved. Actual events or results may differ materially as a result of risks and uncertainties facing us and our subsidiaries. Such risks and uncertainties could cause actual results to vary materially from the future results indicated, expressed or implied in such forward-looking statements.

There are a number of factors that could affect our future operations and could cause those results to differ materially from those expressed in the forward-looking statements including (without limitation): (a) changes to IFRS and associated interpretations, applications and practices as they apply to past, present and future periods; (b) ongoing and future acquisitions, changes to domestic and international business and market conditions such as exchange rate and interest rate movements; (c) changes in domestic and international regulatory and legislative environments; (d) changes to domestic and international operational, social, economic and political conditions; (f) labour disruptions and industrial action; and (g) the effects of both current and future litigation.

The forward-looking statements contained in the report speak only as of the date of the report. We are not under any obligation to (and expressly disclaim any such obligation to) revise or update any forward-looking statements to reflect events or circumstances after the date of the report or to reflect the occurrence of unanticipated events. We cannot give any assurance that forward-looking statements will prove correct and investors are cautioned not to place undue reliance on any forward-looking statements.

Global education spend is massive and we are in the early days of Edtech adoption

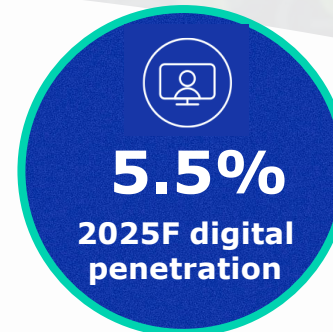
~US\$7.4tn



2025F Global Spend



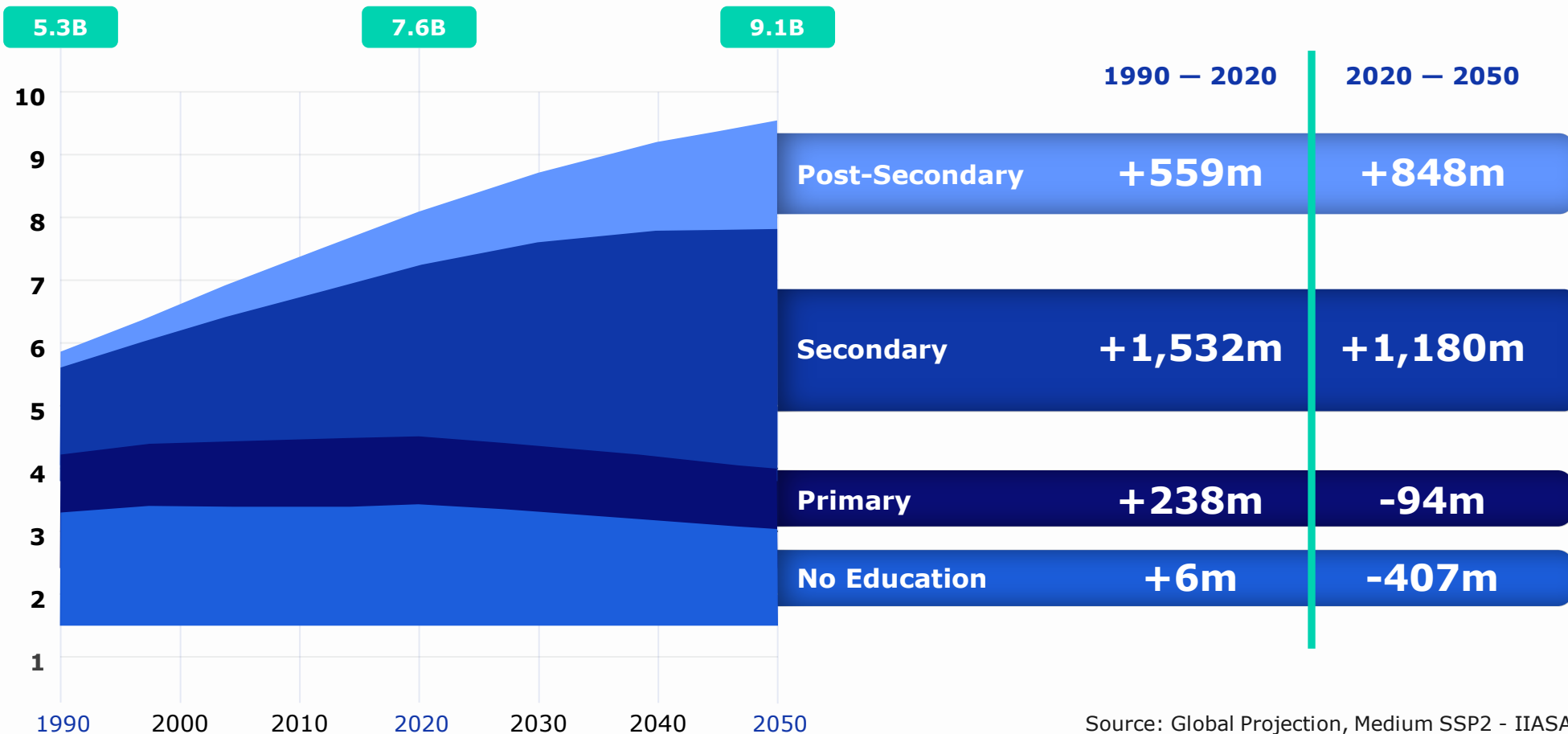
Education accounts for a large chunk of global DSP...



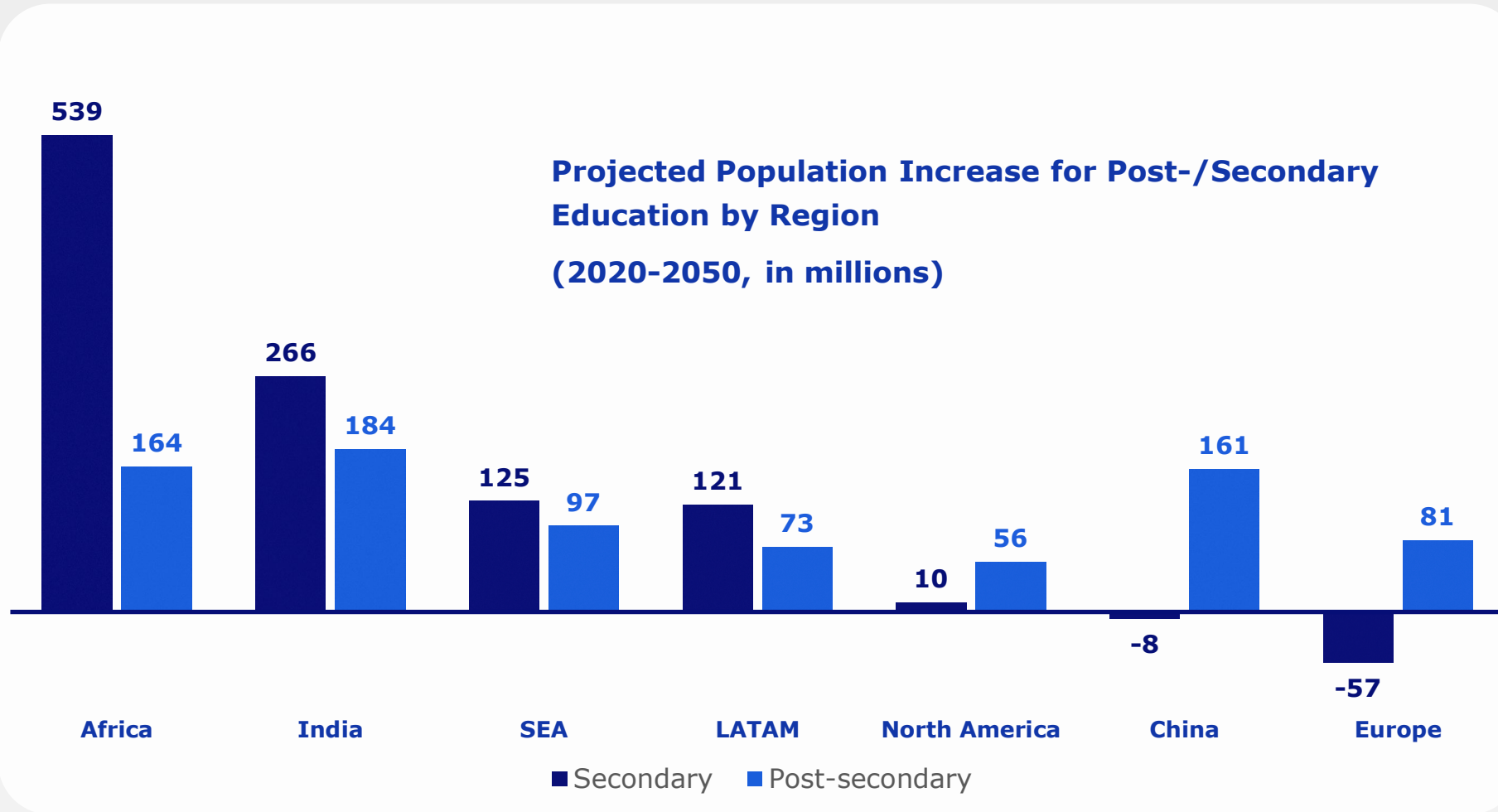
...and digital penetration is very low

Two billion new learners

Over the next 30 years, traditional education will not serve demand

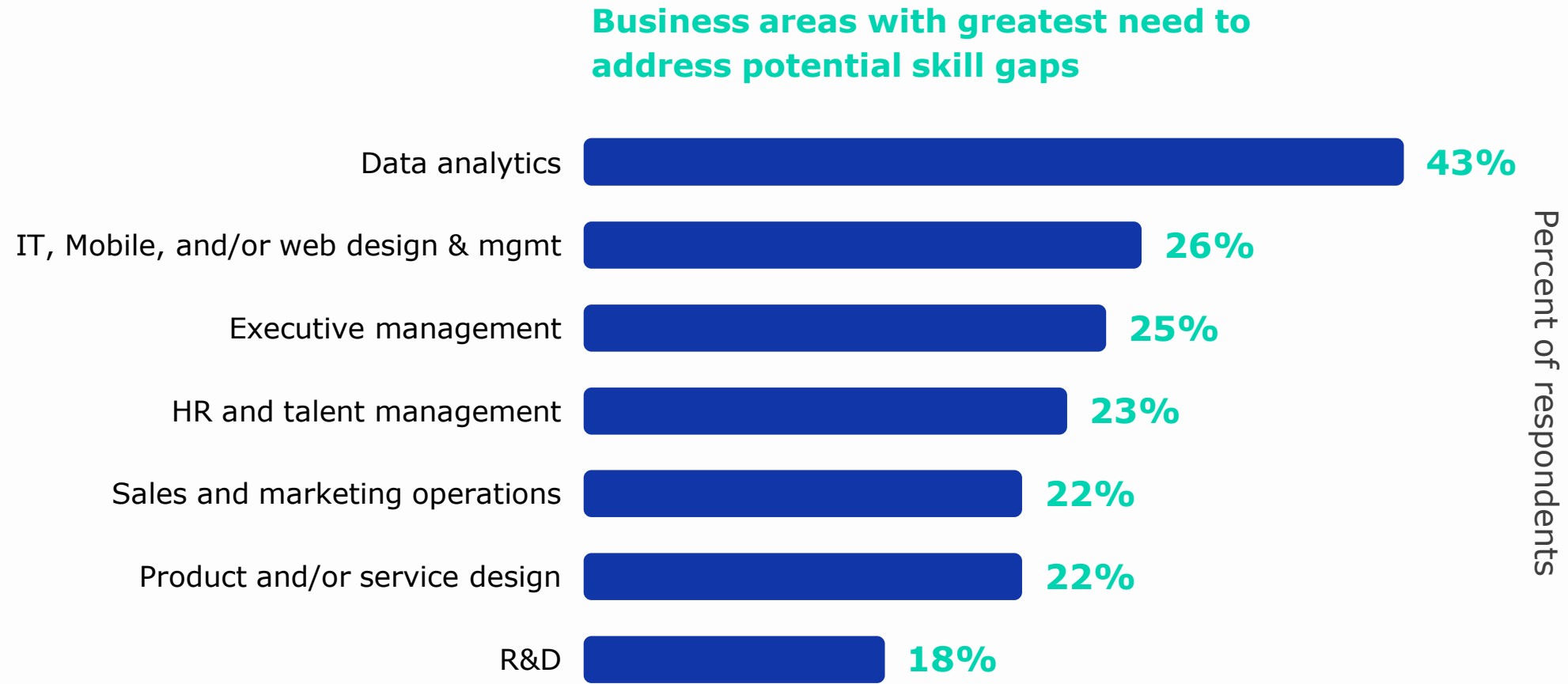


Secondary/post-secondary education in high-growth markets will not replicate the institutions of the West



Economics and demographics alone mean the physical institutions and education products from the West cannot reasonably be scaled to serve global needs

Lack of access will fuel a massive talent shortage, especially in tech



The foundations of education have been slowly changing as a result

Learning model



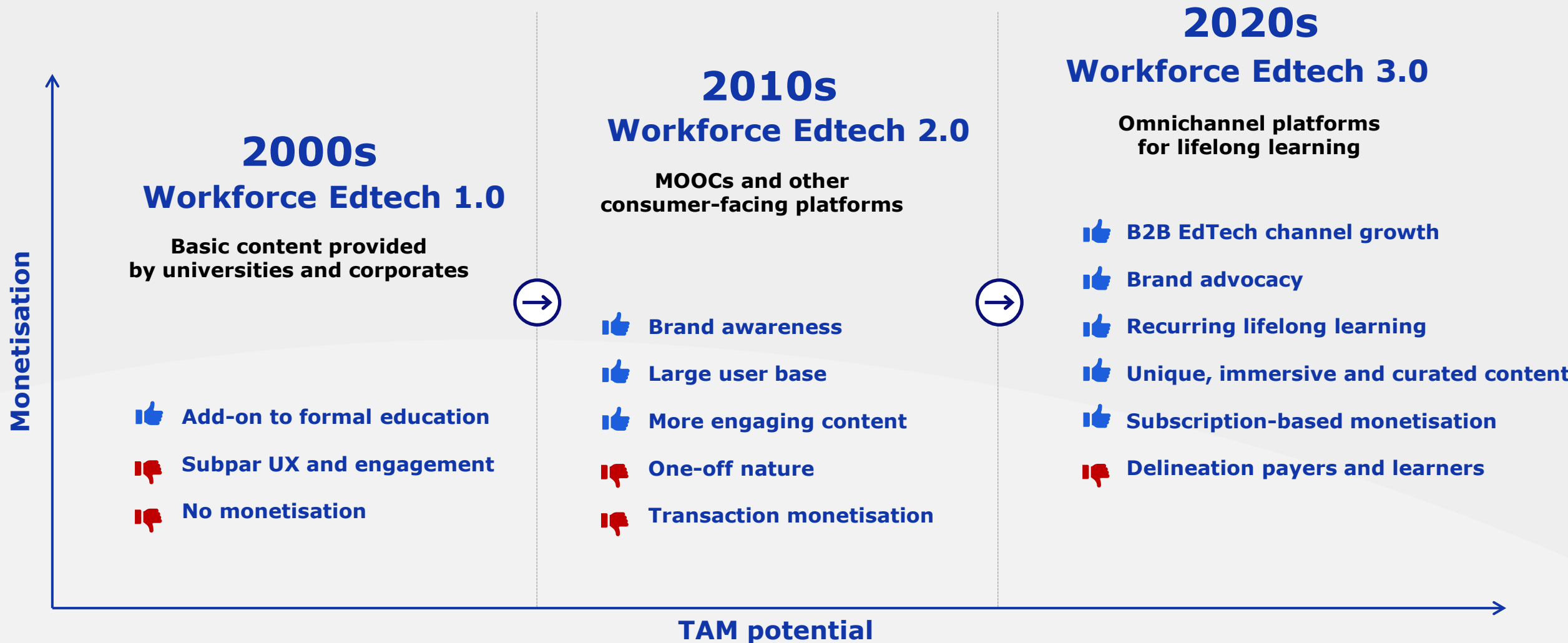
Theoretical	→	Practical
On-campus	→	Online
Group	→	Personalised
Instructor-led	→	Self-paced

Economics

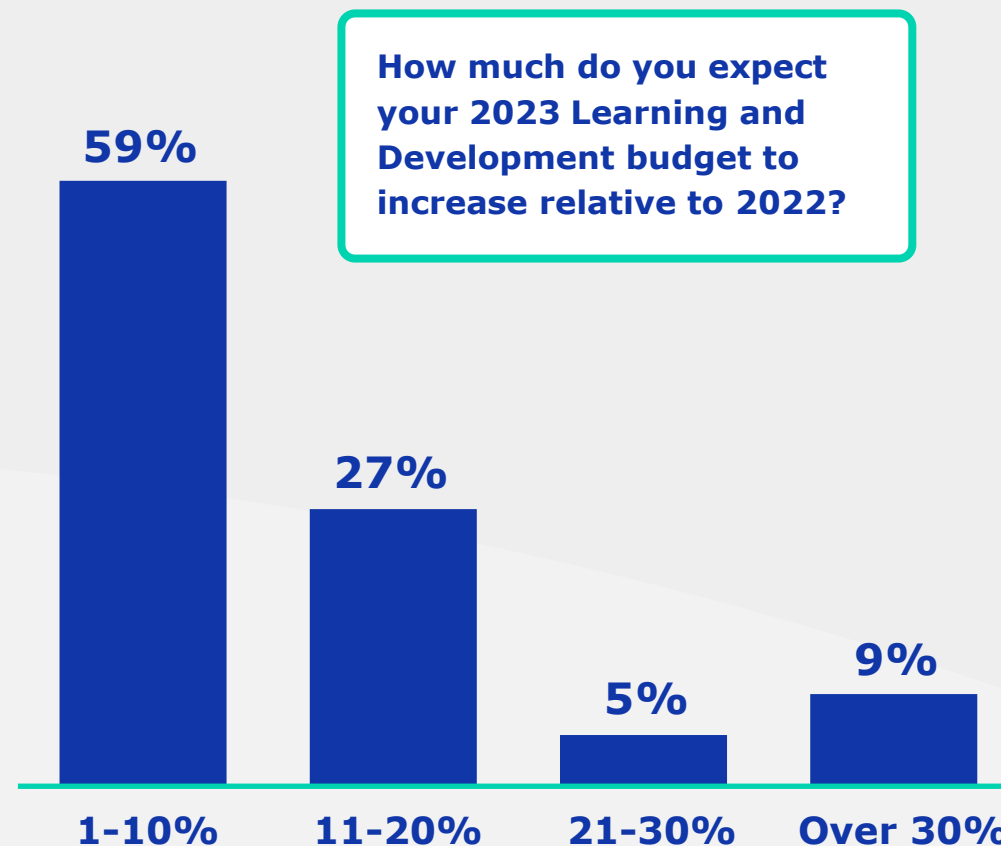
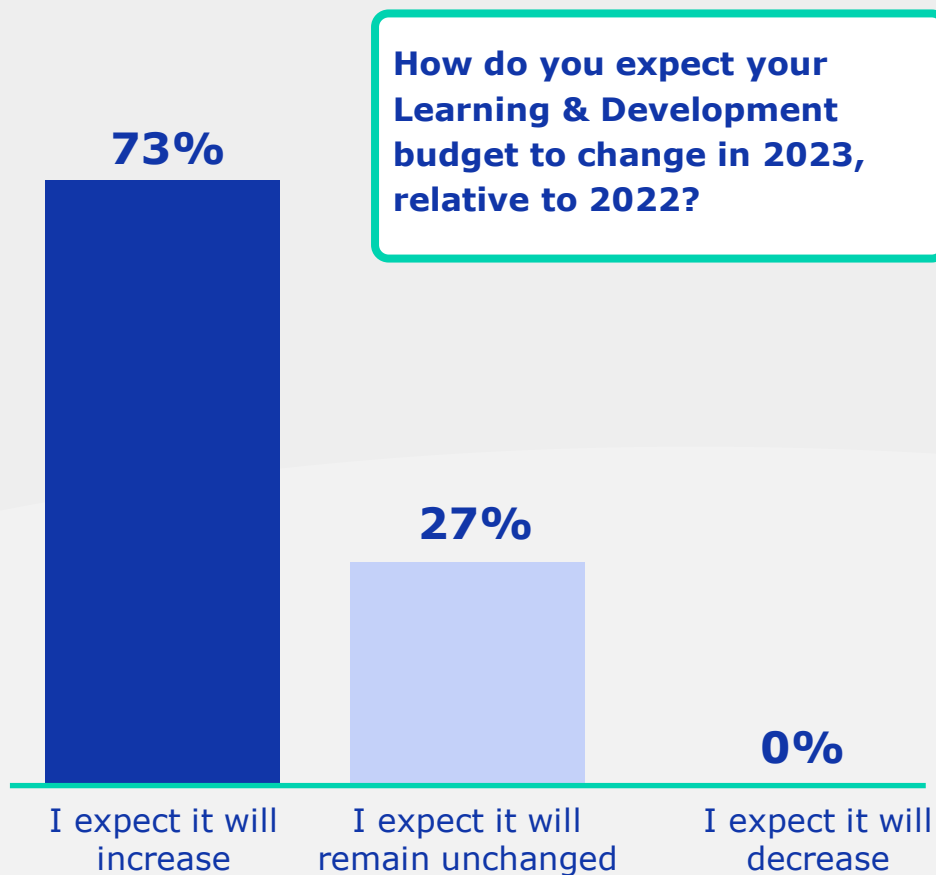


Gov't investment	→	Private spend
Fixed cost	→	Variable cost
Luxury good	→	Mass access
Local	→	Global

Workforce education has evolved over the past 20 years to address needs & increase monetisation



Companies continue to increase spending in Learning & Development



We have built a comprehensive Edtech portfolio, focusing on Workforce and Higher Education



Workforce/Higher Education



K12 education

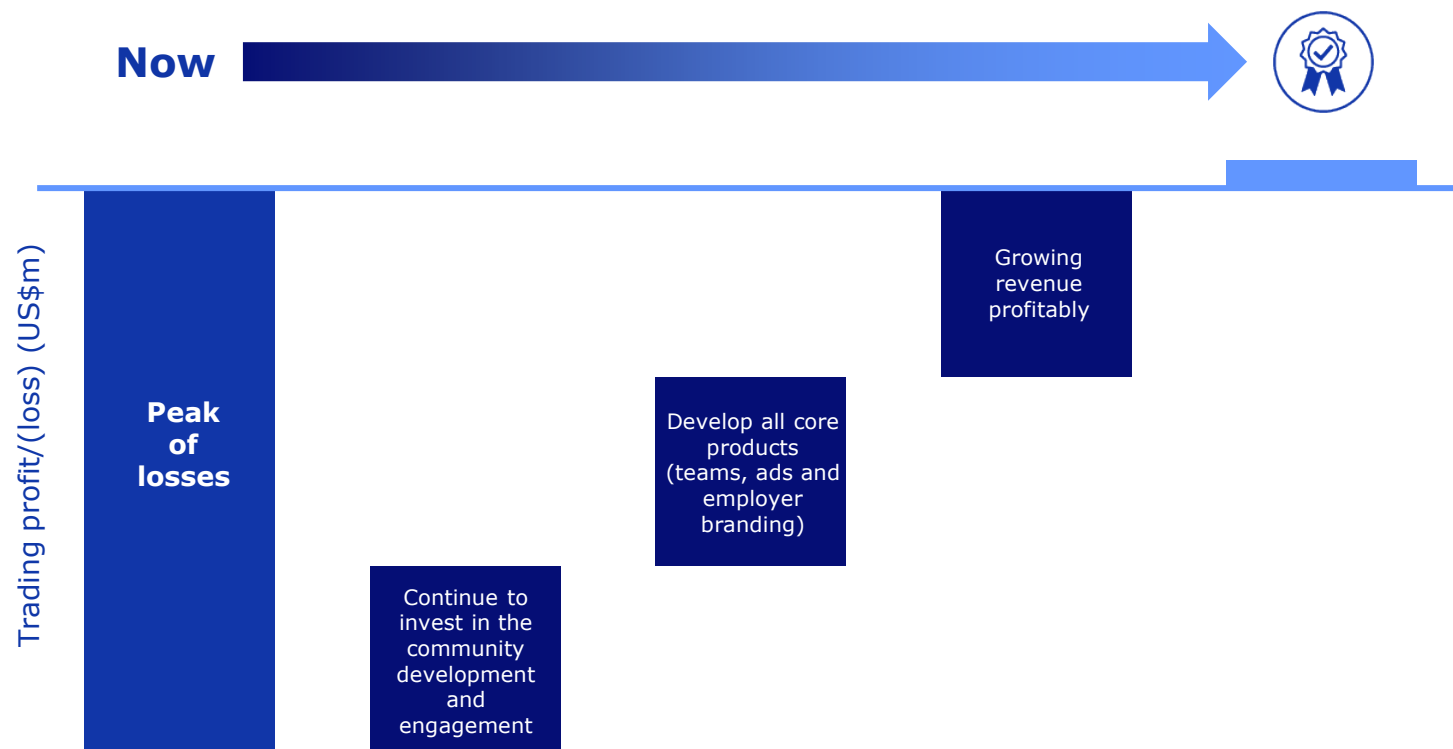


US\$3.8bn+ invested in a portfolio of 12 companies* across the globe

*Codecademy included in total invested; Codecademy was acquired by Skillsoft in April 2022

Our path to profitability and then healthy margins...

Path to profitability for Stack



Margin ambition¹



¹ Adj. EBITDA Margin as percentage of Net Revenue. Long-term and steady state margin ambition.

...which should lead to significant value creation

Current Stack valuation

Net asset valuation (US\$bn)¹

1.5

Nov-22

5-year valuation ambition

4 - 6x

Fast growth of Teams' product

Focus on the developers' experience boosting productivity and collaboration

Expand the product outside US

Enterprise GTM expansion

Alliances & Partnerships

Ads Value Drivers

Build employer branding on the largest developers' platform

Integrate additional value-added content (e.g., key Edtech content)

¹ The estimated market valuation is based on revenue growth and profitability internal estimations



stackoverflow.co

Prashanth Chandrasekar
CEO





stackoverflow

by the numbers

~100m+

monthly visitors to
StackOverflow.com

Top 200

website in the world

14s

every time a new
question is asked

52m+

questions and answers
to-date

81%

of developers surveyed
visit Stack Overflow weekly


50bn+

times Stack Overflow
content has been accessed



Our community is based in
179 countries
across the world



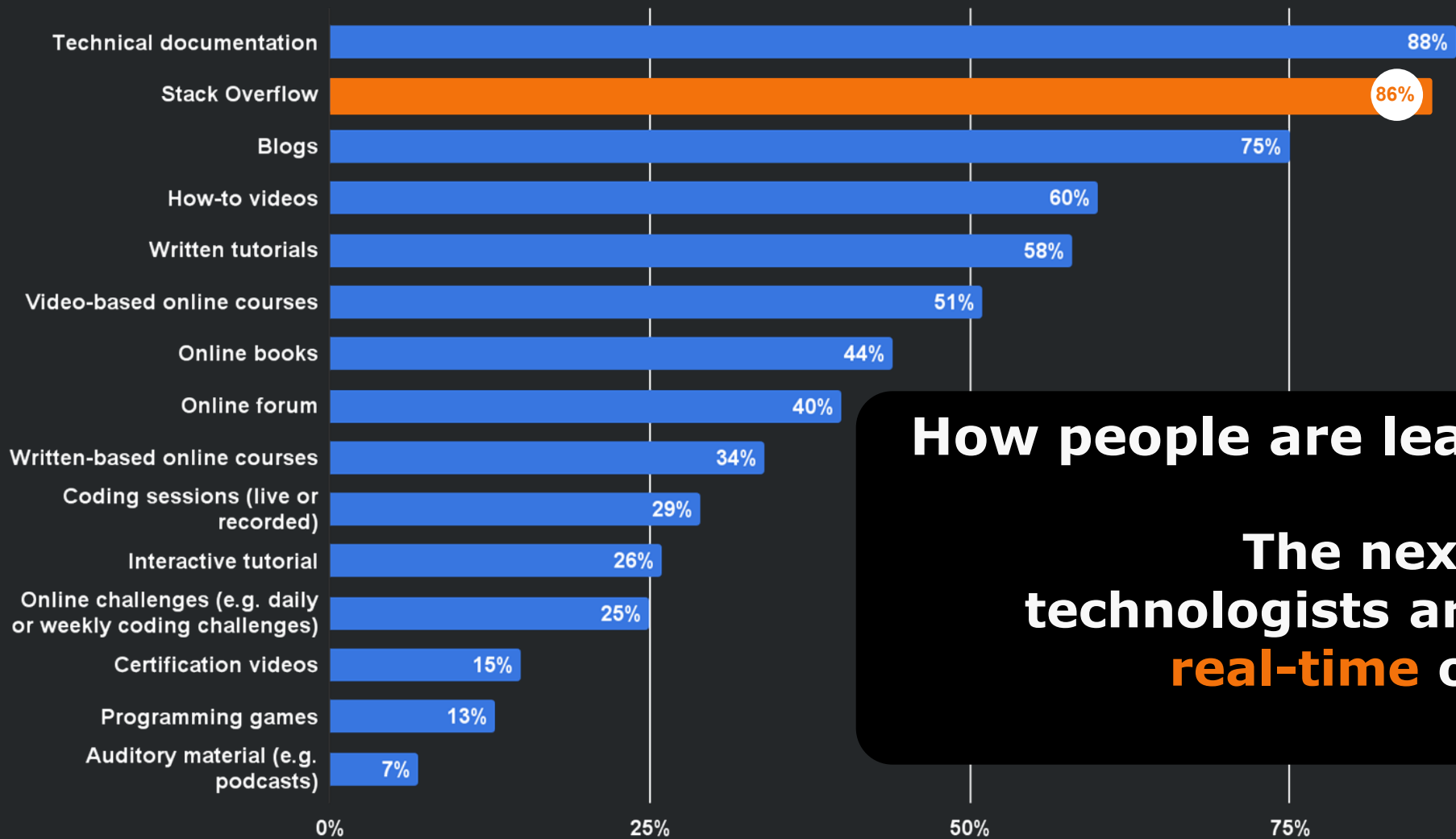
Number of users
Less  More





Today, around 70% of
developers **learn to code**
from online resources.





How people are learning to code:

The next generation of technologists are defaulting to **real-time online learning.**



The **problem.**



Core challenges for tech leaders



**Hiring, onboarding,
reskilling & retention**



**Executing big
technology transformations**

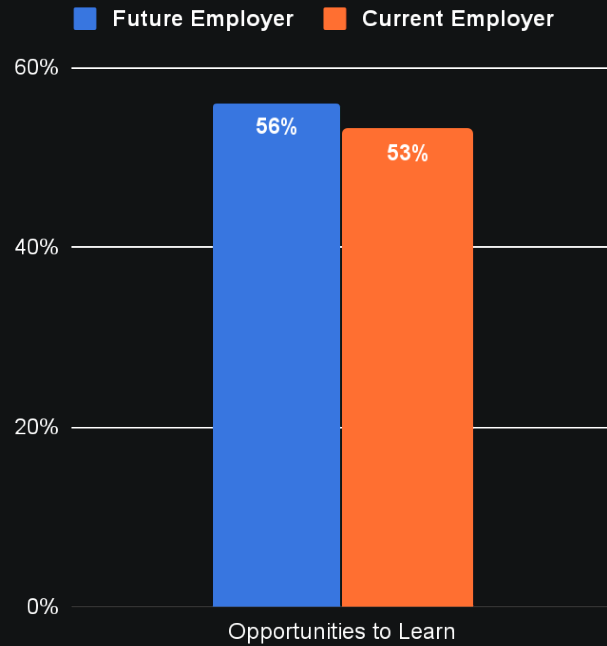


**Managing distributed
team environments**

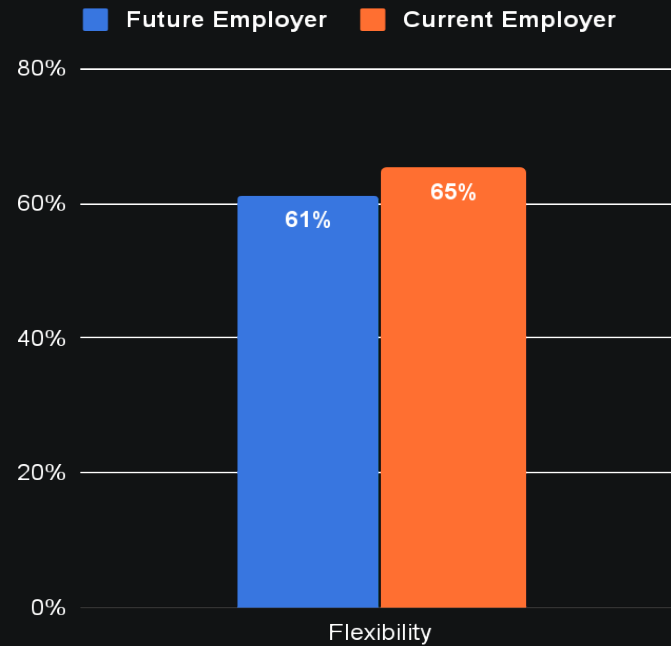


Core challenges for tech leaders

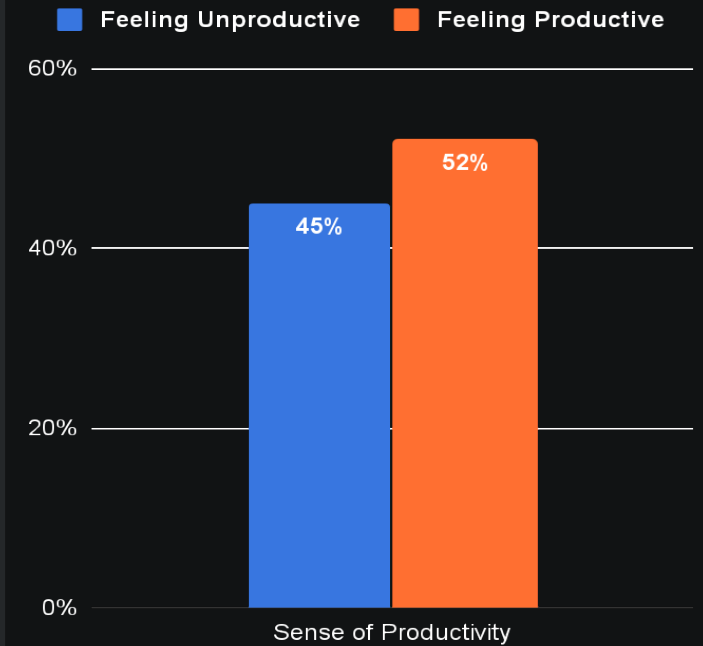
Hiring, onboarding, reskilling & retention



Over 50% of developers say **opportunities to learn** are important to them.



Over 60% of developers say **flexibility** is important when evaluating current and future employers.



Around 50% of developers say **productivity** contributes to happiness at work.



Core challenges for tech leaders



**Hiring, onboarding,
reskilling & retention**



**Executing big
technology transformations**



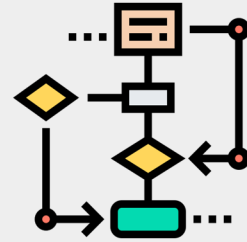
**Managing distributed
team environments**





Core challenges for tech leaders
Executing big technology transformations

Enterprises are
executing large,
multi-year
technology
transformations.



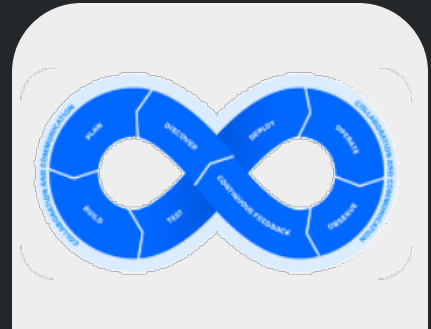
ML & AI



Security



Cloud transformation



Dev Ops



Core challenges for tech leaders



**Hiring, onboarding,
reskilling & retention**



**Executing big
technology transformations**



**Managing distributed
team environments**



Core challenges for tech leaders

Managing distributed team environments

62%

of devs spend
over 8 hours a
month
searching for
answers.



46%

of devs spend
over 8 hours a
month answering
others' questions.

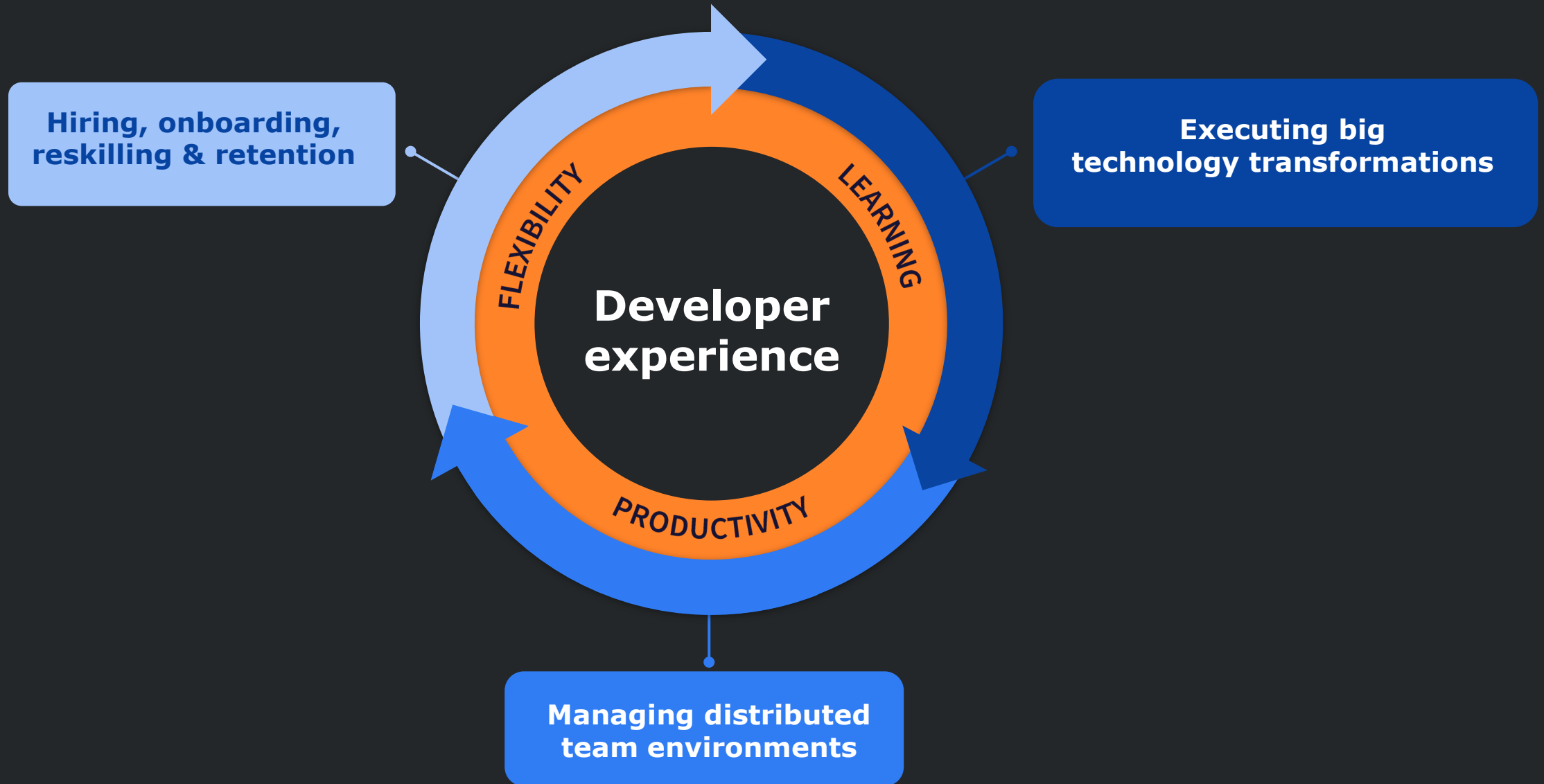


Over 50%
of devs encounter
knowledge silos
every week.

Staying in the FLOW STATE...



The answer: focusing on the developer experience



Stack Overflow's products

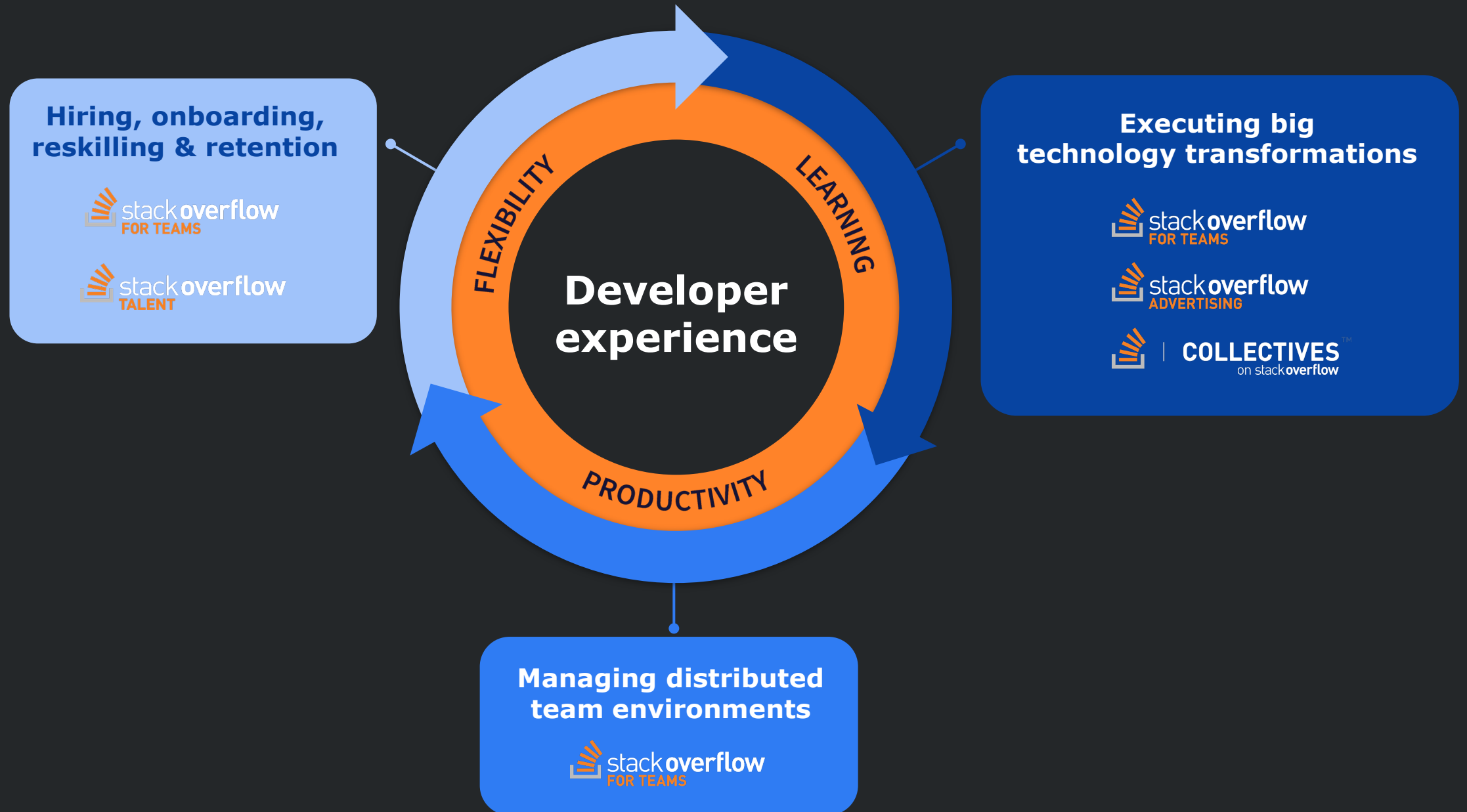


A woman with long dark hair and a man with glasses are looking at a computer monitor in a dimly lit office. The woman is leaning over the man's shoulder, pointing at the screen. The man is sitting at the desk, typing on a keyboard. In the background, another person is visible working at a desk, and there is a brick wall and a potted plant on the desk.

OUR VISION

To become the most valuable destination for the world's current and next generation of technologists.

Stack Overflow's products hyper focus on the developer experience



180+ free sites

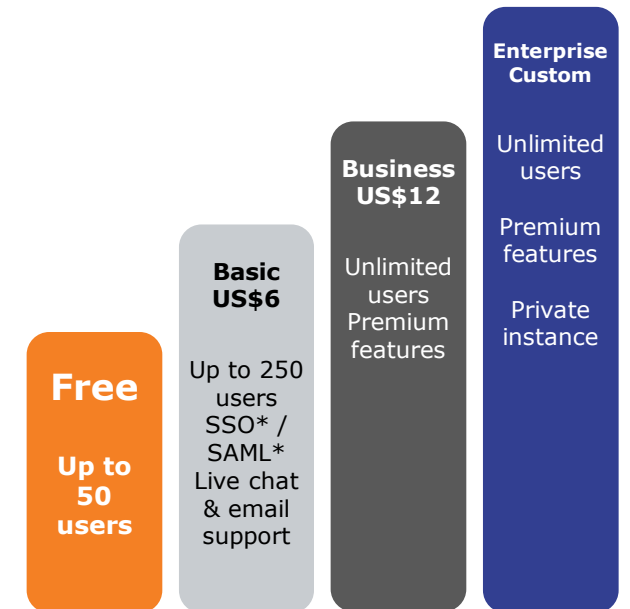
~100m+
Monthly Visitors



Advertising business model



SaaS business model



Product tiers / Monthly price per seat



Sub-communities within the public platform that centralise content around technologies and connect developers directly with the maintainers.



~668k
total questions and answers



186 tags associated



308.3k questions in collective



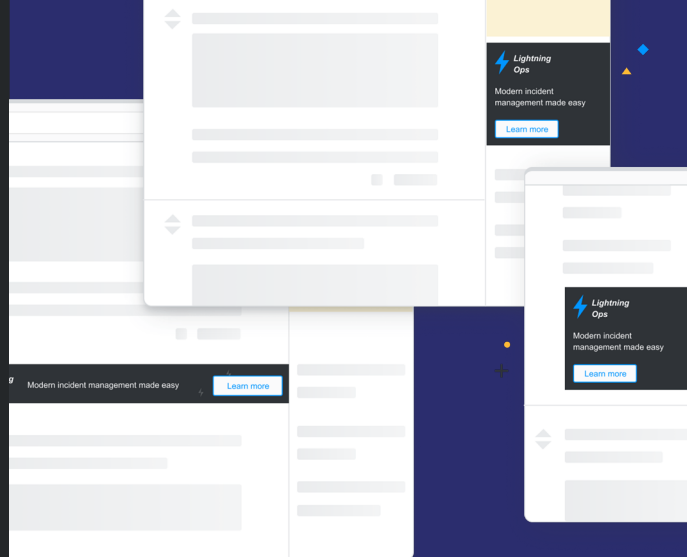
8.5k answers recommended



111 Google Cloud Recognized Members



Created May 12, 2021



- **Banner advertising**
- **Direct-to-developers**
- **Topic tag sponsorships**
- **Site sponsorships**
- **Newsletter advertising**
- **Podcast advertising**
- **Sponsored podcasts**
- **Sponsored blog posts**



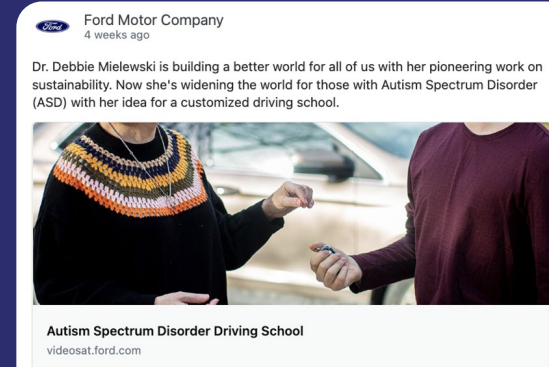
Build a community through company stories



Post links to new content on company pages

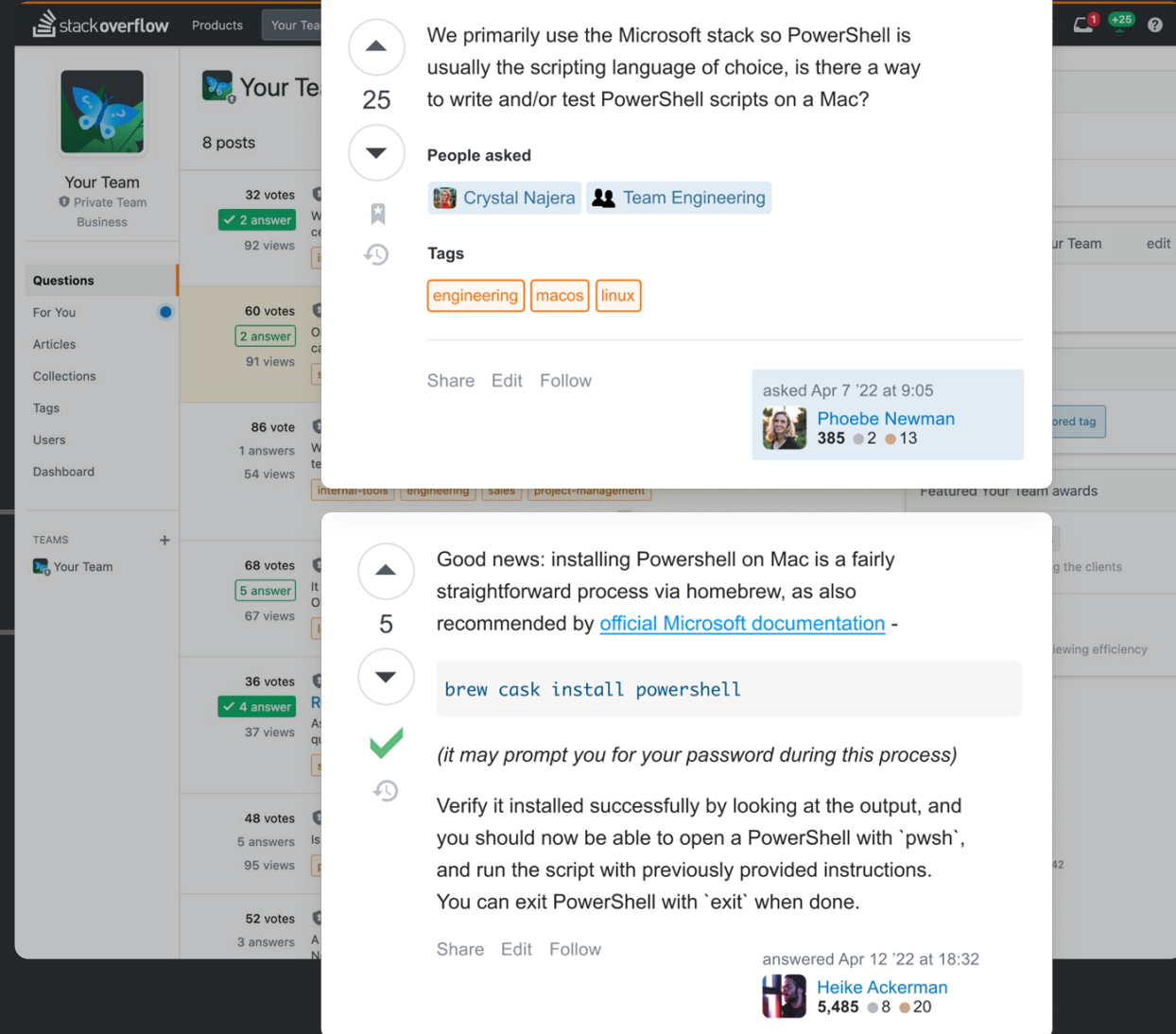


Enable users to discover companies to work for



We support and enable the key value drivers for developers and technologists

- ✓ Attract, onboard and retain top talent
- ✓ Boost team productivity and collaboration
- ✓ Accelerate innovation within your teams



The screenshot shows a Stack Overflow team page for 'Your Team'. The page displays a list of questions and answers. The top question is 'How to install PowerShell on a MacOS machine?' asked by Crystal Najera. It has 25 votes and 2 answers. The top answer is by Heike Ackerman, with 5 votes and 20 upvotes. The answer provides instructions on installing PowerShell on a Mac using Homebrew.

How to install PowerShell on a MacOS machine?
Asked 2 months ago · Active today · Viewed 4k times

We primarily use the Microsoft stack so PowerShell is usually the scripting language of choice, is there a way to write and/or test PowerShell scripts on a Mac?

People asked
Crystal Najera · Team Engineering

Tags
engineering macos linux

Share Edit Follow

asked Apr 7 '22 at 9:05
Phoebe Newman 385 ● 2 ● 13

Good news: installing Powershell on Mac is a fairly straightforward process via homebrew, as also recommended by [official Microsoft documentation](#) -

```
brew cask install powershell
```

(it may prompt you for your password during this process)

Verify it installed successfully by looking at the output, and you should now be able to open a PowerShell with `pwsh`, and run the script with previously provided instructions. You can exit PowerShell with `exit` when done.

Share Edit Follow

answered Apr 12 '22 at 18:32
Heike Ackerman 5,485 ● 8 ● 20

The **new tech stack** is enabling big transformations and needs robust knowledge sharing

Cloud



Code hosting



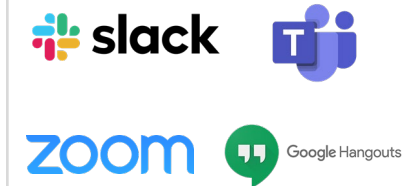
Developer tools + ops



Project management



Real time chat ops



Collaborative knowledge sharing & internal communities



Office 365



ATLASSIAN
Confluence

68%

FY22 Bookings growth

115%

FY22 enterprise NRR

US\$289k

Q4 FY22 enterprise ASP

 PURESTORAGE

 Sony Interactive Entertainment

TOSHIBA

 Carrier

 CROWDSTRIKE

Viasat 

 InterSystems[®]
Health | Business | Government

 AngloAmerican

 chewy

AMD 

 Anheuser-Busch

ASML

ING 

 ServiceLink

 hp

WIDEX[®]
HIGH DEFINITION HEARING

NOKIA

logitech 

FACTSET

 CITY NATIONAL BANK
The way up.™

 Prudential

Quicken Loans

 gamesys group

zendesk

intel

flexport.

PHILIPS

 blend

 standard chartered

box

intuit.

HubSpot 

 zoominfo

 LinkedIn

 imc

 washington river protection solutions
an ormatum-led company

citrix

 flatiron.

 CISCO

 Microsoft

EA

SYNOPSYS[®]

 airbnb

Johnson Controls 

 Chevron

 FINASTRA

 SAP

 Dropbox

RALLY

 redis

 AUTODESK

 dynatrace

verizon 

3M

 Abbott

VERAFIN

vmware

BCG BOSTON CONSULTING GROUP

 IHS Markit

 Verisk

 APP ANNIE

 NOVARTIS

PROGRESSIVE

JUNIPER NETWORKS

Bloomberg

indeed

The Motley Fool 

 Spotify

TechD·vision

CRUISE

Walmart 

CARMAX

 CVS

ebay

Kroger


MARKS & SPENCER



 Cigna

EIS GROUP 

 Liberty Mutual INSURANCE

 NASA Jet Propulsion Laboratory
California Institute of Technology

What's **next**?

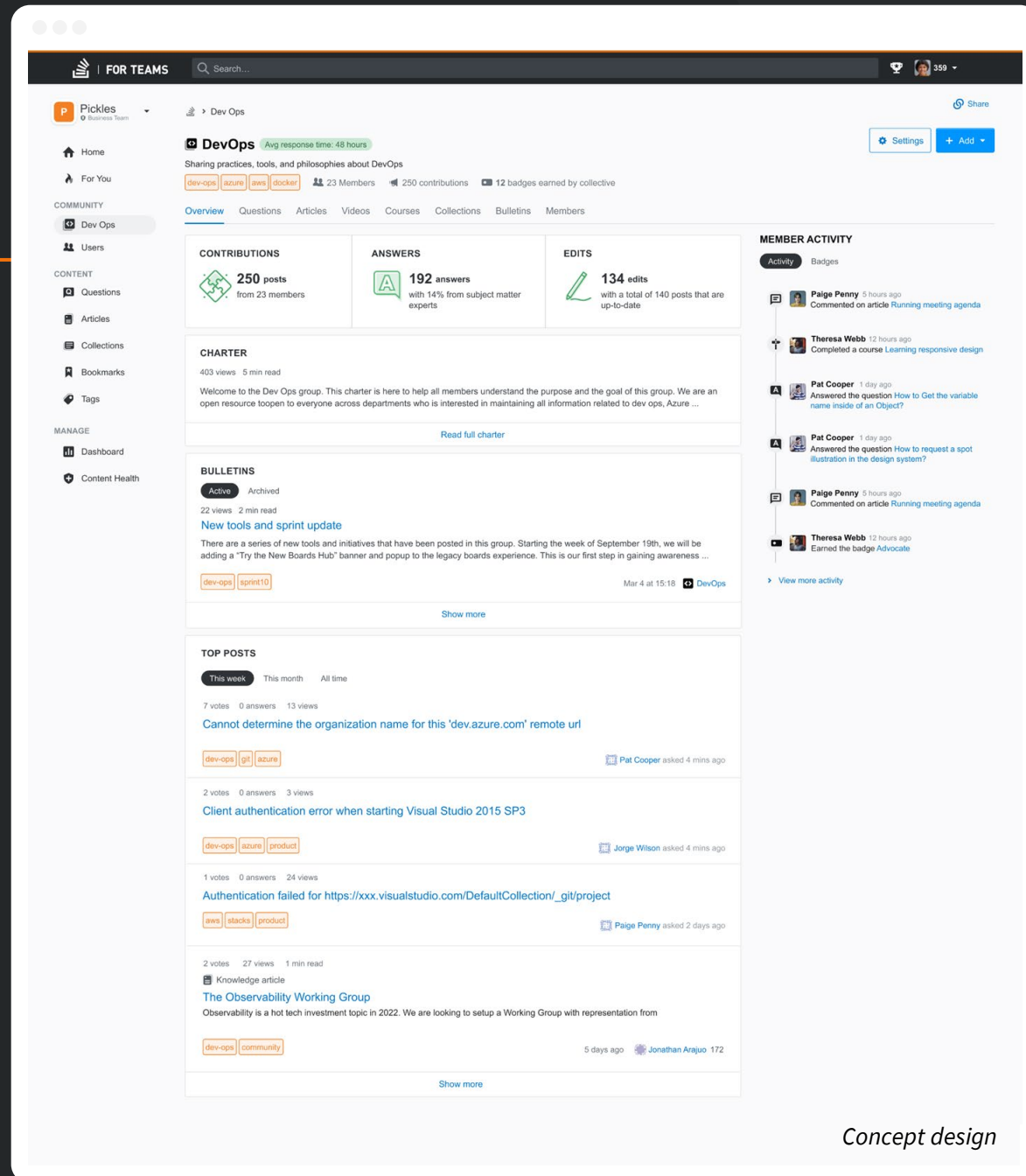




Communities within Stack Overflow for Teams

A home for your guilds, chapters, communities of practice

- Establishes horizontal sub-communities at companies
- Breaks down silos across orgs. and promotes collaboration
- Enables curation of relevant content
- Drives higher adoption and NRR



Concept design





Curating outside content for Teams

Starting with bringing in relevant Stack Overflow content

- Bridges public Stack Overflow and Stack Overflow for Teams
- Drives immediate value to customer by lowering time to build internal Stack community
- Promotes faster user adoption and ARR

The screenshot displays the Stack Overflow for Teams interface. At the top, there's a header with the 'FOR TEAMS' logo and a search bar. Below this, a sidebar on the left contains navigation links for Home, For You, Community, Dev Ops, Users, Content (Questions, Articles, Collections, Bookmarks, Tags), and Manage (Dashboard, Content Health). The main content area shows a question titled 'How to update Ruby Version 2.0.0 to the latest version in Mac OSX Yosemite?'. The question is marked as 'Accepted answer' and has 21 votes. The answer provides a terminal command to install the latest version of Ruby using RVM. The right sidebar contains an 'Import history' section, 'Importer notes', and 'Tags' (security, ruby, mac, it-helpdesk). The bottom of the page shows '3 other answers' and a 'Brew only solution' section.

Why am I getting an error when trying to update Ruby on Mac?

Asked 5 days ago Modified 1 day ago 52 views

Home For You Community Dev Ops Users Content Questions Articles Collections Bookmarks Tags Manage Dashboard Content Health

21

From Public Stack Overflow Read only Sync this import

How to update Ruby Version 2.0.0 to the latest version in Mac OSX Yosemite?

Asked 4 years, 3 months ago Active today Viewed 4k times

I need to update my ruby version from 2.0.0 to the latest version, I can not use some gems because my version is not updated. I had used Homebrew to install Ruby some time ago, How can i update my Ruby version?

edited Jul 5 '16 at 1:41 asked Jul 5 '16 at 1:33

Abhinay Reddy Keesara 8,745 4 90 118 ChuchaC 385 2 13

✓ Accepted answer

Open your terminal and run

```
curl -sSL https://raw.githubusercontent.com/rvm/rvm/master/binscripts/rvm-installer | bash -s stable
```

When this is complete, **you need to restart your terminal** for the `rvm` command to work.

Now, run `rvm list known`

This shows the list of versions of the ruby.

Now, run `rvm install ruby@latest` to get the latest ruby version.

If you type `ruby -v` in the terminal, you should see `ruby X.X.X`.

If it still shows you `ruby 2.0.0`, run `rvm use ruby-X.X.X --default`.

Prerequisites for windows 10:

C compiler. You can use <http://www.mingw.org/>

make command available otherwise it will complain that "bash: make: command not found". You can install it by running `mingw-get install msys-make`

Add "C:\MinGW\msys\1.0\bin" and "C:\MinGW\bin" to your path environment variable

edited Nov 15 '20 at 8:58 answered Jul 5 '16 at 1:51

Jonathan 25.1k 4 90 118 Abhinay Reddy Keesara 8,745 2 13

3 other answers

Mark as accepted answer

Brew only solution

Update:

From the comments (kudos to Maksim Luzik), I haven't tested but seems like a more elegant solution:

```
After installing ruby through brew, run following command to update the links to the latest ruby installation: brew link --overwrite ruby
```

Original answer:

Late to the party, but using brew is enough. It's not necessary to install rvm and for me it just complicated things.

By brew install `rbv` you're actually installing the latest (currently v2.4.0). However, your path finds

Import history

Imported on Sep 1 '21 at 1:03

Importer notes

We are required by IT to keep our Macs updated to the latest version. Many users are having trouble updating Ruby to the latest version after each update. Please troubleshoot with the following instructions prior to reaching out to the helpdesk.

Tags

security ruby mac it-helpdesk

This question is from public Stack Overflow and it is read-only. All public content here is subject to the same creative commons license (CC BY-SA 4.0) that governs the content on Stack Overflow.

Updated May 22 at 6:32 from <https://stackoverflow.com/questions/477816>

Originally asked by ChuchaC

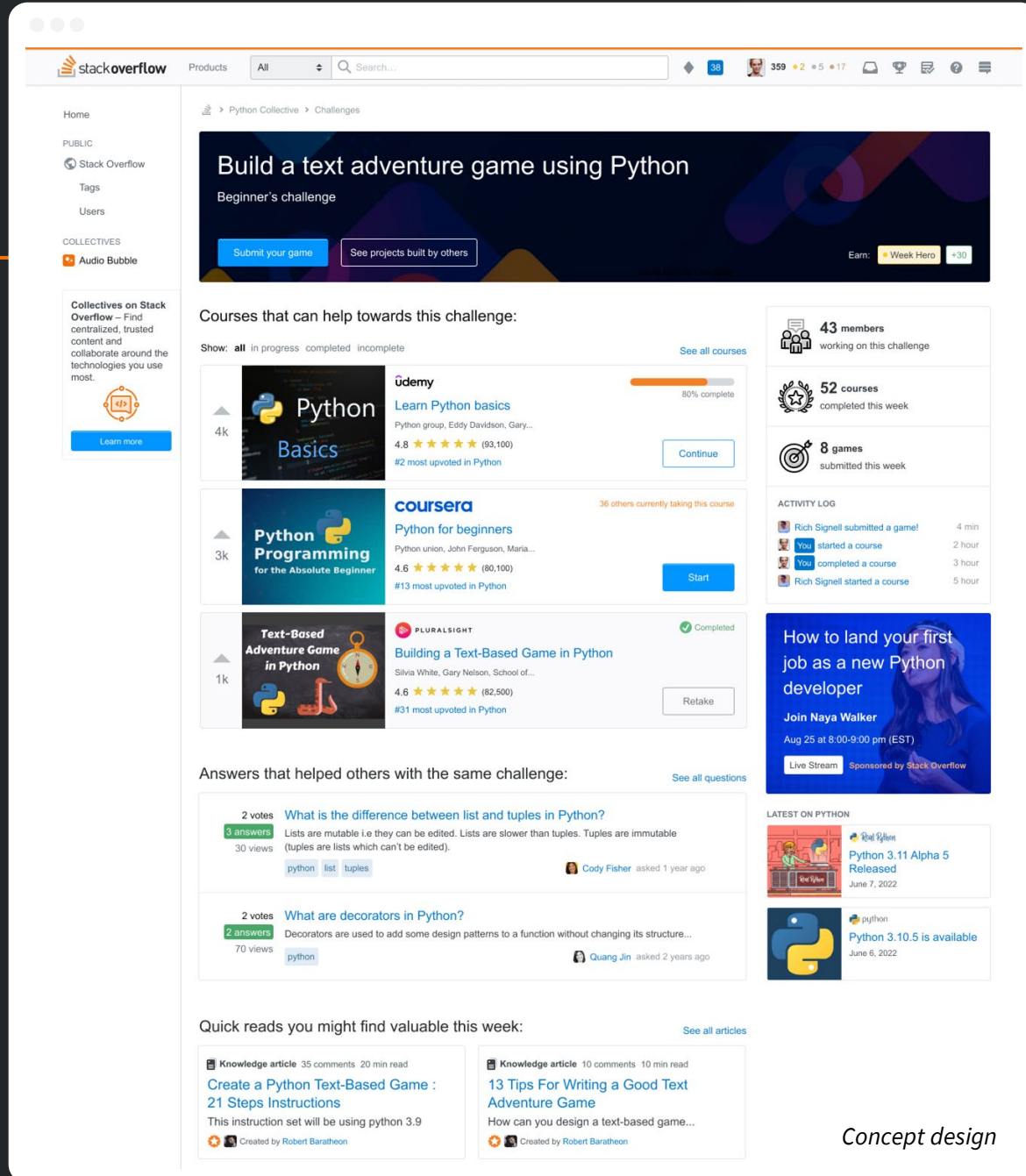
Concept design



Topic Collectives

Content created and curated by the community

- Brings together related technologies and users based on a macro tech topic
- Provides additional advertising / sponsorship opportunities
- Drives up engagement, sponsorship ads opportunities and renewal rates



The screenshot shows the Stack Overflow interface for the 'Python Collective' challenge. The main header includes the Stack Overflow logo, navigation links (Home, PUBLIC, Stack Overflow, Tags, Users), and a search bar. The challenge title is 'Build a text adventure game using Python' with a 'Beginner's challenge' tag. Below the title, there are buttons for 'Submit your game' and 'See projects built by others'. A progress bar indicates '80% complete'. The page lists courses that can help towards the challenge, including 'Learn Python basics' by Eddy Davidson on Udemy, 'Python for beginners' by John Ferguson on Coursera, and 'Building a Text-Based Game in Python' by Silvia White on Pluralsight. It also shows answers that helped others with the same challenge, such as 'What is the difference between list and tuples in Python?' and 'What are decorators in Python?'. The page includes a sidebar with 'Collectives on Stack Overflow' and 'Audio Bubble' sections. The bottom section features 'Quick reads you might find valuable this week' with articles like 'Create a Python Text-Based Game: 21 Steps Instructions' and '13 Tips For Writing a Good Text Adventure Game'.

Concept design



Financials



Massive market opportunity: users

We have <2% of developers on Teams

Stack Overflow is driving the growth of technologists around the world

US\$10bn collaboration market

According to Grandview Research

US\$9.4bn DevOps market

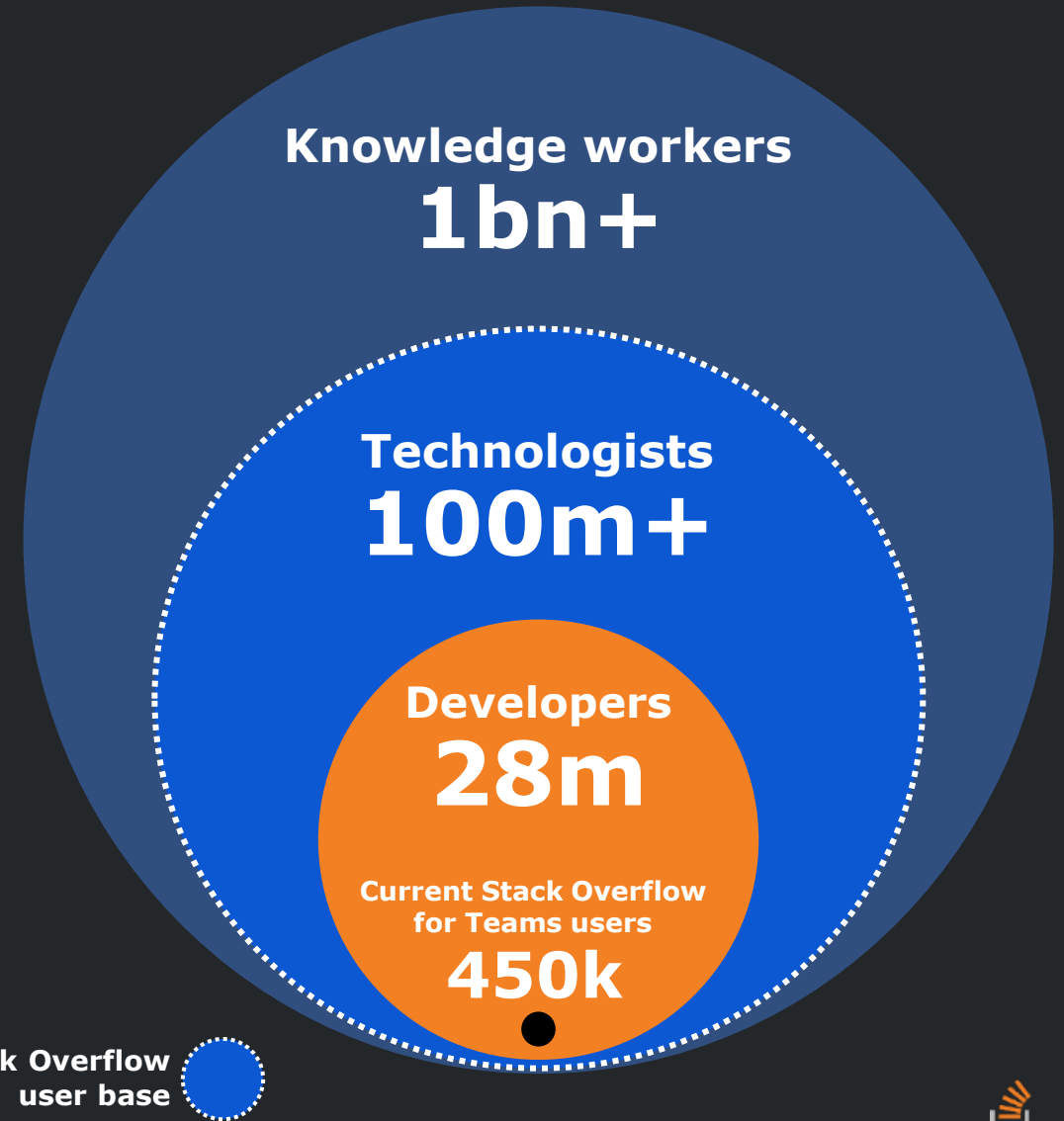
According to Allied Market Research by 2023

2x growth in workstream collaboration market

Over next 4 years, according to Gartner

2x growth in number of worldwide developers

Over next 10 years, according to Slashdata



Massive market opportunity: customers

We have <3% of Enterprise on Teams

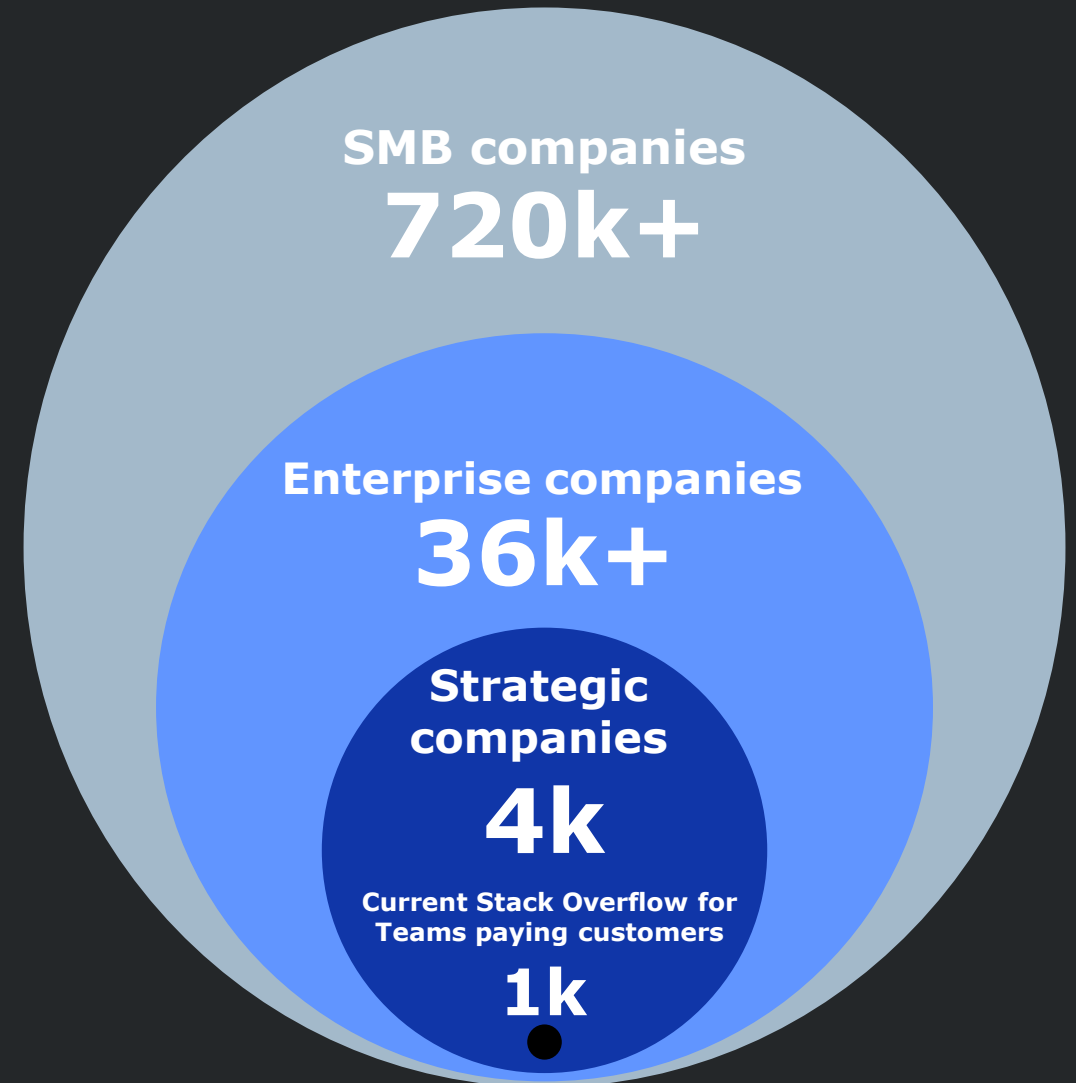
Stack Overflow is enabling knowledge management at organisations across the world

US\$24bn market

Based on current average seat count and ASP

US\$2bn+ revenue opportunity

Based on conservative penetration rates



Growth in Teams users within key customers exemplifies Land and Expand sales strategy

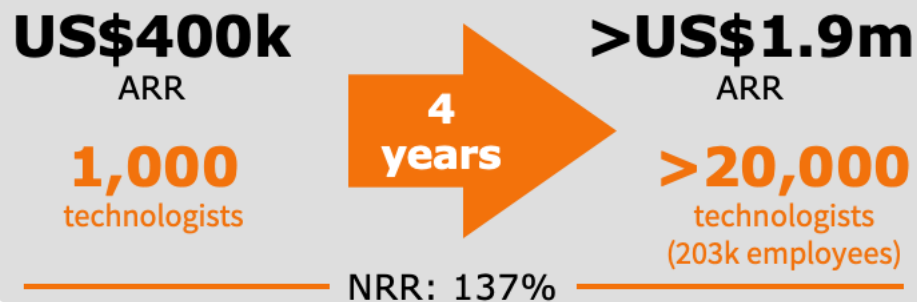
Global financial institution



Global software provider



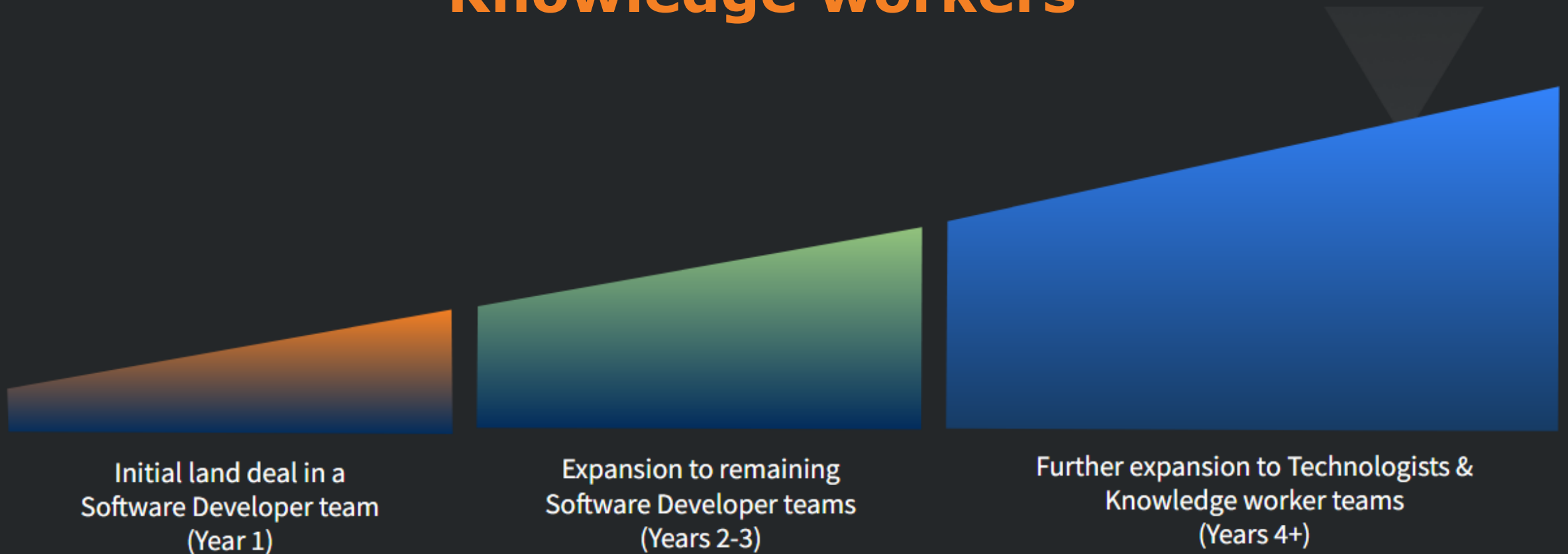
Global telecom provider



Consumer financial services



Land & Expand motion from Developers -> Technologists -> Knowledge workers

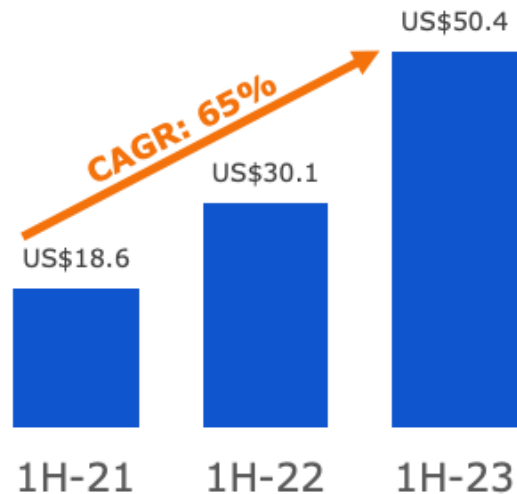


Compelling financial model

3x LTV: CAC



Rapid ARR growth (US\$m)



Investing for continued growth while planning for sustainable leverage

20%
Rule of 40

**Long-term
model**

>40%
Rule of 40

Strong community of engaged users and B2B monetisation opportunity

A strong community

~100m+

Total Monthly Visitors

We have increasing willingness to pay

450k+ 1k+

Total Teams Users

Total Teams Customers

We have a large opportunity to go after via our
Land & Expand GTM motion

US\$24bn+

Market (based on current
average seat count and ASP)

US\$2bn+

Revenue (based on conservative
penetration rates)



Prashanth Chandrasekar
CEO

@pchandrasekar



stackoverflow.co



All learning starts with **one question.**

You're sitting on **the answers.**



6



share edit follow



8

