



# OERu's FOSS Next Generation Digital Learning Environment (NGDLE)

For Executive Leadership Teams

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# Learning on the internet

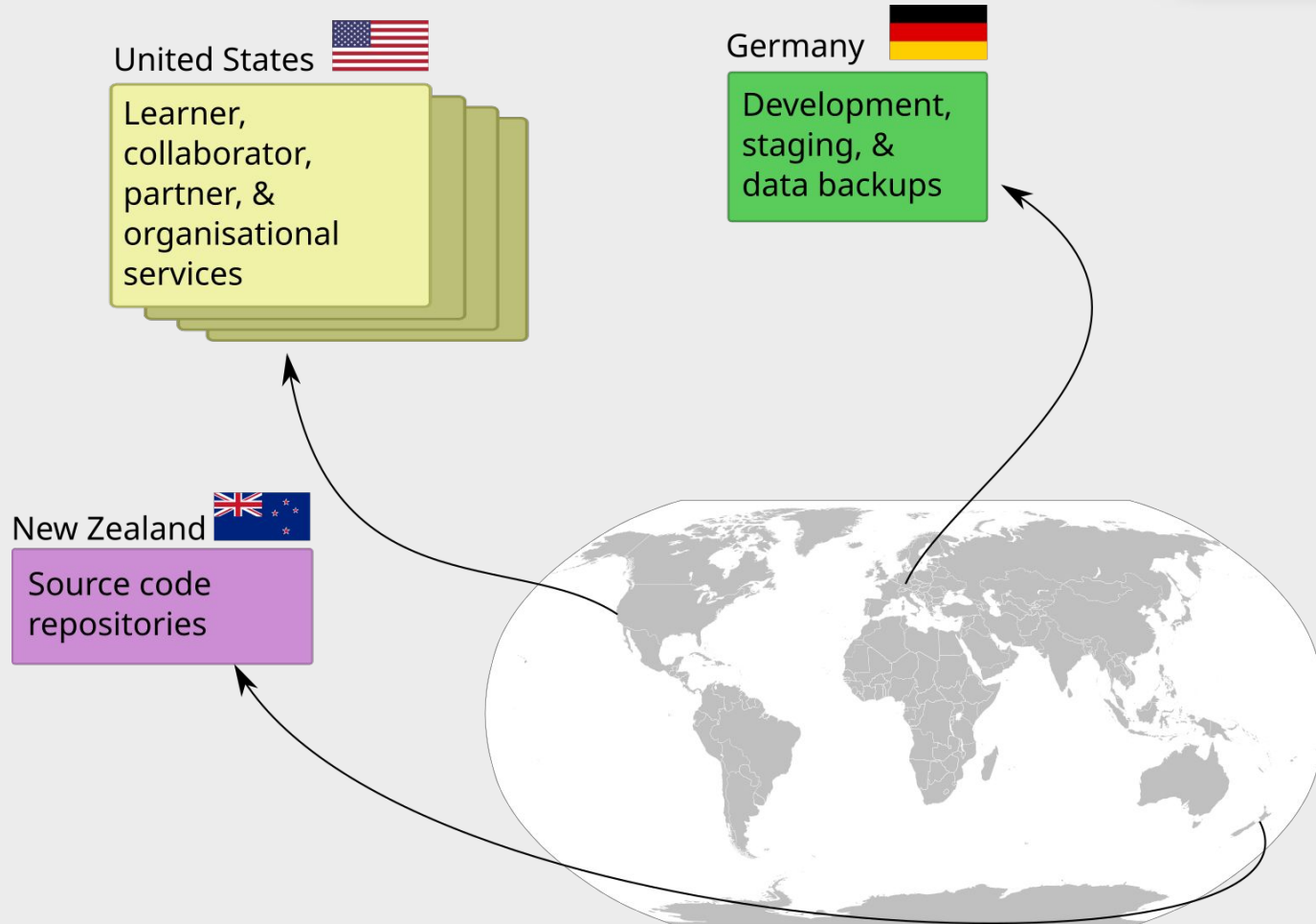


- Best way of supporting learners to develop digital and other learning literacies?

Use *the same technologies* they need to build digital fluencies for learning.

- Learning on the internet
  - is less constrained than via an LMS
  - enables collaborative content creation (even across institutions)
  - learners control their own work (data sovereignty)
  - learners *use* the technologies and practices of the *real* digital world

# OERu's global infrastructure



Globe [image credit](#)

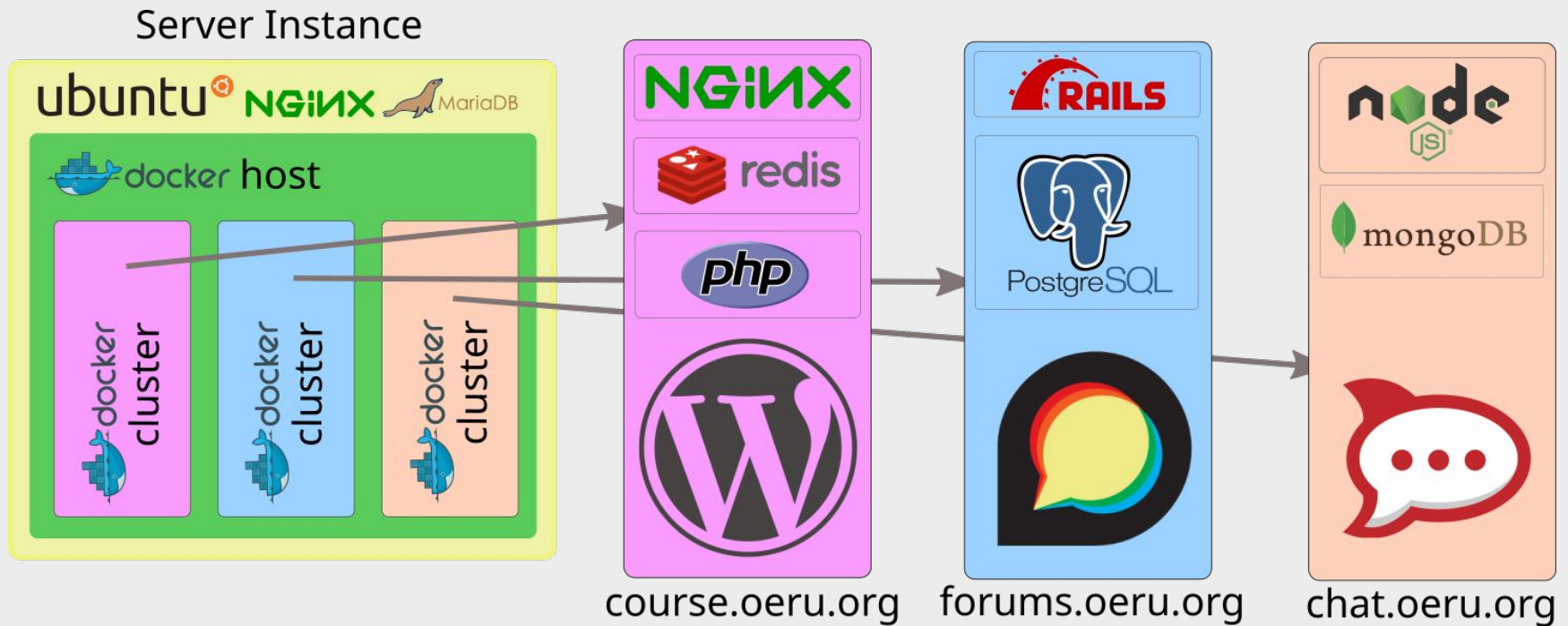
# Learner-facing 'Tech Wheel'



# Our FOSS NGDLE tech mix




# Docker: indispensable



# Docker: writing recipes



Using  docker to manage FOSS complexity



# Docker: share & replicate



## tech.oeru.org

The OERu tech-transfer blog providing howtos & overviews of our Docker recipes & our custom FOSS code.



## git.oeru.org

The OERu software repository for others to use, adapt, contribute to, & learn from our FOSS code.

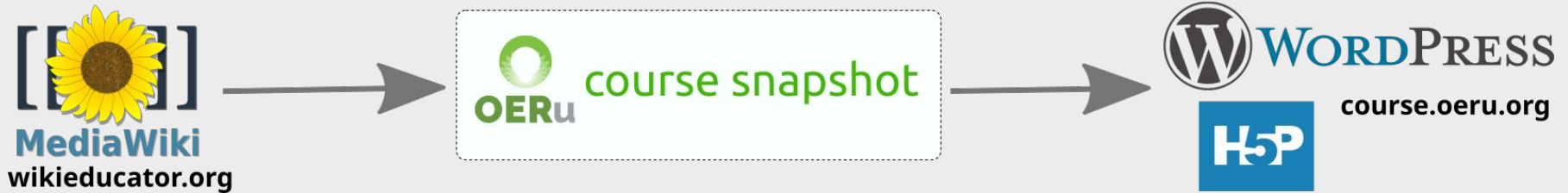




# Strategic development 1



## Automating Courseware Deployment



## Harvesting Distributed Learner Interaction



# Strategic development 2



## Improving Learner Usability



## Automating Learner Administration



# Cost & return on investment



- *Annual* IT costs
  - Fixed costs: infrastructure @ ~ NZ\$6000 + 1 Full time IT person
  - Per-learner: ~NZ\$0 variable cost
  - Proprietary software licenses cost: ~NZ\$250 (Zoom)
- ROI maximised by
  - investing in targeted strategic software development
  - sharing maintenance with FOSS communities
- Four tech selection criteria
  - commodity hosting
  - FOSS for SaaS
  - No per-seat cost component
  - account for internal staff time in TCO



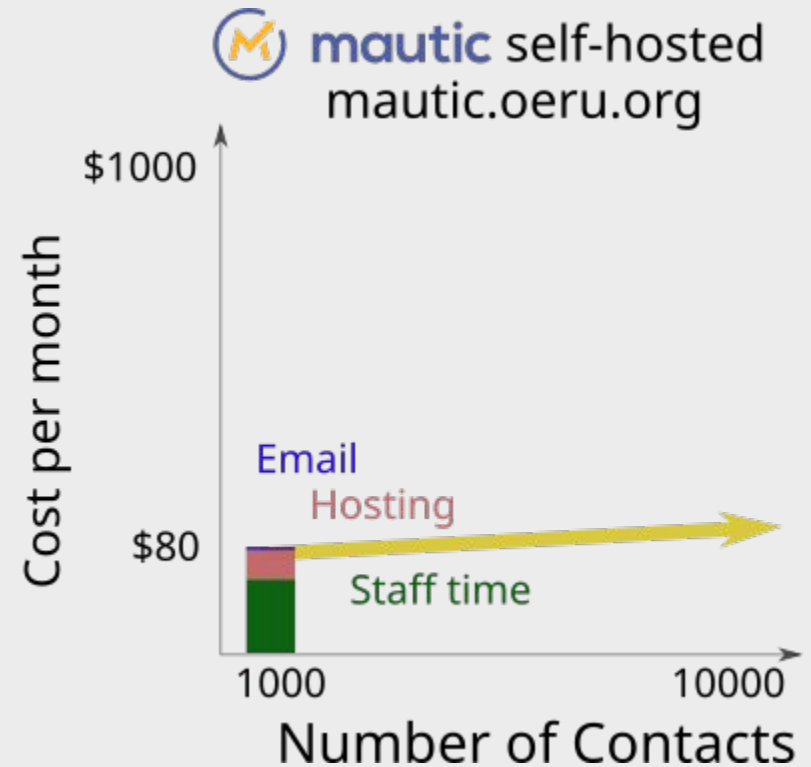
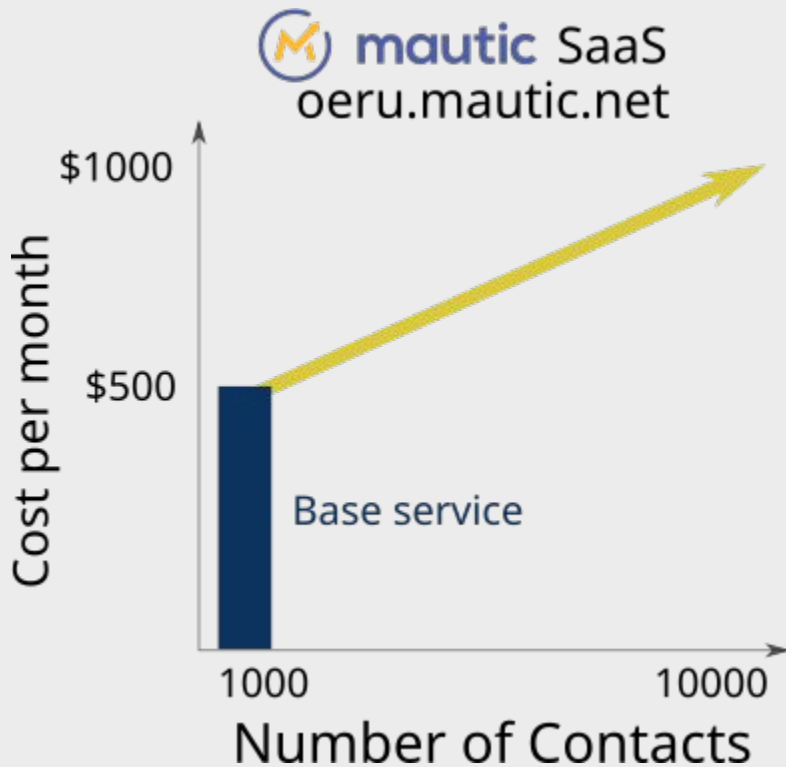
# Case study: Mautic



## Mautic emails sent (2019)



# Mautic cost comparison



# Conclusion



The OERu's NGDLE offers

- the opportunity to pioneer new approaches
  - Building a rich infrastructure for learners and collaborators
  - Implementing a FOSS end-to-end service
  - Potential to scale up to facilitate learners across the world
- Advantages - both technological and pedagogical
- Incredible cost-effectiveness and adaptability

Our NGDLE experience challenges the status quo for IT infrastructure used by most HE institutions.

It demonstrates the viability of a new, *open* approach.

More info: **OERu.org**

This talk online: **oer.nz/ngdle19**

Our FOSS code: **git.oeru.org**

Tech blog: **tech.oeru.org**



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