

“Inner Source Ecosystems”

James Ford • 3rd July 2019



part of the





Inner Source



Ecosystems

Inner Source

... is the use of open source software development best practices and the establishment of an open source-like culture within organizations. The organization may still develop proprietary software, but internally opens up its development.

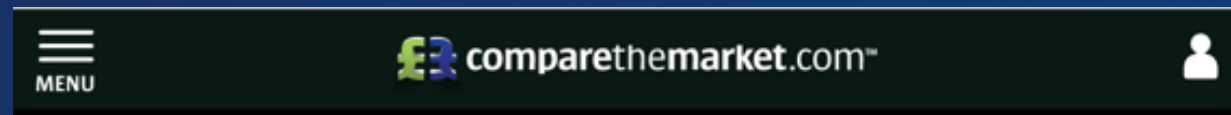
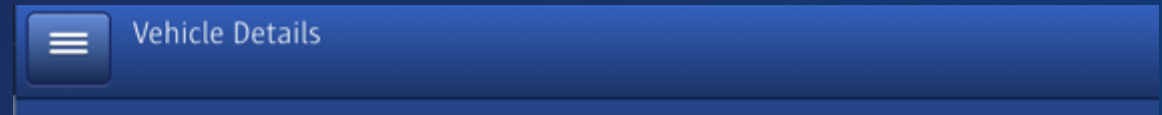
(wikipedia)

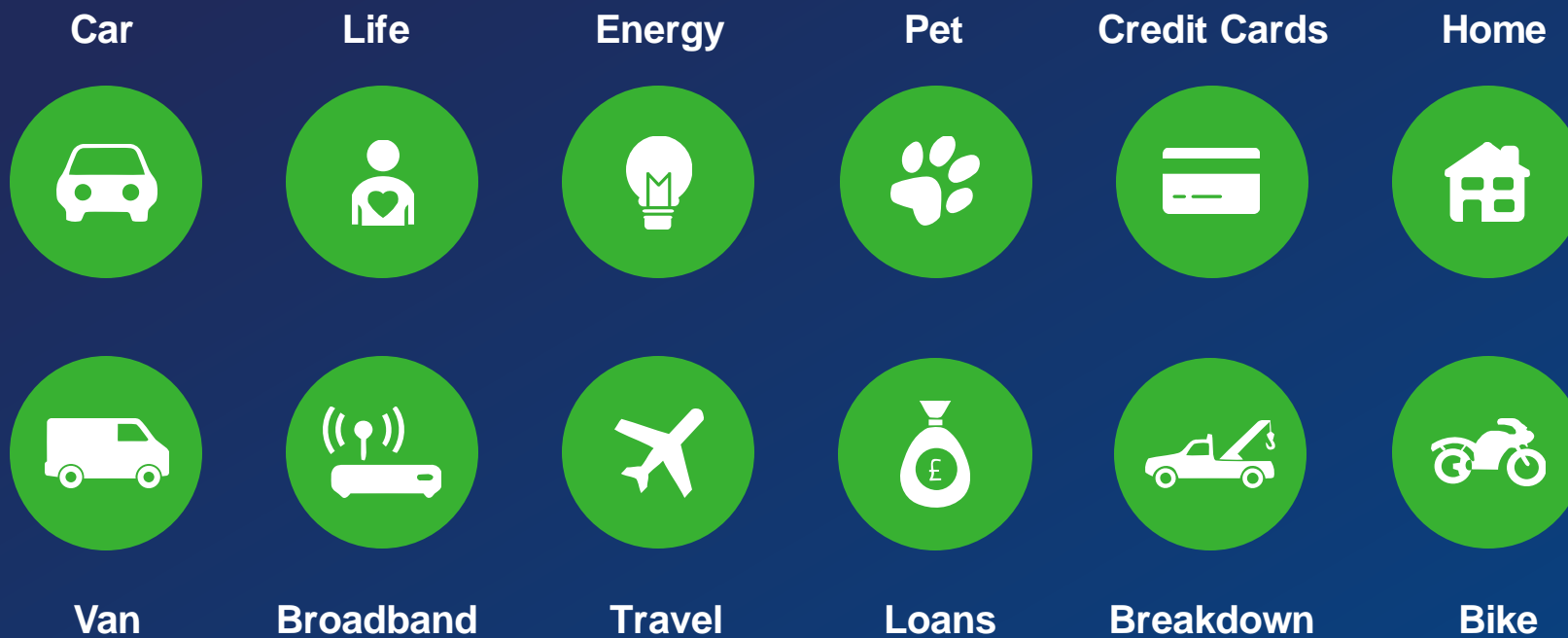
Why Inner Source?

Lessons from our experience



A few years ago...





Technical challenges

- Development 'silos':
 - Give greater independence
 - Result in inconsistent implementations
 - Duplicate (waste) development effort
- Inconsistent approaches makes future changes more difficult
- 'First attempt' solutions are rarely the best

Objectives

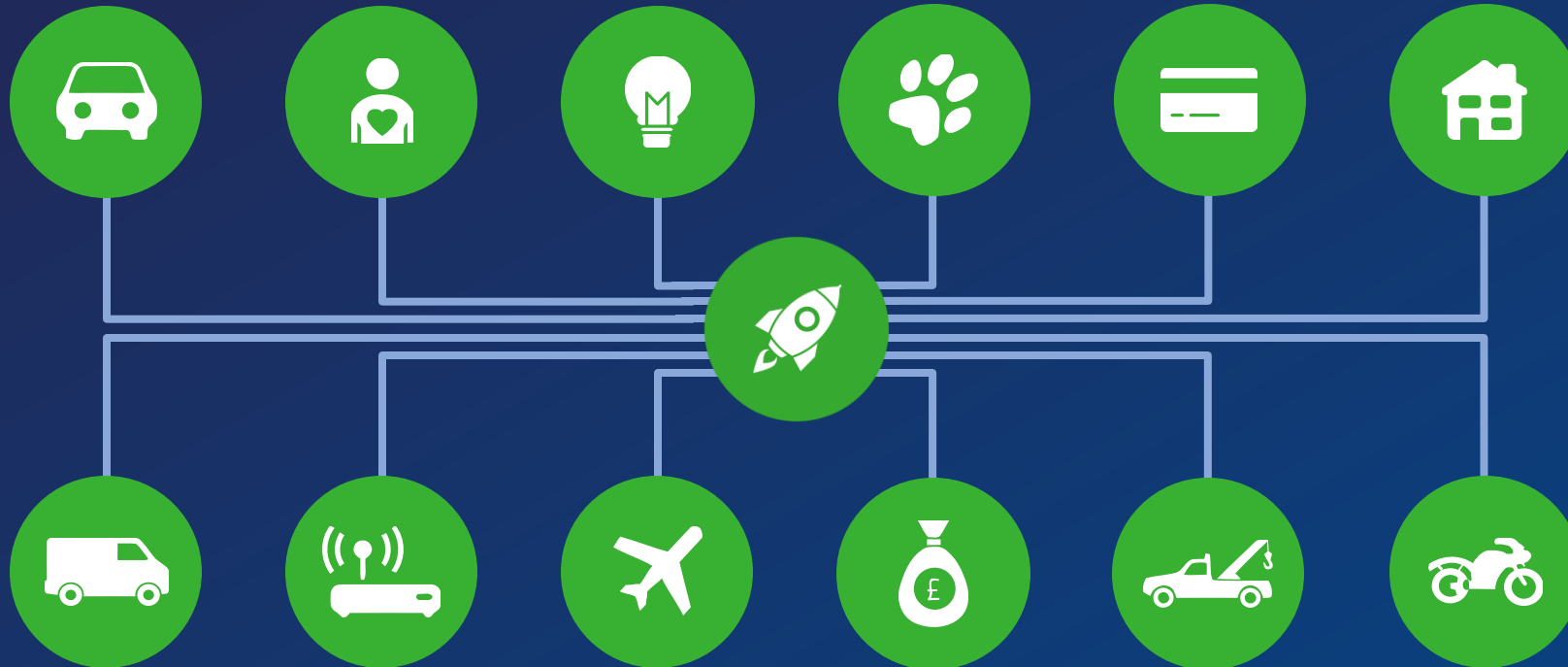
- Build better solutions
- Reduce duplicate effort and waste
- Improve the developer experience
- Make the effort sustainable

“Inner source”

Making internal shared code work.



Shared, supported code libraries



Dedicated supporting teams

- Shared, committed ownership
- Dedicated support
- Focused resource
- Stakeholder management
- Long term vision

React libraries

Output:

- x7 NPM packages
- Command-line project generator tool
- Example applications
- Online Documentation website
- Live Component preview website

“Ecosystems”

Because your code is not an island.



Your ecosystem is...

Anyone that:

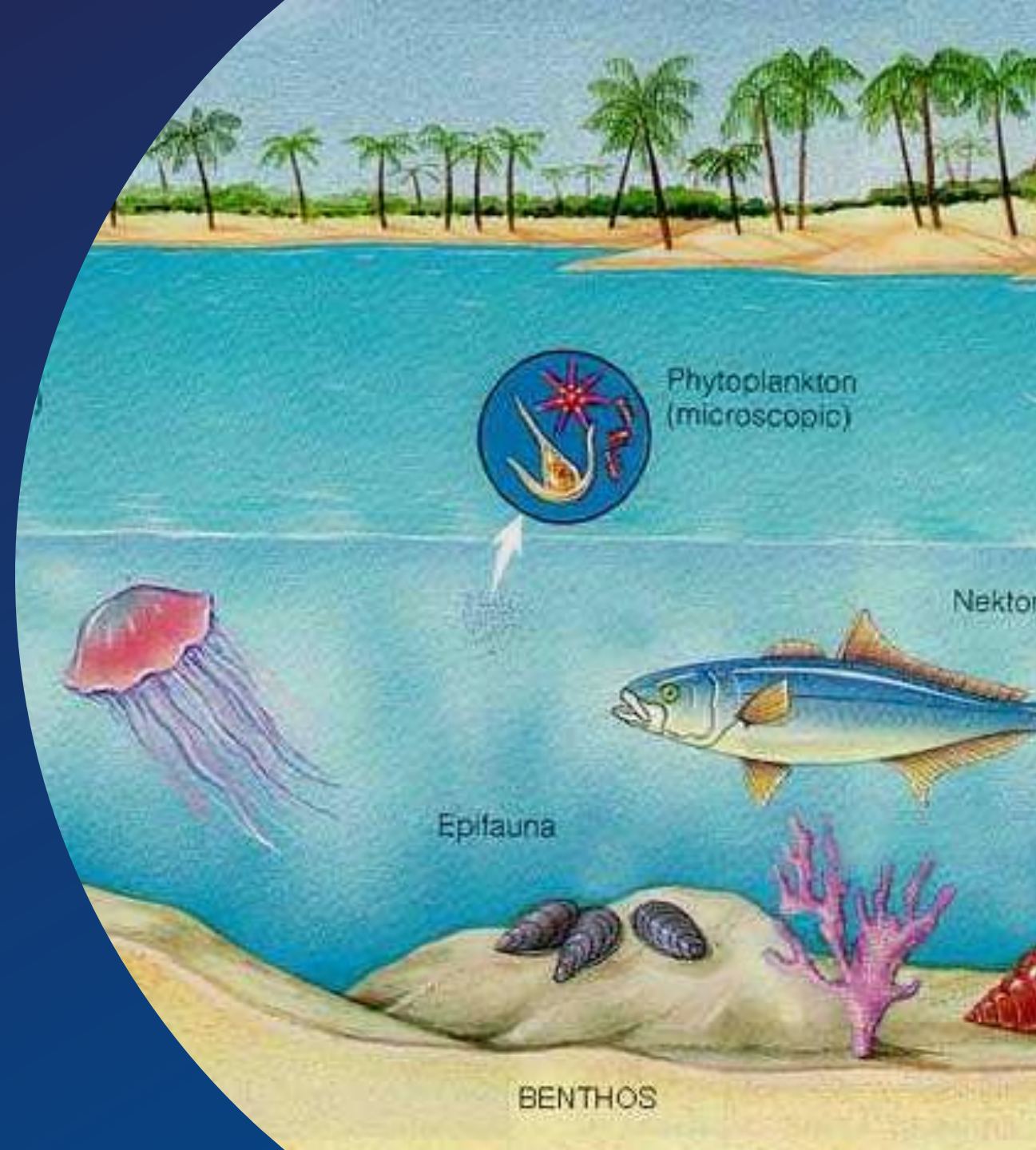
- already uses your code

Anything that:

- is already built with your code
- *could* be built with your code

Anyone that:

- Designs or plans any of the above

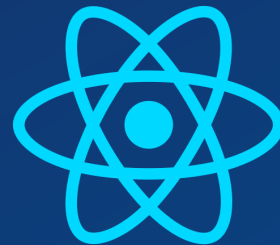
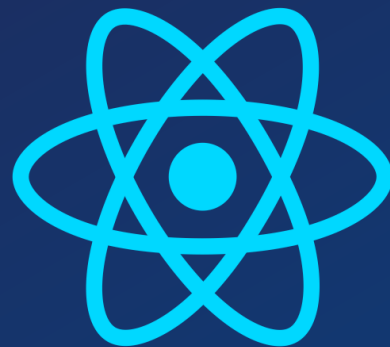
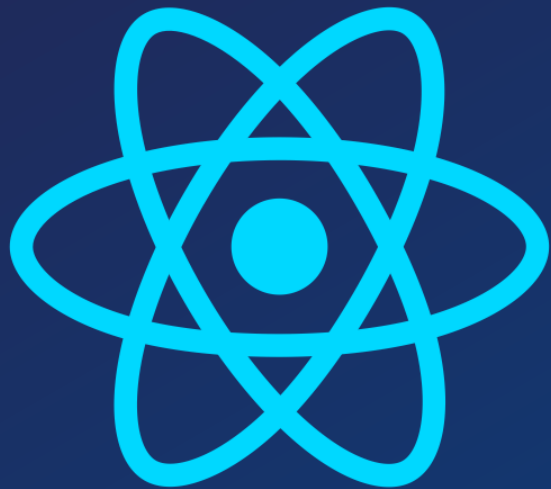


Focus on developer experience

- Everyone wants to do their best work
- People will do what they know and trust
- People have limited scope for adopting new stuff at once
- You should reduce friction for adoption
- People want to learn something new
- People want to understand how it works
- People want to contribute and influence future development

Nurture your ecosystem

- Be proactive and engaged
 - Balance effort – making it easy to get started
 - Coaching & consulting with other teams
 - Rewarding and promoting key contributors
- Be transparent
 - Public communication channels – *Slack, GitHub*
 - Clear guidelines for contributing and expectations
 - Open backlog and issue list for everyone to contribute towards
- Be flexible
 - Respond to changing environments and requirements
 - Led by developer contributions as well as the business strategy



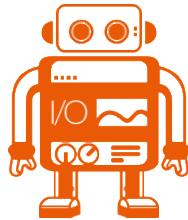
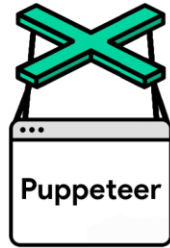
Inner source for React

Improving our React developer experience



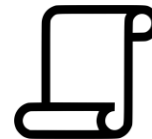
Build ➡ Check ➡ Release ➡ Promote

BABEL



SemVer

Major.Minor.Patch



In stats [1/2]

June 3, 2019 – July 3, 2019

Period: 1 month ▾

Overview

146 Active Pull Requests

92 Active Issues

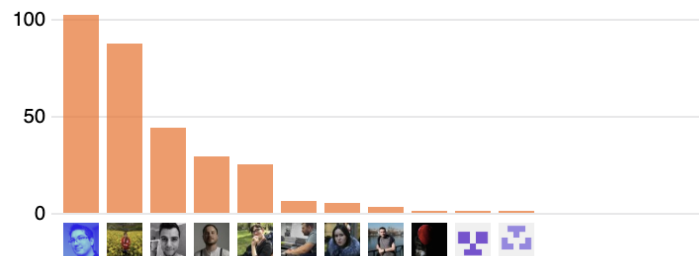
132
Merged Pull Requests

14
Proposed Pull Requests

61
Closed Issues

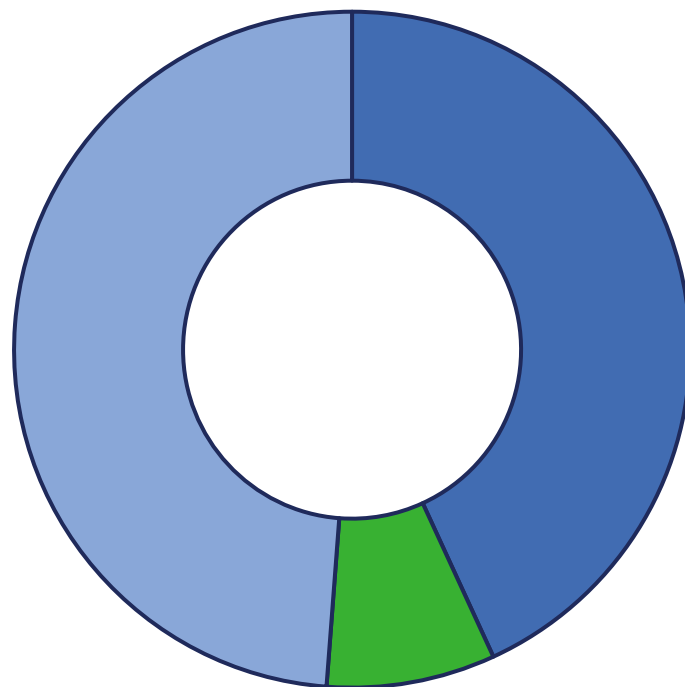
31
New Issues

Excluding merges, **11 authors** have pushed **167 commits** to master and **301 commits** to all branches. On master, **403 files** have changed and there have been **19,081 additions** and **22,167 deletions**.



6 Releases published by 2 people

In stats [2/2]



■ Meerstrap code ■ Journey code ■ External code

Unique code:
7%

Shared code:
37%

Summary

- Building a library is a route to consistency
- It requires business backing to be successful
- Embrace change – requirements, use cases and tech changes
- Shared code requires long-term support and maintenance
- Spend extra effort to save others effort

All done.

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