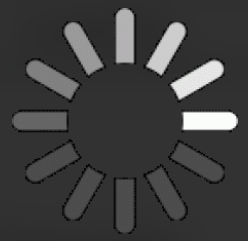
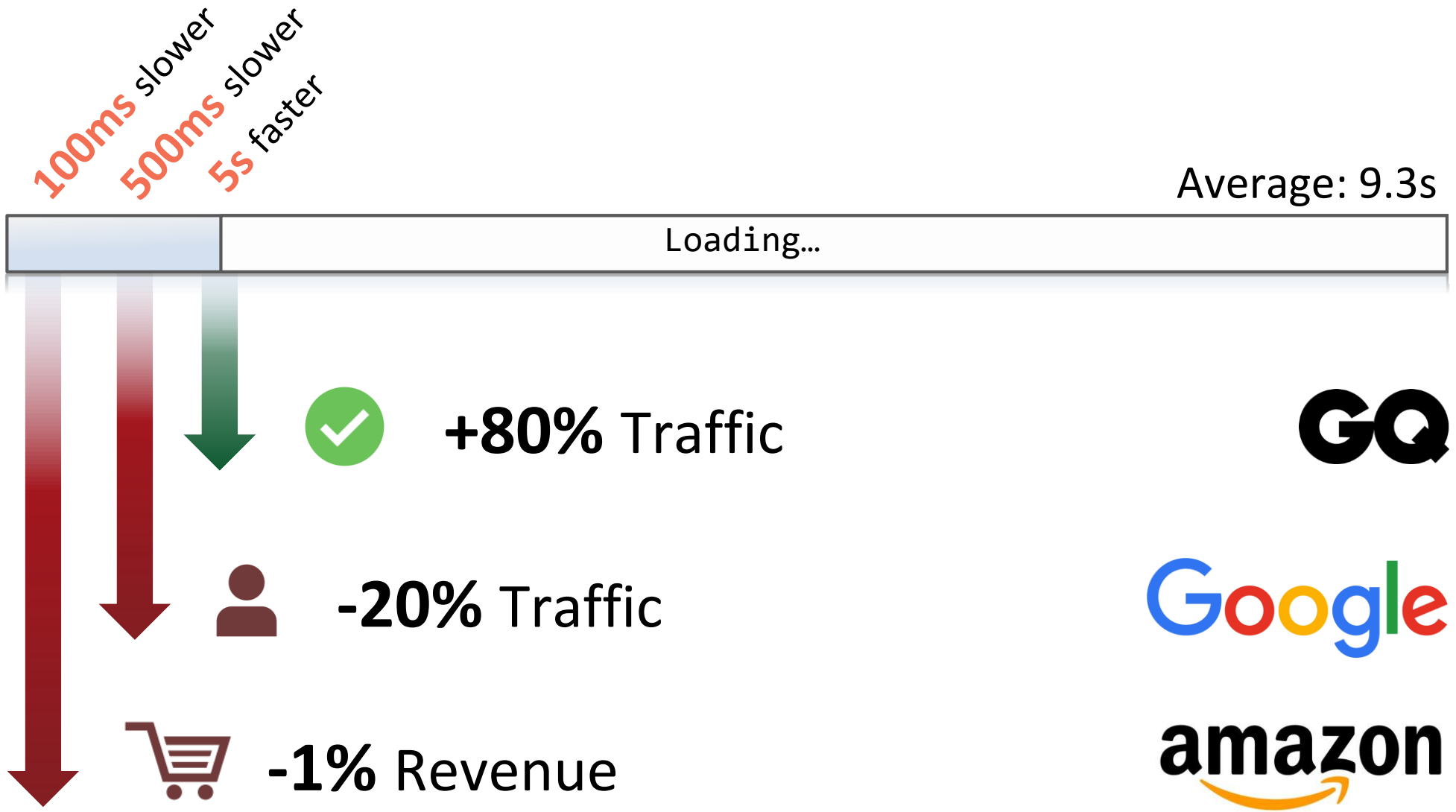
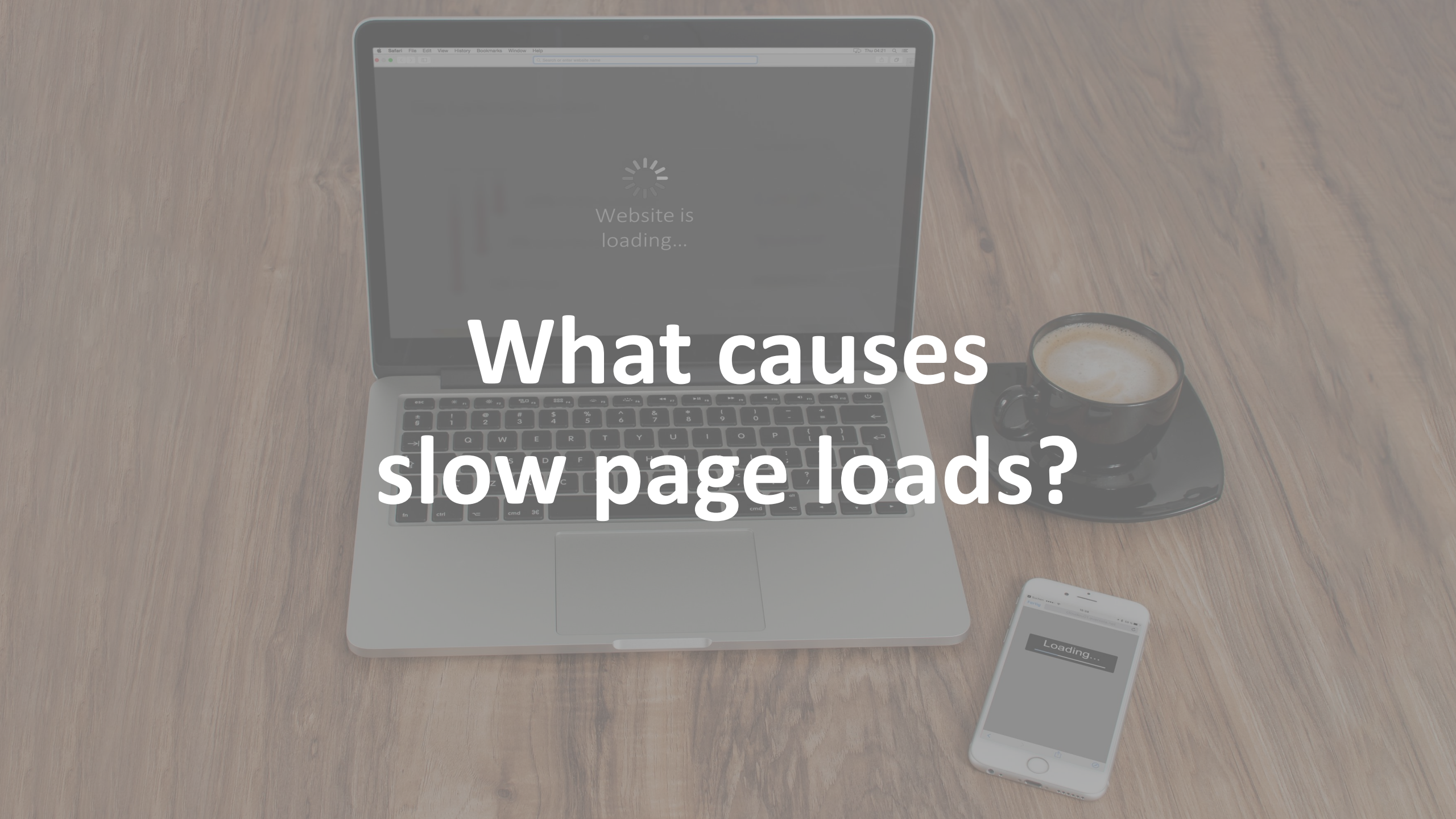
Make the web faster.



Presentation
is loading

Page Load Time = Money

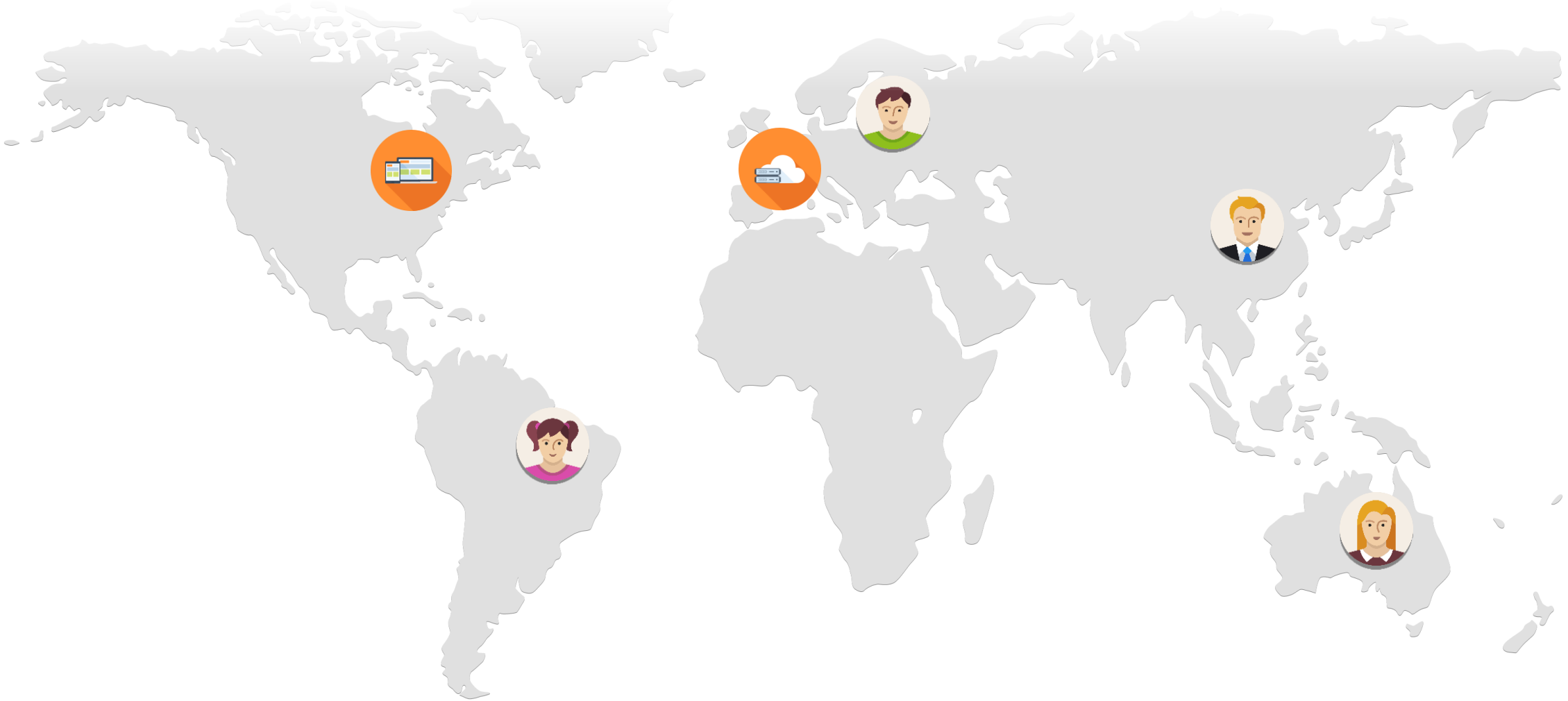




What causes slow page loads?

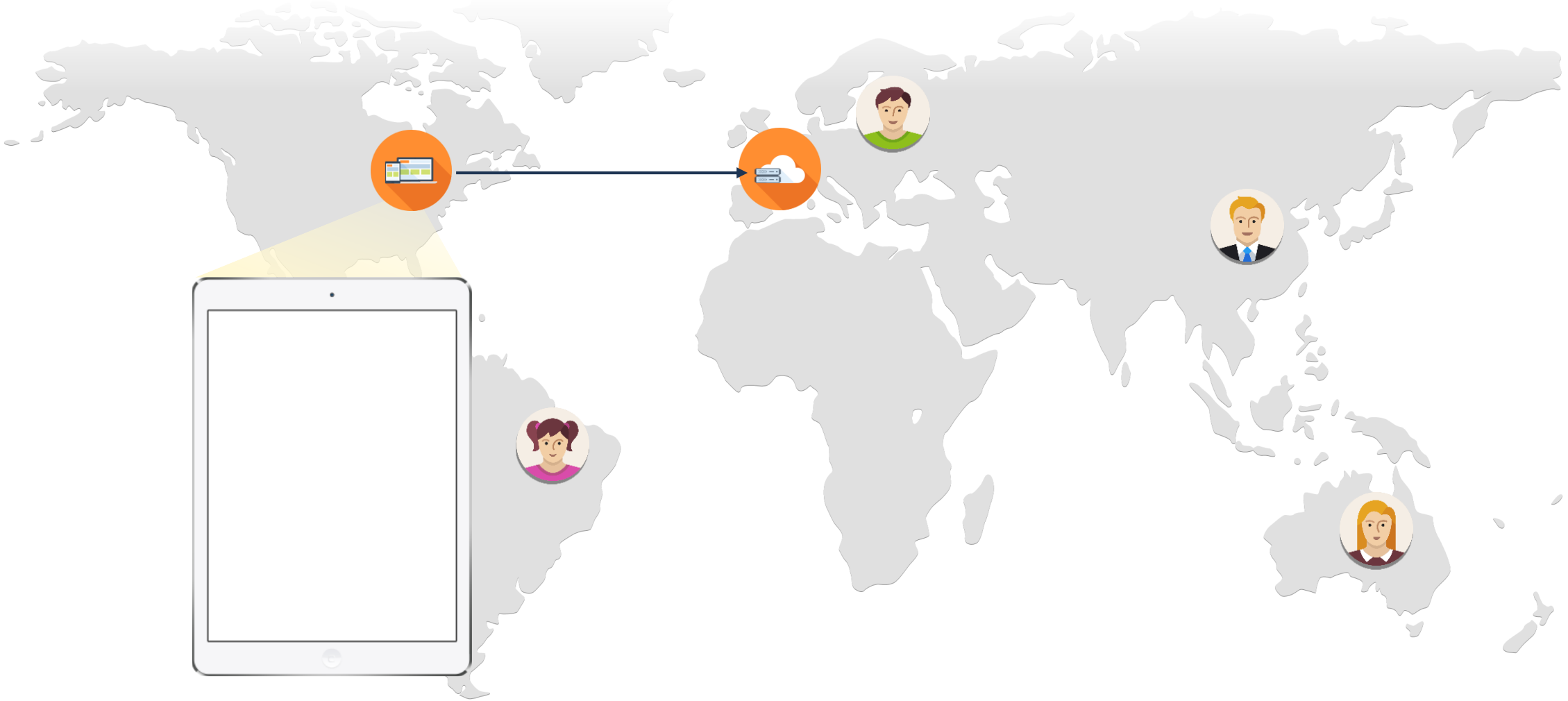
There are 2 performance problems.

This is how the web works.



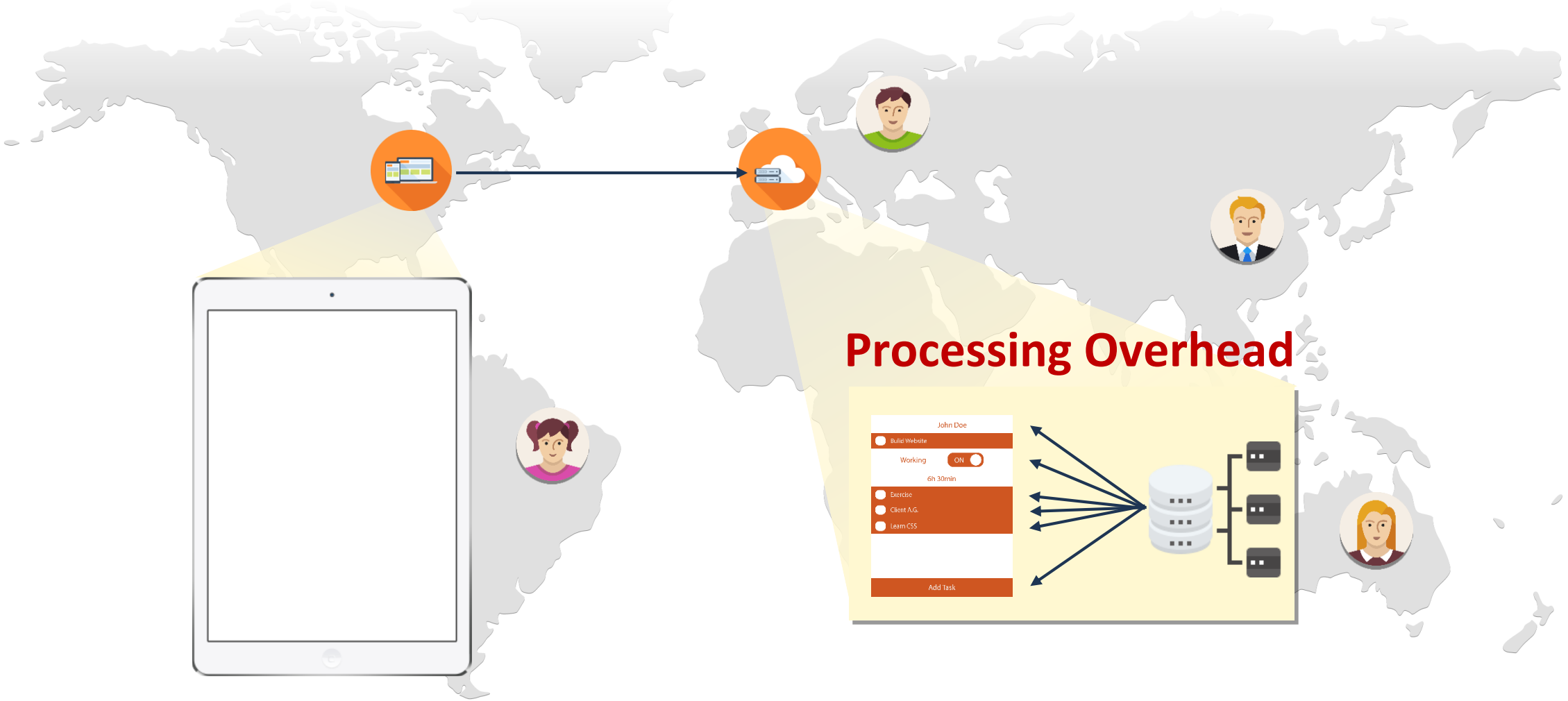
There are 2 performance problems.

When a user visits a website, the backend is requested.



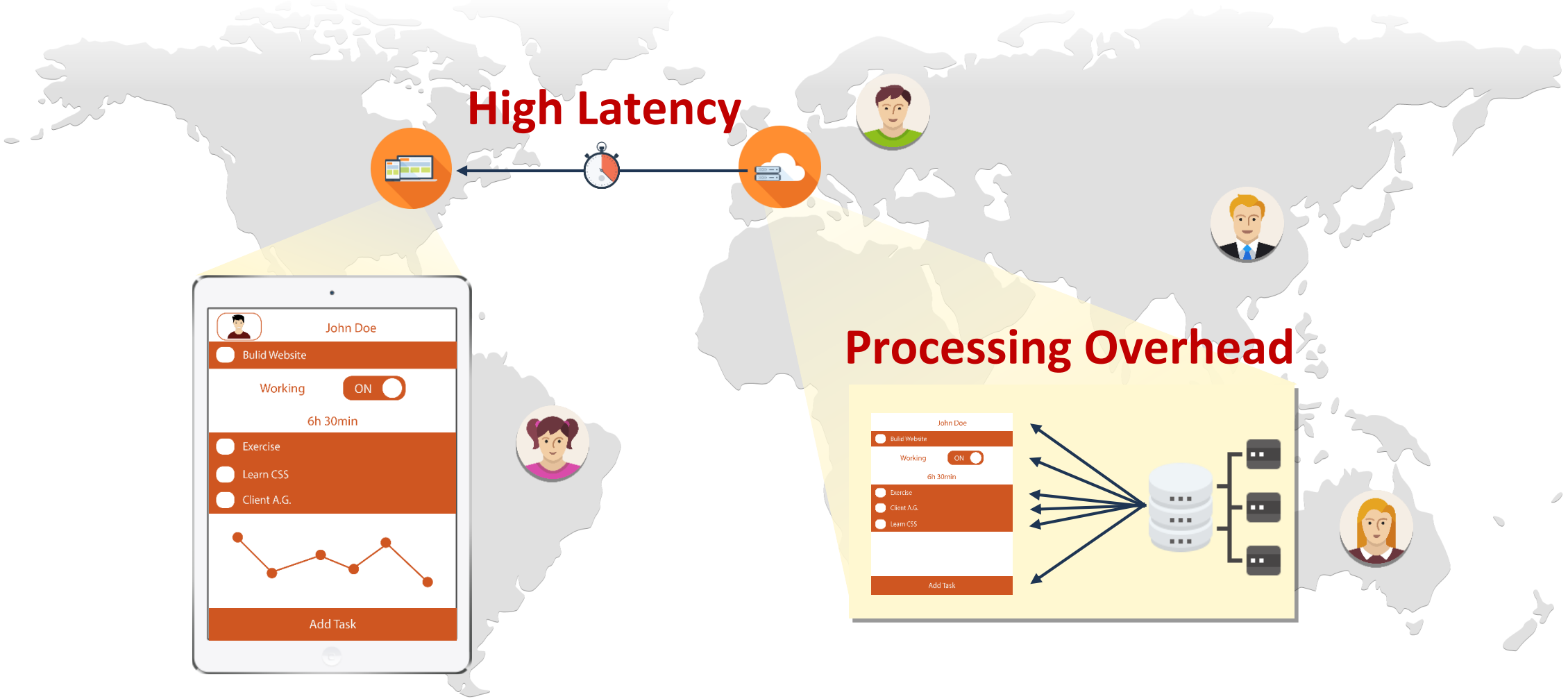
First bottleneck: the backend.

The backend renders the site, causing processing overhead.



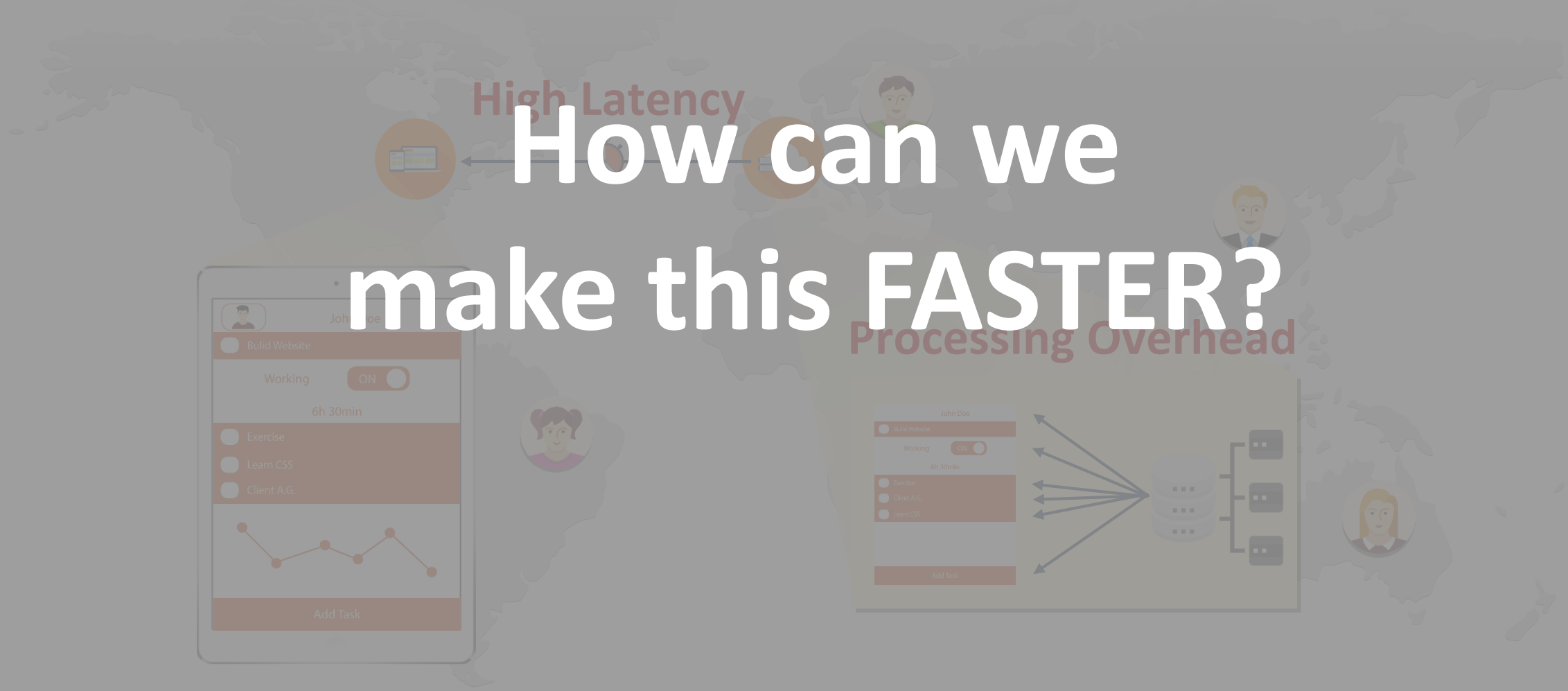
Second bottleneck: the network.

>100 resources are sent to the user, causing network delay.



There are 2 performance problems.

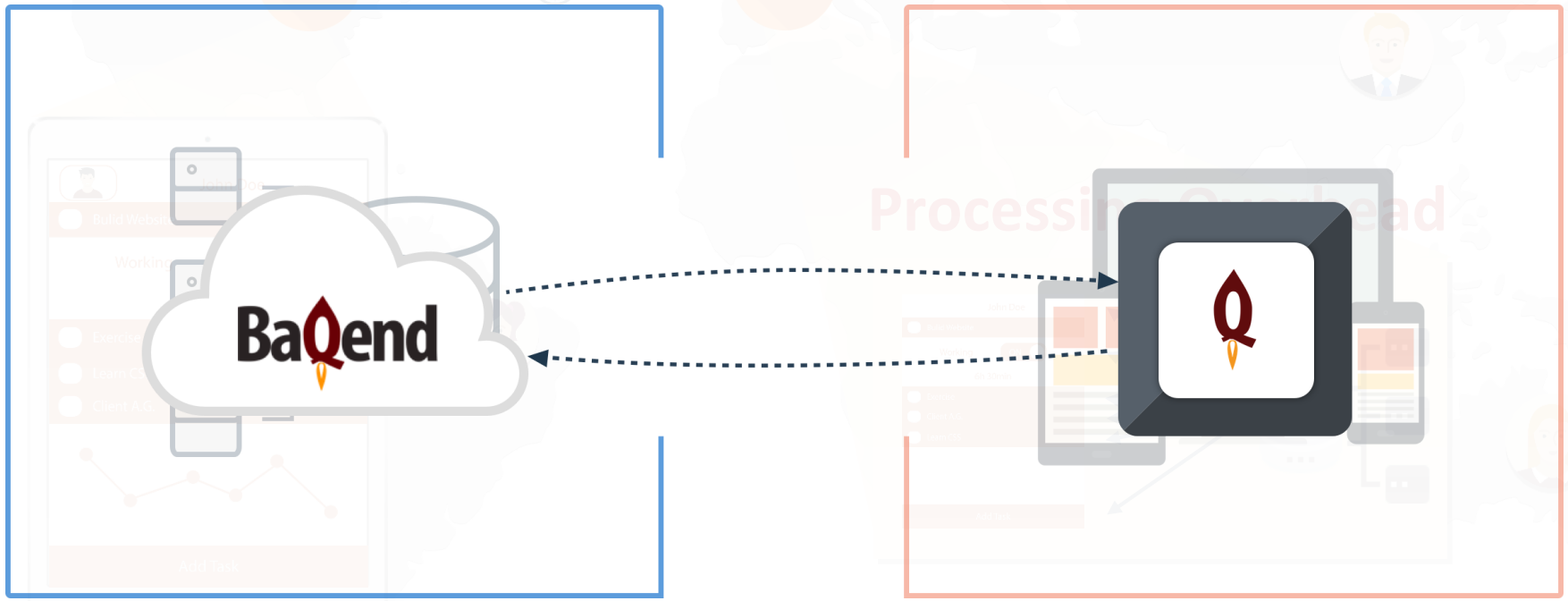
>100 resources are sent to the user, causing network delay.



How can we make this FASTER?

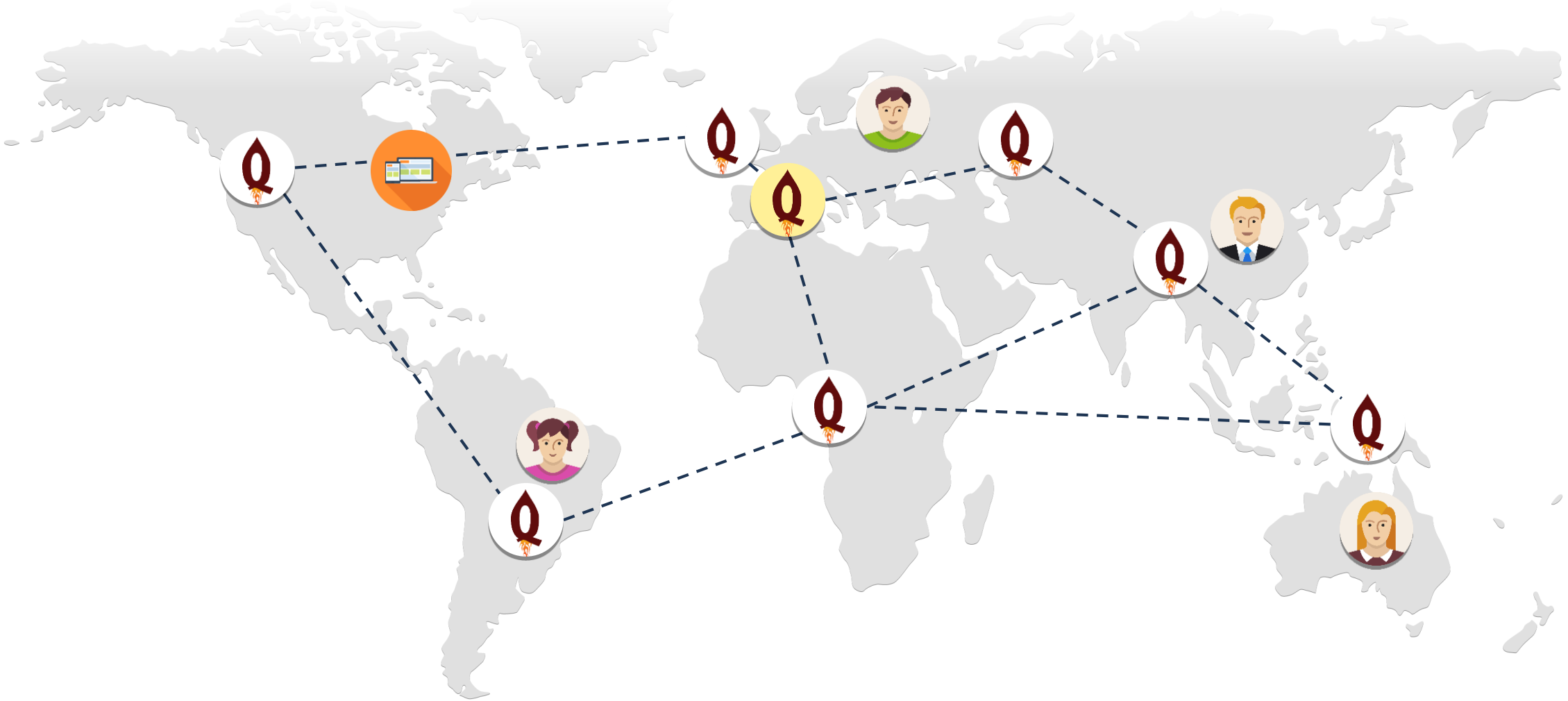
Speed Kit

The tool for getting **existing websites** out of the web performance stone age.



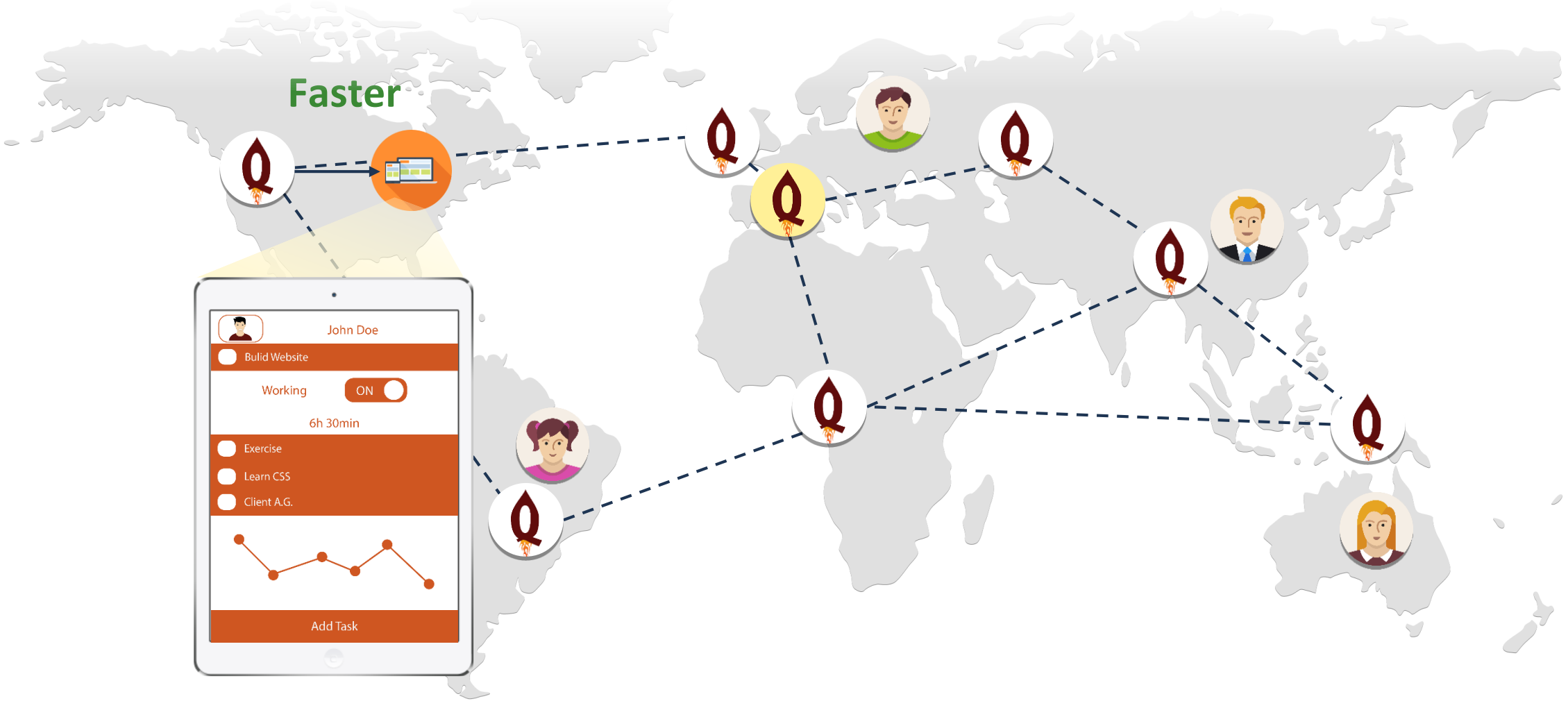
This is what Speed Kit does.

Baqend brings data closer to users.



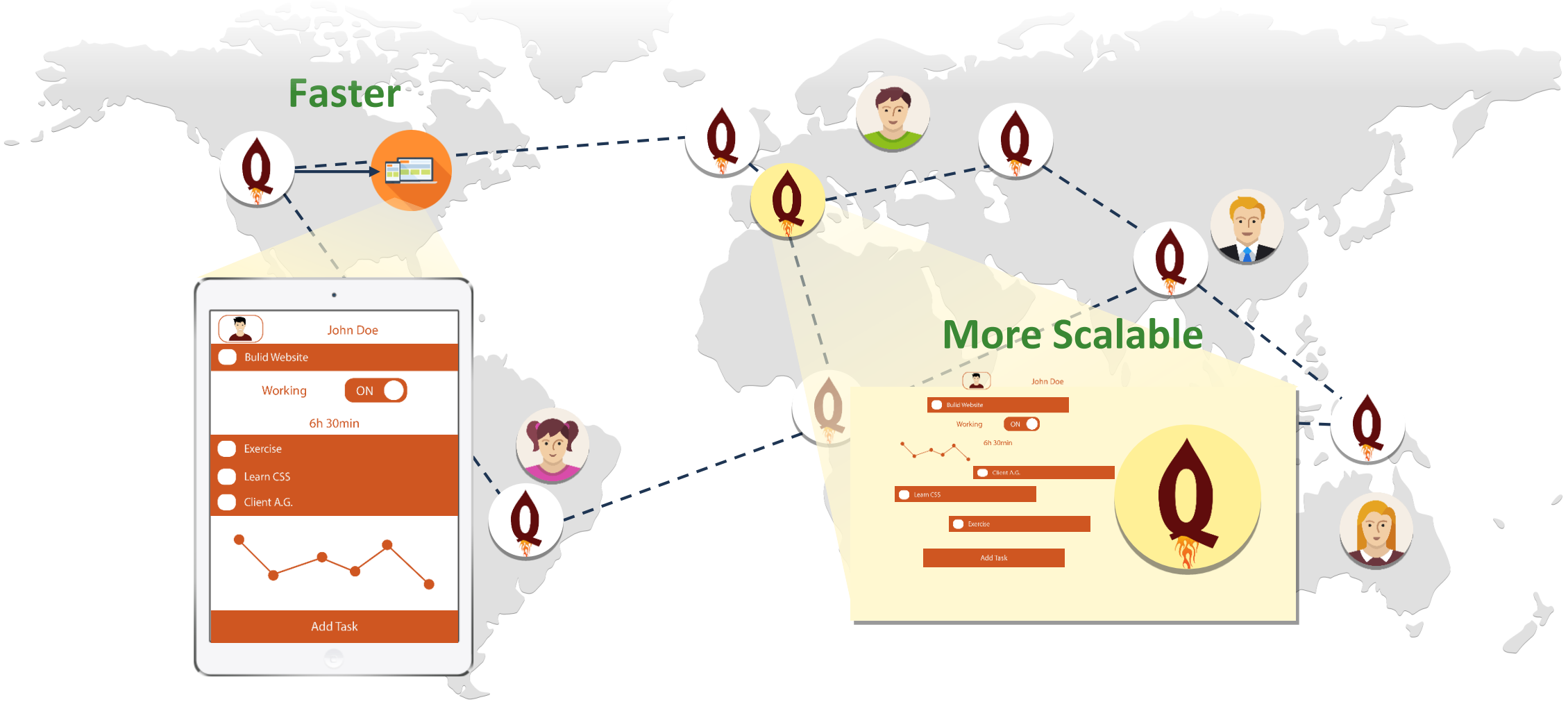
Speed Kit delivers the site faster.

Data is automatically served from the nearest cache.



Speed Kit helps scaling to more users.

The legacy backend can now sustain heavier load.



Speed Kit helps scaling to more users.

The legacy backend can now sustain heavier load.

Novelty: caching dynamic data.

Backed by 30 man-years of research.

F. Gessert, F. Bücklers, und N. Ritter, „ORESTES: a Scalable Database-as-a-Service Architecture for Low Latency", in *CloudDB 2014*, 2014.

F. Gessert und F. Bücklers, „ORESTES: ein System für horizontal skalierbaren Zugriff auf Cloud-Datenbanken", in Informatiktage 2013, 2013.

F. Gessert und F. Bücklers, *Performanz- und Reaktivitätssteigerung von OODBMS vermittels der Web-Caching-Hierarchie*. Bachelorarbeit, 2010.

M. Schaarschmidt, F. Gessert, und N. Ritter, „Towards Automated Polyglot Persistence", in BTW 2015.

S. Friedrich, W. Wingerath, F. Gessert, und N. Ritter, „NoSQL OLTP Benchmarking: A Survey", in *44. Jahrestagung der Gesellschaft für Informatik*, 2014, Bd. 232, S. 693–704.

W. Wingerath, F. Gessert, S. Friedrich, N. Ritter „Real-time stream processing for Big Data", *Big Data Analytics it - Information Technology,* 2016

F. Gessert, W. Wingerath, S. Friedrich, N. Ritter "NoSQL Database Systems: A Survey and Decision Guidance", *Computer Science - Research and Development,* 2016

F. Gessert, S. Friedrich, W. Wingerath, M. Schaarschmidt, und N. Ritter, „Towards a Scalable and Unified REST API for Cloud Data Stores", in *44. Jahrestagung der Gesellschaft für Informatik*, 2014, Bd. 232, 723–734.

F. Gessert, M. Schaarschmidt, W. Wingerath, S. Friedrich, und N. Ritter, „The Cache Sketch: Revisiting Expiration-based Caching in the Age of Cloud Data Management", in BTW 2015.

F. Gessert und F. Bücklers, *Kohärentes Web-Caching von Datenbankobjekten im Cloud Computing*. Masterarbeit 2012.

W. Wingerath, S. Friedrich, und F. Gessert, „Who Watches the Watchmen? On the Lack of Validation in NoSQL Benchmarking", in BTW 2015.

F. Gessert, „Skalierbare NoSQL- und Cloud-Datenbanken in Forschung und Praxis", BTW 2015

F. Gessert, N. Ritter „Scalable Data Management: NoSQL Data Stores in Research and Practice", *32nd IEEE International Conference on Data Engineering, ICDE,* 2016

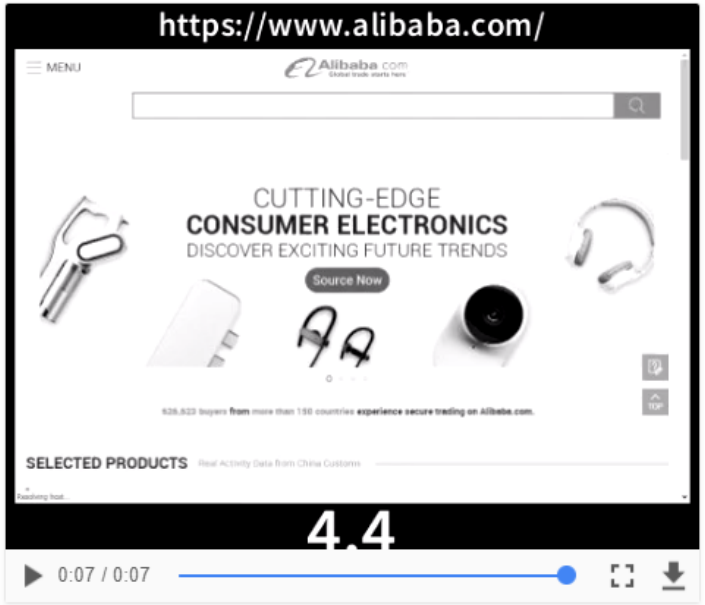
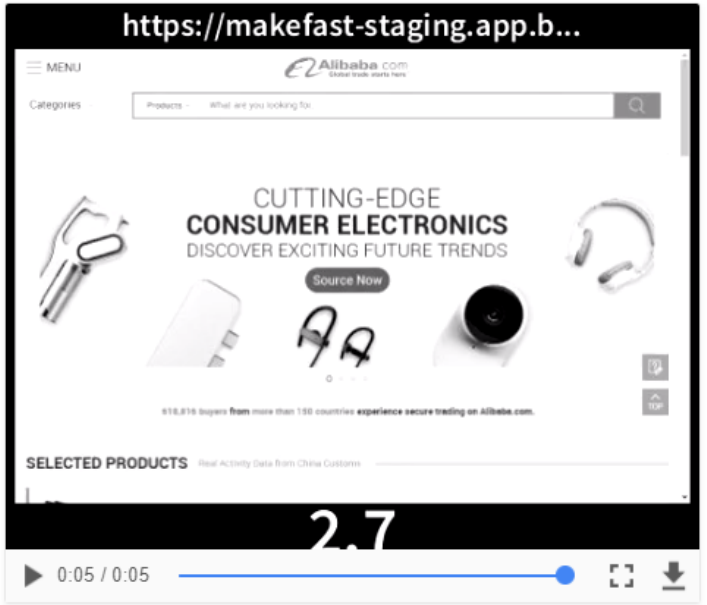
F. Gessert, N. Ritter „Polyglot Persistence", *Datenbank Spektrum*, 2016.

How well does it work in practice?

Websites can test future performance.

Example: alibaba.com

(Source: test.speed-kit.com)

Your Website		Your Website with Speed Kit
		
1701ms	2.82x Faster Speed Index	603ms
769ms	7.77x Faster Time To First Byte	99ms
1169ms	6.22x Faster DOMContentLoaded	188ms
5362ms	1.69x Faster FullyLoaded	3177ms
4.4s	1.60x Faster Last Visual Change	2.7s

Adding Speed Kit to your site.

Integration is extremely simple.

1. Configure Domain

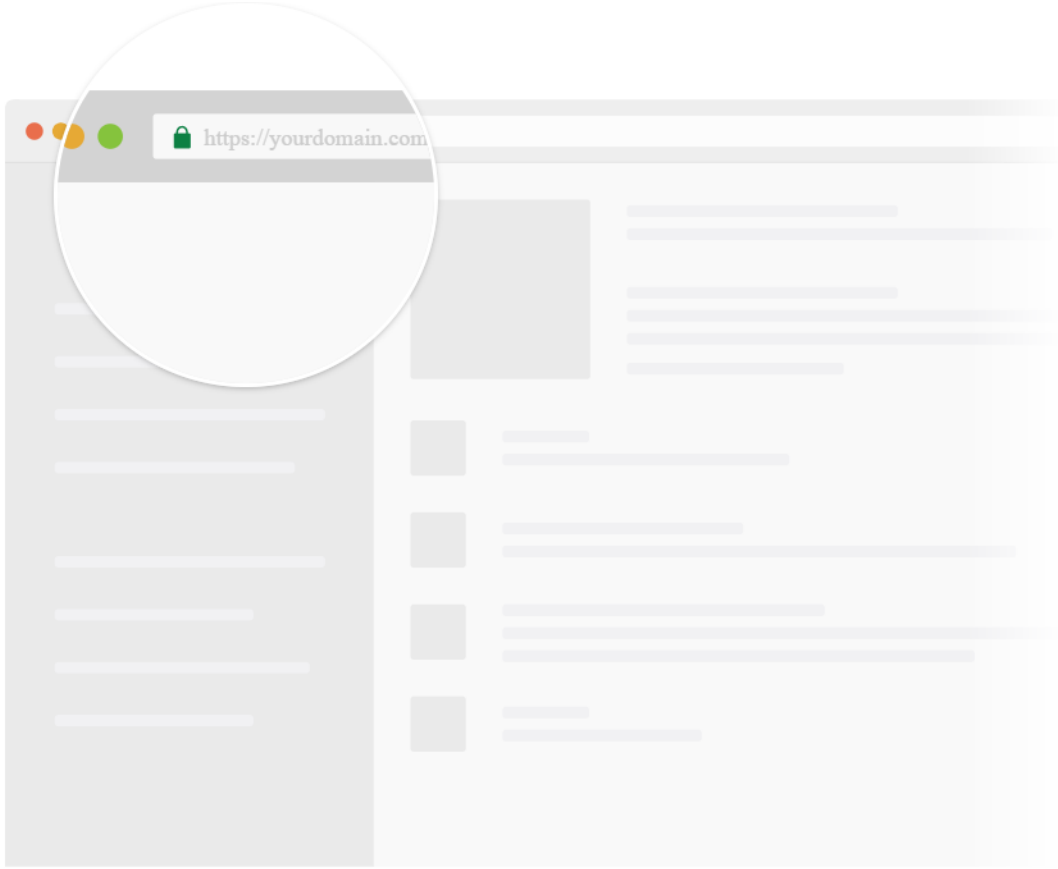
Set URLs Baqend should handle.

2. Include Code Snippet

Add Speed Kit to your HTML.

3. Enjoy Performance

Speed Kit makes the site faster.



…or just install the **WordPress Plugin**.

It works for them.

~2.5× Faster

~2.2× Faster

Technology Partner

SysEleven

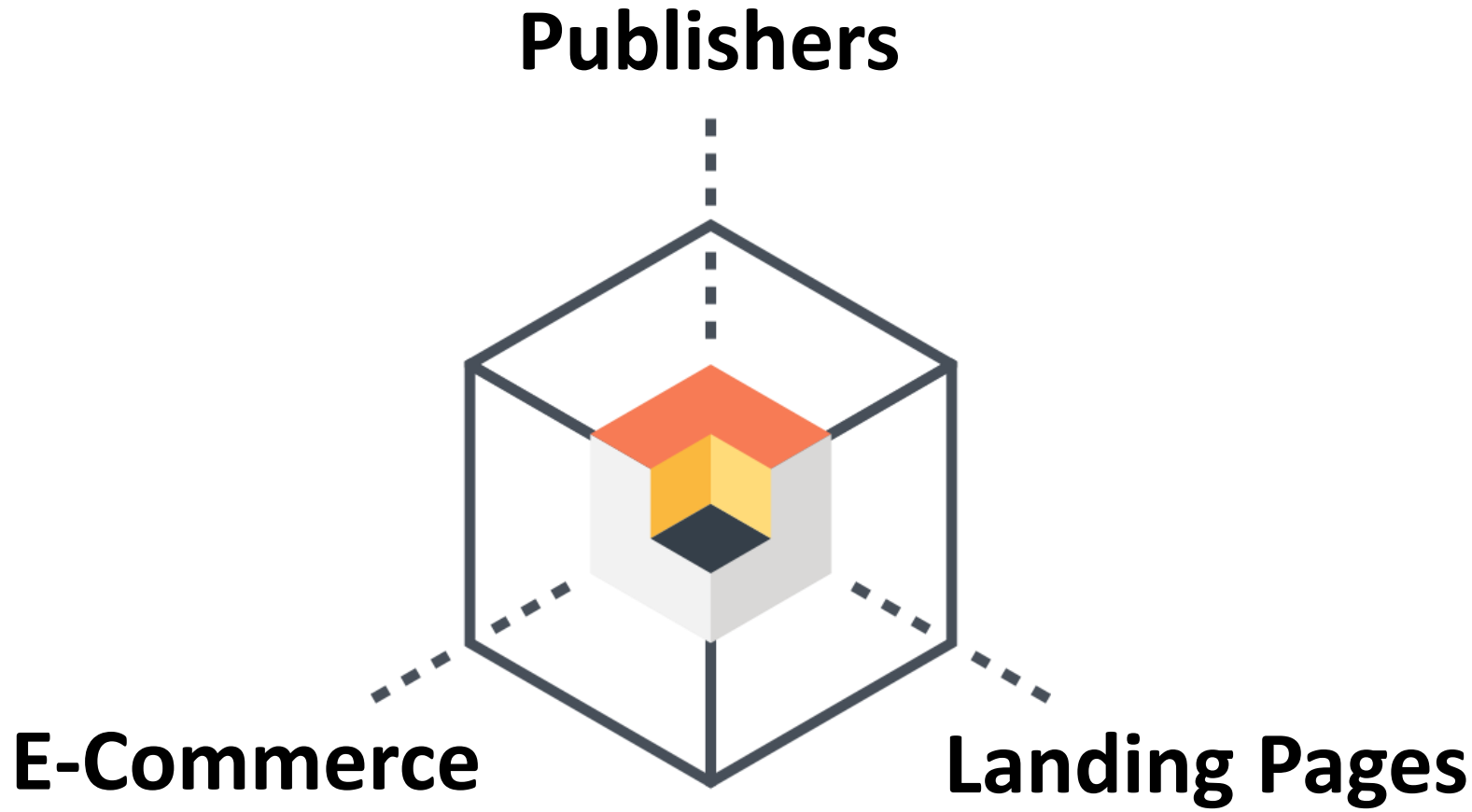
Hosting

+ Support

+ Speed Kit

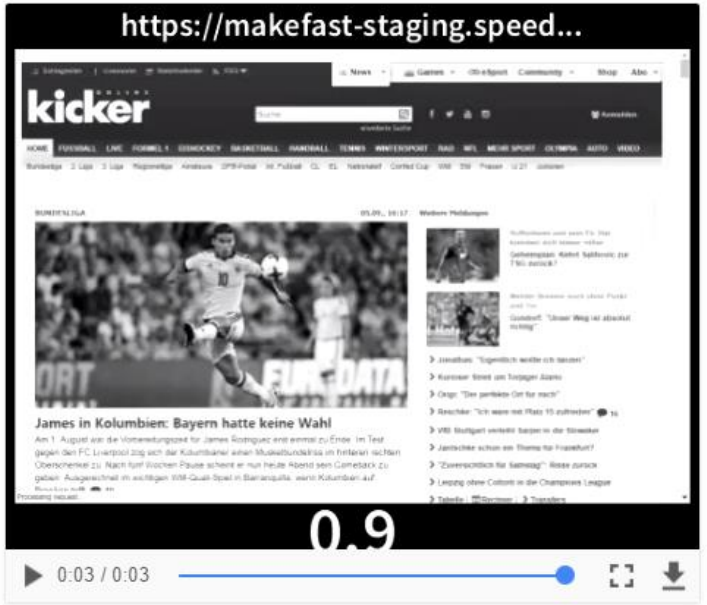
…and two more **multipliers** in the onboarding phase.

Speed Kit works across industries.



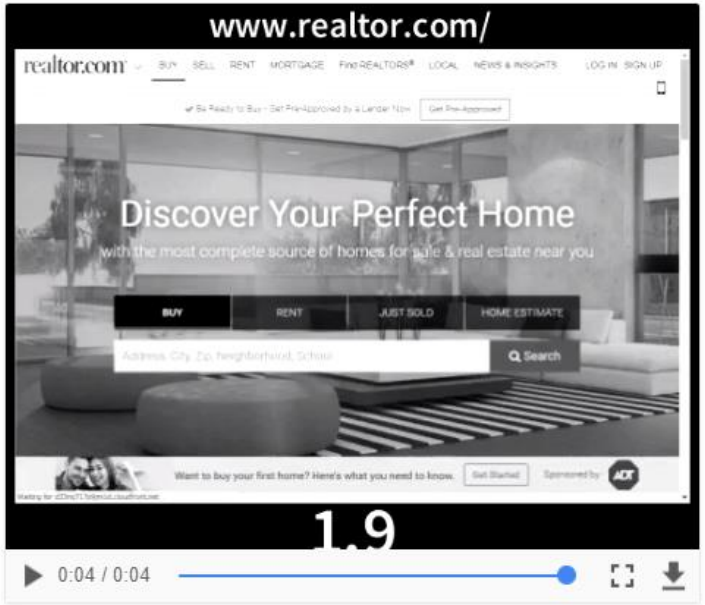
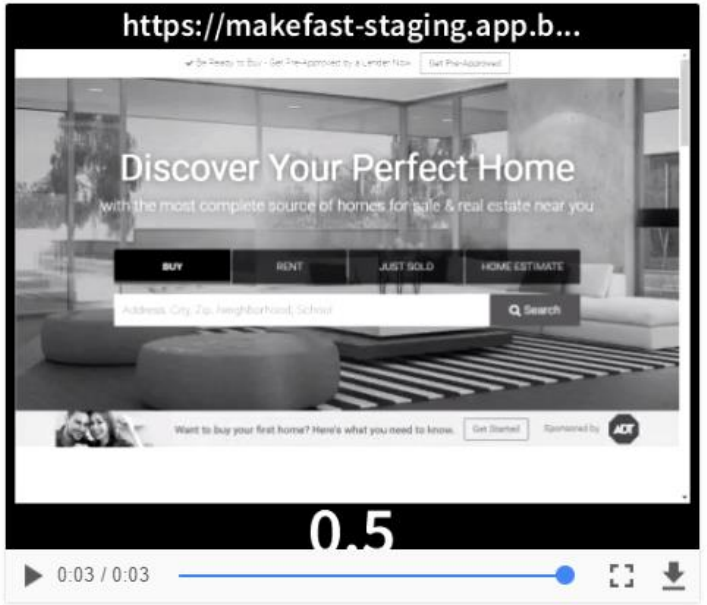
Works for Publishers.

kicker.de

Your Website		Your Website with Speed Kit
	4.11x Faster	
3332ms	Speed Index	810ms
	10.13x Faster	
638ms	Time To First Byte	63ms
	4.91x Faster	
5163ms	DOMContentLoaded	1051ms
	3.67x Faster	
13850ms	FullyLoaded	3770ms
	3.98x Faster	
3.5s	Last Visual Change	0.9s

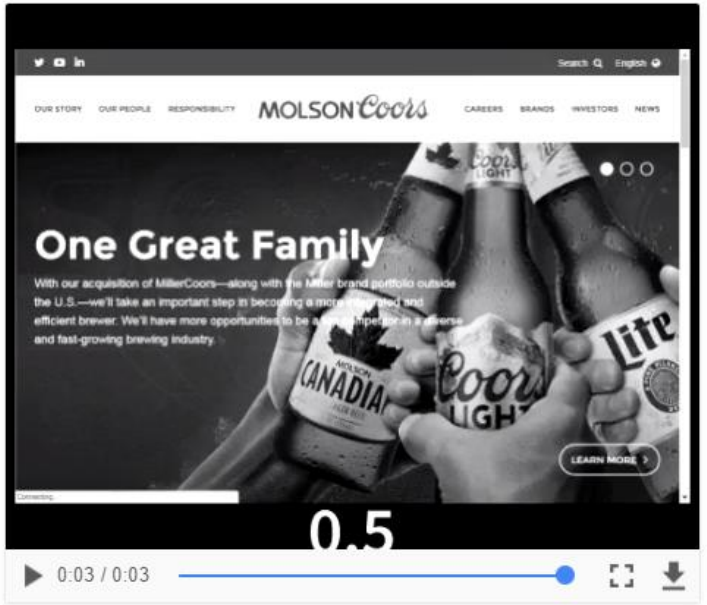
Works for Portals.

realtor.com

Your Website		Your Website with Speed Kit
	3.45x Faster	
1725ms	Speed Index	500ms
487ms	7.27x Faster Time To First Byte	67ms
1191ms	6.40x Faster DOMContentLoaded	186ms
3845ms	1.64x Faster FullyLoaded	2348ms
1.9s	3.91x Faster Last Visual Change	0.5s

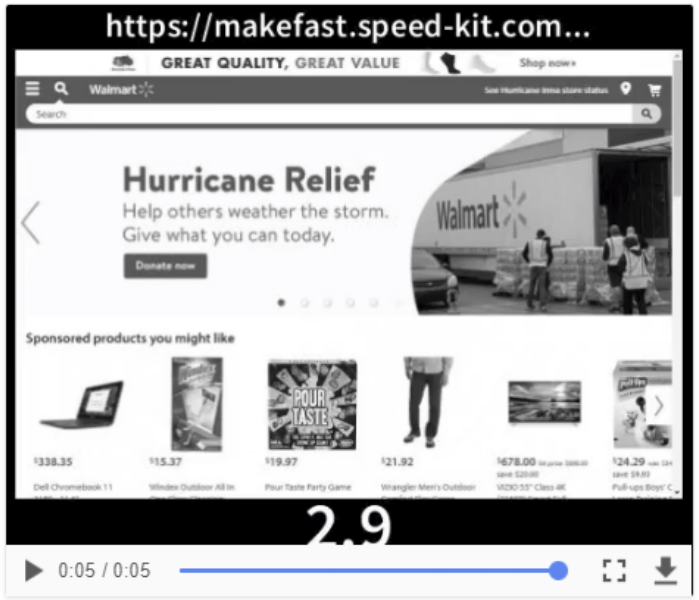
Works for Landing Pages.

molsoncoors.com

Your Website		Your Website with Speed Kit
		
1493ms	3.14x Faster Speed Index	476ms
298ms	149.00x Faster Time To First Byte	2ms
820ms	3.31x Faster DOMContentLoaded	248ms
1753ms	3.61x Faster FullyLoaded	486ms
1.6s	3.27x Faster Last Visual Change	0.5s

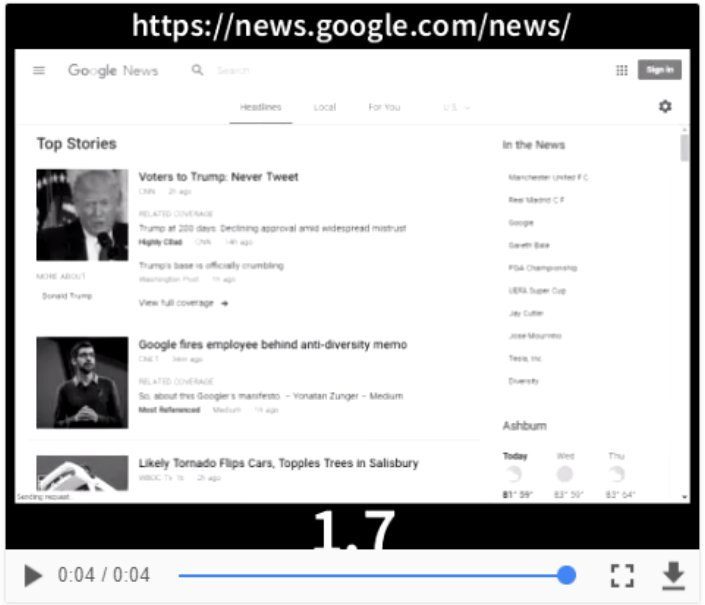
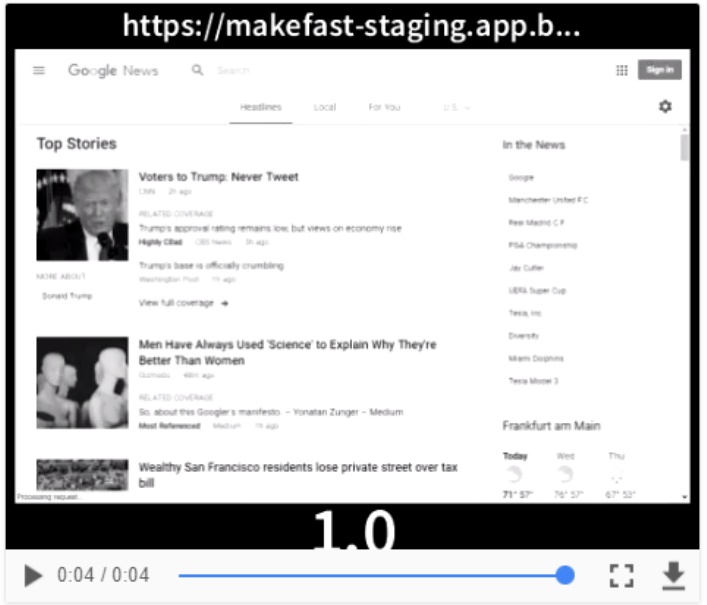
Works for E-Commerce.

walmart.com

Your Website		Your Website with Speed Kit
		
3262ms	2.83x Faster Speed Index	1151ms
2706ms	37.07x Faster Time To First Byte	73ms
3973ms	1.83x Faster DOMContentLoaded	2168ms
5854ms	1.49x Faster FullyLoaded	3916ms
4.6s	1.59x Faster Last Visual Change	2.9s

Works for Aggregators.

news.google.com

Your Website		Your Website with Speed Kit
		
1016ms	2.10x Faster Speed Index	484ms
216ms	3.22x Faster Time To First Byte	67ms
1201ms	2.97x Faster DOMContentLoaded	404ms
2153ms	1.42x Faster FullyLoaded	1511ms
1.7s	1.75x Faster Last Visual Change	1s

Does it work for You?

test.speed-kit.com

Why Speed Kit disrupts the CDN market.

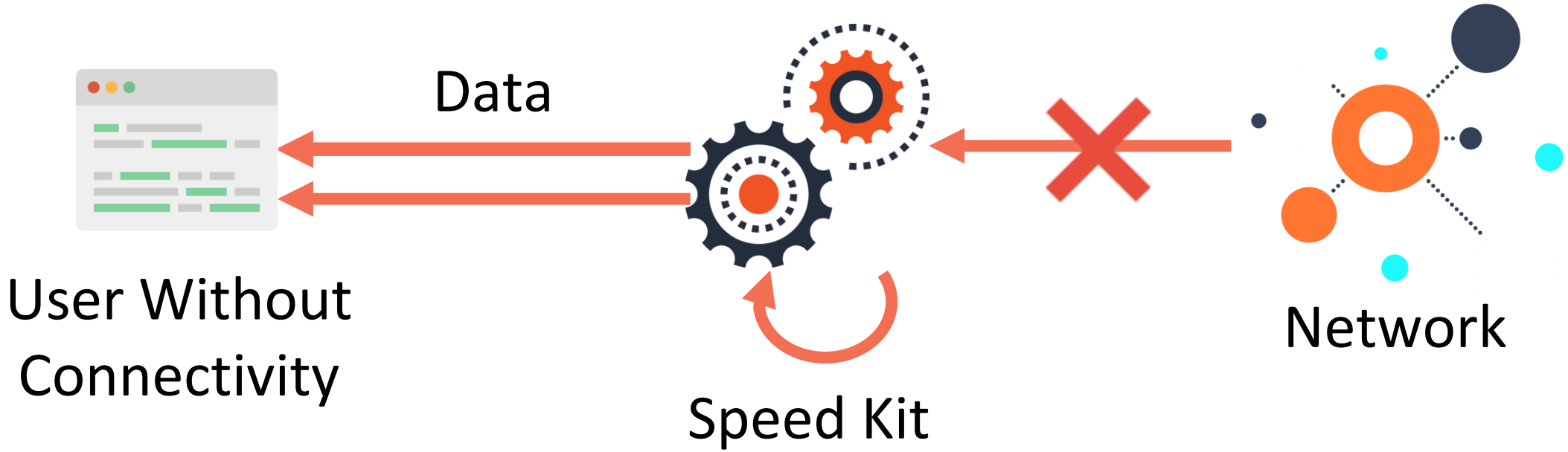
Better
Performance

Simpler
Integration

No Vendor
Lock-in

Transform sites into Progressive Web Apps.

When Offline:



→ Website is automatically **offline-capable**.

4 ways how Speed Kit will help you.

50-300% **Faster Page Loads**

Works for **Any Tech Stack**

Improves **Scalability**

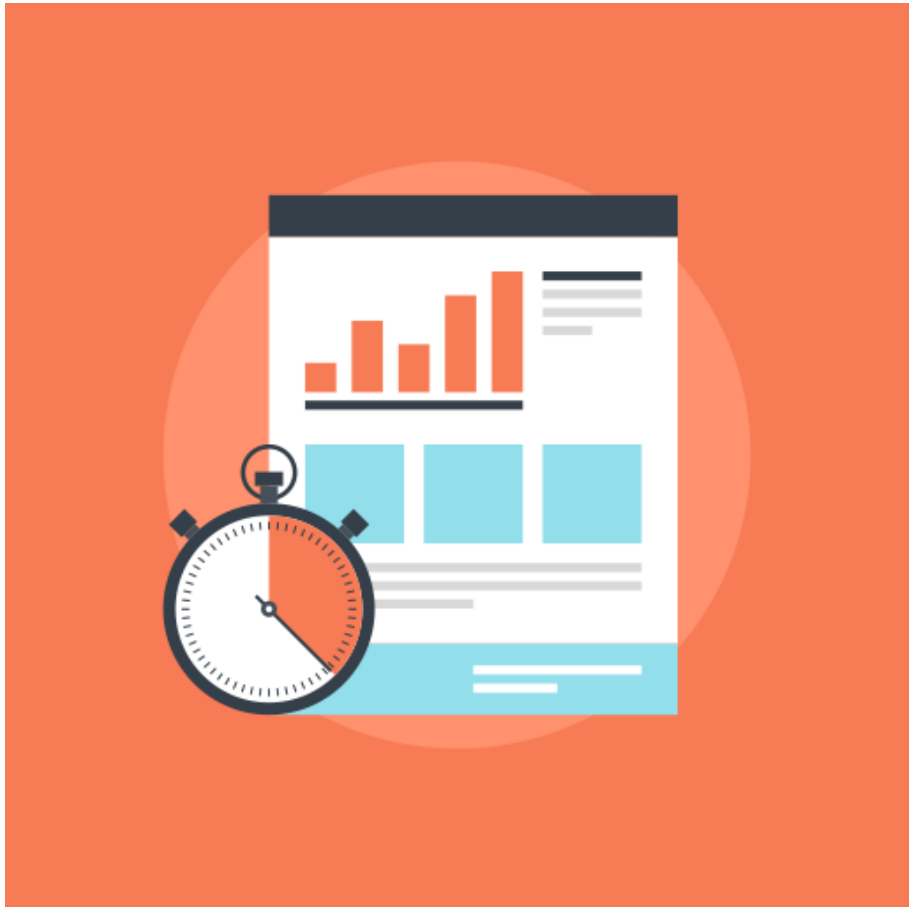
Automatic **Offline** Mode

Dead Simple Pricing.

#Requests + #Bytes

= Pay-as-you-go

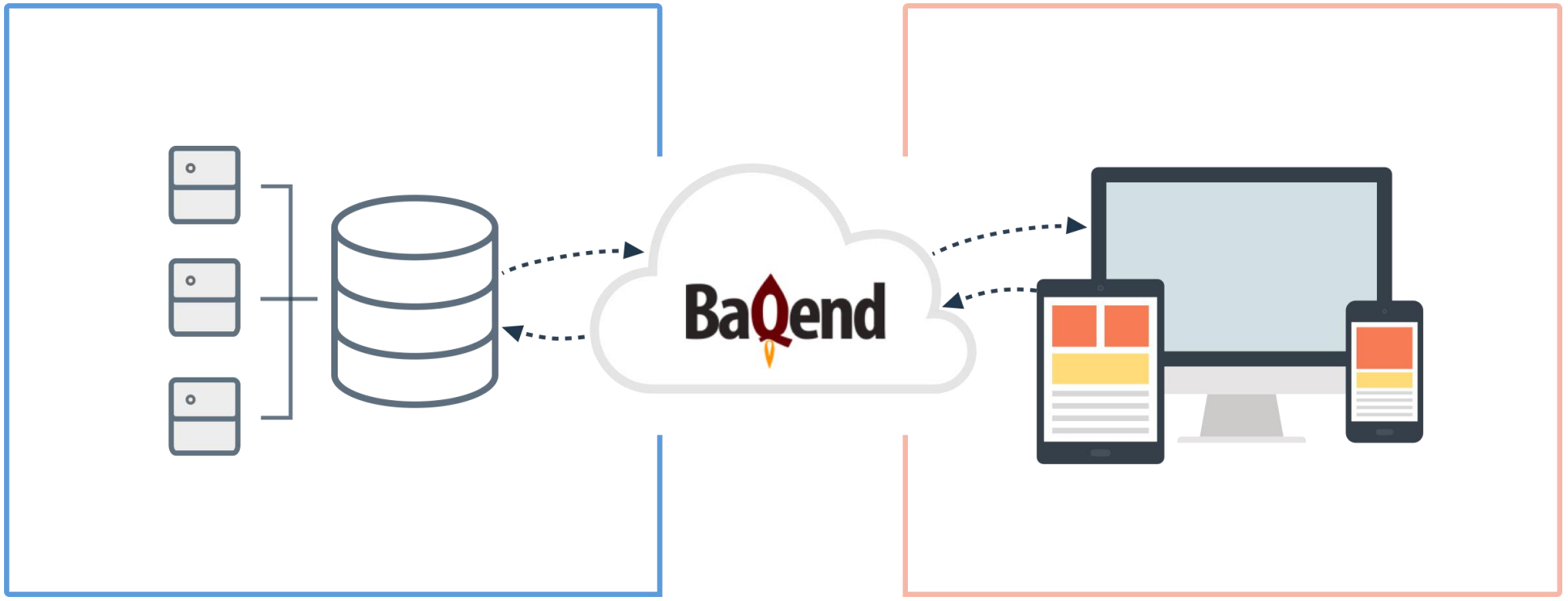
Speed Kit is made for boosting existing websites.



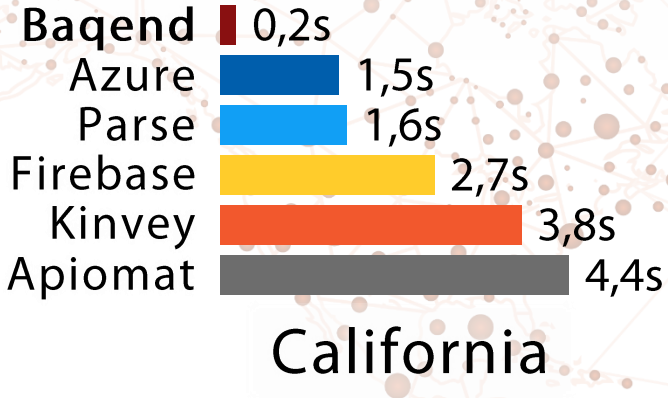
What if a website or app is built from scratch?

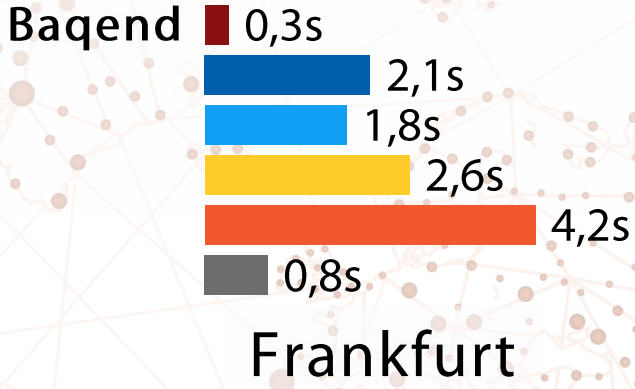
Baqend Platform

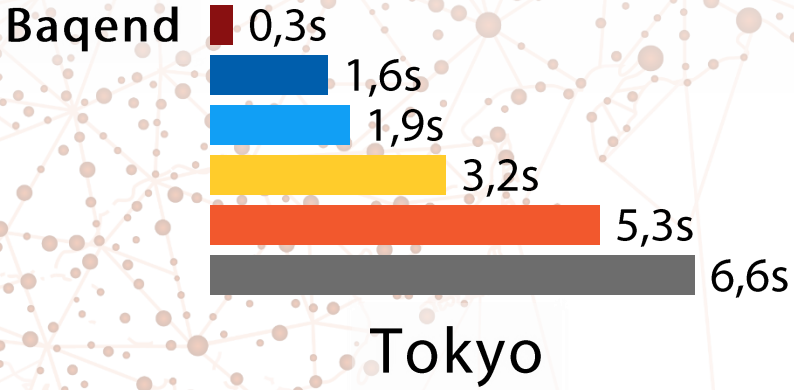
The world’s fastest
Backend-as-a-Service

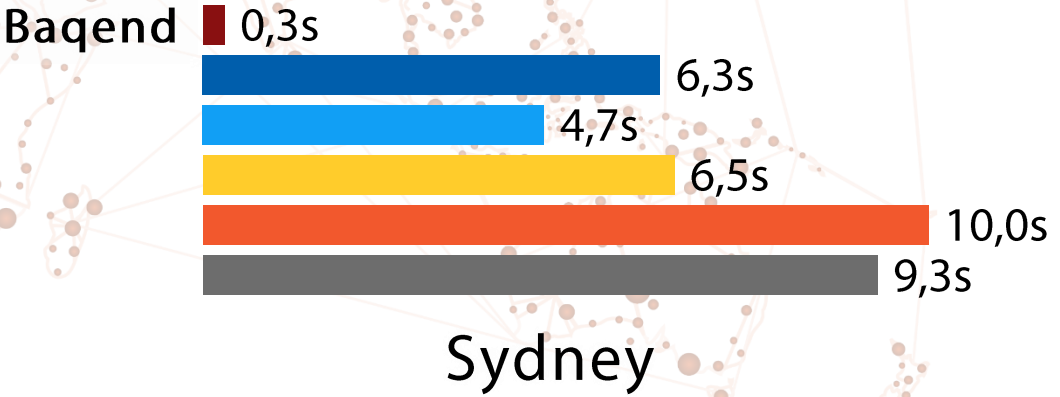


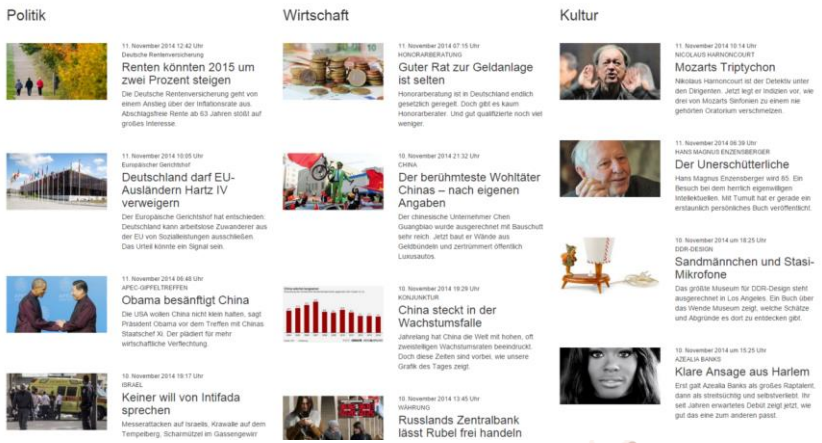
A global Performance Edge of 15x.



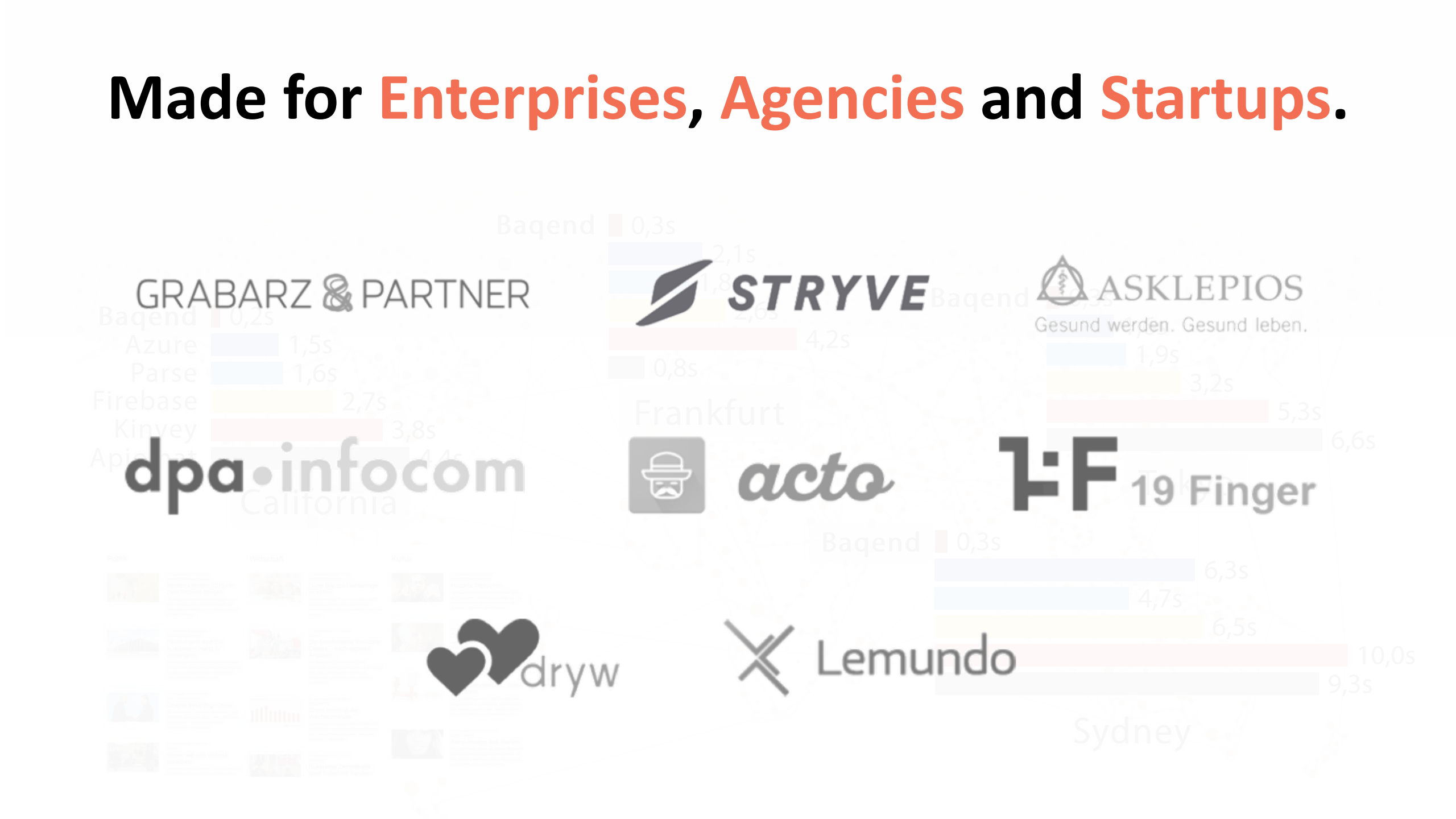








Made for Enterprises, Agencies and Startups.



Baqend in a Nutshell.

Speed Kit

- **50-300% Faster** Loads
- Works for any **Existing Site**
- **Offline** Mode

Platform

- Serverless Platform for **Apps and Websites**
- **15x** Performance Edge
- Faster **Development**

Baqend Team

11 Devs + 2 Business Guys

Make page speed your competitive advantage.

www.baqend.com

BaQend Felix Gessert · fg@baqend · www.baqend.com