# Why We Chose Wagtail for CodeRed CMS

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# Backstory

- We do web development.

- We support non-technical or semi-technical customers.

- We are a tiny team that needs to do a large amount of work.


- Our customers have (usually) been burned before.

- Our customers are not web devs (and don't want to be)

- Our customers have budgets.

**github.com/coderedcorp/coderedcms**

# Backstory

So basically, we are probably a *lot* like you.

# Do We Even Want a Traditional CMS?

## Hosted SaaS / multisite

- Highest dev efficiency
- Least likely for community / market adoption
- Least extensible if a customer wants to add major enhancements.

## Individual CMS per website

- Less dev efficiency (some duplicate work)
- Aligns better with open source model
- Highest level of extensibility.

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# Can we get the best of both worlds?

**YES! if...**

• Consolidate as much functionality as possible into the software.

• Deliver updates through a package system.

• Provide a hosting platform that essentially treats each install as multi-tenants in one giant SaaS (controlled server software, central database, etc.)

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OK, let's build a CMS with the benefits of a SaaS.

# So Why Re-Invent the CMS?

*We are a tiny team that needs to do a large amount of work.*

- New websites should be built extremely quickly.

- Existing websites should be extensible to infinity and beyond.

- ALL websites should be automatically updated with <u>major</u> features, and other "global" improvements.

*Our customers have (usually) been burned before*

- Unexpected breakage due to runaway click and point / plugin hell

- Quality/speed/design degradation over time.

- Need to rebuild whenever business needs change.

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# Open Source CMS Landscape (c. 2016)

# Umbraco

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- Windows-only, requires Visual Studio, Windows server, SQL server, etc.

💩

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# Mega-WordPress

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- Custom CodeRed layer on top of WordPress: theme and set of plugins.

- Many themes already achieve their own similar goals this way, but it is still heinous to extend if you're *not* the theme dev.

- Feels too hacky, and our devs don't want to actually build this!

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- Nice admin UI 👍

- *Very* Django-ish under the hood! 👍

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# Tentative Winner: Wagtail

- It is the most Django-ish of all CMS's

- It has a nice UI

- Seems to have enough features and docs to start with (rich text, media support, tutorials, etc.)

- What we need to do: build **mega-wagtail**, a layer of features on top of wagtail.

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# Building Mega-Wagtail



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# Building Mega-Wagtail

- Quite a lot of trial and error, learning curve at first.

- StreamField is "best and worst feature" – nice concept and UI, but difficult to understand or dive into beyond basics.

- We made many alpha versions and launched a few small client sites.

- One major struggle: trying to make truly dynamic pages/streamfields by overriding __init__() or lazy loading attributes.
  - Due to the diversity of the sites we work on, we definitely needed wagtail to be much more dynamic to support variations without requiring code changes from site to site.

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# Building Mega-Wagtail

- The other aspect: server-side hosting

- Running a fleet of Django sites is quite different than running one. Not to mention running a fleet of Wagtail sites.

- BUT we want to still reap the benefits of a single SaaS

  - Centralized uniform product updates

  - Centralized management

  - Lower infrastructure costs/efficiencies.

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# Finally, CodeRed CMS

- Released first beta version, 0.5.0 to GitHub June 2018.

- Have since built about a dozen client sites with CodeRed CMS.

- Have started shopping Wagtail/CodeRed CMS around to our marketing agency partners, who are showing genuine interest.

- Making a serious open source project is a lot of work, but it is an investment in the future of our company.

- We are betting on Django (safe bet) and wagtail (not so safe bet back in 2016). But felt reassured by the community back then, and *much much* more over the past 2 years!

- Now, we are hoping small businesses and small marketing agencies will bet on CodeRed CMS as a step-up from DIY or freelancer-driven solutions, like WordPress.

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# Behold,
# CodeRed CMS...

(demo)

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