

**Lets have some  
advertisement**

# MageUnconference

## Looking for...

- Sponsors! Friends of MageUC: 300€
- Bigger Sponsors: 500€+
- MOAR Attendees

<http://www.mageunconference.org/2017/>

<https://www.mage-hackathon.de/upcoming/muc17de.html>

# **SOLVING THE HARDEST PROBLEM**

**Introduction to Lizards & Pumpkins**  
**techniques we are using and why**

# Problem

**Your shop is too slow**

**And scaling is  
hard and expensive!**

# Definitions

**Performance**  
**low TTFB (uncached)**



# Scalability

**Double the machines  
double the throughput**

# Solutions

# **Solution for everything?**

**Solution for everything?**  
***caching!***

*There are only two hard  
things in CS:  
cache invalidation and  
naming things.*

**– Phil Karlton<sup>1</sup>**

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<sup>1</sup> <http://martinfowler.com/bliki/TwoHardThings.html> <http://skeptics.stackexchange.com/q/19836>

# Problem: Broken by design

- Cache miss
- Invalidation is HARD if you do it right
- Flush can lead to downtime
- Inconsistencies are hard to avoid

# **Solution: Pregeneration (not cache warmup)**

# Be Prepared scouts motto

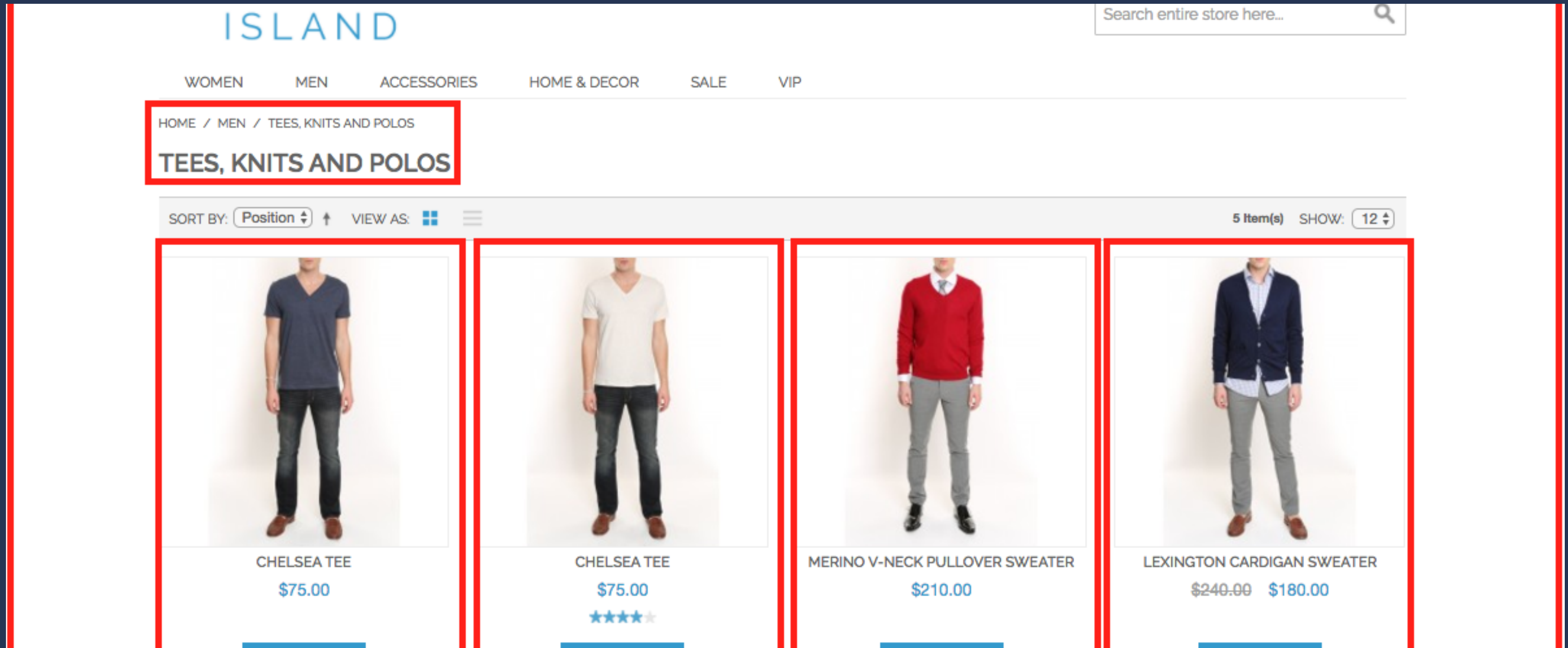
- render only if something is new
- and serve until it is updated



# Not possible with Magento

- Because it doesn't know what the content looks like,
- *when the product is saved,*
- *not until requested*

# Idea



# How to do it?



# Lizards and Pumpkins

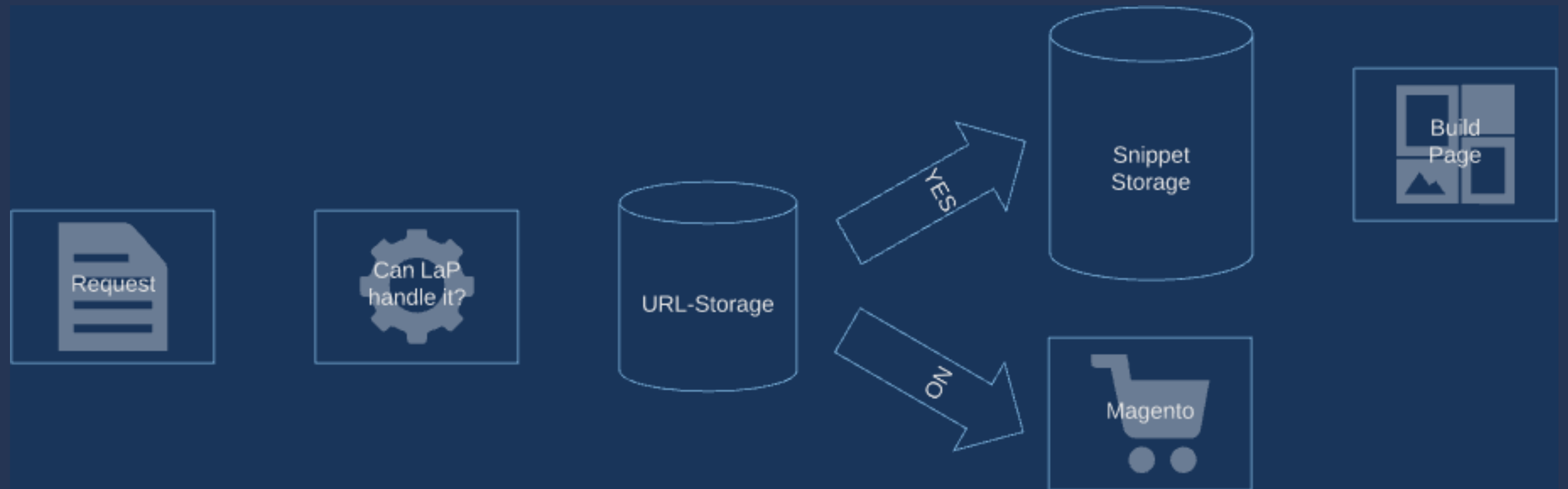
# Process (Import)



# Import

- Work already done, HTML/JSON/XML rendered!
- Logic is in keys, e.g.
  - prices per country
  - availability per customer (group)
  - description per geo ip

# Content Delivery (Request)

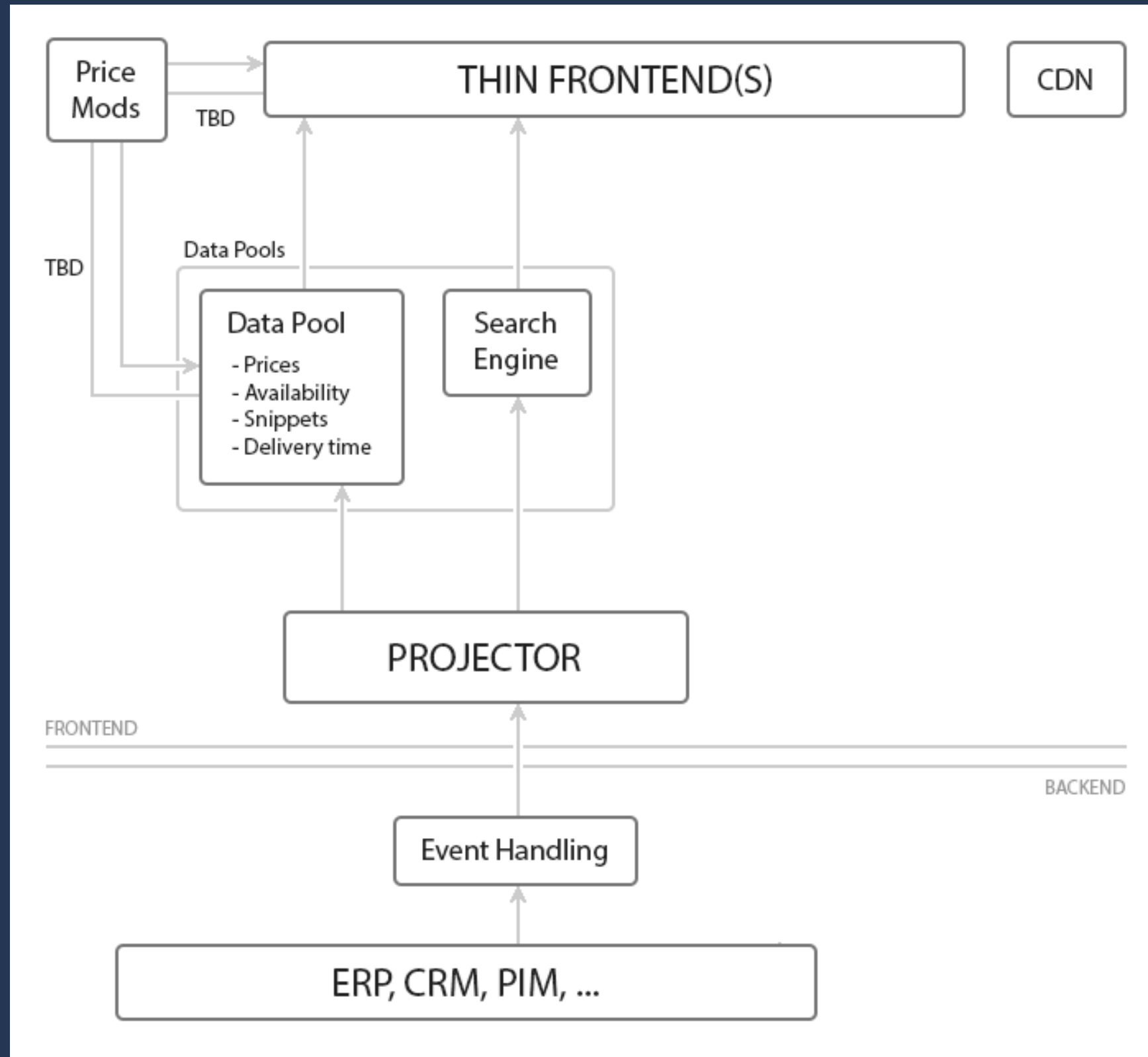


# Build from snippets

- KV storage
- Services (your or SaaS)



**It scales!**  
**HORIZONTALLY**



# Up and downsides

- + boost for TTFB
- +/- Theme needs to be reimplemented (get rid of legacy)
- less documentation (but good to read code!)
- Second software stack to maintain

# Magento Connector

- Exports huge XML files (250k products)
- Schema for XML
- Simple, config products
- no custom options

# Some facts and numbers

- TTFB 30ms (+network)
- 100% TDD (even JS!)<sup>5</sup>
- 100% PHP 7.0 (PHP 5.6 incompatible)<sup>6</sup>
- we have thePHP.cc as consultants since beginning
- first commit by @Vinai on Tue Oct 14 2014<sup>3</sup>
- Main repo > 3.400 commits <sup>4</sup>

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<sup>5</sup> <https://scrutinizer-ci.com/g/lizards-and-pumpkins/catalog/>

<sup>6</sup> <https://github.com/lizards-and-pumpkins/catalog/pull/936>

<sup>3</sup> <https://github.com/lizards-and-pumpkins/catalog/commit/34abfd6900ab00015b4798c62dc6d9126e51d95b>

<sup>4</sup> <https://github.com/lizards-and-pumpkins/catalog>

# First day with 🐉 & 🎃

| Revenue & Conversion Rate |                           | Transactions |                     |
|---------------------------|---------------------------|--------------|---------------------|
| Revenue                   | Ecommerce Conversion Rate | Transactions | Average Order Value |
| 24.52%                    | 44.93%                    | 14.52%       | 8.73%               |

*Funny thing.*

*10 days ago due to hosting fault first  
web-server at 🦎 & 🎃 crashed and was  
down over the weekend and nobody  
noticed.*

*Guess why. Because Lizards was fine  
with a single server.*

**– Tim Bezhashvyly**

# How to get started?

- 4 day workshop to implement a ready to use solution
- Risk? 6000€<sub>(+tax)</sub>



# Questions?