



# APIs From the Outside In

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# What is an API?



Cool



Good for you



Can save the Enterprise

# When is my api an API?

# Is this an Application Programming Interface?

```
public class Football {  
    private float psi;  
  
    public float getPressure() {  
        return psi;  
    }  
  
    public void setPressure(float pressure) {  
        this.psi = pressure;  
    }  
  
    public boolean willKeepUsOutOfTrouble() {  
        return 12.5 <= psi && psi <= 13.5;  
    }  
}
```

My helmet doesn't run Java!!!!!!



# Annotated to listen on HTTP

```
public class RestfulFootball {  
    private float psi;  
  
    @GET  
    @Produces("application/json")  
    public float getPsi() {  
        return psi;  
    }  
  
    @PUT  
    public void setPsi(@FormParam("psi") float psi) {  
        this.psi = psi;  
    }  
  
    @GET  
    @Path("deflategate")  
    public boolean willGetUsIntoTrouble() {  
        return psi < 12.5 || psi > 13.5;  
    }  
}
```

# External HTTP Calls Are Now Possible

```
$ curl http://field.com/football/deflategate
```

# Mission Accomplished!



# We Did It!



# Finally, we can “REST”!

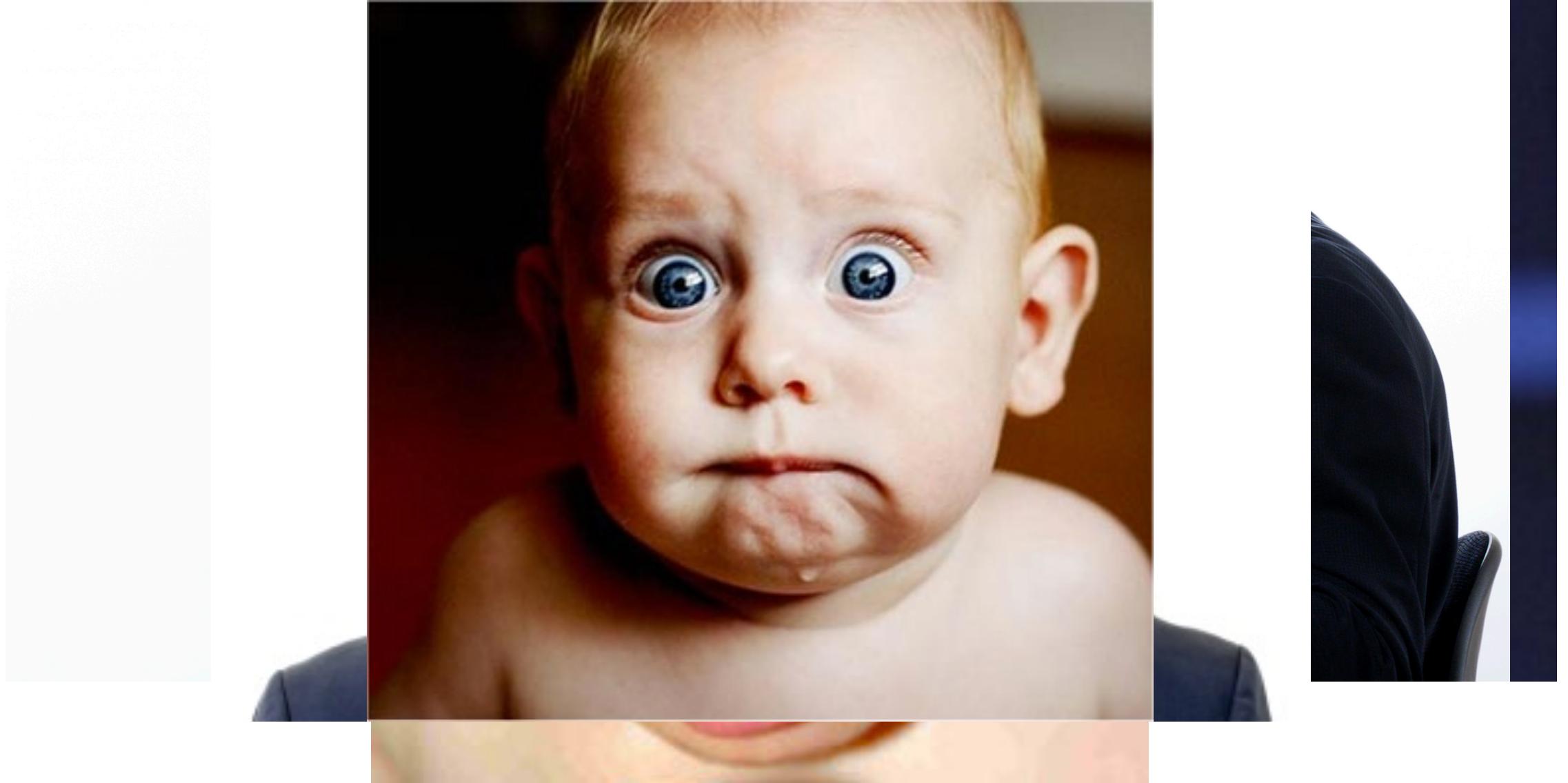




# What have we forgotten?



# APIs are about more than exposure



If you build it...



...will they come?



If you expose an API, but no one consumes it, does it make a difference?



If a tree falls in the forest, does anyone hear it?  
Yes, Chuck Norris does. He hears everything.

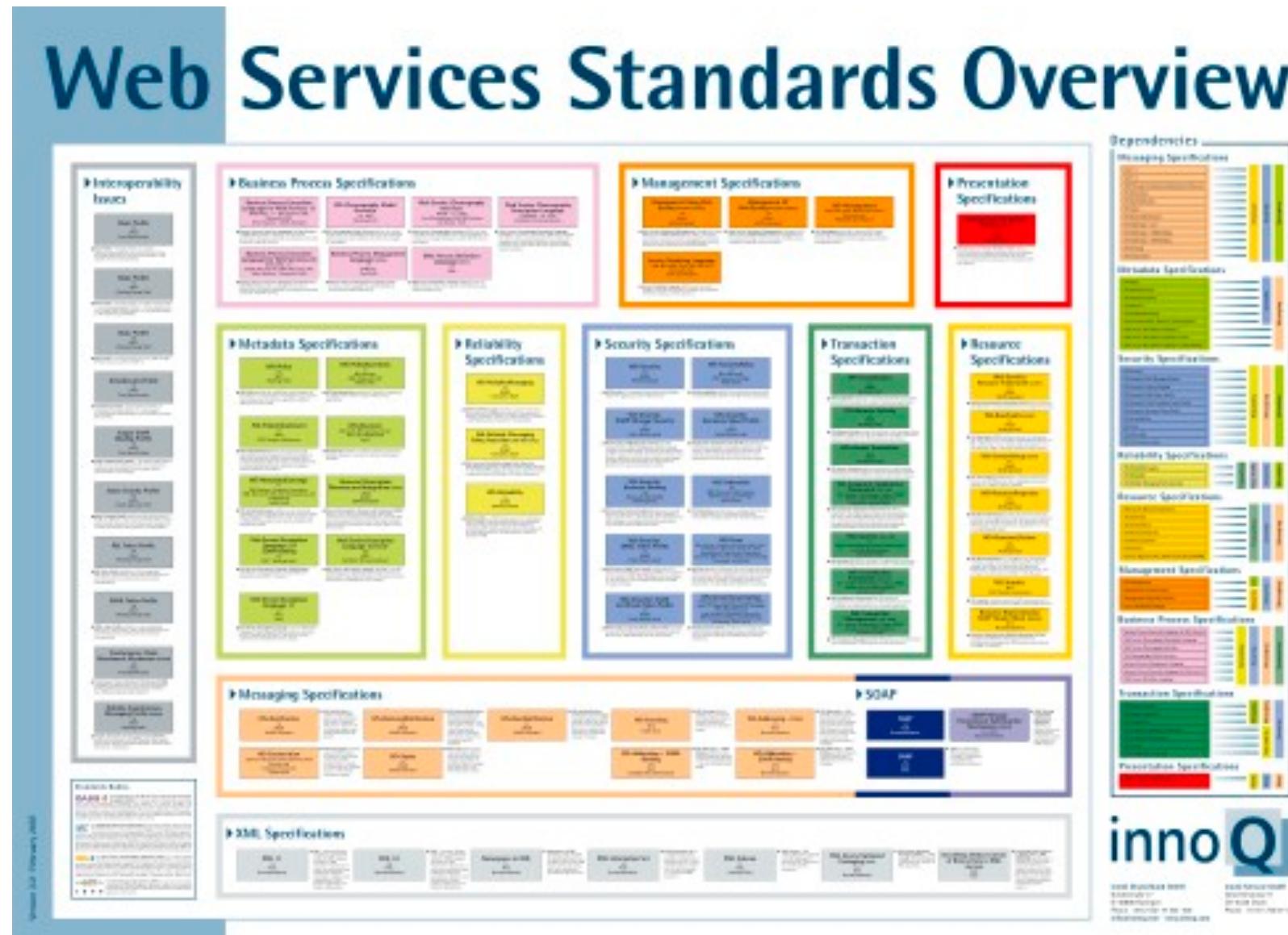
If you are very lucky, maybe your API sells itself. Some do.

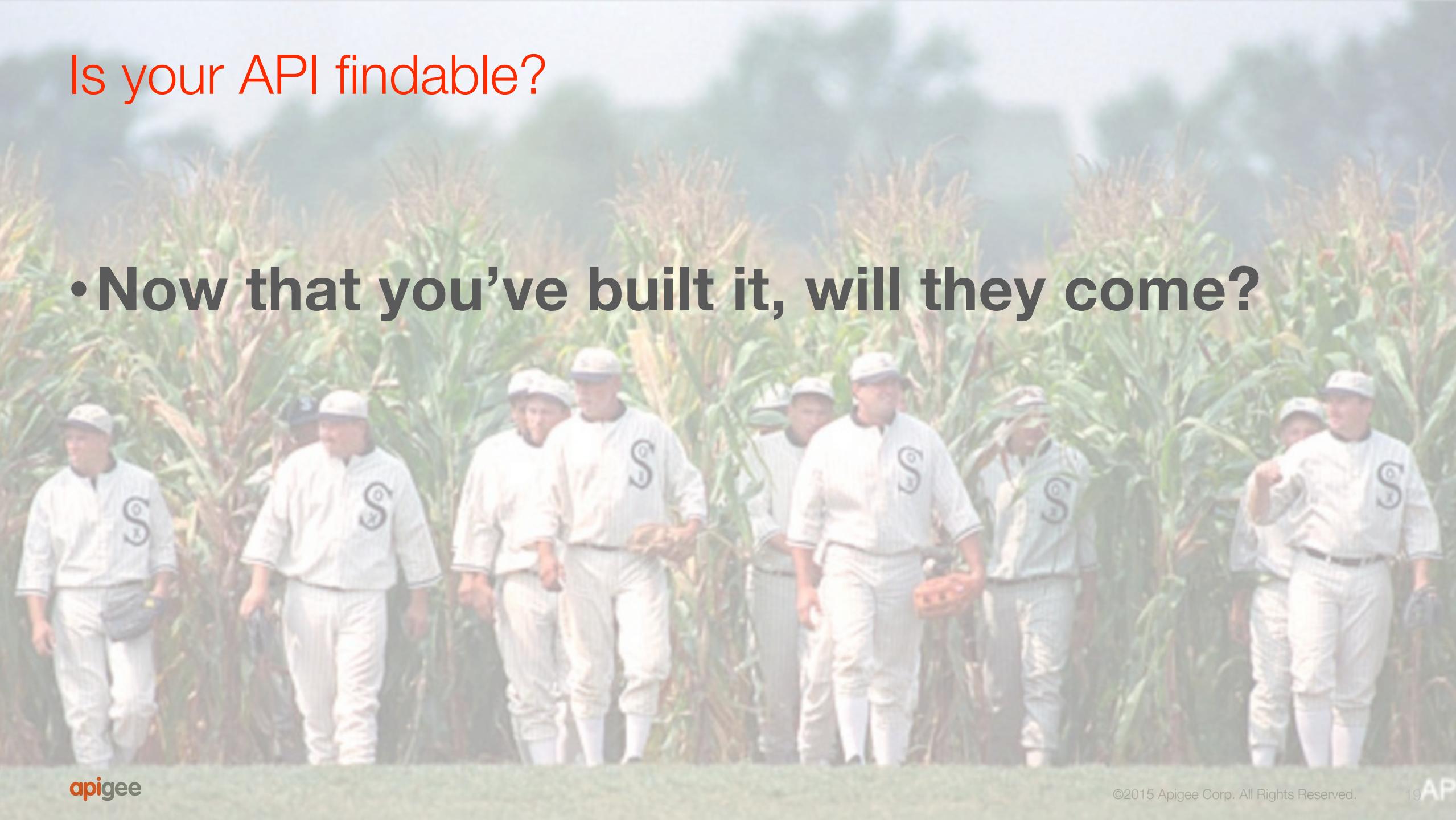


The original PayPal “API” was not pretty, but it was money!



No one ever used SOAP because they liked it.



A photograph of a group of men in vintage-style baseball uniforms standing in a field of tall, green corn. The uniforms are white with a large letter 'S' on the chest. They are looking towards the right side of the frame. The background is filled with the dense foliage of the cornfield.

Is your API findable?

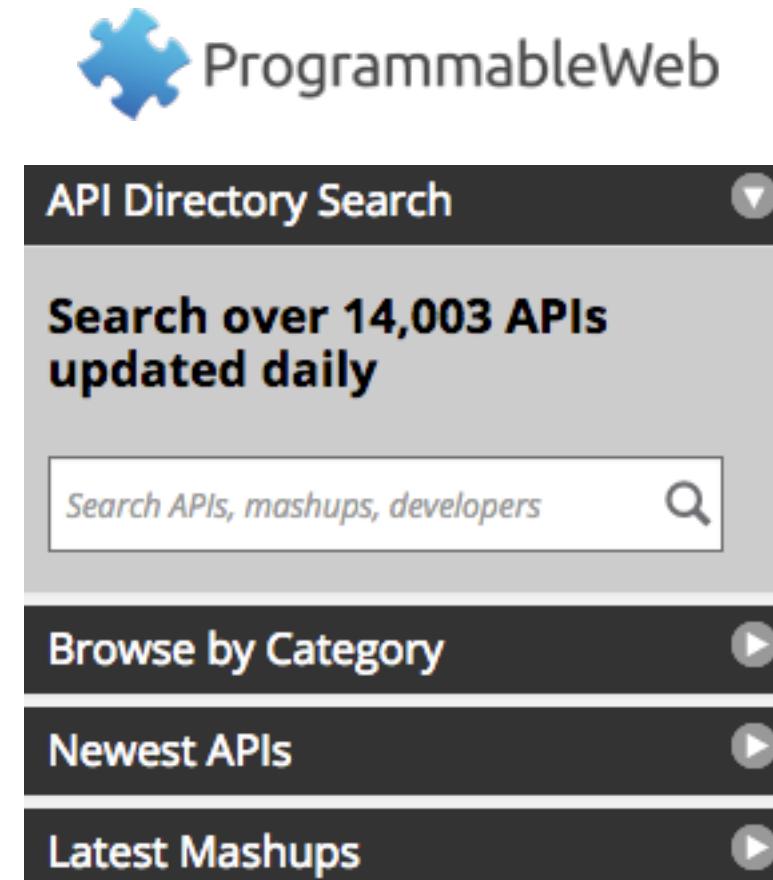
- Now that you've built it, will they come?

A person wearing a white shirt and dark pants stands in a field of tall, green plants. They are looking down at something in their hands, which appears to be a small device or a piece of paper. The plants are dense and reach up towards the top of the frame.

Is your API usable?

- More importantly, now that they've seen it, will they come back?

# There is almost no reason to use a terrible API anymore

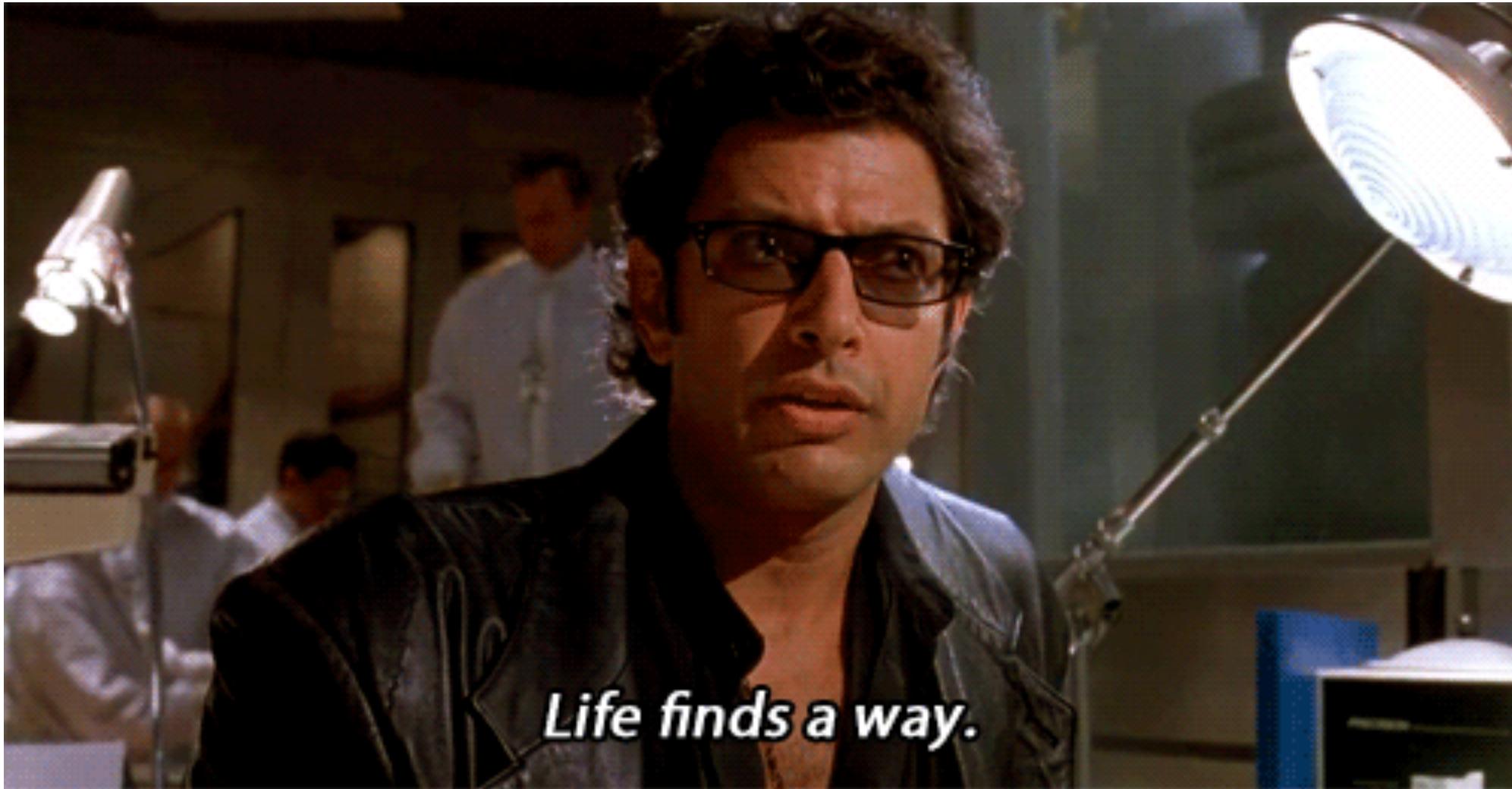


# Perhaps you have a captive audience

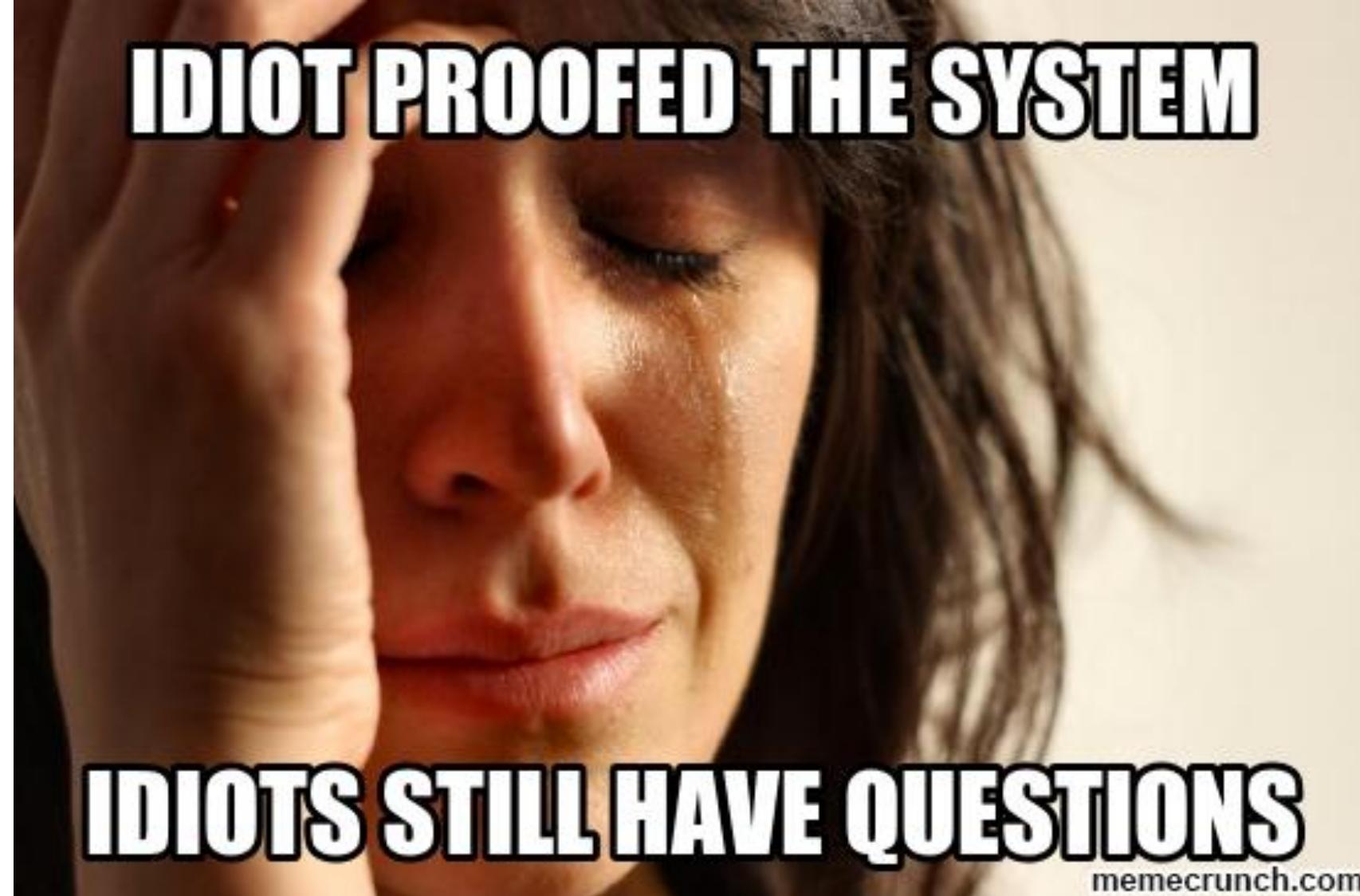




# Developers find a way



*Life finds a way.*



**IDIOT PROOFED THE SYSTEM**

**IDIOTS STILL HAVE QUESTIONS**

[memecrunch.com](http://memecrunch.com)

# Developers can be a crafty bunch



# The Path of Least Resistance



# Time



# Money



# Security



# Agility: The ability to respond to disruptive forces



# Reliability: How is this going to handle Internet scale?

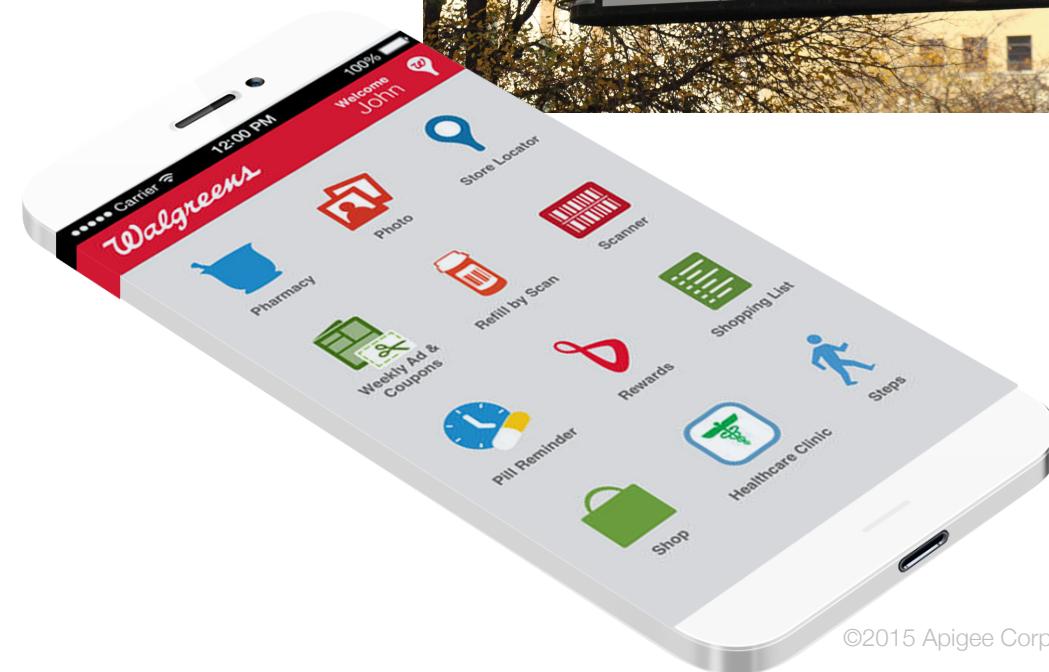


# Adoption Matters

- Efficiency
- Consistency
- Agility
- Reliability
- Spread your corporate DNA
- Security
- What's the point, otherwise?
- Make your way the path of least resistance!

# Digital Transformation

# Are you even in the business you think you're in?



# Every enterprise has its secret sauce



# Plenty of value locked in your backend systems



# But you can't let these jokers inside your vault



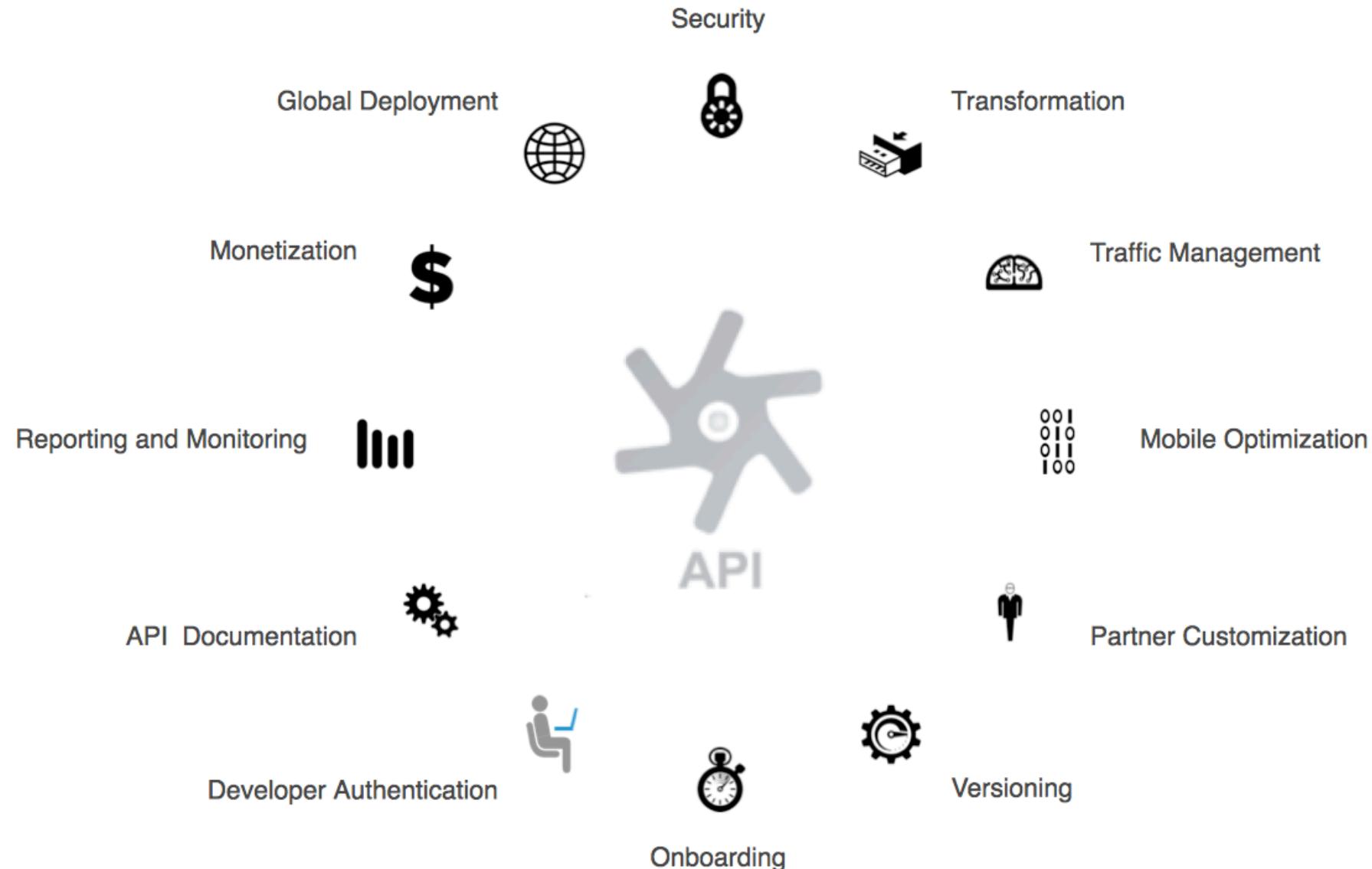
An API is your front door that *securely* welcomes customers inside



# The Façade Pattern



# Where are your fancy annotations now?



# The Digital Economy

