

REBOT

AUTOMATE DEBUGGING

Created by [Naveen K Lekkalapudi](#) / [@nave91](#)

NEW?



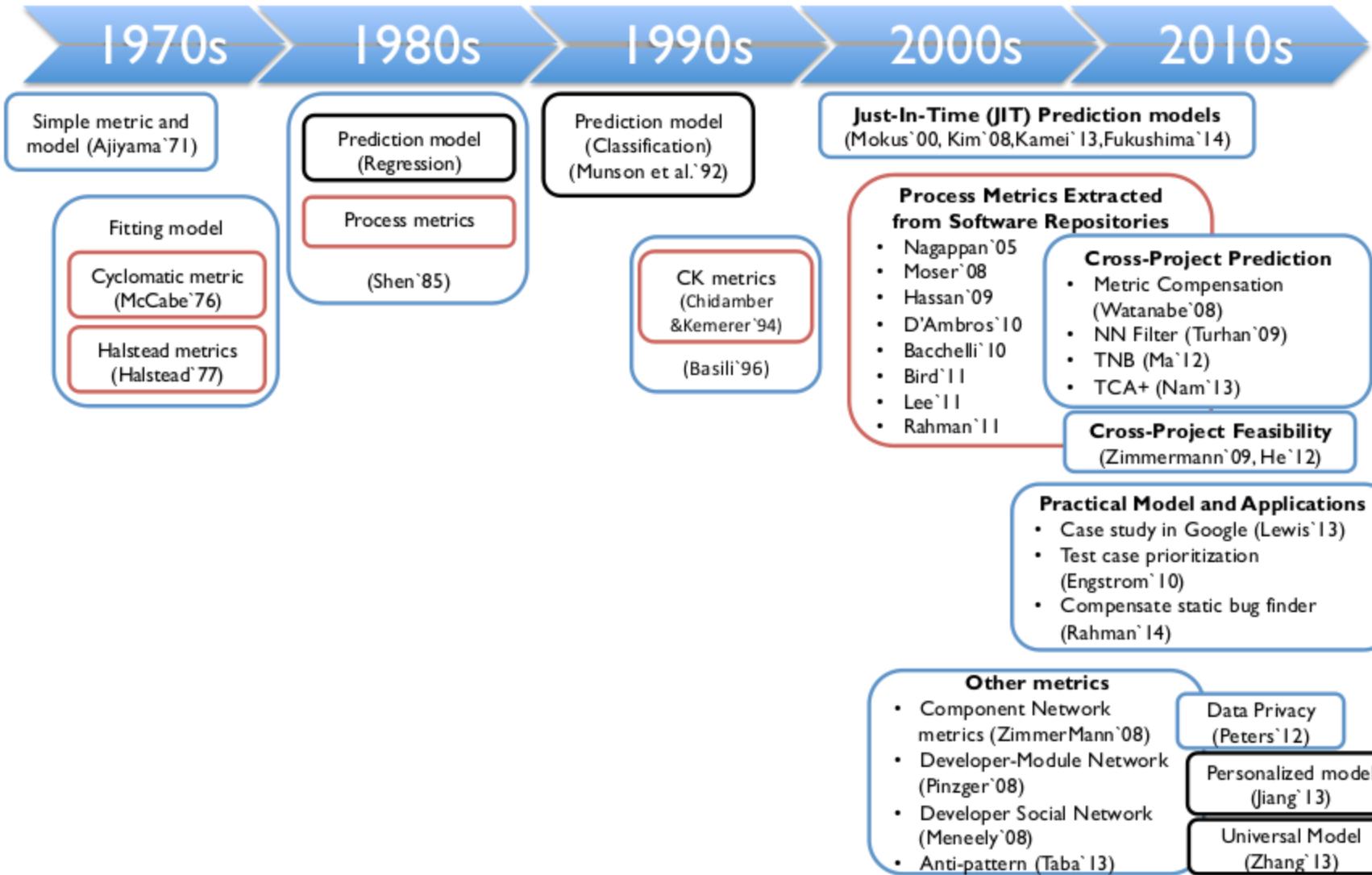
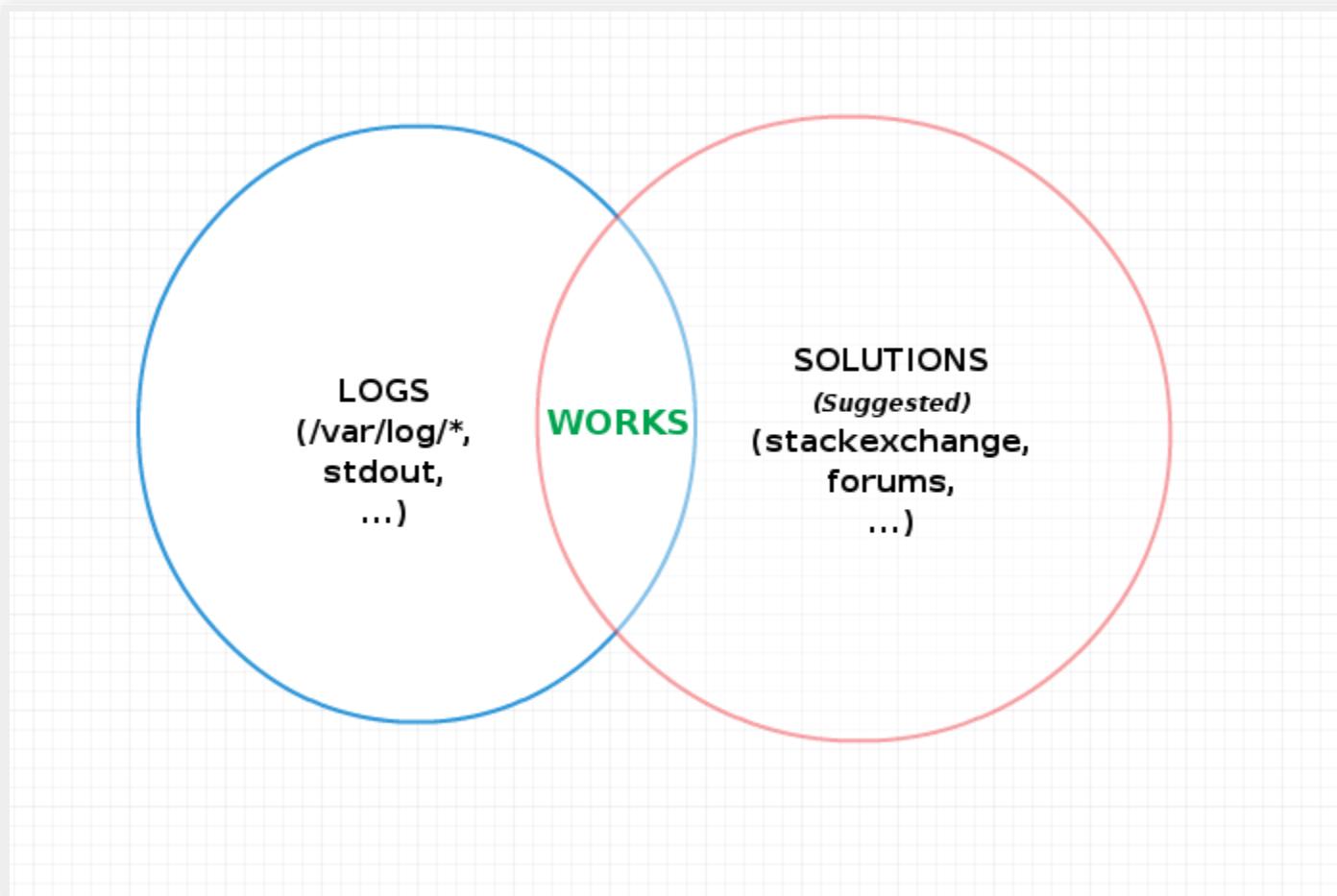
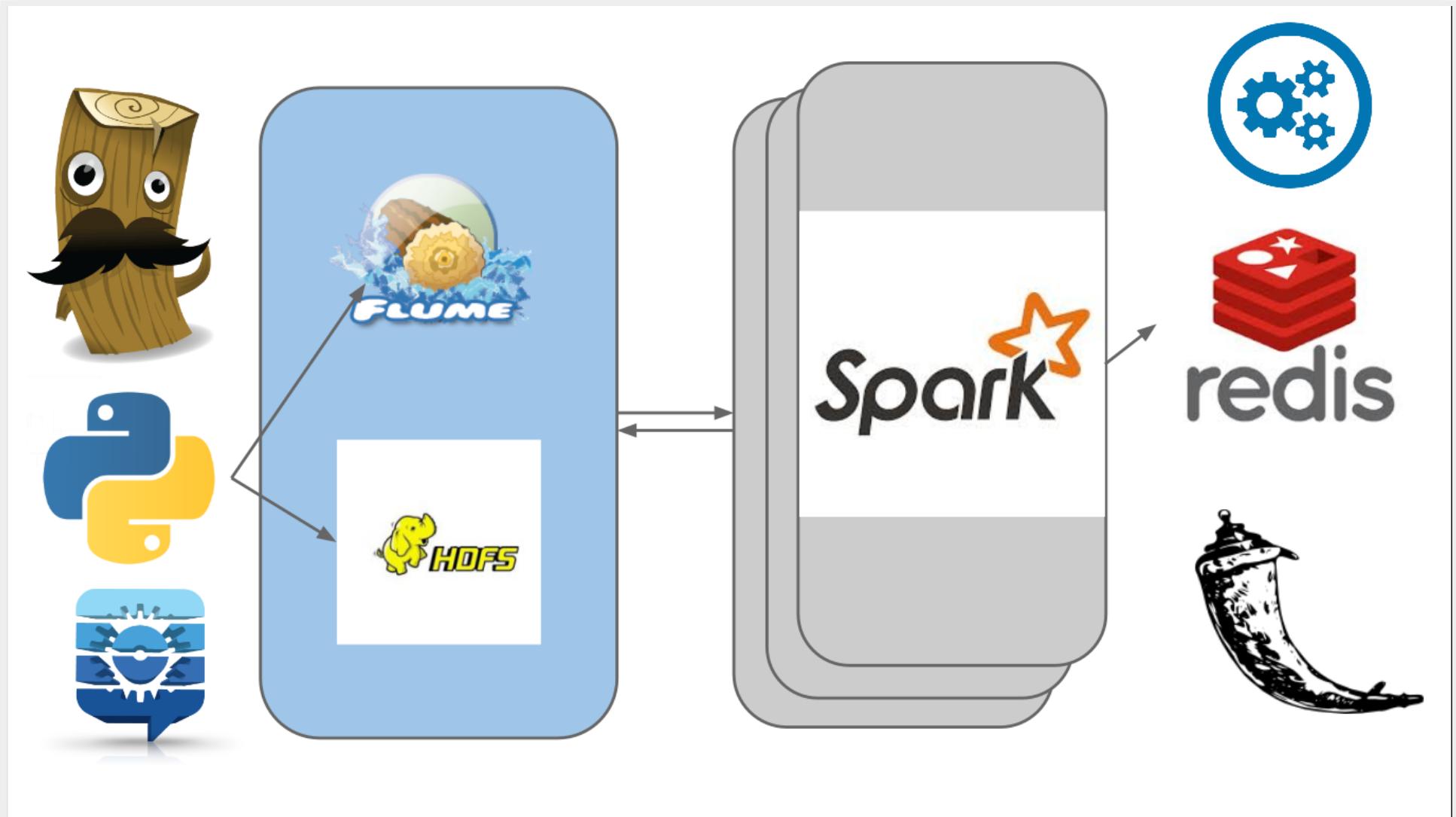


Fig. 2: History of software defect prediction studies

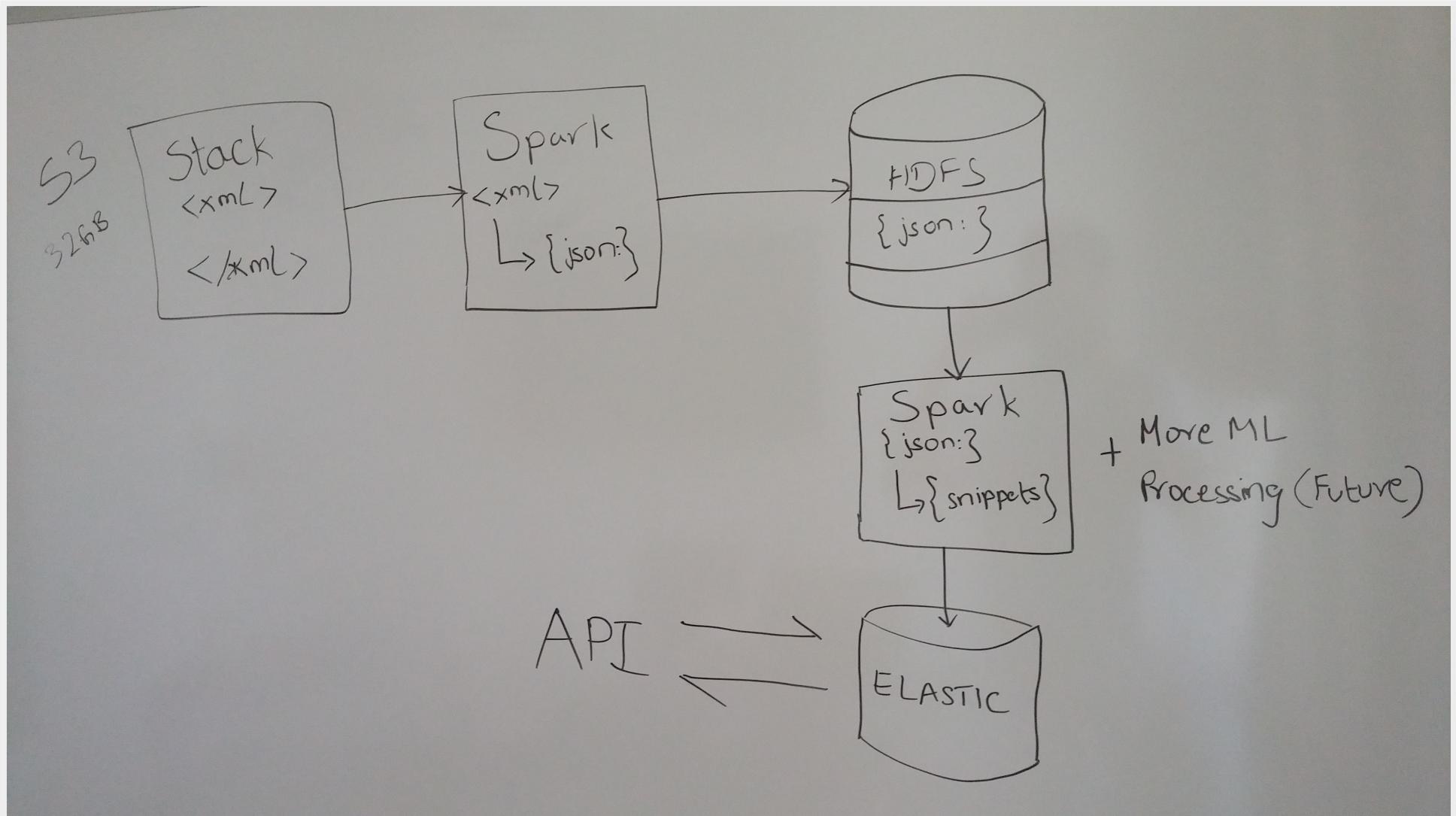
SOLUTION



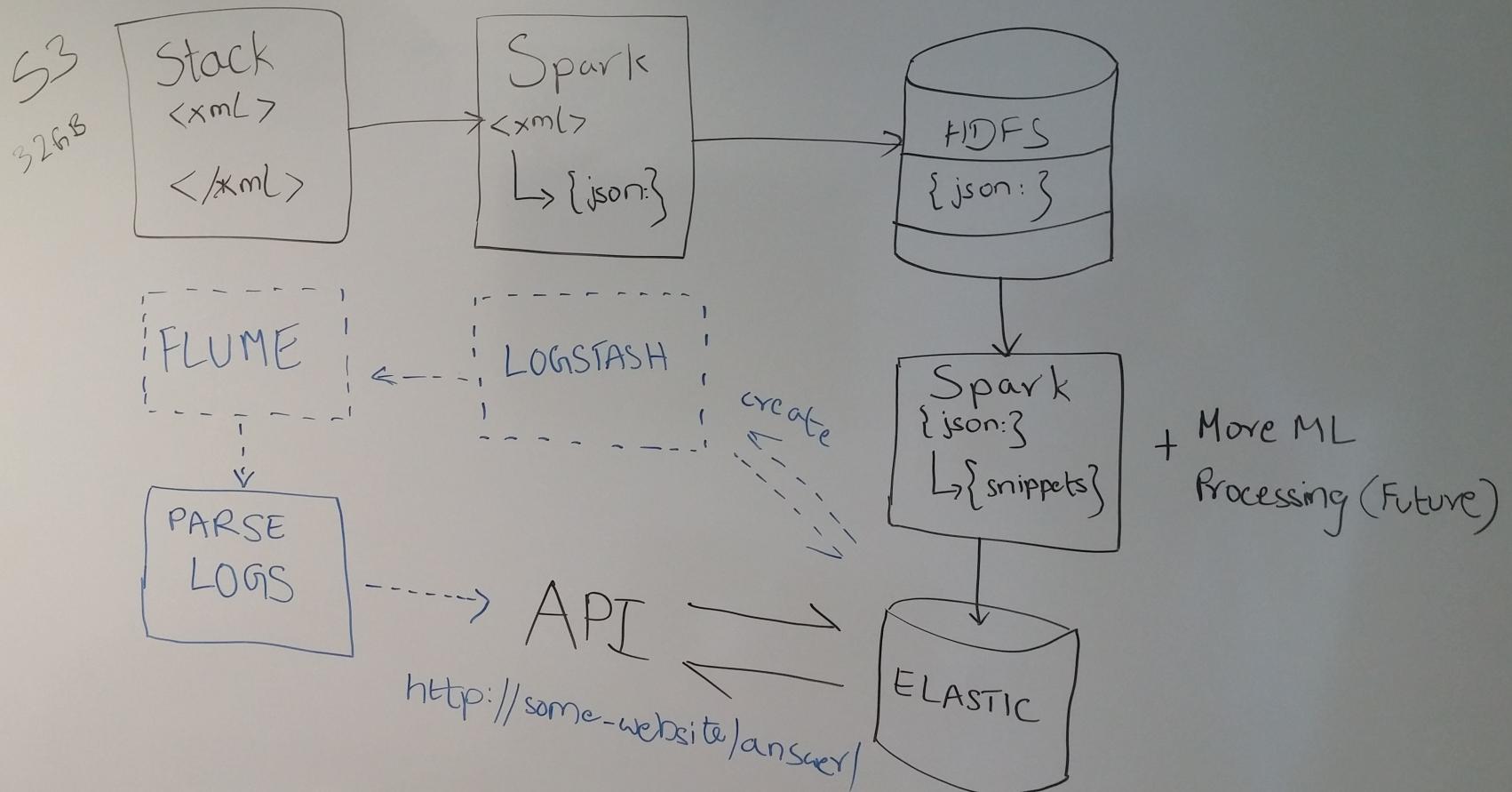
OLD FLOW CHART



NEW PIPE



SHOULD DO



TEXT PARSING

```
<!--?xml version="1.0" encoding="utf-8"?-->
<posts>
<row id="4" posttypeid="1" acceptedanswerid="7" creationdate="2008-07-31">

<p>This is my code:</p>

<pre><code>decimal trans = trackBar1.Value / 5000;
this.Opacity = trans;
</code></pre>

<p>When I try to build it, I get this error:</p>

<blockquote>
  <p>Cannot implicitly convert type 'decimal' to 'double'.</p>
</blockquote>

<p>I tried making <code>trans</code> a <code>double</code>, but then the
```

TEXT PARSING

```
{  
"body": "<.p>I want to use a track-bar to change a form's opacity.</p>\r  
"score": "322",  
"posttypeid": "1",  
"answer": "7",  
"id": "4",  
"snippets": "<.code>decimal trans = trackBar1.Value; double x =1.0; </code>  
}"
```

OUTPUT

```
GET /test-morn/_search?q=body:double
```

OUTPUT

```
{  
  "took": 2,  
  "timed_out": false,  
  "_shards": {  
    "total": 5,  
    "successful": 5,  
    "failed": 0  
  },  
  "hits": {  
    "total": 1,  
    "max_score": 0.10980196,  
    "hits": [  
      {  
        "_index": "test-morn",  
        "_score": 0.10980196,  
        "_source": {  
          "id": "6",  
          "text": "This is a test document."  
        }  
      }  
    ]  
  }  
}
```

HOW DOES IT WORK?

(OR MORE LIKE WUT?)

- 1. Install rebot**
- 2. Misconfigure any service**
- 3. Service shoots logs**
- 4. Rebot detects mistakes using logs**
- 5. Rebot looks for answers on web**
- 6. ~~Rebot fixes your mistake~~**
- 6. Returns link to answer for now.**

QUERIES?

(WHY AM I DISTRIBUTING?)

1. Your *personal* Google will not fit in a traditional relational database.
2. Logs are also massive. (Papertrail, loggly, ..)

(WHAT ARE MY QUERIES?)

1. Find the most relevant error.
2. Find most viable solution for given error.

SHORT DEMO

```
exit /home/vagrant/git/rebot/scripts 83x49
vagrant$ python shoot_logs.py -h
usage: shoot_logs.py [-h] [-o] [-s] [-v VERBOSE]

You are looking at Rebot helper CLI interface. This script keeps shooting logs
till eternity.

optional arguments:
-h, --help            show this help message and exit
-o, --one             shoot just one log to stdin
-s, --sample          keep shooting logs to stdin
-v VERBOSE, --verbose VERBOSE
                      pump up them verbose jargon
vagrant$
vagrant$ python shoot_logs.py -o | python rebot.py
```

```
exit /home/vagrant/git/rebot/scripts 82x49
vagrant$ watch -n 0.1 tail -n 20 links.txt []

```

STREAM DEMO

The image shows a terminal window with two side-by-side panes, illustrating a stream processing application. Both panes have a red header bar at the top.

Left Pane:

```
vagrant$ python shoot_logs.py | python rebot.py
exit /home/vagrant/git/rebot/scripts 83x49
```

Right Pane:

```
vagrant$ watch -n 0.1 tail -n 20 links.txt
exit /home/vagrant/git/rebot/scripts 82x49
```

The left pane shows the command `python shoot_logs.py | python rebot.py` being run, which generates a large amount of log data. The right pane shows the command `watch -n 0.1 tail -n 20 links.txt` being run, which continuously updates the displayed log data.

HOPEFULLY..



ABOUT ME

- MS,CS, WVU.
- Research in Adv Data mining with JPL, NASA.
- SE at startup.
- Comp Security.