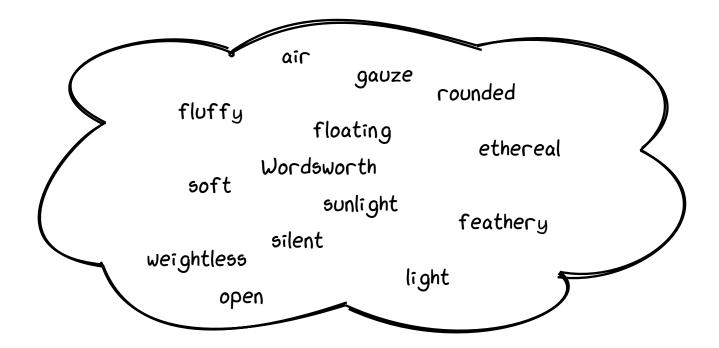
THE BOTTOMLESS DATACENTRE



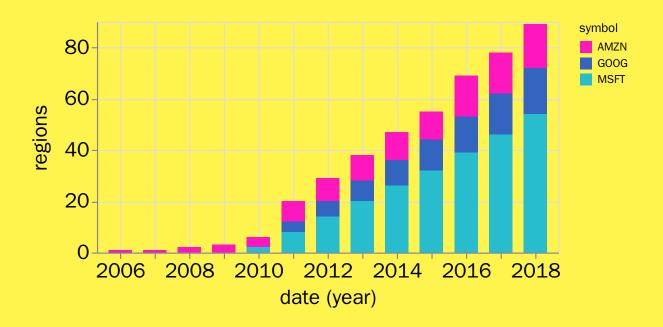
NEWSPEAK



TRANSLATION

```
barbed wire
                                 cooling fans
rectangular
                           industrial
            warehouse
                                     heavy
                         security
       rows of racks
                             artificial light
unsightly
             physical infrastructure
      box
                             cables
           metal
                                  blinkenlights
                electric hum
```

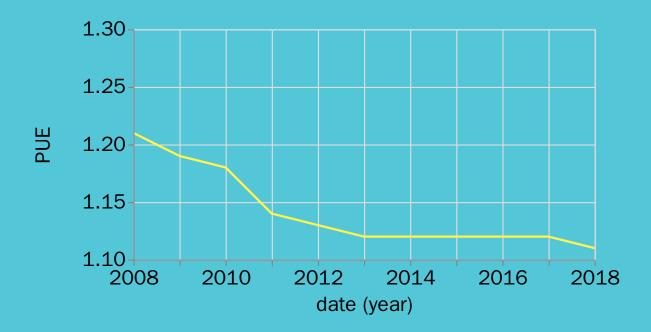
COMPUTE-1 AND UP



Region data based on the AWS, GCP and Azure blogs. Some missing data points interpolated.

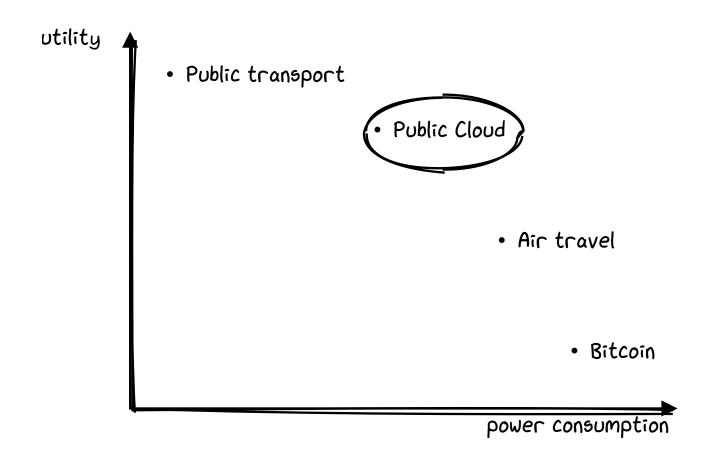
INCENTIVES

$$PUE = \frac{Watts in}{IT watts}$$



Power usage effectiveness data by Google Data Centers

ENERGY MIX



PHOENIX CI

```
FROM golang:1.11.1 as builder
WORKDIR /go/src/github.com/gerald1248/k8s-network-policy-viewer/
COPY * ./
RUN go mod download && go get && go vet go test -v -cover && \
    go build -o k8s-network-policy-viewer .

FROM ubuntu:18.10
WORKDIR /app/
EXPOSE 8080
COPY --from=builder .../k8s-network-policy-viewer /usr/bin/
USER 1000
CMD ["k8s-network-policy-viewer", "-s=true"]
```

THE MISSING THREE PER CENT

We should forget about small efficiencies, say about 97% of the time: premature optimization is the root of all evil

- Donald Knuth (?)

THE VIEW FROM LEMANS

Program to where the performance puck is going to be, not where it has been

- DHH