



Leading during Digital Transformation

Ray Fleming
Microsoft

 @rayfleming



A major shift is happening...



Steam, water,
mechanical
production
equipment

1780s

1870s

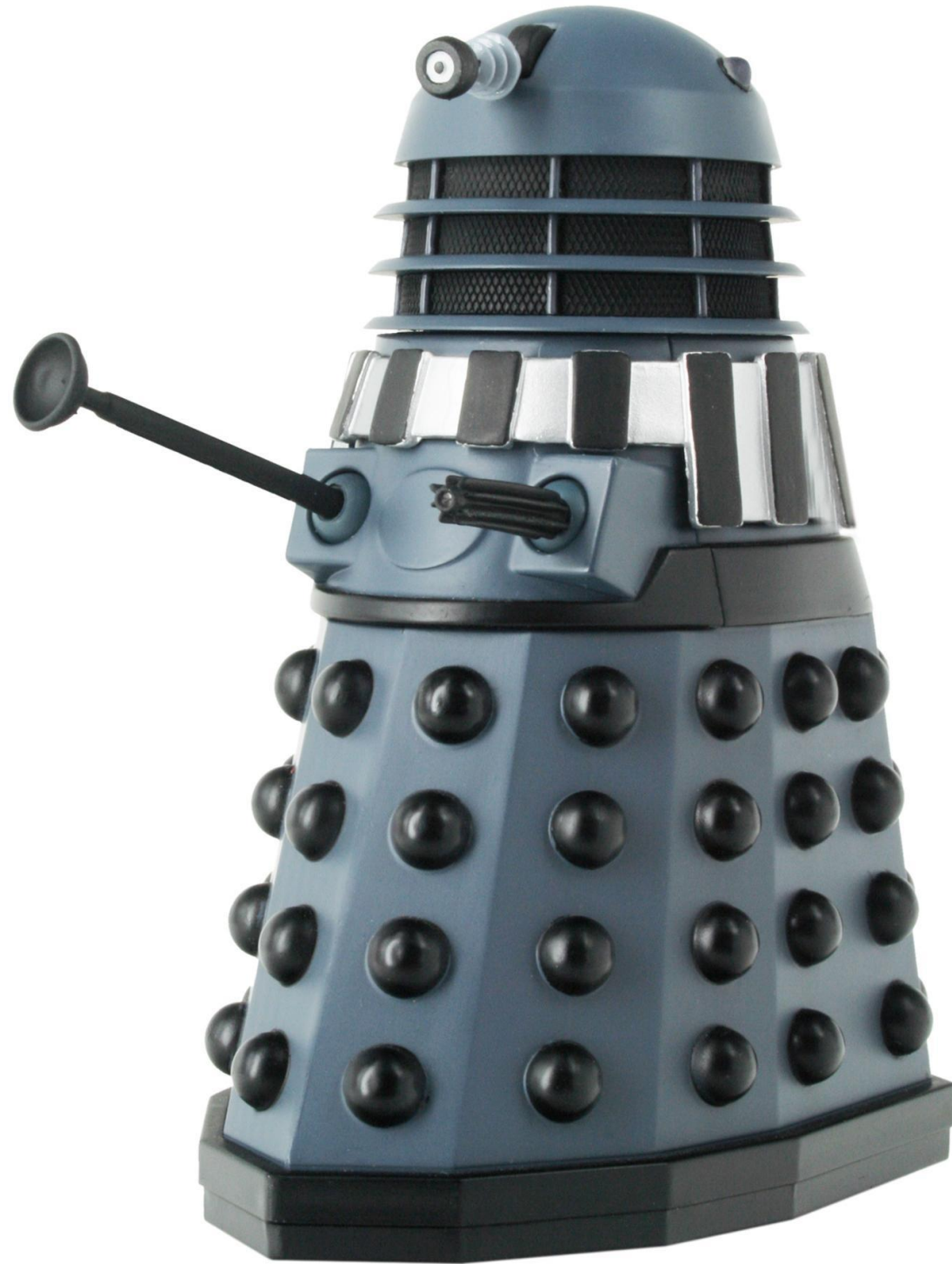
1970s

2017's

A 4th industrial
revolution

Jobs of the future





Technology and jobs

Coming to an office near you

The effect of today's technology on tomorrow's jobs will be immense—and no country is ready for it

Jan 18th 2014



17K



47% of all
jobs will be
automated
by 2034



NEW RELEASE TV



NEW RELEASE TV



NEW RELEASE TV



NEW RELEASE TV



BLOCKBUSTER®

For Lease

Retail

Prime Exposure
in the Heart of Northbridge

110sqm (approx)

BLOCKBUSTER

closing
down
sale
be quick!

BLOCKBUSTER

NEW
MOVIES

CLOSING
DOWN
SALE
30.01.2016

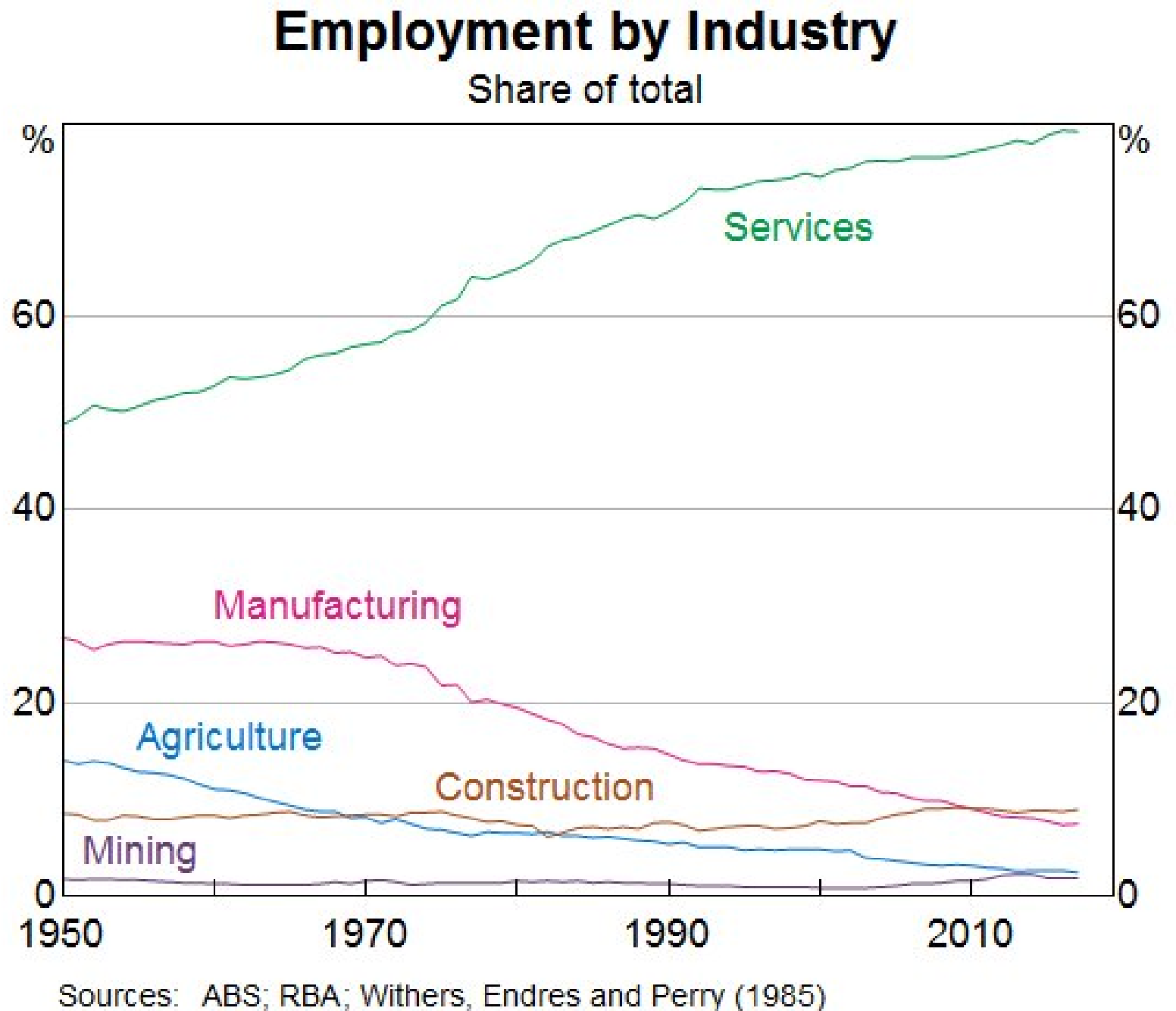
Let's
▶ Play!

Let's
▶ Play!

Let's
▶ Play!

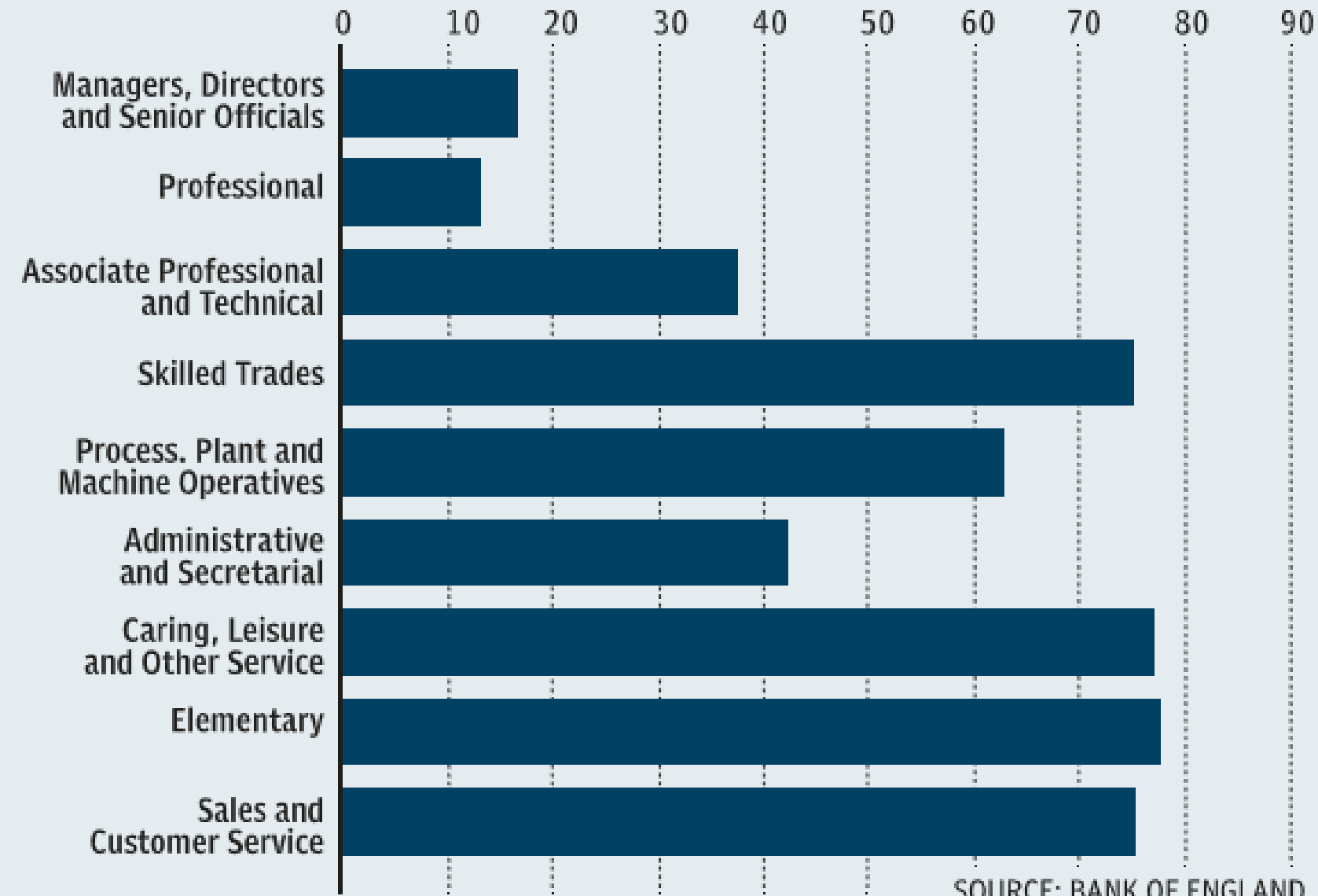
WINTER
AT
IT'S
TIME
TO
GO
OUT
30.01.2016

The shape of
employment
has changed



Average probability of automation by occupation

Average probability of automation across population



SOURCE: BANK OF ENGLAND

Where
are your
students
aiming to
be?

Artificial intelligence (AI)

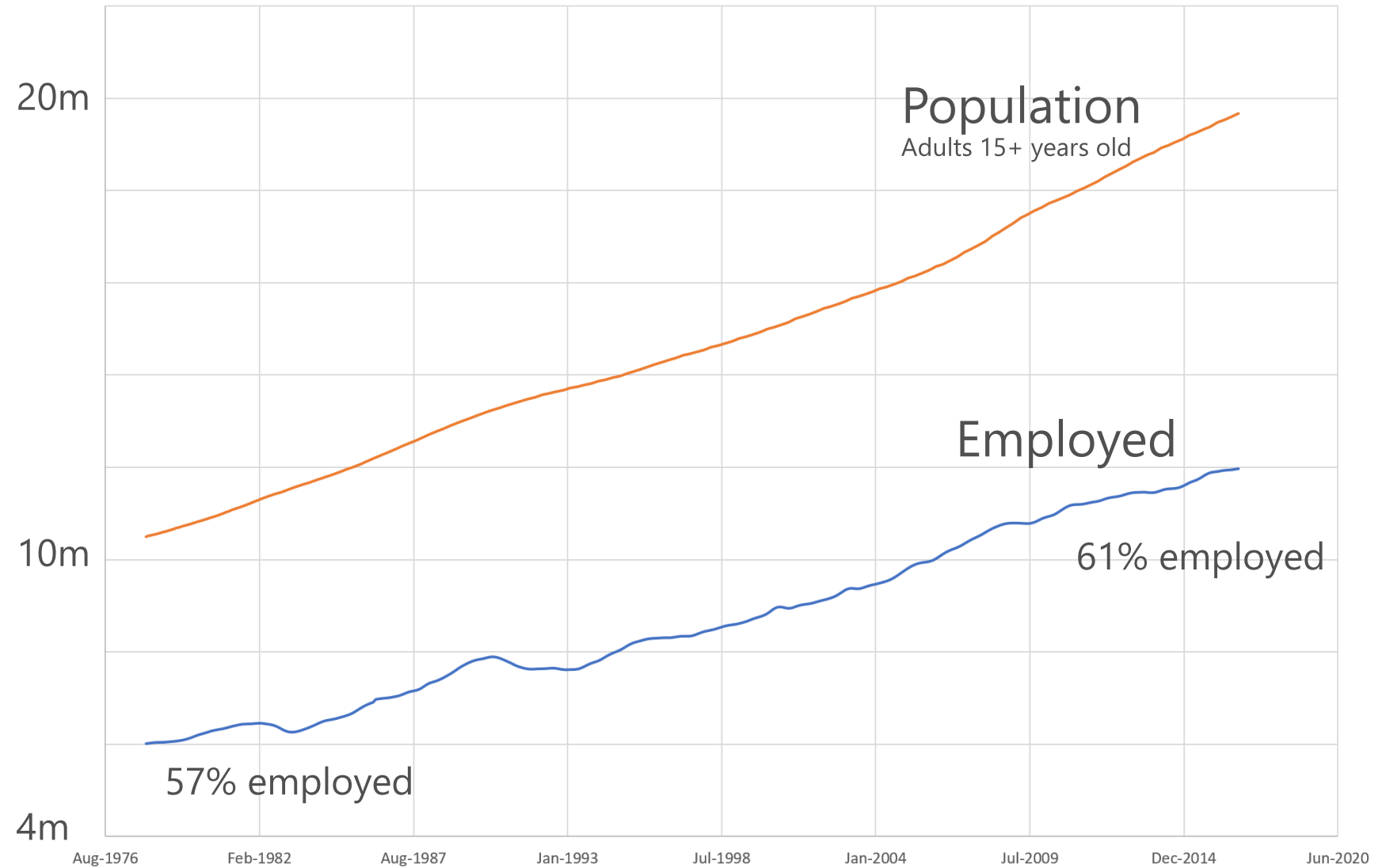
Japanese company replaces office workers with artificial intelligence

Insurance firm Fukoku Mutual Life Insurance is making 34 employees redundant and replacing them with IBM's Watson Explorer AI



Life insurance?

Jobs
keep
growing





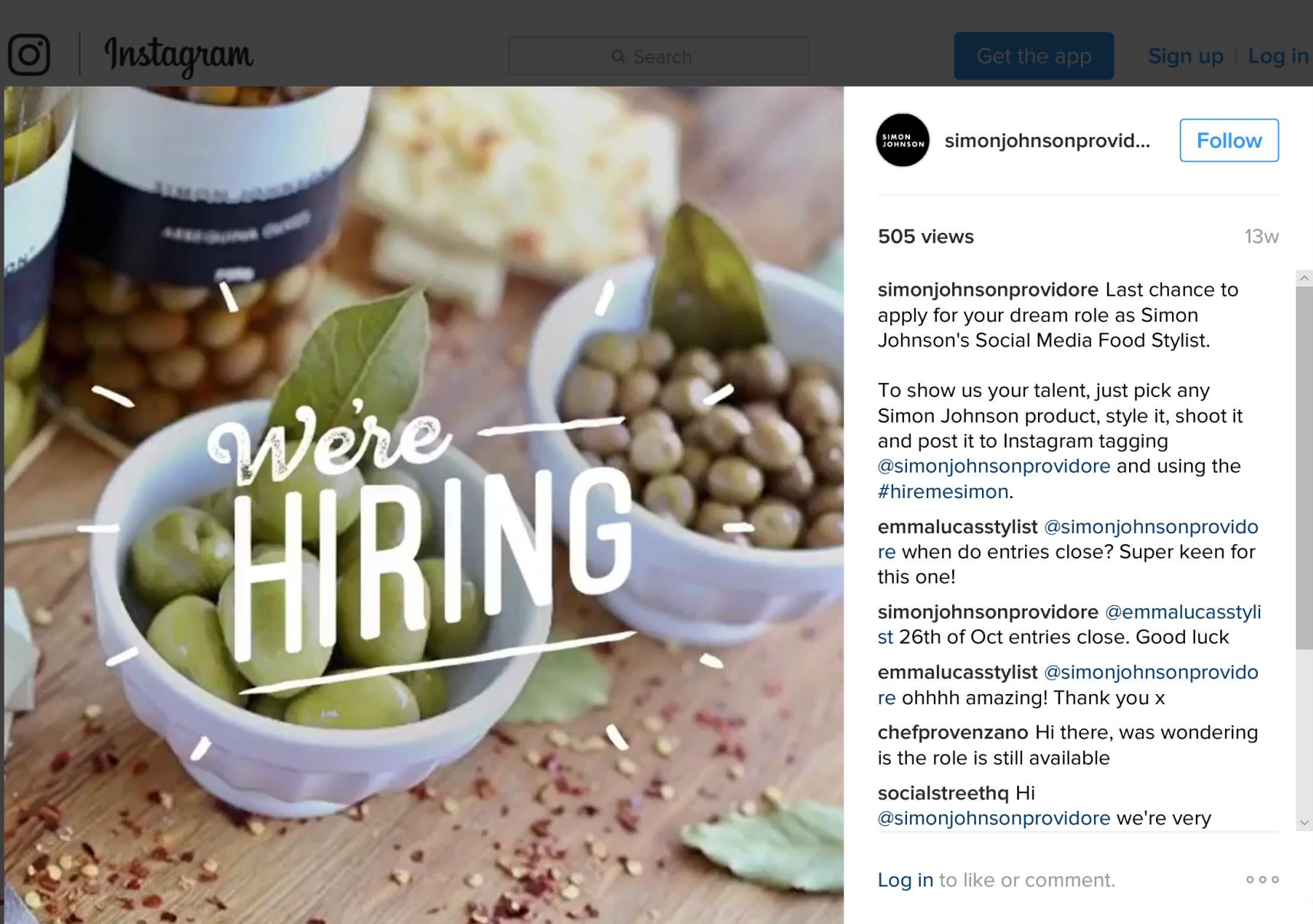
Big data
1939



Big data *2014*



Careers 2016



Careers 2016



Instagram

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allilau

Follow

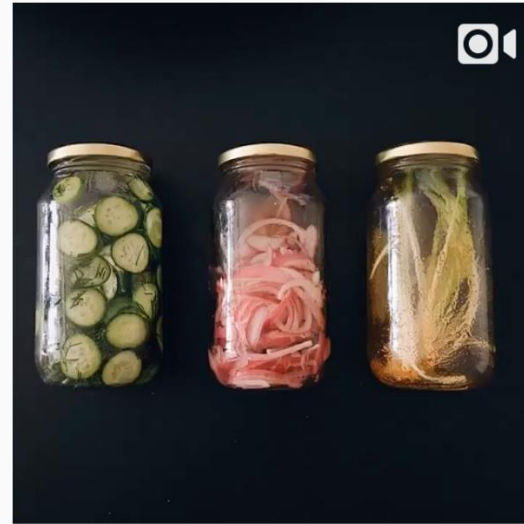
685 posts

16.7k followers

997 following

Girl In A Food Frenzy Designer, Blogger, Foodie.....Mummy! Sydney, NSW
girlinafoodfrenzy.com

Careers 2016





Business transformation



“Every business is a
technology business”





- Students who multitask on a laptop during a lecture score lower on a test compared to those who do not multitask
- Students spend most of their laptop time in class on diversionary activities
- Students who were in direct view of a multitasking peer scored lower on a test compared to those who were not
- Students who use laptops to take notes in class learn less than students who used pen
- Traditional lecture methods are 30% less effective than active learning methods



Stories from the future

The technology lifecycle is accelerating

Microsoft

Do you see data?



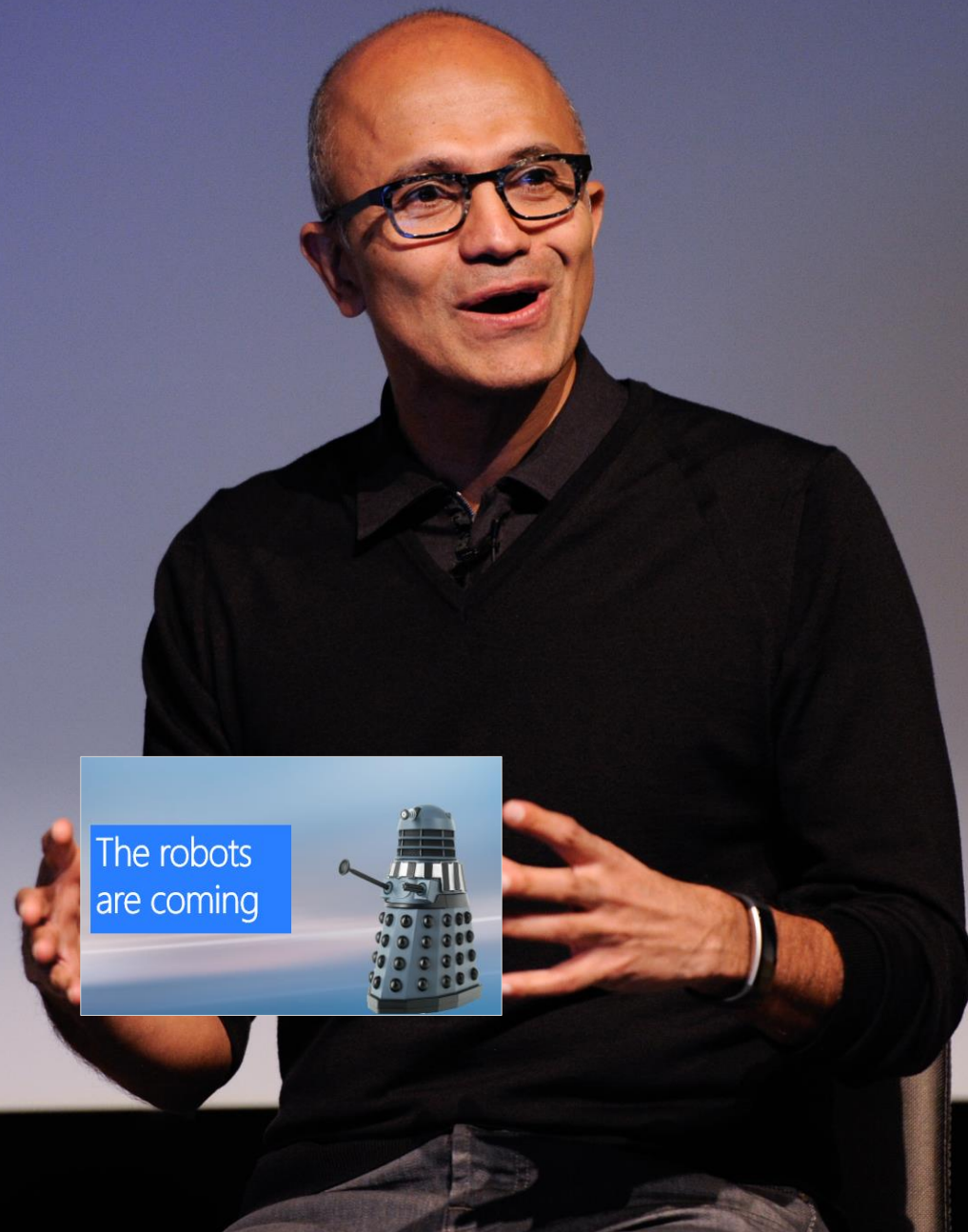
Hidden Gold



Building Intelligent services



The robots are coming



The technology
lifecycle is
accelerating

The procurement process
is now longer than the
product lifecycle...

...and costs more than
the product being
bought.

Agility is
everything

It's now quicker to do it,
than to discuss how to do it,
or to write "it" down

*How do you
change the
culture for
agility?*





Do you see data?

The
workplace
of today...
...for us



The
workplace of
today...

for some of
our
customers



Less paper, or paperless?

- Intelledox and ANU
- Travel management system
 - Replace 10 paper forms
 - Save \$2¹/₂m over 5 years
 - Using the Microsoft cloud for agility and scalability

“The real value is what we achieve over the next few years as we look at more paper processes”

Chris Grange, ANU Executive Director

*Who'll redesign
the process?*



Hidden Gold







Education has a Gold Nugget

It is our data

Predictive Analytics

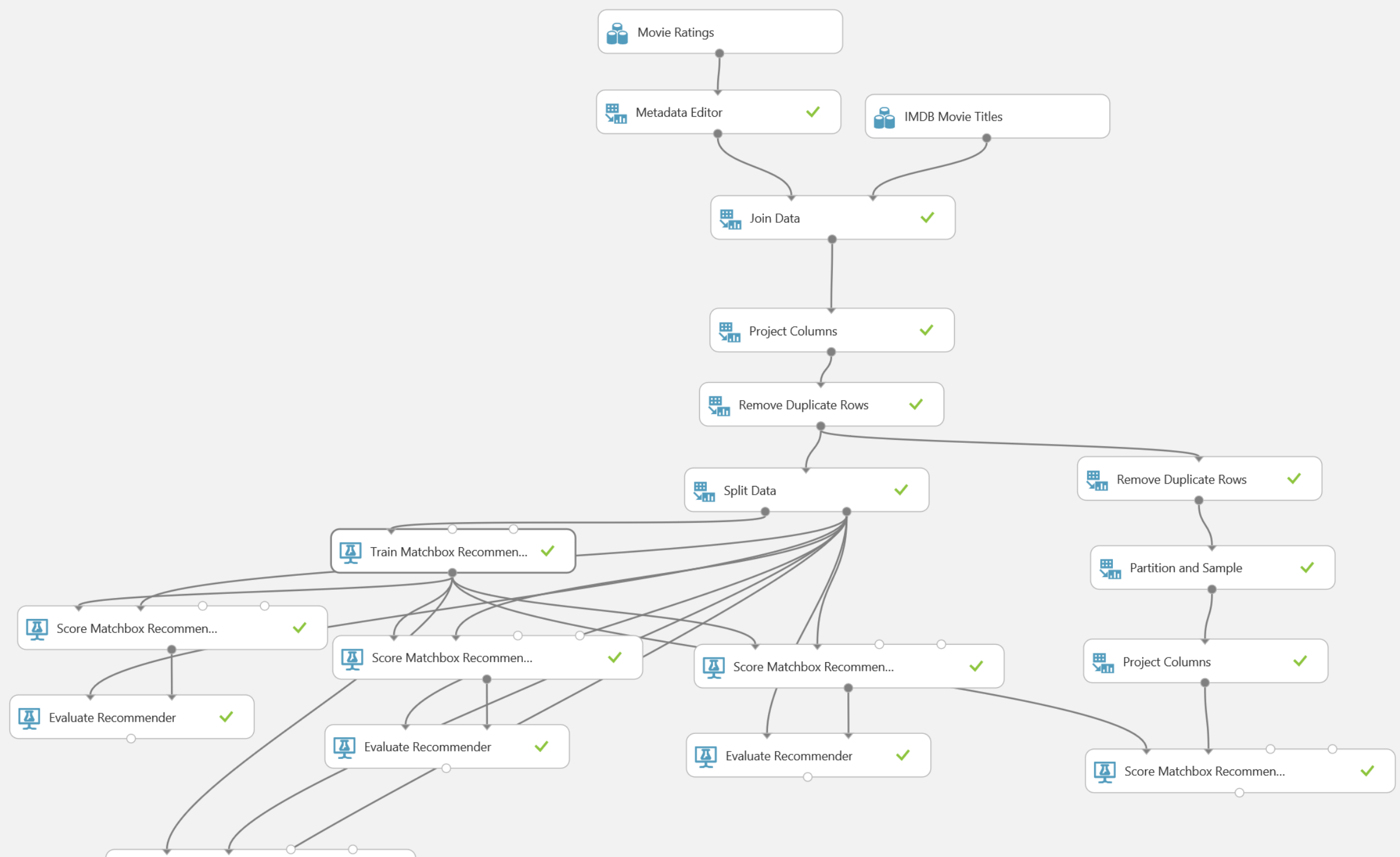







```

graph TD
    MR[Movie Ratings] --> ME[Metadata Editor]
    ME --> JD[Join Data]
    IMT[IMDB Movie Titles] --> JD
    JD --> PC1[Project Columns]
    PC1 --> RDR1[Remove Duplicate Rows]
    RDR1 --> SD[Split Data]
    RDR1 --> RDR2[Remove Duplicate Rows]
    RDR2 --> PS[Partition and Sample]
    PS --> PC2[Project Columns]
    SD --> TMR[Train Matchbox Recommender]
    SD --> S1[Score Matchbox Recommender]
    SD --> S2[Score Matchbox Recommender]
    SD --> S3[Score Matchbox Recommender]
    SD --> S4[Score Matchbox Recommender]
    TMR --> E1[Evaluate Recommender]
    TMR --> E2[Evaluate Recommender]
    TMR --> E3[Evaluate Recommender]
    TMR --> E4[Evaluate Recommender]
    S1 --> E1
    S2 --> E2
    S3 --> E3
    S4 --> E4
    E1 --> S5[Score Matchbox Recommender]
    E2 --> S5
    E3 --> S5
    E4 --> S5
    PC2 --> S5
    
```



Student Experience & Advanced Analytics

*Attrition
Numbers*

Descriptive
Analytics
What happened?

*Attrition
Factors*
Diagnostic
Analytics
Why did it
happen?

Predictive
Analytics
What will
happen?
*'At risk'
analysis*

Prescriptive
Analytics
How can we make
it happen?
*Which
interventions
work?*

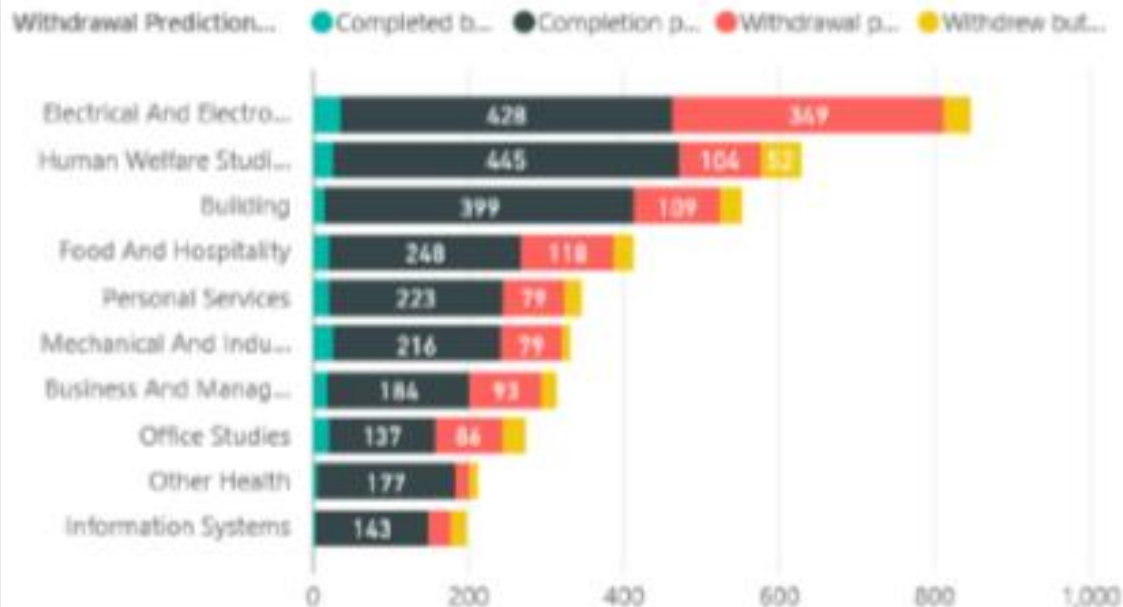
Course Re-enrolment Analytics Module



CRAM

Course Re-enrolment Analytics Module

Enrolments by FOE



Predictions of student propensity to withdraw

Key influencers

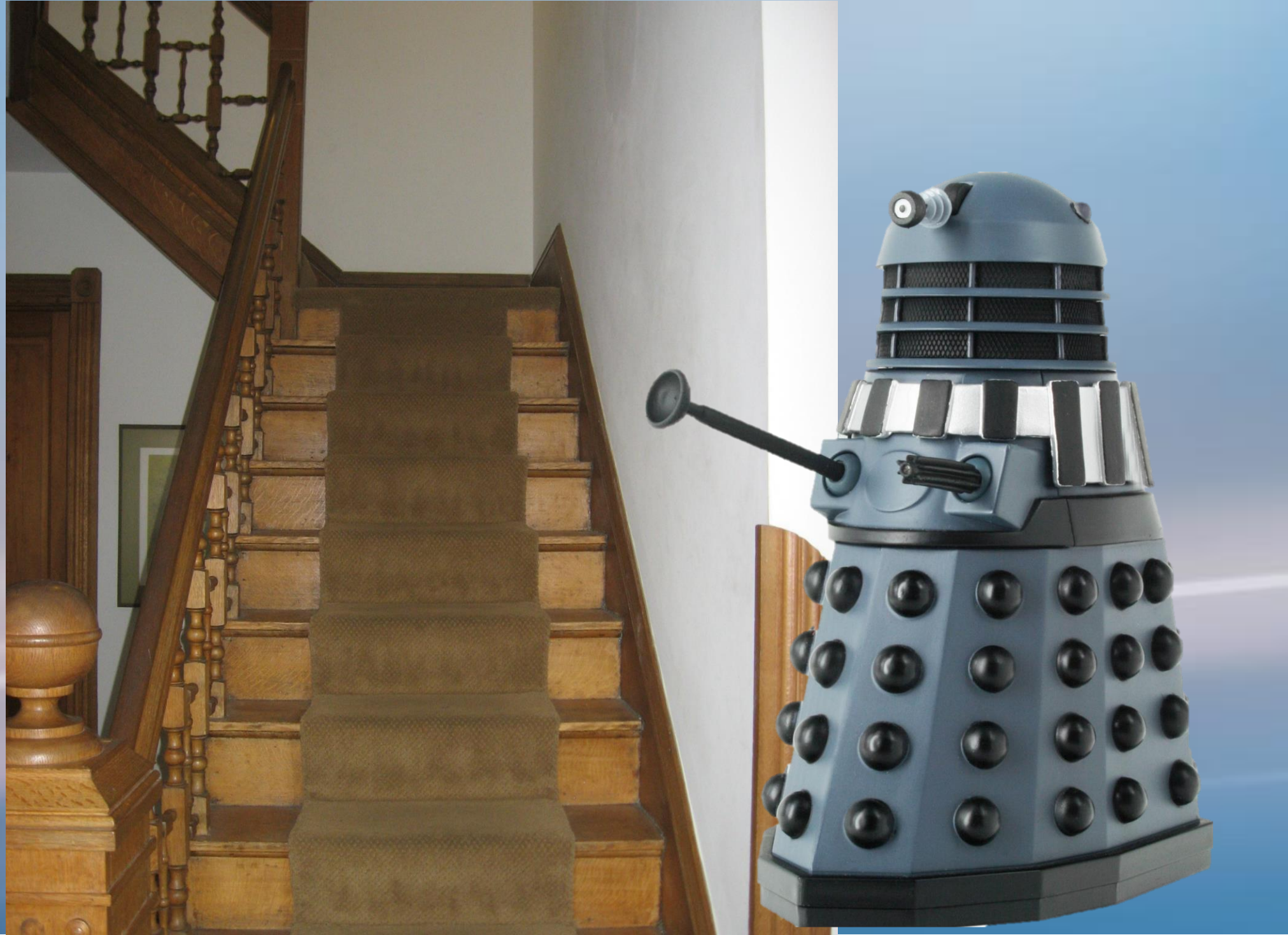


*Are you
collecting the
data you need?*

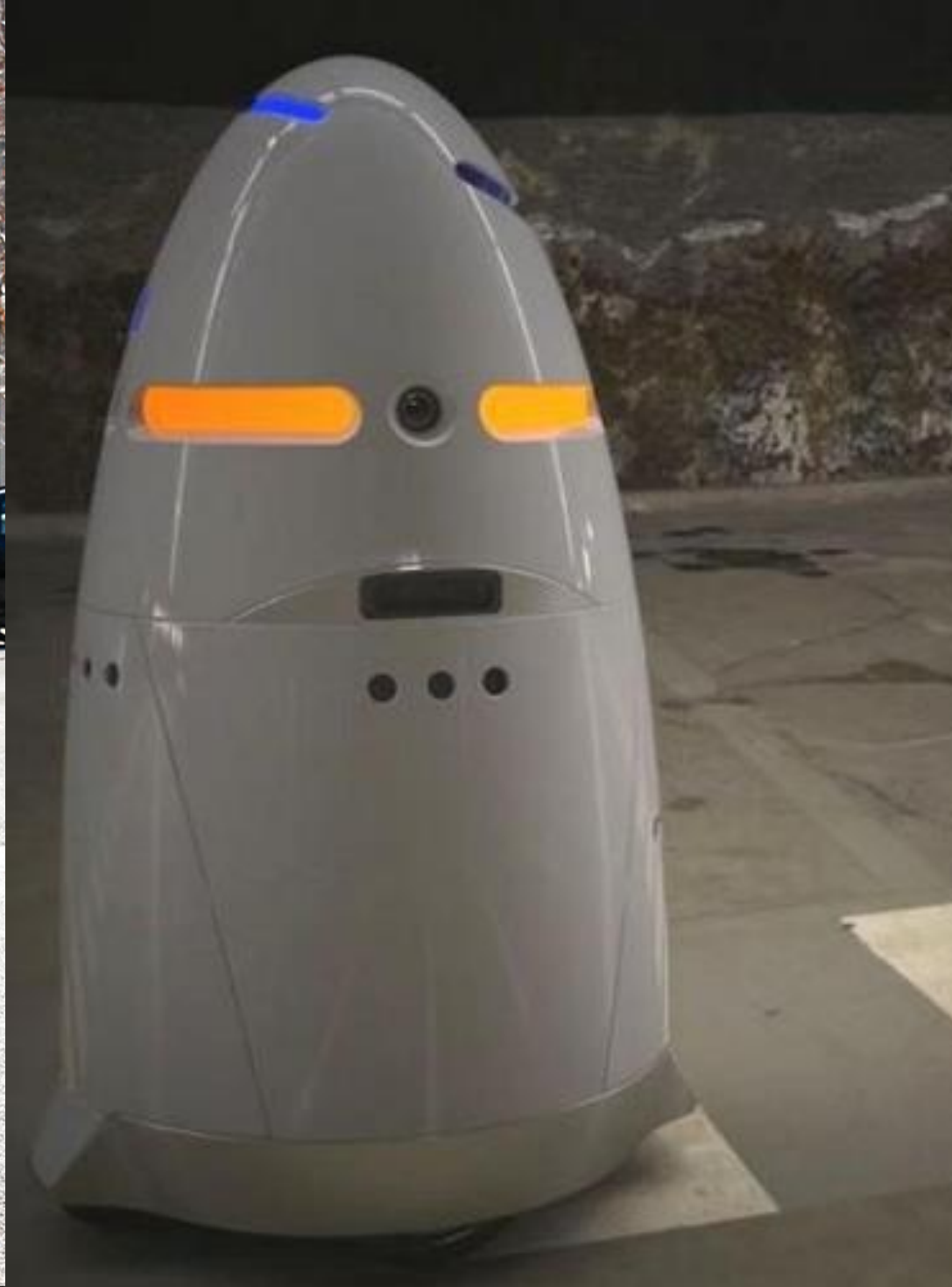
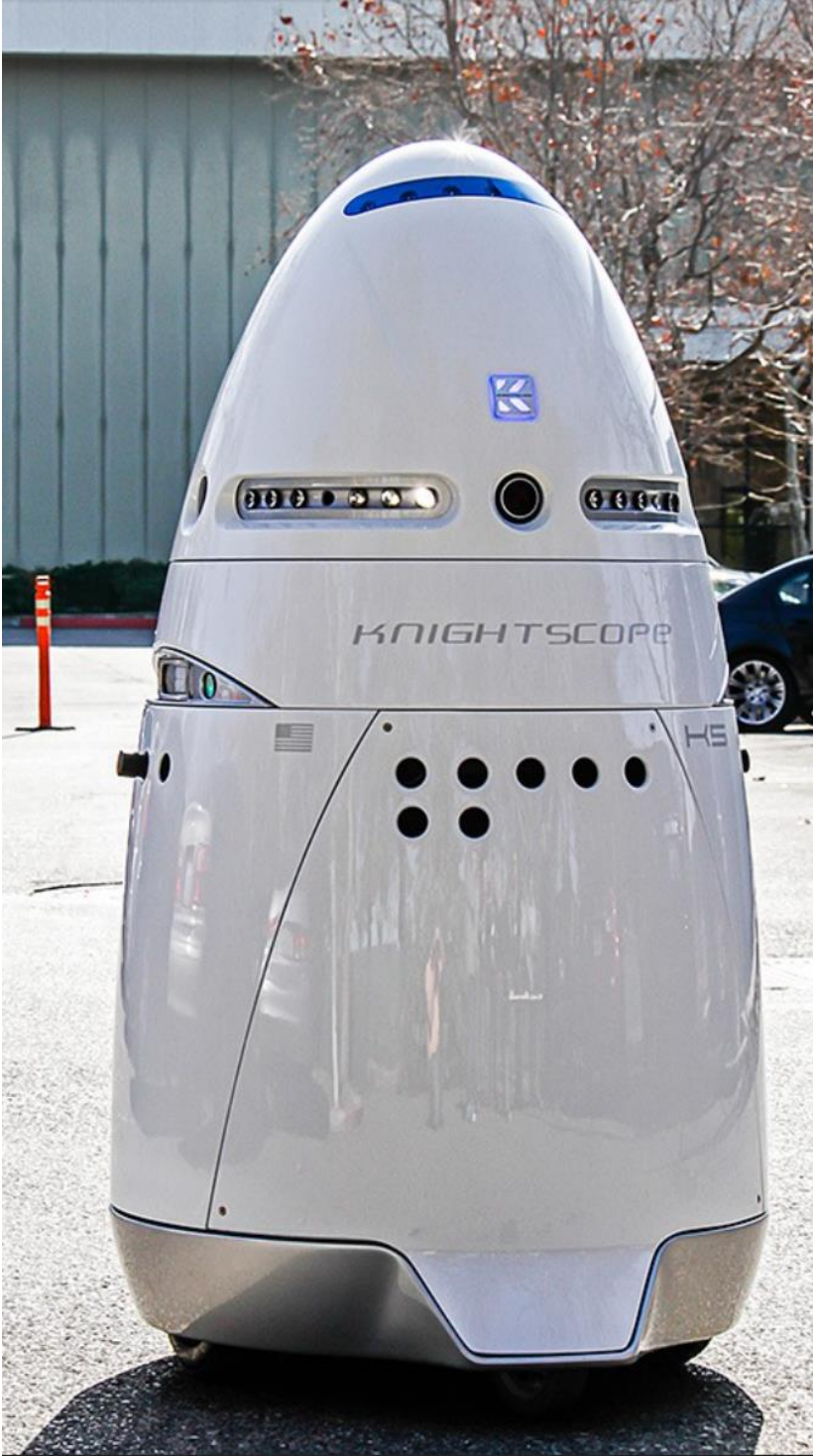


The robots
are coming









Bilal Farooqui

@bilalfarooqui

 Follow



Our D.C. office building got a security robot. It drowned itself.

We were promised flying cars, instead we got suicidal robots.



<https://twitter.com/bilalfarooqui/status/887025375754166272>



<https://www.youtube.com/watch?v=R2mC-NUAmMk>



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