





Agenda

Work 2015

Mathification of GIS

Applications of GIS in practice

Work 2015

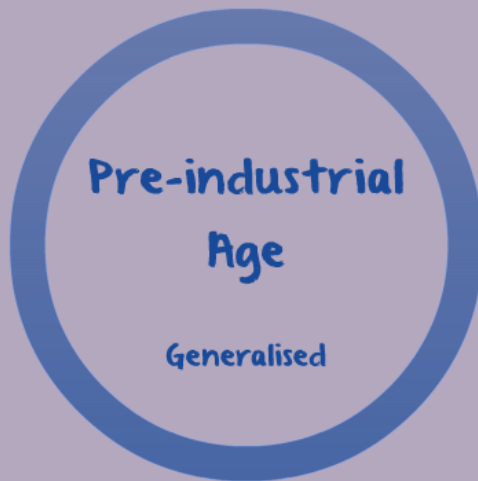
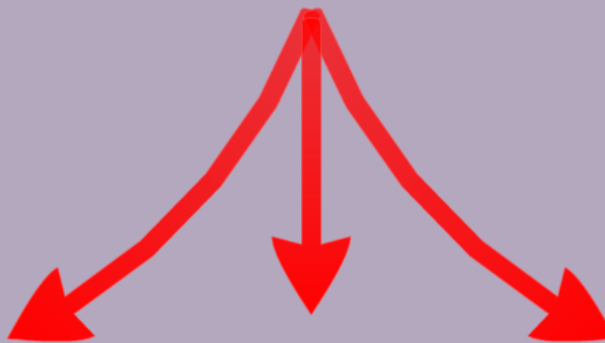
Forces shaping banking & finance

Increased competition - spatial marketing applications

Innovation & e-commerce - fraud

Accessibility - branch & ATM placements

Risk management - GIS in the pricing of risk



Networking

Linkedin: GIS

LinkedIn Home What is LinkedIn? Join Today Sign In

Groups Directory

Groups Directory > G > GIS Community - GITAz (Arizona Chapter)

GIS Community

GIS Consultants for international development


GIS Corner

Gis specialist in Johannesburg Area, South Africa 5 of 119 profiles See all profiles on LinkedIn »

Conferences



GIS SA
Geo - Information Society of South Africa



esri

November 1-2, 2013	Geo Health 2013 Conference	Orlando Springs, Canada
January 27-28, 2013	Geo Asia Pacific User Conference	Hong Kong
February 1-3, 2013	Geo Africa User Conference	Cape Town, South Africa

Job Seeking



indeedTM
one search. all jobs.
South Africa



ConinghamLee
We know people



Career Junction.co.za
Better jobs. More often.

#C Capital



PNET
Start with us
Top recruiters do



Pt
Premier Personnel

LinkedIn: GIS

LinkedIn

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Gis specialist in Johannesburg Area, South Africa

5 of 139 profiles [See all profiles on LinkedIn](#) »

Conferences

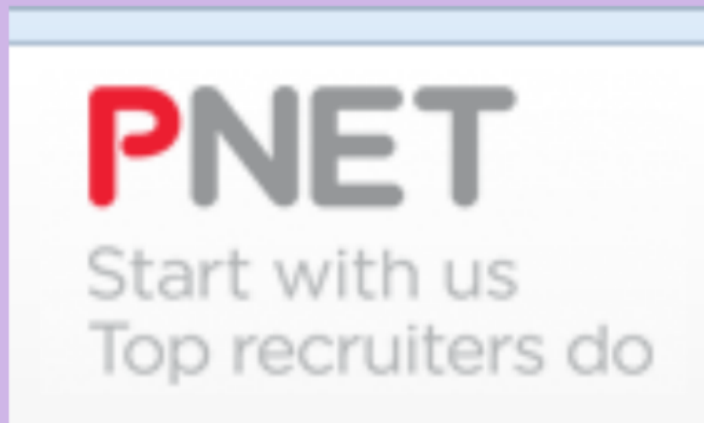


November 3-5, 2014	Esri Health GIS Conference	Colorado Springs, Colorado
January 27-28, 2015	Esri Asia Pacific User Conference	Hong Kong
Postponed	Esri Africa User Conference	Cape Town, South Africa

Job Seeking



HC Capital



Skills and pay

Level:	GIS Analyst	Senior Analyst	GIS Manager	Head: GIS
Salary Survey:	180-250k p.a	300-500k p.a	500-700k p.a	> 750k p.a
Experience:	0 - 1 years B Degree	2 - 5 years B Degree + Hons	4 - 6 years M Degree	7 years+ M Degree/MBA
Skills:	GIS Technical	GIS Technical Programming Analytics	GIS Technical Programming Analytics Communication Leadership	GIS Technical Programming Analytics Communication Leadership Innovation

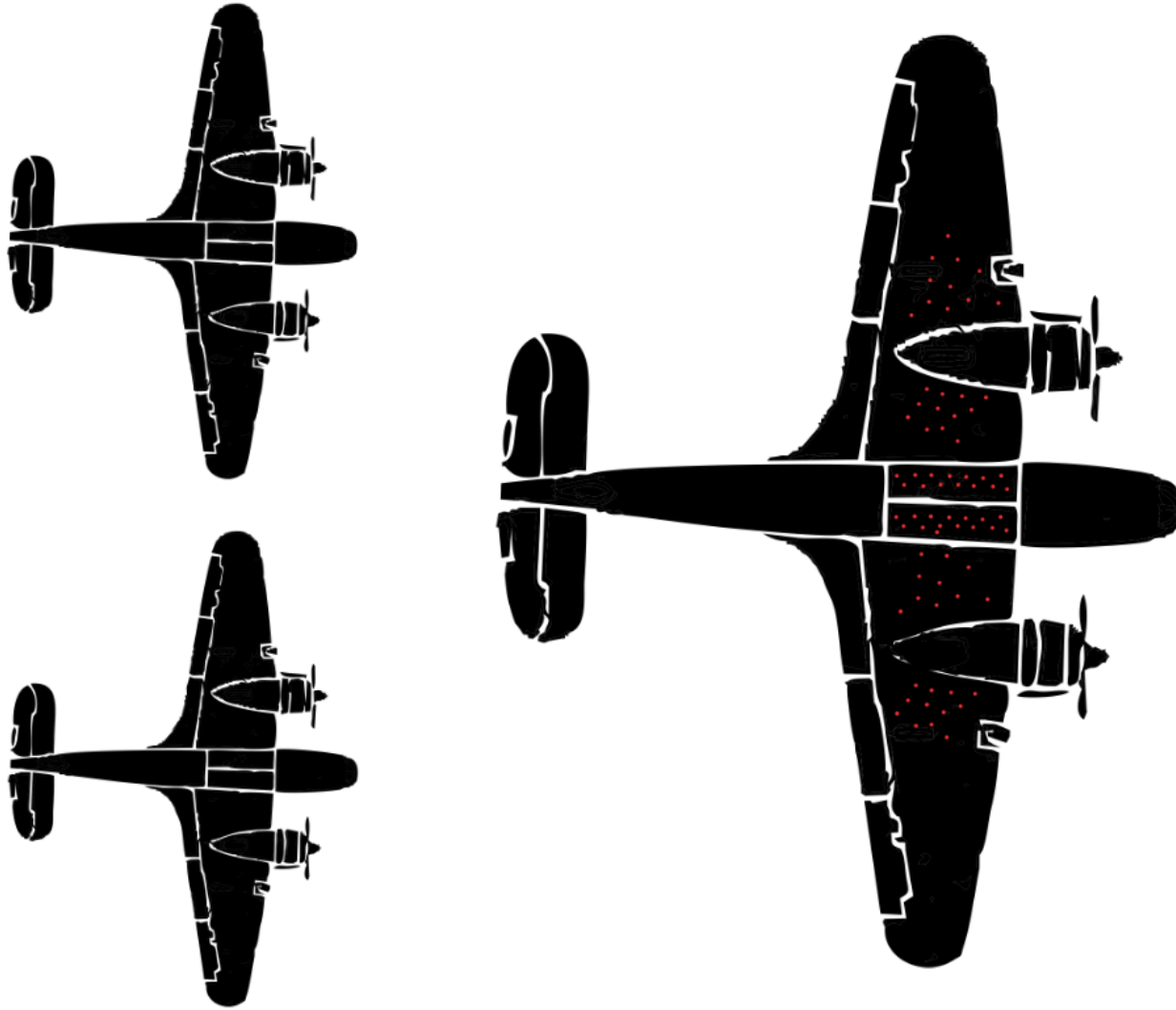
Source: Survey amongst recruitment agencies

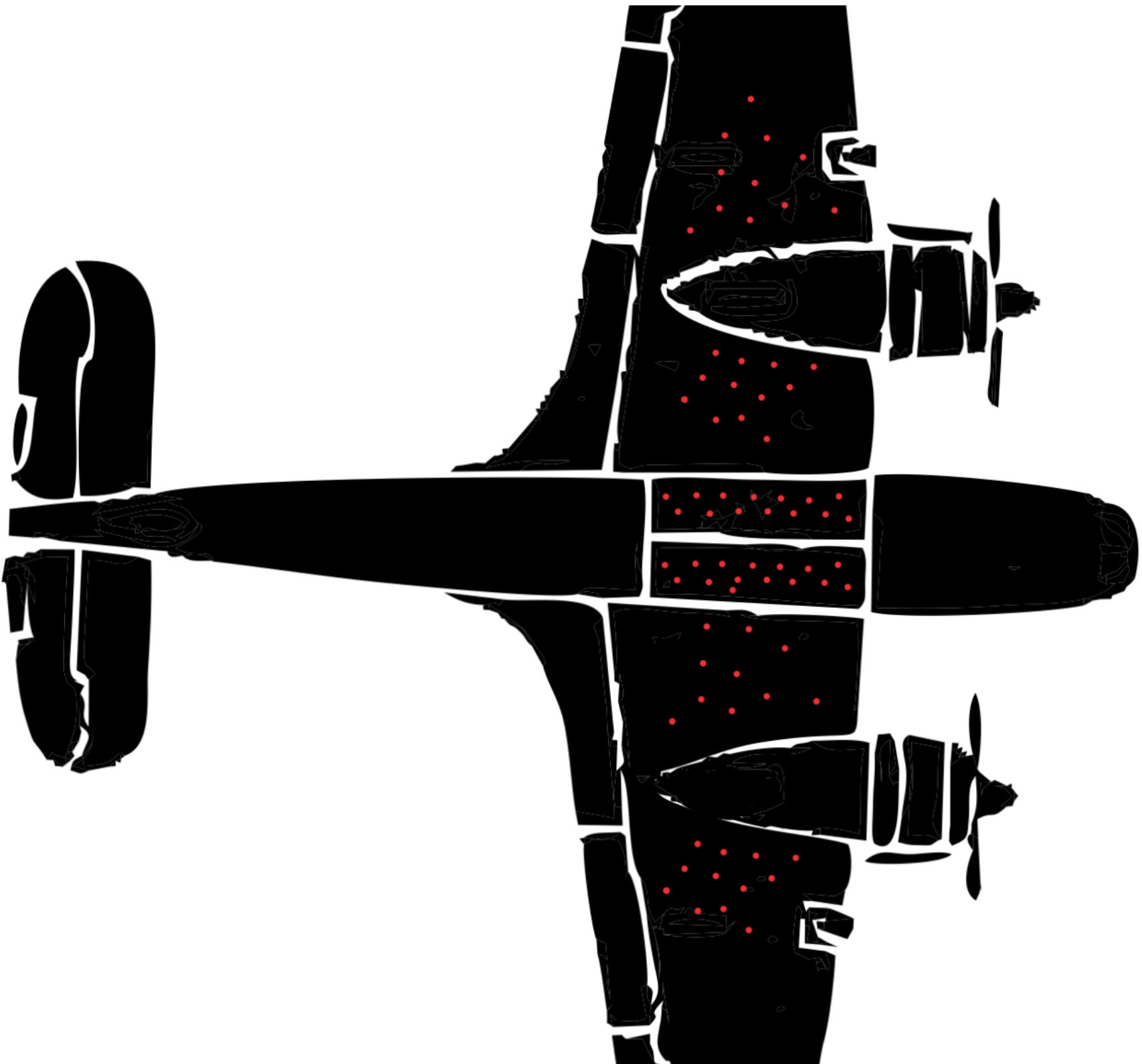
The African Bank GIS Challenge

Mathification of GIS

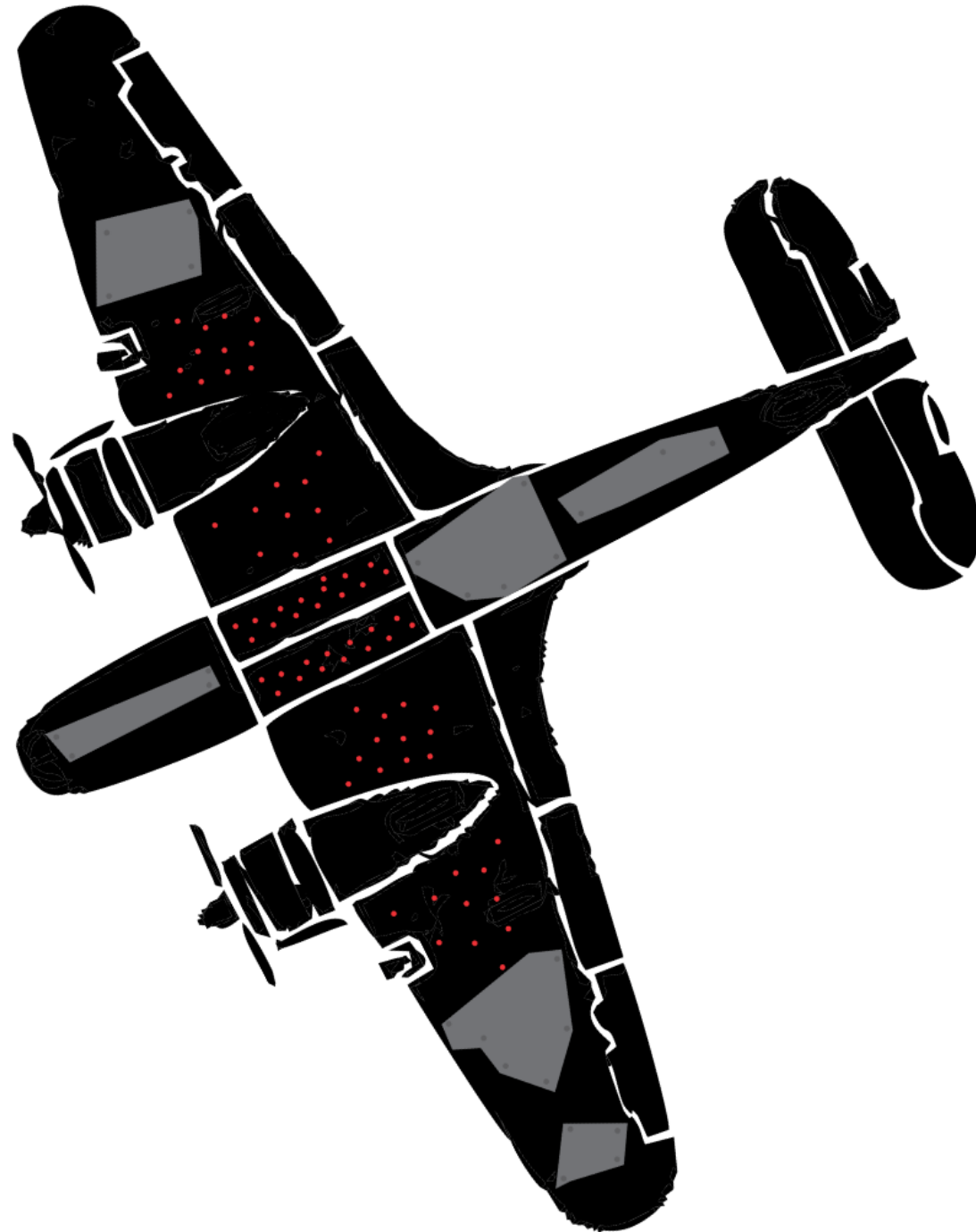
Critical Thinking

Planes returning from a run...





Round 2!



Sense of numbers

Big Data

What is it?

Netflix

Skill sets

Conceptualisation

Business Acumen

Curiosity



Soft

Communication

E.Q

Confidence

Willingness to learn

Be prepared to make mistakes

Hard

Coding

SAS,SQL,ACCESS

Basic Statistical Analysis

Presentation skills

Excel/Graphing tools

Mapinfo/ArcGIS

Curiosity

```
graph TD; Curiosity --> Soft; Curiosity --> Hard;
```

Soft

Communication

E.Q

Confidence

Willingness to learn

Be prepared to make mistakes

Hard

Coding

SAS,SQL,ACCESS

Basic Statistical Analysis

Presentation skills

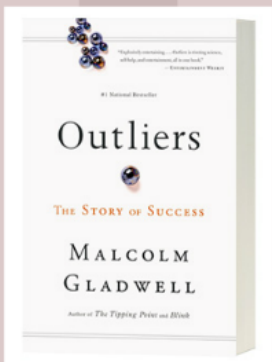
Excel/Graphing tools

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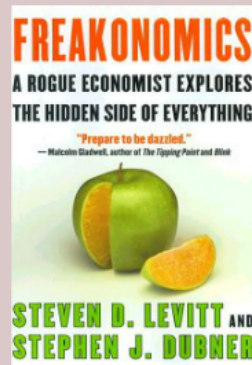
Toolkit

Numeracy Material

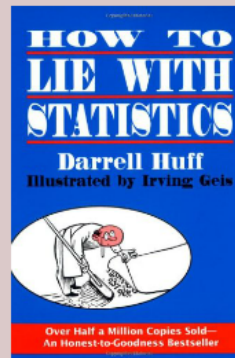
Outliers



Freakonomics



How to lie with statistics



Programming

 **sas** www.sas.com

SQL www.w3schools.com

Extra

Toastmasters

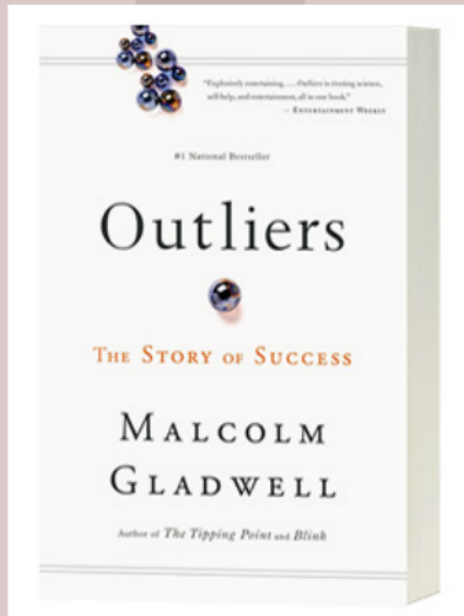
Google Trends



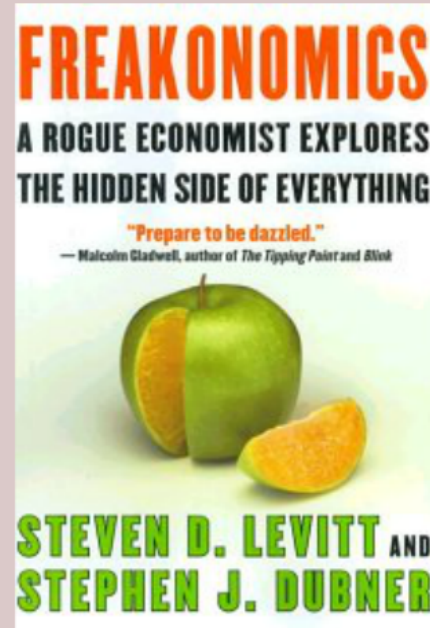
Search term:

Numeracy Material

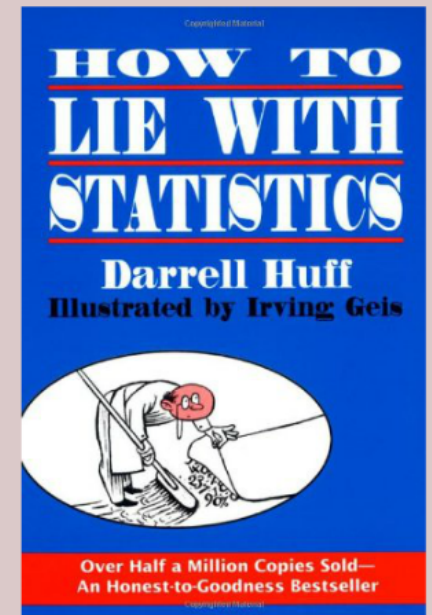
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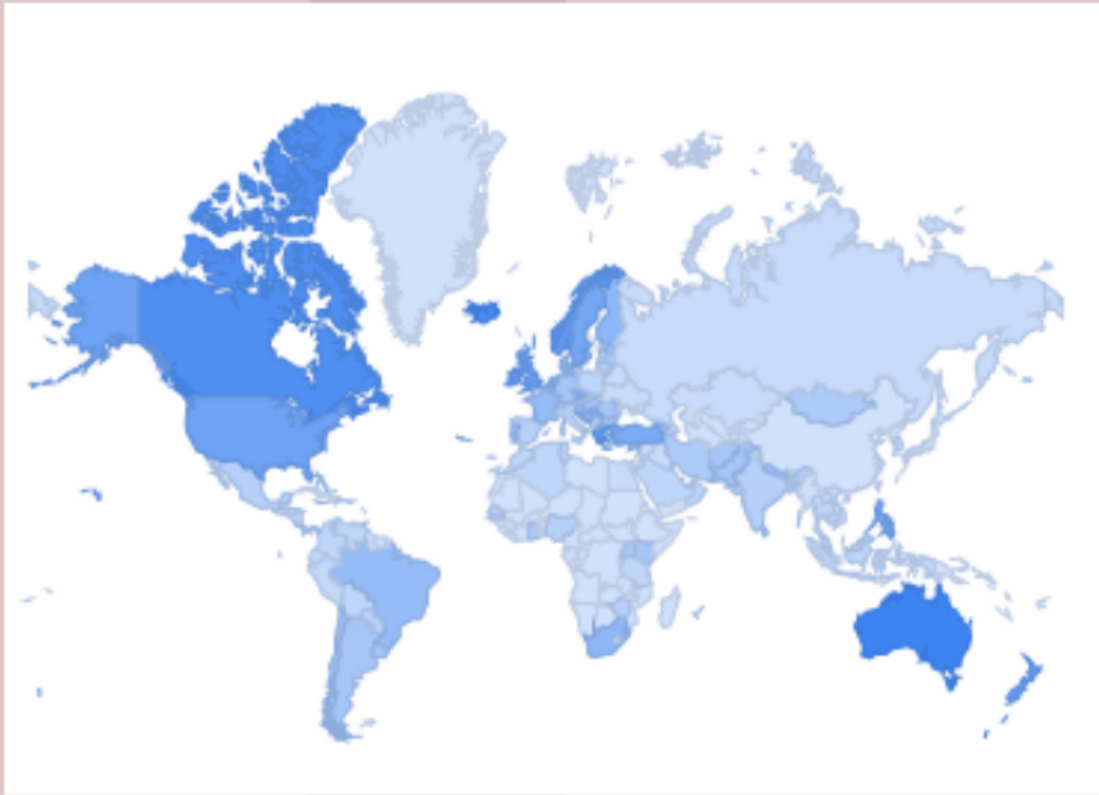
Toastmasters

Google Trends



Toastmasters

Google Trends



Search term:
'Game of
Thrones'

Applications of GIS in practice

Facts about South Africa

Walt Disney serves SA wine Exclusively

Largest producer of Macadamia nuts

Sole producer of Mercedes C-Class, right-hand drive vehicles

Kimberly - First town in the Southern Hemisphere
to install electric lights, 2ND September 1882

Home of Rooibos

Dolosse, large concrete structures used to protect harbours,
coastlines and seawalls

South African Suburban Credit Scores

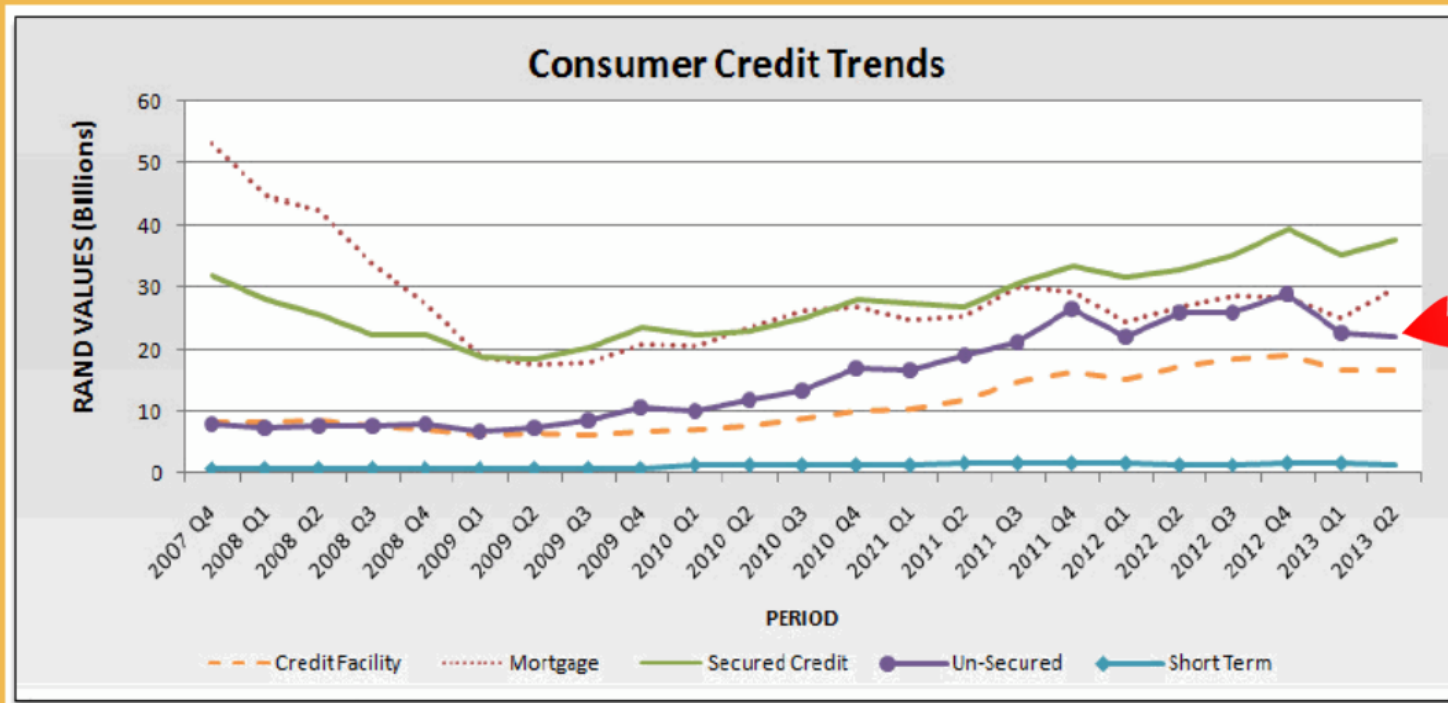
Background

Data and Methodology

Findings

Take-outs

Background



Explosive growth in unsecured lending

Source: National Credit Regulator, Q2 2013

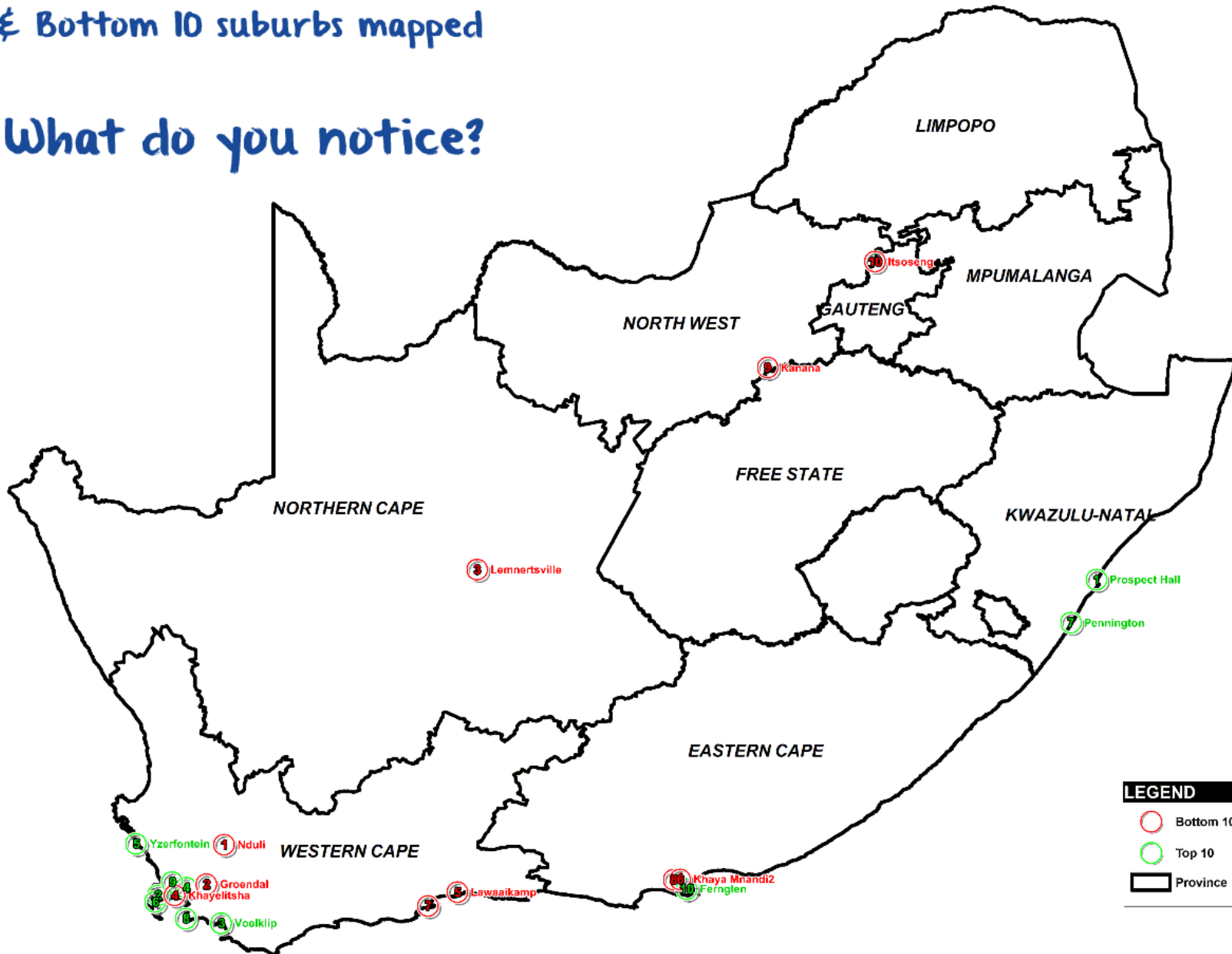
Data and Methodology

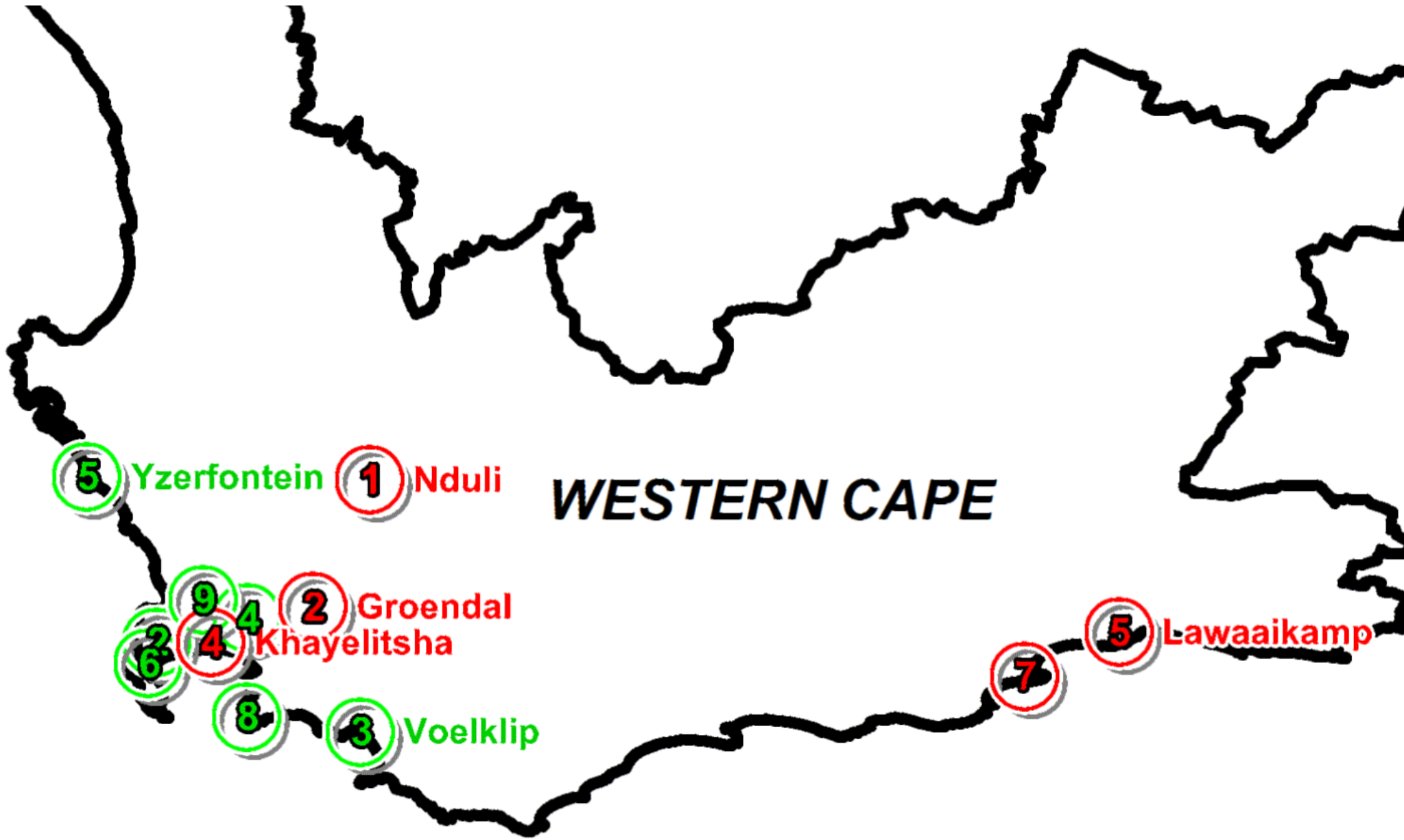
- Experian Credit Bureau
- Consumer historic payment behaviour (DCM)
- Geocoded consumers rolled up to suburb level
- Extracted the 10 best and 10 worst suburbs

Findings..

Top & Bottom 10 suburbs mapped

What do you notice?





5 Yzerfontein 1 Nduli

WESTERN CAPE

9 Groendal
4 Khayelitsha

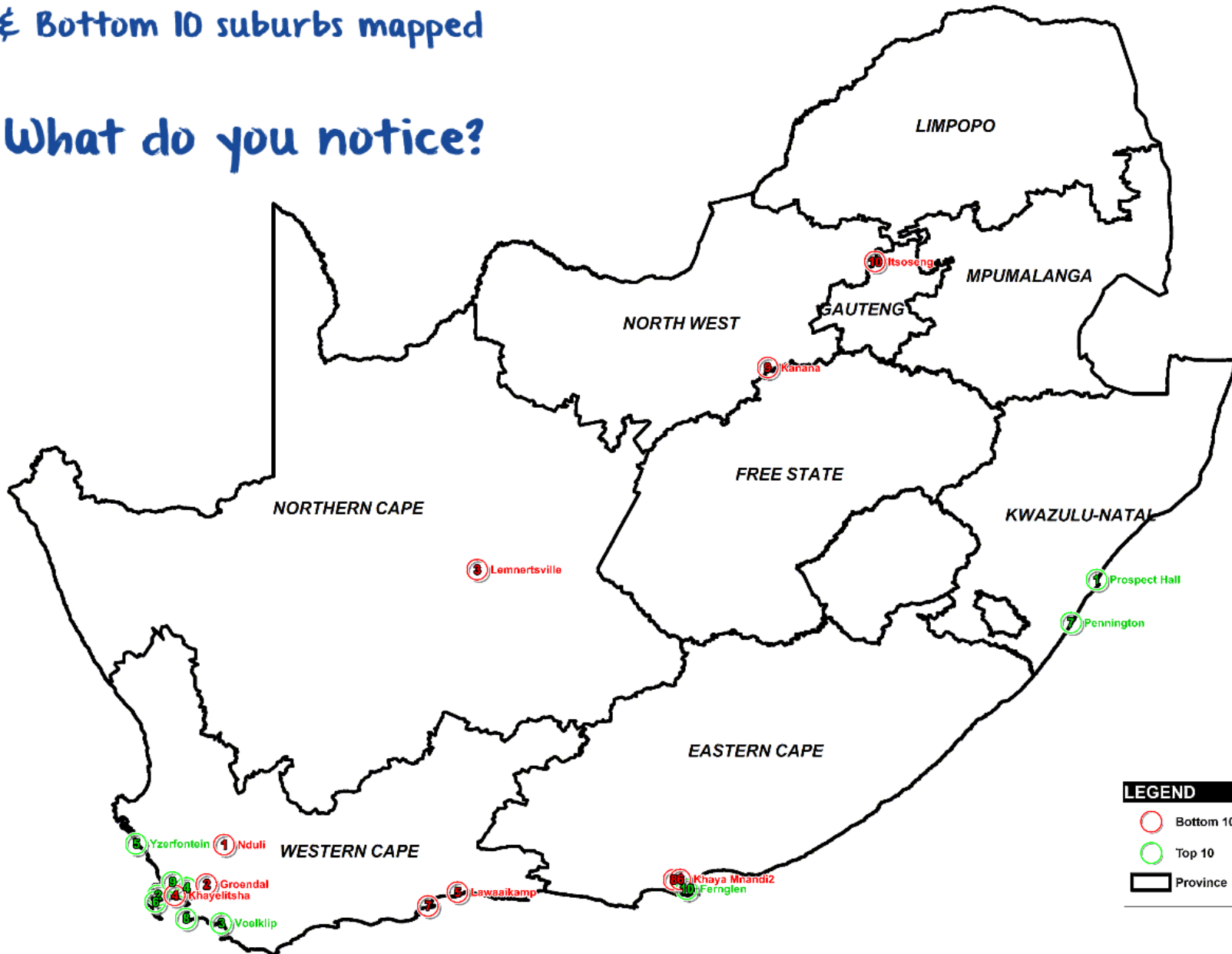
8 Voelklip

7 5 Lawaaikamp

Findings..

Top & Bottom 10 suburbs mapped

What do you notice?



Census Findings

Census Variable	Top 10 average	Bottom 10 Average
Average number of people per dwelling	2.2	3.2
Predominant education level	Matric	Some Primary
Predominant Race	White	African
Average income	R33'000	R2 '300
Credit bureau Variable	Top 10 average	Bottom 10 Average
Average monthly credit instalment	R6'300	R2'600
Ratio of the average credit instalment to average income	21%	115%
Average age credit active population	49	39

Source: Census & Credit Bureau

Top 10 average
suburbs

VS.

Bottom 10
average
suburbs

suburbs

suburbs



Higher
educated
(Matric)

vs.

Lower
educated
(Some primary)



Higher
educated

(Matric)

VS.

Lower
educated

(Some primary)

Older
population

(Age 49)

Younger
population

(Avg 39)

Older
population

(Age 49)

VS.

Younger
population

(Avg 39)



White



VS.

African



White

vs.

African



higher income

(R33,000)

vs.

Low income

(R2,300)

A more robust approach to assessing consumer's ability to repay credit must be explored

South Africa is a disparate society with respect to credit utilisation



Take-outs

Top suburbs

Aging demographic

Declining need for credit

No future opportunity for lenders

Bottom suburbs

Younger demographic

Strong need for credit

Poor credit scores



Thank you

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Martin Steenkamp
MSteenkamp@AfricanBank.co.za

African Bank Reception
011 256 9000

A stylized map of the African continent is visible in the background, rendered in various shades of green and brown. The map is centered behind the text.

Thank you

Contact Details:

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