The Pareto Principle Puzzle

Ralph Gray

My very first “Ignite” presentation
The Pareto Principle Puzzle

- 80 / 20 rule
- History
- Examples
- ... in IT
- And a puzzling Case Study
In 1906, Italian economist, Vilfredo Pareto, observed that 80% of the land in Italy was owned by 20% of the population.

• It was the start of the 80/20 rule
History

In the 1930s and 40s, Dr. Joseph Juran, a Quality Management pioneer in the US, recognized a universal principle that he called the "vital few and trivial many". It appeared that he was applying Pareto's observations about economics.

• The name Pareto Principle stuck
The “vital few and trivial many”

What does it mean?

The **80/20 Rule** means that in anything:
- a few (20%) are vital and
- many (80%) are trivial

In **Pareto's** case it meant:
- 20% of the people
  - ... owned 80% of the wealth

In **Juran's** initial work, he identified:
- 20% of the defects
  - ... were causing 80% of the problems
Some other examples

• 80% of profits come from ... 20% of customers
• 80% of complaints come from ... 20% of customers
• 80% of sales come from ... 20% of products
• 80% of sales are made by ... 20% of the sales staff
Pareto Analysis in Problem Management

- Pareto Analysis is just ONE of the tools for Problem Management
- Used to PRIORITISE incident types for investigation
- Good categorisation of incidents is essential
- 80% of the impact is caused by
  ... 20% of incident types
How it works – Steps 1 and 2
How it works – Step 3
In Service Level Management

Metrics requested by Customer X

Value of the Metric

KPIs
In Requirements

20% EFFORT → 80% RESULTS
• Which now leads us to our puzzling case study

• ... But first a story

• Once upon a time, in 2005 ...
... in 2005, some friends in Britain said “Let’s go to France for lunch” ... as you do!

We went to Calais on the ferry and visited the magnificent Town Hall.
Then in 2013, I was in a charity shop, and I saw this jigsaw puzzle.

I just had to have it.

Early in 2014, I decided to do the puzzle.
Let’s get started

With the help of my 4-year-old granddaughter, we sorted the pieces into:

• Edges
• The garden
• The building
• The sky

So first, build the edges
Now the garden

Wow, certainly a lot of garden pieces, ... Need to do some sub-sorting.

After many interruptions, the garden is just about done, and you start to get a feeling of satisfaction that the picture is building up.
Town Hall

Construction of the Town Hall is now well advanced.

Sky pieces were separated into those that were pure blue, and those that touch the building.
Town Hall done. Just the sky to go.

No clouds ... No aircraft vapour trails that are so common in Europe?

Just pure blue sky.
Not 80 / 20

I count the remaining pieces.

300 almost identical blue pieces, out of 1000

Maybe Pareto got it wrong!
Maybe it is the 70 / 30 rule!
Enough!

This going to take too long!

With virtually no design clues to help, finishing the boring bit will take much longer than all the rest of the puzzle.

I decide that 70% complete was good enough and pack it up.
Let’s go to France for lunch!

So why waste time trying to fill in the blue bits, when in 20% of your time you can get 80% of your enjoyment.