The *free-role* data professional: a catalyst for data analytics + science innovation and job market stability
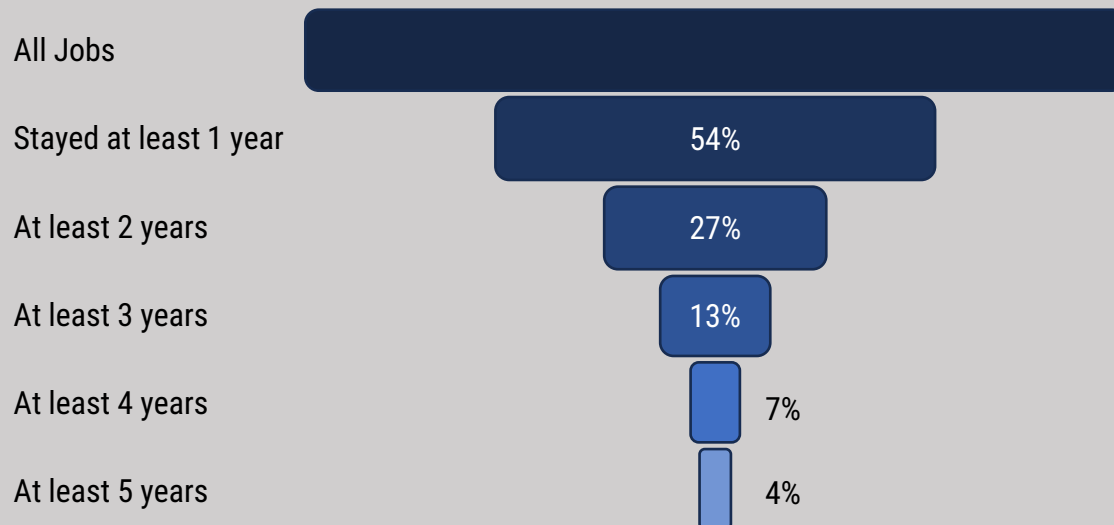
Minimising the causes and consequences of high job turnover in data science and analytics

UCOVI Research Q3 2023

In October 2022, UCOVI analysed the career histories of nearly 1,500 former and current data analysts and scientists from their LinkedIn profiles.

On average, data analysts and scientists spend 16 months in their roles before moving on internally or externally.

Only 27% make it past the 2-year mark of a data analytics or science position, and only 13% make it beyond 3 years.

All Jobs	
Stayed at least 1 year	54%
At least 2 years	27%
At least 3 years	13%
At least 4 years	7%
At least 5 years	4%

Anonymised data and analysis to produce these stats available at:
https://github.com/Data-Ned88/UCOVIFreeRoleWhitePaper

A job market in which near 3 out of 4 participants move after two years is a generally accepted fact of life for businesses and data team leaders.

At UCOVI, we believe that high turnover in the data job market is a problem.

1. It hinders the growth of the data analytics and science profession.
2. It skews the supply market for tools and technologies around data.
3. It demoralises data professionals and limits what they can accomplish.
4. It reduces the impact that data teams have within their businesses.
5. It limits the ability of businesses and other organisations to innovate with data and release value into the economy.

The next slide is a flow diagram of blocks and arrows. It unpicks in full the negative feedback loop of high job turnover within data science and analytics.

Blue squares relate to data analysts/scientists as individuals

Orange squares relate to the data profession, user community, and supply market

Green squares relate to businesses and organisations

Black squares relate to the wider economy and society

Blue arrows mean one square causes/leads to another

Magenta arrows mean one square negates/reduces the impact of another

Existing Data Job Market

Legend:
- Data analysts/scientists
- The data profession, user community and supply market
- Businesses and organisations
- Wider economy and society
- Key factor cell: Resignation/free-role project
- Causation
- Attenuation/Prevention

Quiet quitting
- De-motivation → Reduced output of data team

Resignation drivers
- Customers and waiters → One-sided business relationships
- Constant requests for basic stuff, no groundbreaking insight
- Decreased prospect of pay rise or advancement
- Business leadership loses faith in data team
- Leaving becomes tempting and easier option
- Boredom
- Early onset grievance about data quality, dysfunction, lack of documentation or training
- Resentment towards business, its stakeholders, and its objectives
- Data team feel like they're doing shadow IT

- Inflation
- More money for same role
- Data person leaves role after 2 years
- Frustration at lack of impact on business, and taking comfort from learning instead of achievement
- Habit of upskilling for upskilling's sake
- Estrangement from core purpose
- Short-term fixes

- Reputational cost to data team and its leader within the business, perception of instability
- Frustrated software developer
- Builds tool for fun
- The tool is a success
- More solace in skills learnt and addiction to vanity projects.
- Increased stakeholder requests for BAU
- Data community obsessed with tooling/DevOps and not discoveries from data
- Frustrated software developers breed more frustrated software developers
- Overheated tooling supply market

- Standing of data analytics is diminished
- Skewed talent pool : skill and motivational imbalances
- Voice of data quietens
- Available pool of data leaders is diminished
- Leadership skills atrophy
- Soft-skills and business acumen atrophy

- Business and data team loses skill, knowledge, experience
- Opportunity cost
- Cost to wider economy of another company not being as efficient as it could
- Work done by inexperienced staff
- Minimal notice-period handover
- Bullsh*t jobs– the 'duct-taper'
- Slow pace, mistakes
- Low-performance and poorly understood tech/data stack
- Depleted knowledge base

- Loss of business confidence and poor supplier relationships
- Clamour for needless migrations
- Migration projects consume time and talent and are slow to bed in
- Perception of instability and treading water

When a data professional announces they are leaving a company for another job, the company typically offers one or more of the following:

1. More money.
2. Cosmetic promotion.
3. Platitudes about the company's commercial trajectory and exciting projects to come.

Even if these types of counter offering were generally successful in preventing resignations*, they come with their own drawbacks and are rarely sustainable.

Instead, organisations should take a proactive approach to retaining their best data scientists and analysts through the offer of a **free role**.

*27% role retention after 2 years suggests this is not the case.

The free role would be offered to high-performing data analysts and scientists after 2 years.

1. The data analyst agrees a project or corpus of projects that they believe would add value to the business and that they would like to undertake.
2. The data analyst works on the agreed projects full time over the course of one year, save for 2 hours per week to maintain relations with their team and manager.
3. At the end of the free-role year, the data analyst presents the value of their work to their manager and senior stakeholders in the business.

Now let us run through the negative feedback flow diagram again, but this time replacing the white square where the data professional leaves after 2 years with a square where they are offered a free role…

Dynamics if free role offered to analysts at 2 years' tenure

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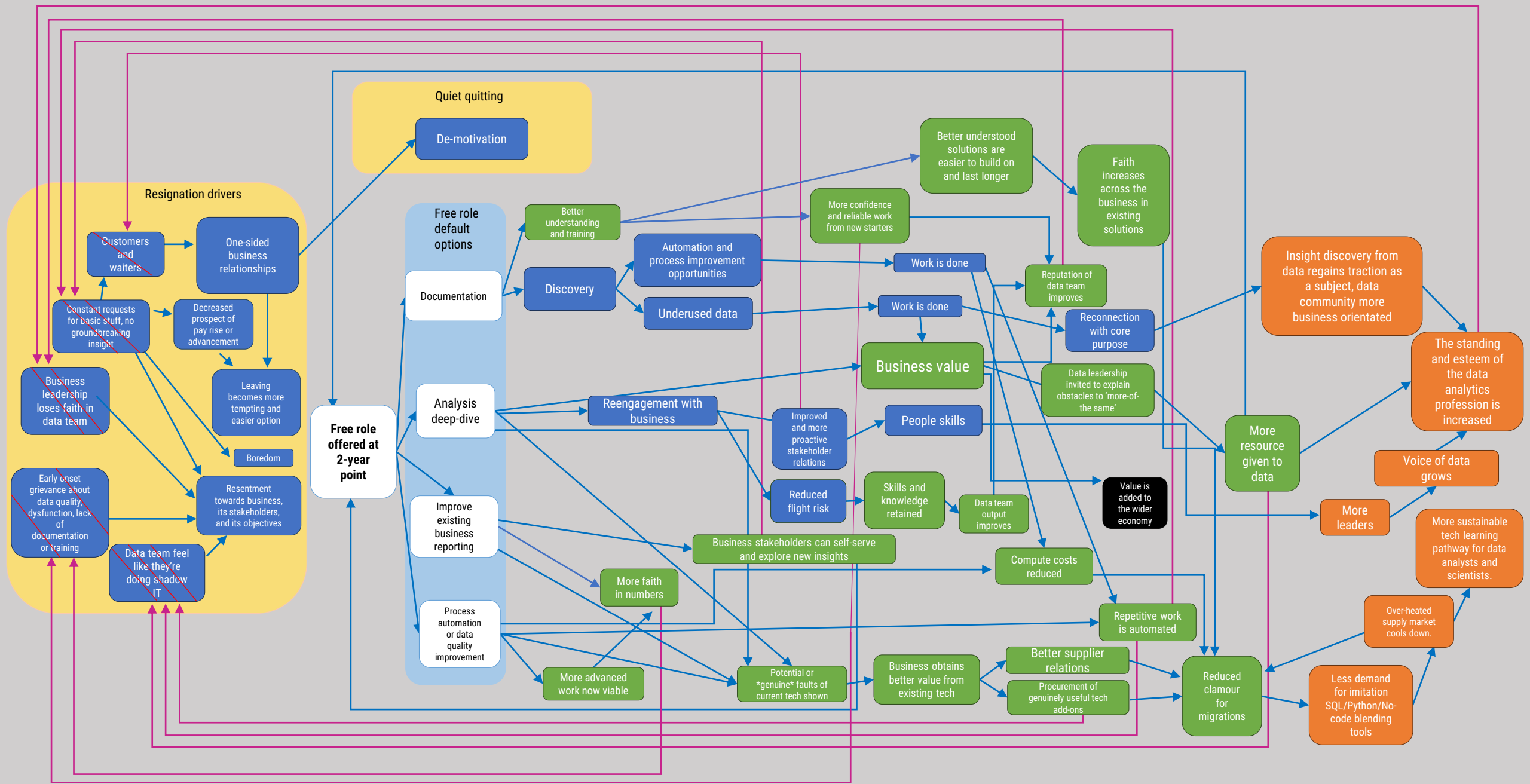- The data profession, user community and supply market
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Free role default options
- Free role offered at 2-year point
- Documentation
- Analysis deep-dive
- Improve existing business reporting
- Process automation or data quality improvement

- Better understanding and training
- Discovery
- Automation and process improvement opportunities
- Underused data
- Reengagement with business
- More faith in numbers
- More advanced work now viable
- Potential or *genuine* faults of current tech shown

- Better understood solutions are easier to build on and last longer
- More confidence and reliable work from new starters
- Work is done
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- Business value
- Improved and more proactive stakeholder relations
- People skills
- Reduced flight risk
- Business stakeholders can self-serve and explore new insights
- Skills and knowledge retained
- Data team output improves
- Business obtains better value from existing tech
- Procurement of genuinely useful tech add-ons

- Faith increases across the business in existing solutions
- Reputation of data team improves
- Reconnection with core purpose
- Data leadership invited to explain obstacles to 'more-of-the-same'
- Compute costs reduced
- Value is added to the wider economy
- Repetitive work is automated
- Better supplier relations
- Reduced clamour for migrations

- Insight discovery from data regains traction as a subject, data community more business orientated
- More resource given to data
- The standing and esteem of the data analytics profession is increased
- More leaders
- Voice of data grows
- More sustainable tech learning pathway for data analysts and scientists.
- Over-heated supply market cools down.
- Less demand for imitation SQL/Python/No-code blending tools

The offer of a free role to a high-performing data analyst or scientist…

1. Helps a business retain its most likely source of data-driven innovation
2. Re-engages the analyst emotionally within the team and company, boosting their morale, focus and output.
3. Reduces staff turnover within a business's data team, saving recruitment costs and providing stability.
4. Repletes the business's bank of technical and domain knowledge so that tools are used well, supplier relationships improve, and technical debt is reduced.
5. Makes the business more data driven and the data person more business driven.

A business offering a free role to a data analyst or scientist should consider:

1. Is the analyst or scientist "worth" the offer in terms of:
    a) Ability and skill?
    b) Tenure, knowledge of business, past performance?
    c) Potential in idea proposed for free-role project?
2. How will the business "check in on progress" so that the analyst is not micro-managed but the business can spot a clearly failing project early enough to cut losses?
3. How does the business ensure the analyst on the free role is still sufficiently engaged with their team?
4. How does the data team leadership motivate team members who are <u>not</u> offered free-roles?
5. What is the upper limit on the number of team members who are on a free-role at any given time, and can the data team still broadly meet business expectations with experienced members on self-guided projects?
6. How does the business ensure that rejection of a free-role offer does not reflect badly on a data person?

Organisations can (and should) modify the default timings and arrangements set out earlier to suit their needs.

But it is also important to remember that constant check ins and caveats do not constitute "freedom" any more than a time period of six weeks (or something similarly short) constitutes a "role".

For any questions, email enquiries@ucovi-data.com