



Offering
New Measures
of Insight
into Data and Images
www.3d-metrics.me

Sabine K McNeill
21a Goldhurst Terrace
London NW6 3HB
Tel: 0044 20 7328 3701
sabine.mcneill@3d-metrics.com

How Can We Finance Deepening Understanding and Increasing Intelligence?



Brief Company Description

3D Metrics was set up to commercialise the IP [Intellectual Property] developed in private and independent research. It consists of the founder's mathematical concepts built into various software prototypes. Recently, a highly experienced developer produced a [Smart Knowledge Engine](#)¹ as an online service and work in progress. As a first step, its re-visualisations of images have been documented

- in screenshots on the blog 3d-metrics.me²
- in videos on the YouTube channel [Smart Knowledge Space](#)³
- as an introductory website on [Smart Knowledge Space](#)⁴.

The Product / Concept

Our engine enhances the visualisation of STRUCTURED DATA and IMAGES:

1. a unique and generic software method RE-VISUALISES IMAGES in 'True Colour 3D' – to see more structure and detail;
 - our NUMERICAL treatment of images is not only the basis for our unique re-visualisations;
 - it also serves as the basis for AUTOMATION: 'domain experts' set SELECTION CRITERIA and BOUNDARY CONDITIONS from 'reference images';
 - the operators monitoring automated processes will then watch all events that are 'off limits' and can feedback to the experts;
2. the second unique and generic software method to LAYER MULTI-DIMENSIONAL DATA for slicing and dicing a movable object needs completing;
 - a third method with a unique FORECASTING algorithm includes the production and interpretation of short-, medium- and long-term TRENDS;
3. the methods will be available by subscription and by buying a license for customised installations.

¹ <http://www.smart-knowledge-portals.uk/>

² <http://3d-metrics.me/>

³ https://www.youtube.com/channel/UCZFjdZADoElxKb_7rcjiDEg

⁴ <http://smartknowledge.space/>

With the image analysis method, challenges at nanoscale can be addressed promising especially rewarding insights, but also the interpretation of images produced by satellites and telescopes will be intriguing.

Screenshots and videos convey the uniqueness of our visualisation format, but only driving the engine yourself, with your own images, whether at nano-, human or astronomic scale, will make you go WOW! AMAZING!

The Market Opportunity

Just focussing on the cytology / pathology market of our image analysis method: Washington G-2 reports estimated the US anatomic pathology and cytology market to be slightly over \$12 billion in 2006. Growth of 60% took place between 2003 and 2006. Over 14,000 board-certified pathologies are actively practising in the US.

Our NUMERICAL analysis allows us to quantify 'Digital Colour Brightness' as a new 'digital yardstick'.

As new 'image metrics' Digital Colour Brightness in True Colour 3D can thus make contributions to the science of imaging, by setting new standards and references for displays and imaging technologies – besides the science of materials, health and whatever domain is of interest to the user.

The Competition

In the cytology domain, *CellProfiler*, *FuzzyFluid* and *Labman* are freely downloadable software examples. They are easily out of date, as they are not a 'software as a service' that we offer online and thus keep it up-to-date all the time.

No other imaging software is independent of scale and thus application.

Financial Information

The company has an empty bank account. All activities so far have been entirely self-funded.

If Apple had put in their realities as a forecast, they would not have been believed. Hence we consider our financing forecasts to be dependent on the intentions and motivations of any funder.

The current product has been created by one software designer, web publisher and online promoter and one developer. To make the product a commercial success, can take various avenues:

1. Public procurement
 - a. thanks to attending many events over the years, the founder is well equipped to make the right approaches and has started to do so with these documents:
 - i. [Industrial Strategy](#)⁵ – in response to the Government's consultation;
 - ii. [What is Innovative?](#)⁶ – in response to the latest funding round for emerging and enabling technologies by innovateUK, where the chances of success are 20%.
2. Financially strong clients
 - a. A project to automate CCTV scanning in a new way is being discussed which would be ideal as a 'top end' application of automating image analysis.
3. The Internet Public
 - a. A crowdfunding workshop on 29 March will clarify which platform would be best.

The Team

Without considering the recent funders, the company consists of the founder Sabine K McNeill as the software designer and Neil Lowden as the software developer. Their LinkedIn profiles are on <https://www.linkedin.com/in/sabinekmneill> and <https://www.linkedin.com/in/neillowden/>

⁵ <https://drive.google.com/open?id=0B8aTrTXscxFFRjEtZ1NzNDg5ZVE>

⁶ <https://3dmetricsdotme.files.wordpress.com/2017/03/17-03-17-what-is-innovative-exec-summary.pdf>

Sabine studied maths and computing in Darmstadt in Germany and had her only employment as a systems analyst at CERN in Geneva, where she used to diagnose software. After a serious car accident on duty trip, she became self-employed as an event organiser, first in Geneva, then in London.

When re-visiting maths and sciences with 'software-aided thinking', she had profound insights that she captured in her first prototype in Visual Basic.

Subsequently, she developed the art of writing software specifications for two developers in London and two in Berlin. She also developed the skills of online publishing and promotion.

She now has a considerable web presence as well as a wide network of academic and industrial contacts as potential Domain Experts.

As a software and web developer previously working for UBS in Europe and Asia, Neil brought the offline prototype into the 21st century of online graphics.

To scale-up, the cost of development is 'paralleled' by the costs of and promoting / marketing and sales. The income which also determines the Return Over Investment is the big question mark – especially when considering intentions and motivations over short-, medium- and long time frames.

Funding History

Entirely self-funded by family and friends since November 1996.

One grant of £5,000 via London Metropolitan University, one gift of £5,000 by a wealthy individual and one sponsorship to participate in an exhibition at CERN by UKDTI.

Since May 2015, the founder was sponsored by one funder who contributed £4,500.

Since November 2016, the developer was funded by two friends contributing £2,500 and £9,000.

How would you plan to realise the value of the company? Within what timeframe?

The success of our enterprise will be determined by the growth of the number of individual and corporate subscriptions and the number of users visiting our [Smart Knowledge Space](#)⁷.

Key to success will be Domain Experts whose selection will determine the strategic route:

1. In terms of IMAGING ANALYSIS: what are the funders' priorities besides cytology and pathology?
 - The science of imaging? Nanoscience? Materials research?
 - Industry standards for displays and imaging technologies? Health related technologies? Machine vision? Microscopy? Space research?
2. In terms of LAYERING MULTI-DIMENSIONAL DATA: what are the priorities of funders and the online community?
 - Climate change? Financial data? Economic data?

To deliver a successful online business, partnering with cloud providers for 'package deals' has already begun with one conversation.

Targeting governmental and public service institutions is priority, as 'demo data' will be derived from governmental Open Data for training to address a report by produced by techUK: [Demystifying, understanding and addressing the Data Skills gap in the UK](#)⁸.

Due to the underlying new mathematical spaces, conceptual art installations are envisaged for 'out of the ordinary' events to attract attention beyond the world of business where bottom lines count. But is Time really Money?

Our unique method to [forecast time series](#)⁹ is also generic and can expand the business into yet more directions.

⁷ <http://smartknowledge.space/>

⁸ <https://3dmetricsdotme.files.wordpress.com/2017/01/17-01-25-techuk-big-data-skills-gap.pdf>

⁹ <http://3d-metrics.com/wordpress/software-methods/forecasting-time-series>