



Life as an Innovation Advisor:

Technology Commercialization, Landscaping,
and Ideation

2020 Internship Showcase

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Innovation Advisors Perform a Variety of Tasks for a Diverse Client Base

- ✓ RTI Innovation Advisors (IA) assist a diverse portfolio of clients in a wide range of industries including Consumer Products, Health, Food and Agriculture, and Water.
- ✓ IA facilitates Strategic Innovation, helps client's Go-To-Market with their products, and can providing meaningful Insights into a specific field/market.
- ✓ As an IA Intern, I have primarily been involved in Go-To-Market and Insight related projects.



We are your trusted partner, bringing discipline to your innovation process."



SI
Strategic Innovation

Technology Commercialization ←

 <p>GM Go-To-Market</p>	 <p>Your Challenge</p>
 <p>In Insights</p>	

→ Landscaping

→ Ideation



Technology Commercialization for NASA

01



NASA Researchers Develop Technology

02




Researchers Submit Technology to NASA Tech Transfer Office

03



NASA Provides RTI with background to begin Technology Opportunity Assessment

03b




Generating Technology Opportunity Assessment Sheet

- Purpose: Inform and attract potential licensures
- Distilling wealth of primary/secondary market research into informative and aesthetic brochure-like format
- Ideating on potential uses and applications



National Aeronautics and Space Administration



Visual Instrument Sensor Organ Replacement (VISOR)



Device that converts visual signals to audibly perceptible signals

Humans rely heavily on vision to sense their environment. However, visual sensing is generally available only for a limited visible range of wavelengths, roughly 400 nanometers (nm) to 700 nm. The range of wavelengths at which interesting physical and/or chemical effects occur, is 180 nm through about 10,000 nm. Audible sensing, over an estimated audible range of 200 Hertz (Hz)-50,000 Hz, is similarly limited, but this range is a larger fraction of the audible range of 10Hz-105 Hz. The Visual Instrument Sensor Organ Replacement (VISOR) device translates visual and other passive or active sensory instruments into sounds. The sensing super-position device increases the image resolution perception and is obtained via auditory and visual representation. The VISOR device provides a mapping or association between signals representing a selected region of a received visual image and audibly perceptible signals that are mapped one-to-one onto a selected set of distinguishable audible signal parameters. External multi-spectral sensors are translated into audible signals targeting the same human vision field. VISOR provides the ability to sense beyond the human visible light range, to increase human sensing resolution, to use wider angle visual perception, and to improve the ability to sense distances. It also allows compensation for movement by the human or changes in the scene being viewed. Using the invention, a wide variety of tasks that are difficult or cumbersome to accomplish can be met. The system operates in real-time, using limited capabilities of the human user.

BENEFITS

- Enables user to simultaneously focus attention on multiple aspects of a visual field
- Extends the vision system of human beings
- Increases human sensing resolution
- Enriches image detail
- Operates in real time



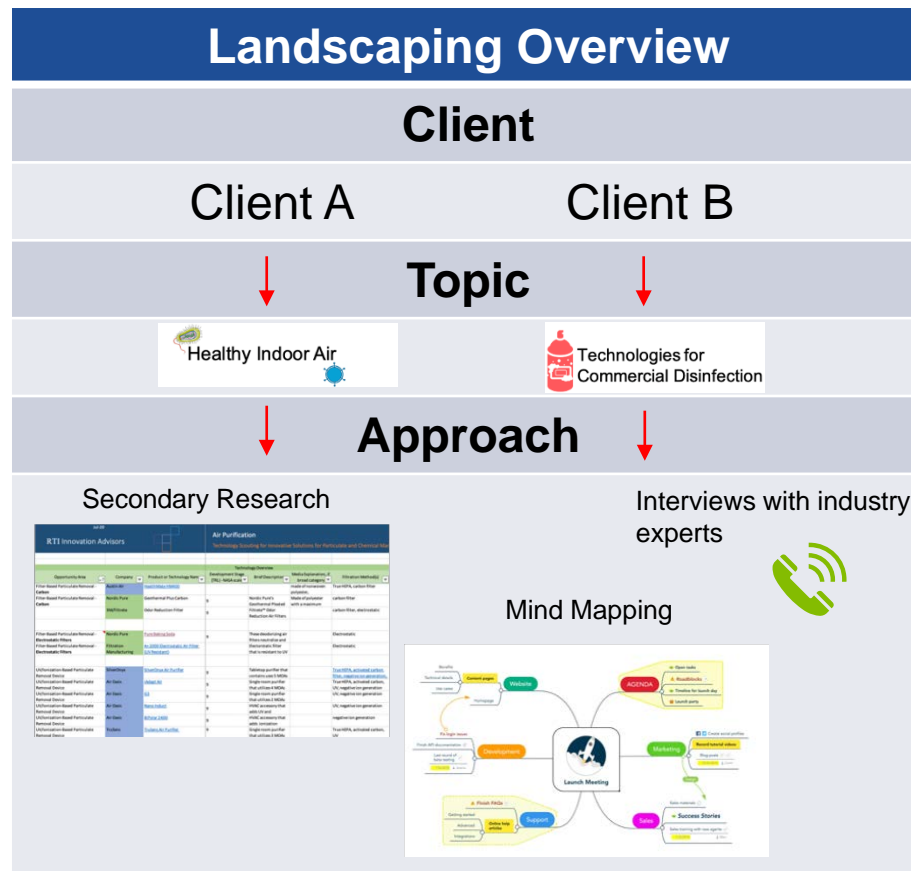
technology opportunity

Image courtesy of NASA:

<https://www.nasa.gov/sites/default/files/arc-15578-2.pdf>

Landscaping: Shallow Snorkeling and Deep Dives

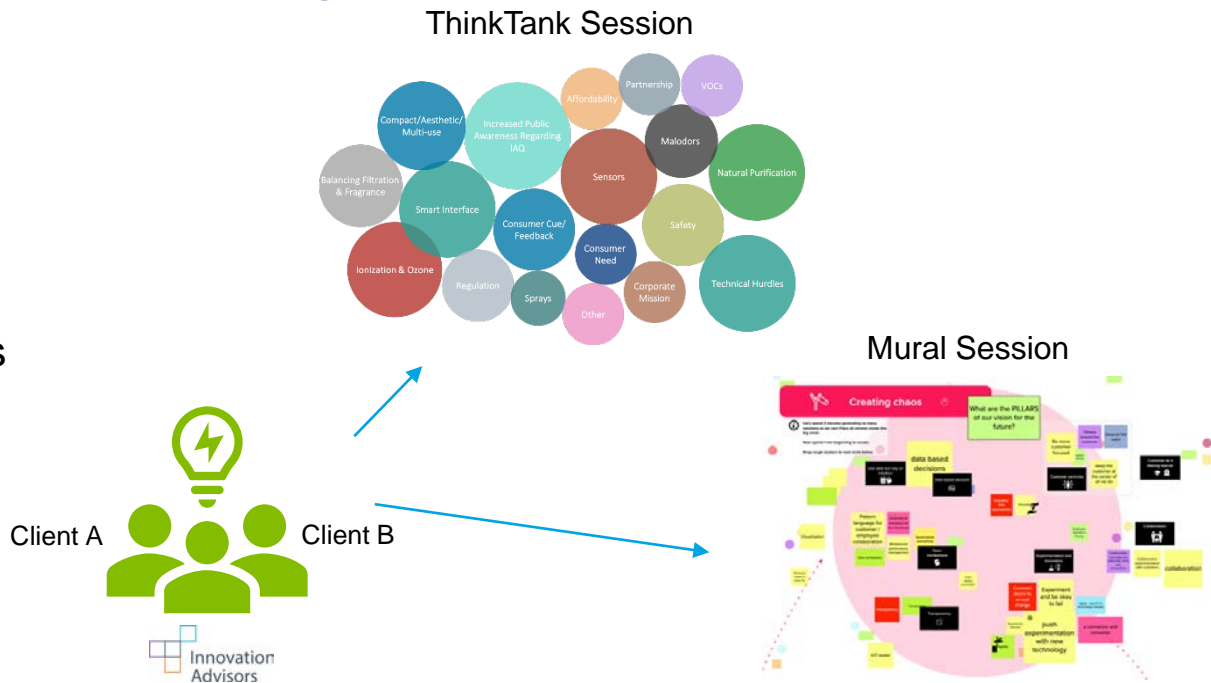
- ✓ Clients approach Innovation Advisors (IA) with a specific interest, but need a broader perspective or more granularity.
- ✓ IA conducts extensive secondary research on the area of interest that includes regulations, scientific validity, trends, technologies, key opinion leaders, market opportunity, and costs.
- ✓ I was responsible for distilling regulation information, profiling technologies and helping facilitate Mind Mapping sessions and interviews with industry experts.





Ideation: Providing the Resources Necessary for Informed Thought

- ✓ After landscaping, conducted ideation sessions with clients to identify overarching areas of interest, market opportunities, or pain points.
- ✓ Utilized multiple different tools including ThinkTank and Mural.
- ✓ I was responsible for helping facilitate and contribute to sessions and transforming resulting data into more quantitative graphics.





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Thank you

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