

# ENVIRONMENTAL BUSINESS JOURNAL®

Strategic Information for a Changing Industry

REPRINT

Innovation in Services & New Practice Areas

Environmental Business International Inc.

## INTERA LEVERAGES SPECIALTY EXPERTISE, TECHNICAL PROFICIENCY & OWNERSHIP CULTURE TO SUSTAIN BUSINESS PERFORMANCE

**INTERA** is an international consulting firm of engineers and hydrogeologists focused on solving some of the world's most challenging environmental and water supply problems. Since 1974, INTERA has been at the forefront of characterizing and simulating natural systems to assist clients in making risk-based decisions. The company's core purpose is 'Innovation and Stewardship for a Sustainable Tomorrow'. INTERA's customer mix of 1/3 private sector, 1/3 state and local government and 1/3 federal government enables the company to quickly respond to regional or global market fluctuations by transitioning staff to support projects in other sectors. Headquartered in Austin Texas, INTERA operates branch offices in California, Colorado, Florida, Indiana, New Mexico, Texas, Hawaii, and Washington, and international offices in Switzerland, France, and Australia (opening soon). INTERA operates as one cost center and incentivizes sharing work across offices and across continents. It is not unusual for staff from several domestic and international offices to work together on a project on yet another continent. Collaboration is key to meeting company's annual goals. Across industries and geographies, teams are trusted with finding ways to manage risk, to more sustainably use water resources, to protect coastal resources and infrastructure, and to safely isolate radioactive and other hazardous wastes.

*Dr. Marsh Lavenue, Chairman and CEO. Dr. Lavenue joined INTERA in 1985 as a Staff Hydrogeologist. His technical expertise includes regional groundwater model development, calibration, and sensitivity/uncertainty analysis. He contributed to and coauthored numerous journal articles and technical reports focused on adjoint sensitivity techniques and advancing the Pilot Point Inverse Method, which has led to its adoption as an industry standard in groundwater model calibration. Dr. Lavenue served in various roles of INTERA's technical, business development and management prior to becoming CEO in 2008. He has led INTERA to a 4x growth in revenues and earnings since taking over as CEO. He has led four acquisitions which broadened INTERA's service offerings and expanded its locations geographically. He has expanded the number of employee owners and successfully executed an internal ownership transition (non-ESOP) governed by INTERA's Equity Plan, which comprises a combination of direct stock sales, stock options, and restricted-stock bonus awards.*

### EBJ: How has business been for INTERA over the past couple of years?

Lavenue: Over the last few years, INTERA has sustained a 10% organic growth rate and has also grown inorganically through acquisitions, which broadened INTERA's service offerings and expanded its locations geographically. We did experience some short-term impact to our field work in 2020 due to Covid restrictions but our data analytics and modeling revenue surpassed our expectations, which enabled us to finish 2020 on plan. One major highlight in 2020 was winning the Cen-

tral Plateau Cleanup Contract (CPCC) at the Hanford Site with our partners at **Amentum** lead by Scott Sax, Amentum's Program Director for CPCC. We are very fortunate to be able to support Scott and his technical team in achieving great things at Hanford over the next ten years. Another major milestone is building the Composite Analysis (CA) and Cumulative Impact Evaluation (CIE) systems for our customer, DOE Richland Operations Office, to support disposal and remediation decisions at Hanford. There is nothing else like these tools on the planet relative to providing a comprehensive evaluation for

hundreds of waste sites with shallow and deep contamination, multiple active and inactive hazardous and radioactive waste facilities, major radioactive waste storage systems, and complex groundwater plumes that are comingled and spread across four Operable Units. Lastly, our mining, coastal engineering and water resources/utilities teams have significantly expanded our services and geographic coverage by executing on our strategic plan. I couldn't be prouder of what my team has accomplished.

### EBJ: How does INTERA differentiate from competitors and in which ways does it bring additional value to your customers?

Lavenue: Two key INTERA differentiators are the remarkably long tenures in our staff and the wide employee ownership and engagement we have achieved. Annually, INTERA's attrition of 3% is less than a third of our peers in our industry. INTERA has also retained over 90% of staff joining INTERA via acquisition over the last decade. Engagement is achieved by clarity in our purpose, our values and regular anonymous feedback on how our team is experiencing work.

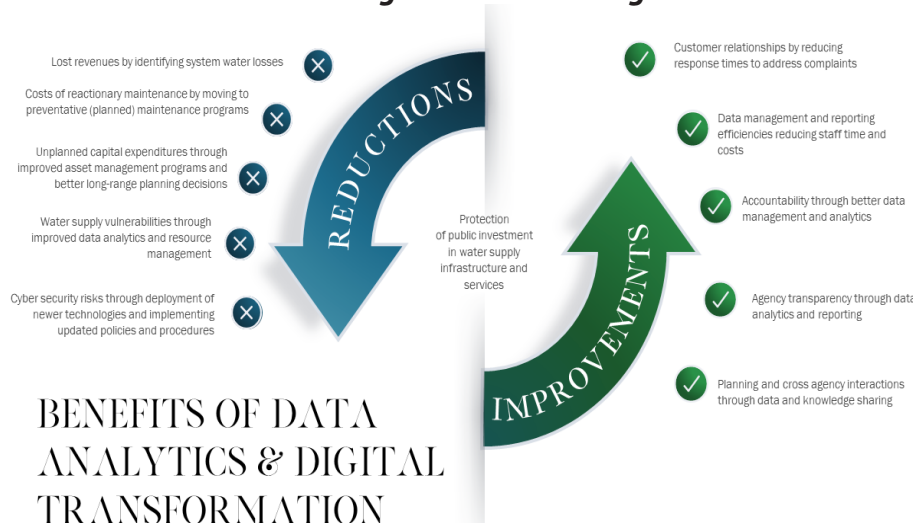
This has led to our recent recognition as a company that has successfully built a meaningful and sustainable corporate culture. The low attrition rate enables continuity in project teams over years and sometimes decades that our clients appreciate. For example, long term projects such as the Hanford site environmental restoration, the Swiss radioactive waste isolation program, the Tampa Bay Water Utility integrated SW/GW modeling and the Ranger Uranium Mine Closure Plan modeling support in Darwin, Australia benefit from longevity of the INTERA staff working on their projects.

### EBJ: INTERA also has offices in Switzerland and France. When did you established these offices and why did it make sense strategically?

Lavenue: We had offices in Switzerland and France in the mid-90s but after our sale to Duke Engineering and Services in 1995, those offices were either closed or sold. When we were able to purchase INTERA back from Duke in 2002, we re-established both offices after our European leadership came back to INTERA. The main strategic reason we wanted back into Europe was to re-establish our role in the French and Swiss High-Level Radioactive Waste (HLW) programs headed up by Andra and Nagra respectively. With Yucca Mtn in the States defunded and WIPP operational, the historic roles we played in the domestic programs e.g., site characterization, modeling and performance assessment (PA), had dried up so we shifted talent to the Nevada Test Site (now NNSS) project and later to Hanford and made a strategic decision to get back into the European and Nordic HLW programs. We now also support mining clients and water resources clients in our European offices.

Our interest in remaining a player in the HLW market is due to the technology transfer these programs enable. Tools, software and IP developed on these programs are often transferable to our environmental, mining and water resource clients' projects. It gives us a competitive advantage. In fact, the reason we were selected to support Rio Tinto/ERA on the Ranger Uranium closure project in Darwin over other well-established mining consulting companies was due to our PA expertise and the similarities of the Ranger Mine closure

## INTERA Advocates Digitalization Strategies for Clients



Source: INTERA presentation document

requirements to a PA for a HLW site.

**EBJ: How does INTERA promote innovation throughout the company? And have you incorporated new services and/or new practices within the past couple of years?**

Lavenue: INTERA historically has developed first-in-kind solutions to ground-water problems in the environmental industry. Notwithstanding the development of the CA for the DOE at Hanford I mentioned earlier, over the last decade we were much more focused on applying technology readily available in the industry versus advancing the state of the science further.

However, in 2020 we decided that it was timely for us to do more and we have made some key hires to re-establish INTERA's role in advancing uncertainty analysis as it relates to making risk-based decisions which clients across all our lines of business are facing.

For example, Dr. Jeremy White, internationally recognized as an expert in inversion of natural-system models and statistical uncertainty quantification, joined INTERA last year to head up our decision analysis offering to our water resources, mining and environmental clients. As a Principal Hydrogeologist at INTERA, Dr. White's focus will include providing value to our clients in decision analysis as well as to the hydrogeologic technical community via the continued development of his open-source codes: PEST++ and pyEMU and other uncertainty analysis/optimization tools.

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Another area of innovation that we kicked off in 2020 is the digital transformation of the water utility industry. Another Key hire we made, Dr. Alison Adams, the previous Chief Technology Officer at Tampa Bay Water (TBW), the largest wholesaler of water in the State of Florida serving 2.5M customers, joined us a few years ago. Dr. Adams was the architect of TBW's digital transformation and today, TBW has one of the most advanced Decision Support Systems (DSS) in the water utility industry.

INTERA played a key role in the development of TBW's DSS and when she retired from TBW, I asked her to join us so that we could bring our collective expertise to bear on the digital transformation challenges our water utility clients are facing. A few months ago, INTERA joined the Intel Partner Alliance, Internet of Things. We will use Dr. Adams' experience and INTERA's data analytics expertise. Intel, INTERA and another key partner of ours, Isle Utilities, have formed a coalition with a handful of water utilities to co-create new technologies and new reference digital architectures which will disrupt the old way the water industry has traditionally managed their operations. Dr. Adams has written a white paper describing the Digital Transformation Roadmap. Intel has led digital transformation across several industries and offers a unique opportunity to engage Intel's complete industrial ecosystem of partners including End Users and Solution Providers to Water Utilities.

**EBJ: How did your backlog change in 2020 and how do you think that things will be in 2021?**

Lavenue: We experienced some impact to our environmental and coastal engineering business in 2020 due to the pandemic. I am also concerned that short term, some of our municipal clients will be tightening their belts given the payment delinquency some of them are already experiencing from their customers. I suspect we will see some 2021 backlog impact in the shorter term due to the economy but hopefully the stimulus recently passed will more than offset any lingering covid impact.

**EBJ: How is INTERA's organizational structure? And how has the structure**

**changed over the past year? What are the things that work well?**

Lavenue: INTERA is organized regionally like most other service firms. As we have grown and new roles opened, members of our team stepped up to address the needs of the organization. Over the last decade we have expanded into California, Europe (again), Australia, Washington, and Indiana. Over the last decade I have been slowly executing a leadership succession plan so we can be resilient as my generation retires from the company. My predecessor executed this perfectly and I am following the process he used so there is minimal disruption to the company. One other major structural change I made was the addition of an external Board member about 8 years ago. Robert Malone, the past chairman and president of BP America, Inc., agreed to serve on INTERA's Board due to the close friendship he has with our retired founder Ron Lantz.

Bob's governance experience and advice in our strategic plans to grow our mining and oil and gas services has been a game changer for us. Bob brings lots of governance best practices to INTERA's Board. He currently serves as an independent director of the Halliburton Company, as Chairman of Peabody Energy Company, and is a board member, president and CEO of the privately held First National Bank of Sonora, Texas. He began his board position with INTERA in March 2012.

**EBJ: You've worked at INTERA for some time now. Can you describe your experience and how it has evolved since you started? What qualities, abilities and circumstances have taken you and the company to achieve great success?**

Lavenue: I joined INTERA in 1985 fresh out of grad school as a groundwater modeler. My MS advisor always spoke so highly of INTERA so it was a real honor to get a job offer from them. INTERA also hired my officemate in grad school, Van Kelley, who has also spent his career here and has been instrumental in the growth of our water supply/resource business.

Over the many decades with INTERA, I never felt as if there wasn't new opportunities to pursue. I have grown up with my

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peers, Cindy Ardito and Alaa Aly, who are both INTERA Board members now. It has been very satisfying to see INTERA grow through the shared efforts of all of our team. Regarding the qualities for advancing your career, I can say that fast growth happens when you step way out of your comfort zone.

For example, I volunteered to open our first branch office in Albuquerque, now a 50-person office. There had been some hesitancy for us to expand but now it's clear that geographical expansion was really key to us growing from a small one office business to a middle-market corporation. I would say that the most life changing event was my decision to move to France in the middle of my career to pursue a PhD under Ghislain DeMarsily.

I remained an INTERA employee while in France studying and I opened an office and hired one of my graduate school buddies, Benoit Paris, to take over after I returned to the States. Benoit leads our team in France today. So, the advice I give to our younger staff is to take risks and volunteer to open new locations. The challenges you will face on the front lines forces you to make decisions under uncertainty, which will prepare you for future leadership opportunities.

**EBJ: How would you describe your leadership style? And what words of wisdom do you have to share with your peers across the environmental industry and the next generation of leaders to come?**

Lavenue: I recently read the book *Loonshots* by Safi Bahcall. Borrowing from his perspective on leadership, my leadership style is that of a 'careful gardener'. When you hire right, have clarity of purpose and



roles, and provide the right conditions for your team to succeed, the company can thrive. As a careful gardener, my job is to be a good steward and ensure the nourishment and care of the organization.

An engaging corporate culture is nutrition for the organization, as such, we have been very intentional in building a great corporate culture and holding everyone accountable to the behaviors aligned with our core values. The pruning process is a metaphor for eliminating any bad behaviors that may surface from time to time.

We are all humans so we will fail in meeting the standards we set, God knows, I have made lots of mistakes over 13 years as INTERA's CEO. The key is to prune as needed and grow from these situations as individuals and as a team. One resource that has helped us is Kim Malone Scott's Podcast on Radical Candor which describes best practices on developing trusting relationships with your team by "Caring Personally and Challenging Directly". I highly recommend it.

The pruning process also describes the periodic strategic planning and execution needed to grow intentionally. Reassessing our markets, our geographic locations and

our personnel in key positions is critical as you scale. Doug Tatum's book, *No Man's Land*, covers this topic in great detail and was a great resource for me early in my executive career.

I have been fortunate to have a team that understands we have to match the right people with the need of the organization at any given time. I am not suggesting that these conversations have been easy by any means because it often requires them to step out of roles they may have held for years so that we could get new talent in those roles particularly as succession occurs. I have found that employing empathy and clarity of purpose in these conversations has enabled INTERA to continue to evolve and grow.

One last thing I would like to convey is how important we believe it is to share the financial upside with your current and future leaders. In my M&A activities, I have seen too many small business owners hoard ownership to their own detriment. These companies rarely scale past 20 to 50 people because of the revolving door of talent that pass through the company. Once a high potential employee realizes they will never get a piece of the pie they are gone.

INTERA has been very accommodating in our approach to ownership for staff we want to lock in for the long term. We have used Restricted Stock, Incentive Stock Options, Non-Qualified Stock Options and direct stock sales as tools to facilitate ownership for younger staff. It has also enabled us to transition a significant portion of the INTERA ownership from my generation to the younger staff over the last decade without needing to go the ESOP route.

Having spent most of my professional life at INTERA, my passion is to continue enhancing the company as I transition out of my CEO role over the next 5 years. I am very enthused about the future we have and believe our next generation will be ready when the time comes for them to take INTERA to the next level. ■

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