

SUCCESSION PLANNING: SUNTRACKER'S TECHSTRATEGY

CONNIE D.M. ALLSOPP

The World's Registrar

GEORGE L. WHALEY

San José State University

Introduction

Succession planning was not a major concern when Canadian-based SunTracker Technologies Ltd. (STL) was founded. Ian Ashdown and Wallace Scott co-founded STL in 2011 to provide advanced professional design software for the lighting industry. In 2021, Ashdown and Scott co-founded a second company, HelioSol Software Solutions Inc. (HSSI), that focused on marketing and licensing STL's products. The combination of a world-renowned scientist and a lawyer with a business background shaped the startup's management perspectives.

See a video overview of Horticultural Lighting Design software to illustrate the type of product STL offered to the lighting industry: <https://youtu.be/DEJKBXqRDA4?si=ChLbZAlhIG39CYgl>

The co-founders believed that knowledge transfer through daily communication and documentation of their work projects were components of effective leadership and were sufficient to address any concerns about succession planning. However, in 2022, when serial entrepreneur Shirley Lang joined STL as Chief Administrative Officer (CAO) and subsequently became the HSSI's Chief Executive Officer (CEO), she raised a concern for their consideration.

During a company retreat in 2022, Lang asked the co-founders about the importance of succession planning. Scott replied, *“I believe daily communication is the best succession planning any company may want as everyone stays well informed.”*

Succession planning and intentional leadership moved to the forefront after Ashdown suddenly passed away in June 2023. Scott pointed out that, *“Daily communication helped me to pivot and take on the role of CEO while also maintaining his Chief Financial Officer (CFO) and Chief Legal Counsel (CLO) duties.”* Ashdown had been the company's exclusive face for twelve years due to his expertise in global lighting design, and he held awards in the field. In late June 2023, the industry podcast, **Today in Lighting**, paid tribute to Ian Ashdown in the latter part of the episode as a key loss to the global lighting industry (see *Today in Lighting* video, <https://www.youtube.com/watch?v=86LzULo5dNO>).

Scott, now as CEO, said, *“It will be near impossible to replace Ian’s lighting expertise.”* Scott noted that ongoing communication within a small firm was its superpower. He believed that being a small, agile tech firm gave the company the advantages of a flat organizational structure, and ongoing informal communication and leadership kept everyone *“in the know”* without a formal documented succession plan.

Concerning leadership, communications, and succession planning, Lang and Scott offered:

“Selecting new employees to replace Ashdown’s skillset is important for future success, as is communication with all stakeholders, and our goal is to keep Ashdown’s legacy alive.”

Lang and Scott concluded that licensing and updating their unique lighting design software required more staff. They concluded that the company may also need a structural change, while they continued to monitor the leadership and financial progress. HSSI’s CEO, Lang, divulged, *“We are attempting to do succession planning without calling it that, simply a context*

that is often misunderstood.” Lang and Scott admitted that effective leadership and succession planning would play a prominent role as the company grew and day-to-day-management became more complex, yet they were uncertain whether knowledge transfer through their informal work of ongoing communications would remain the focus, or whether a formal succession plan based on a specific leadership style would become the primary driver of change in the future.

Management Background

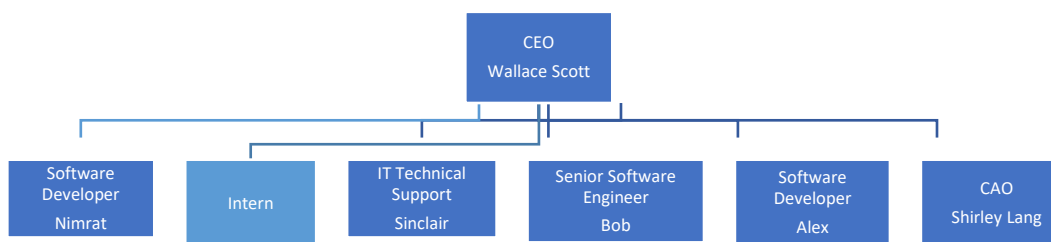
Wallace Scott served as the Chief Legal Counsel (CLC) and Chief Financial Officer (CFO) of STL, while the late Ian Ashdown, as CEO, Senior Scientist, and co-founder, contributed significantly to the company’s research and software development legacy. STL management believed that for a profitable company, the company’s size, the number of levels in the organization, growth, and employee turnover were key factors in the need to replace or add new employees.

STL Flat Organizational Structure

The entire STL team comprised a Senior Software Engineer, two Researchers and Developers, IT Technical Support, an Intern, and Shirley Lang as CAO (see Exhibit 1). The 2025 company structure, as seen in Exhibit 1, had only one level below the CEO, six employees, little turnover, and one new hire.

Exhibit 1. STL Company Organization Chart

Source: Author's Notes (2025)



Since nonmanagement employees were not required to go through a manager to talk with each other or the CEO, everyone felt that goals, tasks, new practices, and interpersonal issues were easy to handle when they compared the STL structure to larger organizations. The CEOs, Scott and Lang, experienced the same ease of communication and knowledge transfer. In parallel, HSSI maintained a smaller team of three, led by Shirley Lang as CEO, alongside a marketing assistant and an administrative assistant, and maintained a similar flat company structure.

Knowledge management was a key priority for Scott, who had extensive experience in leadership and business as did Lang in start-ups, and both understood the value of sound decision-making through good judgement. Judgment was one of those traits' leaders invoked but rarely defined. It was often a factor for staff promotion, and it became increasingly more important over time as individuals advanced in the company taking on more responsibility for day-to-day decisions. Judgment could be defined as *"the capacity to act wisely in situations where rules by themselves are insufficient—by recognizing what matters, weighing competing priorities, anticipating consequences, and deciding under uncertainty"* (Duncan 2026). Duncan (2026) provided five ways this was evident within the workplace, and specifically how leaders promoted good judgement:

1. **Evaluative**, recognizing when something is good/ bad, strong/weak, appropriate/off base;
2. **Contextual**, knowing when general rules apply and when the situation is different enough to require an exception or team discussion;

3. **Trade-offs**, weighing competing objectives when no option is clearly right;
4. **Anticipatory**, seeing second-order consequences before they materialize; and
5. **Ownership**, deciding when to personally own a decision and its risks rather than deferring or escalating under uncertainty. Scott met weekly with his team and promoted the daily communication among the team to encourage good judgement habits as well as how he might guide his team to create the conditions for success.

Wallace Scott's Professional Background

Wallace Scott was called to the British Columbia Bar in 1996 and practiced law extensively, where he provided advice, planning, implementation, management, and due diligence to clients across technology, intellectual property, corporate commercial, business, finance, and litigation domains. (See Scott's LinkedIn profile, <https://www.linkedin.com/in/wallace-scott-cd-14141261/>).

Scott's diverse expertise encompassed software engineering, human biology, biomechanics, and experience in the optoelectronics industry; he co-invented US patents and served as a founder and director of STL. Previously, he held in-house roles, including General Counsel at TIR Systems Ltd., where he managed over 170 US and foreign patents and applications, and Senior IP Counsel at Philips Intellectual Property and Standards in Eindhoven, Netherlands. In 2011, he departed in-house counsel to establish his own practice tailored to startups and small businesses.

Ian Ashdown's Contributions

Ian Ashdown, Senior Scientist and co-founder of STL, authored *Radiosity: A Programmer's Perspective* (John Wiley & Sons 1994), with featured software undergoing continual development thereafter and licensed to entities such as Lighting Analysts, Inc. for AGi32,

ElumTools, Licaso products, and Glamox AS for OptiWin 3D Pro. Throughout his over four-decade career, Ashdown demonstrated profound passion for lighting, unwavering scientific integrity, and exceptional expertise, yielding numerous academic articles, lighting standards, and software innovations. A TCI.com podcast interview (“*It’s just a hobby*”) elaborated on his software details. Beyond technical renown, Ashdown exhibited remarkable compassion, assisting many individuals personally and professionally. (See “*In Memory of Ian Ashdown*” on the STL website, <https://www.suntrackertech.com/about/>).

Shirley Lang’s Professional Background

Shirley Lang served as Chief Administrative Officer (CAO) of STL and CEO of HSSI, (see HSSI website <https://www.heliosolsoft.com/about-us/>), bringing over 40 years of leadership and management experience as a proven entrepreneur who founded several successful and innovative enterprises. She held influential executive positions in both the private sector and non-governmental organizations (NGOs), thereby serving industry and community alike. Her extensive expertise encompassed communications, marketing, and public relations. Previously, Lang functioned as Vice President of Marketing and Communications at STL, where she played an instrumental role in leading HSSI and negotiating the exclusive license arrangement between STL and HSSI.

Leadership in the Executive Suite

The CEOs knew it was not unusual for company founders in any industry to have the largest influence on the leadership process and culture of start-up firms (Jones & George 2019). Moreover, Lang and Scott believed that *intentional leadership* was a key process in organizations, and that leadership at the top or executive suite was important for effective succession planning (Jones & George 2019; Marshall 2001). Scott stated:

“If anyone has a desire for training and development, regardless of the field, we support them both financially and professionally. That’s our job to support them as leaders!”

Additionally, the STL and HSSI founders believed that leadership and company culture were important factors in a firm's strategic competitive advantage, which were identified as strengths in the company's current and future (see Exhibit 5, Appendix C for a SWOT analysis). When Ashdown and Scott co-founded STL, they wanted to lead by example and build a collaborative culture to achieve profit, as well as achieve their Mission, and Core Values.

As the two companies, STL and HSSI, developed, specific leadership styles of the CEOs emerged. The CEOs connected leadership style to other behavioral styles and effective teamwork. Scott and Lang observed that the founder, Ashdown, did lead by example, but he had a more hands-off, directive, **Theory X**, and an autocratic style when working with company teams. This observation was confirmed by company advisors, who described Lang’s style as democratic, participative, **Theory Y**, and supportive. Scott’s self-assessment and observation by others described him as a mix of participative, direct, X, and Y, and supportive leadership styles. Scott wondered about what leadership approach was preferred over the next five years and agreed to take behavioral and leadership style surveys. A summary of Scott's scores on two leadership surveys, a conflict management style, and a personality style survey is shown in Exhibit 7 (Appendix C).

Succession Planning

“All CEOs will inevitably leave office, yet research has long shown that most organizations are ill-prepared to replace them” (Harrell 2016). But Lang and Scott had asked their shareholders, peers, and company advisors to recommend examples for formal and informal succession planning. Generally, the advisors noted that small and medium firms, such as STL, would benefit from succession frameworks that combined SME succession research with theories explaining

team learning, knowledge translation, and ongoing innovation (Gakure, et al. 2013; Gumbo, et al 2012; Reeves 2010). In practice, company advisors thought this usually meant building on a small set of complementary frameworks rather than searching for a single ‘Tech-only’ model.

An additional source for succession planning was provided to CEOs in the form of a book, *The Succession Solution: The Strategic Guide to Business Transition* (Franc 2019) with its **Succession Solution Scorecard**. The Franc scorecard (see Exhibit 6 in Appendix C) revealed the risk of failure or success of a company’s strategy for succession planning through a series of 25 questions.

The advisors proposed seven models of succession planning, from traditional to internal promotion to employee shares to legacy planning, or a combination, that the CEOs might consider as the best one, or a combination to implement over the next 5 years (see Exhibit 2).

Exhibit 2. Seven Frameworks for Succession Planning

Source: Authors' notes (2025)

Internal promotion: Internal replacement promotion/heir placement (human capital, leadership-pipeline, family-business succession). Longenecker & Schoen (1978) and the *Japanese Times* (2026) reported that Kongō Gumi, a temple-building firm founded in 578, was the oldest continuously operating company in the world, (<https://www.japantimes.co.jp/business/2026/02/09/companies/japan-1000-year-old-business/>).

External replacement: External replacement buy-outs (entrepreneurial succession, private-equity and strategic buyer logic), for example in 1988 the RJR Nabisco Takeover (Finance Blitz 2024, video on YouTube https://youtu.be/Lpd0R_ZK8n8?si=ZmUL1Uk7rmJd-ogE).

Major takeover: Takeover by major corporation (resource-based view, synergy, and integration issues), such as General Motors (*GM News* 2025) fully acquired ownership of Cruise, (<https://news.gm.com/home.detail.html/Pages/topic/us/en/2025/feb/0204-cruise.html>).

External sale: Sell only one company (portfolio and carve-out logics; focus on strategic fit), such a Qualcomm Inc. and Hewlett-Packard Co. (<https://www.qualcomm.com/news/releases/2014/01/qualcomm-acquires-palm-ipaq-and-bitfone-patent-portfolio-hp>).

Governance shift: Keep both, change only the governance model (stewardship and stakeholder governance), such as *What's Patagonia's Succession Strategy?* (Roshitsh 2020, <https://wwd.com/business-news/retail/patagonia-sudden-succession-strategy-1203651470/>) and (Trelstad, Hsieh, Norris & Pinskney 2023, <https://www.hbs.edu/faculty/Pages/item.aspx?num=638340>).

Employee shares: Teamshares, Inc. Canada-style transfer (broad-based employee ownership, “permanent home” ownership and incentive alignment), such a Canadian based Root Cellar Grocer sale to Teamshares, Inc. (<https://www.teamshares.com/canada>) and Chan's (2025) *The Root Cellar* (<https://cheknews.ca/root-cellar-founders-sell-grocery-store-chain-launch-employee-ownership-model-1291584/>).

Legacy plan: creating a membership style opportunity for clients to participate in the legacy plan of the company by owning shares and/or membership in the company, such as Canadian-based Coast Capital Bank, (<https://www.coastcapitalsavings.com/about-us/social-purpose/social-purpose> and <https://www.coastcapitalsavings.com/become-a-member/personal>).

Lang and Scott were pleased to receive the academic models and practical steps for succession planning and agreed to use the scorecard (see Exhibit 6) in their decision-making process. However, they felt that ongoing effective communication would still be needed to transfer

unique knowledge and adopted a supportive leadership approach to implement succession planning.

Knowledge Management and Transfer through Communication

Knowledge management (KM) was understood by the CEOs as the deliberate and systematic governance of organizational knowledge resources, including their creation, storage, sharing, and application to sustain performance, innovation, and learning (Antunes & Pinheiro 2020; Argote 2012). Within this framework, knowledge transfer to new employees served as a critical sub-process that ensured continuity and skill diffusion. Lang and Scott knew that companies' design, structures, technologies, and social practices that enabled newcomers to organizations such as STL for learning codified procedures and the tacit know-how embedded in experienced members' routines were essential to business success (Liao & Wu 2009).

Core Relationship

Scholarly literature positioned KM as closely related to organizational learning: the former structured and coordinated knowledge processes, while the latter represented collective cognitive and behavioral change resulting from those processes. Effective KM, therefore, acted as both an input to and an outcome of continuous organization learning (Liao & Wu 2009). The CEOs held weekly meetings with each team member to envision their work projects, to hear their successes and challenges and to consider how each moved the needle on the company's mission and vision.

Newcomer Knowledge Transfer

Scott understood that STL knowledge transfer (KT) to new employees was described as multi-level, socially embedded process through which newcomers acquired task, role, and cultural knowledge (Basten & Haamann 2018). STL had integrated formal mechanisms such as

onboarding and training with informal ones such as mentoring, shadowing, and peer guidance to convey explicit and tacit knowledge alike. Drawing on organizational socialization theory, researchers emphasized institutionalized tactics – collective, formal, sequential, fixed, serial, and investiture – that reduced uncertainty and facilitated adjustment. Lang met with each newcomer to provide insights on the company systems and how each person could plan his or her goals then share with the team at the weekly team meeting and with the CEO.

Socialization Tactics

While Lang, as the CAO of STL, intentionally staged organizational socialization, studies further demonstrated that mentoring, peer networks, and supportive cultures acted as socialization resources enhancing performance and learning (Antunes & Pinheiro 2020). Within STL and HSSI, KT referred to the intentional movement of both explicit and tacit insights among individuals or teams, producing observable changes in practice or outcomes. It required adaptation to contextual differences and involved both decontextualization and recontextualization supported by social networks, technological and structure enablers within the company culture. Weekly “*wet Fridays*” were held with the entire team to share experiences as well as monthly lunches to socialize and chat about the bigger dreams and goals.

Key Processes

KT involved “*knowledge push*” and “*knowledge pull*,” relying on relational trust, shared language, and cultural compatibility (Argote 2012). It mitigated staff turnover risks, knowledge hoarding by individuals, and silos within the firm, especially during onboarding or succession. Organizations that fostered sharing cultures by embedding psychological safety, recognition methods, and leader-modeled learning behaviors had greater success. The weekly team meetings enabled each team member to share projects, new learning and challenges for group solution finding.

Practical Methods

Structured capture methods - including mentorships, job shadowing, storytelling sessions, and after-action reviews - systematically retained critical IP and supported succession continuity. (Fitriastuti, et al. 2019). For example, the senior software engineer at STL took two years to absorb unique company knowledge and was tasked with passing it on to the new graduates joining the team. Together, they created videos for customer learning and future staff training.

Learning Perspective

From an organizational learning perspective, KT operationalized the encoding of knowledge, skillsets, and expertise into routines and repositories while allowing reinterpretation through newcomer engagements and active communication (Argote 2012; Antunes & Pinheiro 2020). Team learning and sharing became the norm as the conversations and planning between team members continued to be encouraged and modelled by the CEOs. Opportunities to share professional growth opportunities and readings, and shared judgments to create success in various projects through debates among the team members.

Company Structure

Although it was not uncommon for small tech firms to create a flat organizational structure, the STL and HSSI company structures were rather unique; all employees in the two companies reported directly to the CEO (see Exhibit 1). There was no evidence of formal departmental divisions or multiple office locations. The STL flat structure changed the usual definition of the executive suite (Jones & George 2019), as only the CEOs were top management or members of the executive suite for STL and HSSI.

The flat structures affected the ongoing daily communication strategy and leadership within STL and HSSI. The two firms operated as a partnership with a flat management structure,

emphasizing collaboration between software engineers, researchers, and technical support staff. Leadership in the executive suite indicated that although the relationship with one CEO was hands-on, it was also participative. Seldom was expertise shared in an authoritarian, take-it-or-leave-it style. Since informal communication was where work knowledge transfer usually happened, Scott and Lang agreed that leadership style was associated with communication style and employee growth and performance. The CEOs and employees held weekly team meetings to network and share information and expertise. Scott and Lang believed that the flat structure, leadership approach, and emphasis on informal knowledge transfer allowed teams to work closely together, often partnering with academic institutions and industry organizations to develop and refine their lighting design software tools.

Lang and Scott were aware that STL was in the creativity stage for startups, and it would be difficult to maintain a flat structure if succession planning meant fast growth (Greiner 1972). They acknowledged that their leadership approach, knowledge transfer strategy, and the succession planning framework would influence their ability to keep a flat structure as their superpower—ongoing communication within a small firm.

STL Mission and Core Values

STL was a small privately held technology firm that specialized in computational lighting science. STL's mission was to promote and advance innovation in lighting across the architecture, horticulture, entertainment, and health sectors. The company's vision positioned it at the forefront of this domain, where it drove continuous innovation and established new standards for lighting design software tools, while its core values underscored scientific integrity, technical excellence, and collaboration. In the context of succession planning, these elements exemplified how the co-founders' legacy plan—particularly that of co-founder Ian Ashdown—shaped long-term governance, as a firm committed to upholding rigorous standards through partnerships with academic and industry bodies to ensure knowledge transfer and sustainability beyond key leadership transitions.

Succession Planning Implications

Succession planning in a small tech firm like STL necessitated embedding the co-founder's vision into institutional frameworks to mitigate risks associated with leadership and communication voids. The emphasis on advancing Ashdown's legacy highlighted proactive strategies, such as documenting core values and collaborative networks to facilitate the identification and development of potential successors capable of maintaining the technical excellence that Ashdown had designed and STL had patented.

Strategic Knowledge Transfer

STL's partnerships with external entities exemplified effective knowledge management, preserving specialized expertise in lighting science and design. This approach aligned with governance best practices for privately held tech firms, where formalizing mission and values into succession protocols ensured continuity in innovation and technology-driven sectors.

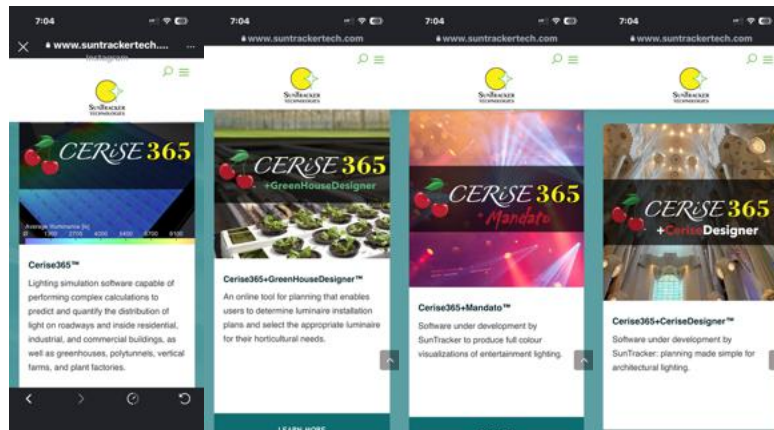
STL Product Line

STL offered specialized product portfolios that focused on professional lighting design, primarily for horticultural and architectural applications (see Exhibit 3). The products were Cerise Software Suite, Cerise365+GreenHouseDesigner, Daylighting Tools, and TM-33 Photometric File Conversion.

Exhibit 3. Company Products

Source: The STL Lighting Software website <https://www.suntrackertech.com> (2025)

Below are examples of the product line promotions:



The company's product descriptions were informative for external and internal purposes. Products were designed for professional users in niche markets such as agriculture, architecture, entertainment, and health, emphasizing scientific legitimacy and specialized functionality. Additionally, the product descriptions were provided as a help with knowledge transfer for new employees and others who wanted to get up to speed quickly on a specific product. Further knowledge transfer was available through three YouTube videos:

https://youtu.be/DagqxN5bP_4?si=vcfAabMXhAEOTFH5 ;

<https://youtu.be/18GgTAzL41M?si=FNp3D5DtPN46qWgS> ;

<https://youtu.be/m1QRcZC6csc?si=V0CxiJTFMINHR3s7>

Financial Performance Indicators and Metrics

Canadian law and regulations did not require public financial disclosure of privately owned firms such as STT and HSS. Management was thus concerned about public disclosure of their financial records that could fall into the hands of competitors. Nonetheless, management knew that an analysis of financial trends would be an important element of future succession planning decisions and provided a summary of key financial performance indicators for 2022,

2023, and 2024. (The numbers in Exhibit 4 were based on the company's non-consolidated financial statements prepared by its CPA firm and were slightly modified to meet JCRI case writing protocols.)

Exhibit 4. Key Financial Indicators

Source: Personal Communications 2025; adapted from Authors' Notes, 2025

(\$ Canadian Values, 000)	2022	2023	2024
Current assets	806,978	803,224	1,078,764
Current liabilities	202,594	132,076	11,638
Working capital	604,384	671,148	1,067,126
Total assets	1,268,074	1,230,716	1,497,068
Total liabilities	1,268,074	1,230,716	1,497,068
Revenue	1,435,286	1,612,862	2,080,368
Profit/(loss)	642,714	217,860	583,390
Cash and cash equivalents	395,150	521,960	798,908
Book value of equity	1,067,480	1,098,640	1,485,430
Retained Earnings	1,065,478	1,096,638	1,483,428
EBIT (Operating income)	425,014	540,784	1,513,440

Management Challenges

In the final quarter of 2025, it had been eighteen months since the unexpected death of Ian Ashdown in 2023. Although the financials (see Exhibit 4) appeared to have improved, Lang and Scott felt the numbers needed to be analyzed to inform future decisions regarding succession planning. They pondered over five questions that were based on whether their informal approach to knowledge transfer through daily communications, leadership, and succession

planning would remain as their strategic advantage and drivers of change. The CEOs recognized they both desired to remain professionally active for at least five more years, yet what strategic leadership approach would be needed to sustain the enterprise beyond five years? Scott posed several critical questions to Lang for them to consider in an off-site meeting with company advisors:

1. Should Lang and Scott consider a formal succession plan now using Exhibit 6 as an internal audit?
2. If a formal succession plan were needed, should Lang and Scott begin to groom an internal heir candidate, search for an experienced external successor (Hellaner, et al. 2026), or select one of the other succession plan models offered above in Exhibit 2?
3. Would leadership become the key criterion for the succession plan?
4. Should the company structure and knowledge transfer be included as a key component of the succession plan?
5. How would financial performance protect the sustainability, social, and personal legacy goals?

Lang and Scott pursued answers to these five questions in the areas of communications (knowledge transfer), leadership, and succession planning to address their personal legacies, Ian Ashdown's legacy, and the company's mission sustainability.



Appendix A. STL Design Software

Source: Authors' Notes (2025)

In 2012, STL was granted its first patent for predictive daylight harvesting in commercial buildings. It currently had two granted patents and eight patent applications for greenhouse and commercial building control systems, circadian and spectral lighting, geometric simplification, real-time dynamic lighting simulation, and neural network controllers (*The STL Lighting Software website <https://www.suntrackertech.com>, 2025*).

In 2015, STL recognized the need for horticultural lighting design software for greenhouses, polytunnels, and vertical farms. In addition to developing its *Greenhouse Builder* software, the company was working with academia on botanical research projects and with the American Society of Biological and Agricultural Engineers (ASABE), the Illuminating Engineering Society (IES), the Commission Internationale de l'Éclairage (CIE), and other organizations on the development of international standards for the lighting industry worldwide.

STL was at the forefront of software development for horticultural, architectural, and entertainment lighting design (see Technical Notes, Appendix C).

Appendix B. STL Data

Source: Authors' Notes (2025)

STL offered a specialized product portfolio focused on professional lighting design, primarily for horticultural and architectural applications (*The STL Lighting Software website* <https://www.suntrackertech.com>, 2025). The specific details of each product are as follows:

- **Cerise Software Suite:** Recognized as an industry standard in North America and parts of Europe, the Cerise suite was built on over 30 years of experience and decades of lighting R&D. It was known for deep technical expertise, multiple patents, and contributions to academic articles and standards, making it highly credible among engineers and advanced users.
- **Cerise365+GreenHouseDesigner:** This award-winning product received the AE50 award from the American Society of Agricultural and Biological Engineers, highlighting its innovation in food and agriculture engineering. It was specifically designed for greenhouse and horticultural lighting applications, offering dedicated tools for climate-based daylighting simulations and advanced photometric analysis.
- **Daylighting Tools:** STL provided specialized tools for daylighting, including climate-based simulations that allowed for precise modeling of natural light in architectural and horticultural environments. These tools supported complex design challenges and were used by professionals in the architecture and health sectors.
- **TM-33 Photometric File Conversion:** The company offered utilities for converting photometric files according to the TM-33 standard, which was essential for accurate lighting analysis and compliance in professional lighting projects. This feature was tailored for advanced users needing precise photometric data handling. All products were designed for professional users in niche markets such as agriculture, architecture, entertainment, and health, emphasizing scientific legitimacy and specialized functionality.

Appendix C. What are Lighting Software Companies ?

Source: Authors' notes (2025)

Competitors:

STL in Victoria, BC competed globally with specialized solar and climate-data providers such as Solargis, Solcast, Steadysun and, on the software side, tools like PVSyst and other solar farm assessment and resource-assessment platforms. These firms offered overlapping services around high-resolution solar irradiance, weather, and PV performance modeling that project developers, utilities, and financiers used for planning and operating solar assets.

Key competitors in SLT's niche of solar resource and climate/renewables data included:

- **Solargis**- global solar and meteorological data, PV energy modeling, and bankable energy assessments across the full lifecycle of solar plants. <https://solargis.com/>
- **Solcast** (a DNV company) – global solar, wind and weather datasets, with APIs for historical, real-time and forecast data used by asset owners, grid operators and market participants. (FlyPix AI, 2025 March10P <https://flypix.ai/solar-farm-assessment-tools/>)
- **PVSyst** – widely used PV system design and simulation software that relied on external irradiance datasets and was a standard tool for engineering and bankability studies. <https://www.pvsyst.com/en/>
- **Steadysun** – focused on accurate solar power generation forecasts and live irradiance data for optimizing grid injection and PV plant operations. <https://steady-sun.com/>
- Other data providers sometimes used as benchmarks in the same space included **SolarAnywhere** and **Vaisala/3Tier** for solar irradiance and weather modeling.

These players competed on data coverage, accuracy, integration into design/forecasting workflows, and credibility with financiers and utilises.

Exhibit 5. 2025 SWOT Analysis

Source: STL Lighting Software website <https://www.suntrackertech.com>; Authors' Notes (2025)

S – Strengths (Internal)	W – Weaknesses (Internal)
<p><u>Deep technical expertise and legacy</u>: Cerise suite positioned as an industry standard in parts of North America and Europe, backed by 30+ years of experience and decades of lighting R&D.</p>	<p><u>Co-Founder dependence and succession risk</u>: Heavy reliance on the late co-founder Ashdown’s unique technical knowledge and relationships, creating continuity and credibility risks.</p>
<p><u>Strong scientific legitimacy</u>: Multiple patents, academic publications, and standards contributions provide high credibility with engineers and standards bodies.</p>	<p><u>Limited marketing and sales capacity</u>: Technical, content-heavy sites with little pricing, onboarding, or customer success messaging; likely constrained salesforce and global distribution.</p>
<p><u>Specialized, award-winning products</u>: Cerise365+GreenHouseDesigner earned an AE50 award, signalling recognized innovation in horticultural and agricultural engineering.</p>	<p><u>Narrow market and product focus</u>: Concentration on lighting design and horticultural niches may limit diversification into adjacent software verticals.</p>
<p><u>Focused professional portfolio</u>: Dedicated tools for horticultural lighting, daylighting simulations, and TM-33 photometric conversion serve demanding professional users.</p>	<p><u>Commercial vulnerability in broader market</u>: Reputation-rich but commercially exposed versus larger simulation/CAD platforms with stronger brands.</p>
<p><u>Reputation in niche communities</u>: Strong links to universities, standards bodies, and associations position the firms as reference points for complex lighting problems. Along with highly recognized in situational leadership given the positive internal culture as staff were support professionally and finally to take academic courses.</p>	<p><u>Potential resilience issues</u>: Specialization may reduce robustness against sector downturns or regulatory shifts in horticulture and related markets.</p>

Exhibit 5. 2025 SWOT Analysis, cont.

O – Opportunities (External)	T – Threats (External)
<p>Leverage niche authority for growth: Use recognized expertise in lighting design and standards involvement to deepen penetration in horticultural, architectural, and related professional segment.</p>	<p>Intensifying competitive pressure: larger simulation, CAD, and building-performance platforms can outspend on marketing, distribution, and integrated offerings.</p>
<p>Expand into adjacent verticals: Extend lighting and daylighting tools into broader construction, building performance, and smart-building ecosystems.</p>	<p>Technological change risk: Rapid shifts in lighting, simulation, and data standards could erode existing product advantages without sustained R&D.</p>
<p>Build award recognition: Use AE50 and similar recognitions in targeted campaigns, partnerships, and case studies to attract new institutional clients.</p>	<p>Reputational impact of founder loss: Clients may question long-term stability and innovation capacity after the co-founder’s passing.</p>
<p>Partnerships and licensing: Collaborate with OEMs, greenhouse builders, and software platforms to embed cerise tools or data into broader solutions.</p>	<p>Sector-specific volatility: Exposure to horticulture and greenhouse sectors leaves revenues vulnerable to policy, energy, and agriculture market swings.</p>
<p>Codifying and scaling expertise: Systematically capturing legacy know-how in documentation, training, and automated tools could reduce key-person risk and enable scaling.</p>	<p>Regulatory and standards shifts: Changes in lighting or horticultural standards could require major re-engineering, straining small-firm resources.</p>

Exhibit 6. The Succession Solution Scorecard

Source: Franc (2019)

This survey poses 25 questions for CEOs to conduct an audit of their company’s succession plan. CEOs either complete their own self-assessment, or a trained advisor assists their decision-making process. Questions are then scored with the number that best reflects the answer, using 1- Strongly disagree to 4- Strongly agree, and rubric at the bottom to calculate results.

1. You have identified a date when you would like to exit or relinquish control of your business.	
2. You have calculated the value for your business.	
3. You have talked with your family about the succession of your business.	
4. You have a written succession plan in place for your business.	
5. You have identified a specific successor for your business.	
6. Your identified successor is motivated and prepared to assume your role in management.	
7. You have identified who will receive the ownership of the business.	
8. Senior management is in place to operate your business in the event you are unable to do so.	
9. If there is more than one owner of your business, then a written agreement is in place to transfer ownership.	
10. You are not personally liable for bank debt or to any business creditors.	
11. You have calculated the death taxes, expenses, and other costs that will occur at your passing.	
12. Your estate has the liquidity to pay the death-related expenses in the event of your passing.	
13. Your business has no bank or other debt which becomes due at your passing.	
14. You have an estate plan that reconciles with your succession plan.	
15. You have a Power of Attorney that addresses your business.	
16. Your business and the rest of your estate can be divided fairly (as determined by you) among your family.	
17. The business has a defined dividend policy.	
18. No family members wish to own or work in your business.	
19. You have a family employment policy.	
20. You have a competent team of professional advisers (CPA, attorney, etc.).	
21. You have decided how you will transfer ownership of your business, either by gift, sale, or other form of transfer.	
22. You have developed your personal goals for after you leave your business.	
23. You know how much income/assets you will want before you exit from your business to maintain your lifestyle.	
24. There is a consensus among your key stakeholders over the current succession plan.	
25. You have an active board of directors involved in the succession of your company.	
TOTAL	

Exhibit 6. The Succession Solution Scorecard, cont.

Scoring Rubric:

Once each question is answered, tally the total value and this number demonstrates where the firm lands regarding succession planning:

- 0-60** Significant risk of failure of succession to next generation.
- 60-75** Potential risk of failure of succession to the next generation.
- 70-85** Significant progress has been made, continue the good work.
- 86-100** Congratulations, you're set to have a strong succession plan in place.

Exhibit 7. Wallace Scott's Behavior and Leadership Style Survey Results

Source: Authors' Notes (2025)

Below are the results of Wallace Scott's scores on a battery of behavioral style surveys. Several surveys are leadership surveys, and the others relate to leadership style.

Survey Name	Wallace Scott's Scores				
Supervisory Attitudes Theory X-Y (Self)	Self-Score 35	Actual Survey Score 29	X 10-20	Mixed 20-30	Y 30-40
Supervisory Attitudes Theory X-Y (Lang)	Self-Score 31	Actual Survey Score 23	X 10-20	Mixed 20-30	Y 30-40
T-P Leadership Style	Task Orientation 7	Shared Leadership medium-high	People Orientation 14		
Jungian Type Personality Style	Extrovert/Introvert Reserved (I)	Intuitive/Sensing Intuitive (N)	Thinking/Feeling Reasoning (T)	Perceiving/Judging Judging (J)	
Conflict Management	Avoiding 2	Smoothing 12	Bargaining 7	Forcing 6	Problem-Solving 11

Notes:

The **X** score is an Authoritarian style, and **Y** is like the Participative or People style.

The **T**= Task score is like **Theory X**, and the **P**= People score is like **Theory Y**.

Actual Survey Scores are better predictors than Self Scores.

INTJ score is usually described as reserved, friendly, rational, and decisive.

The highest possible score for each conflict management style is 12. Problem-solving is considered the best style because it focuses on the problem, positive outcomes, and uses a combination of other styles. Therefore, an 11 score on problem solving is better than a 12 score on other conflict styles.



CONNIE D.M. ALLSOPP works as a business and education consultant and was a former supervisor/ instructor at the University of Victoria, B.C., Canada. Connie has over twenty-five years of practical experience in teaching and leadership while concurrently working as an entrepreneur. Dr. Allsopp holds a B.Ed. In Education, an M.Ed. in Administration with Business courses, and a Ph.D. in Leadership with a cognate in Public Administration from the University of Manitoba, along with a Post Doc in Mental Health from University of Victoria. More recently, she serves as the Co-Editor of the *Journal of Critical Incidents*. She has given public talks in China, Brazil, Vietnam, Turkey and Switzerland about her chapter published in Axonjay's (2026), "THE SHIFT." Her research focus has been on leadership, knowledge mobilization, entrepreneurship, strategy, sustainability, IDEA, technology, and program evaluation.



GEORGE L. WHALEY is Emeritus Professor of Human Resource Management at San José State University. He worked in the private and government sectors before his career in education. He received his B.S. degree in Engineering Mathematics and M.B.A. from the University of Arizona and Ph.D. in Organizational Behavior from the University of Colorado. Professor Whaley has published empirical articles and cases in a variety of peer-reviewed journals in the fields of organizational behavior, strategy, human resource management, transportation management, and sustainability. His articles have been published in books such as the *Handbook of Transportation Engineering* and *SYMLOG Field Theory*. Dr. Whaley is a former co-editor of the *Business Case Journal*, as well as a member of numerous academic, professional, and service organizations, and serves on the editorial boards of several academic publications.



References

- Altman, E.I. (2000). Predicting financial distress of companies: Revisiting the Z-Score and ZETA® models. In *Handbook of research methods and applications in empirical finance* (p. 428).
- Argote, L. (2012). Organizational learning and knowledge management. <https://doi.org/10.1093/oxfordhb/9780199928286.013.0028>
- Barney, J. (2010). *Gaining and sustaining competitive advantage* (4th ed.). Pearson Prentice-Hall.
- Basten, D., & Haamann, T. (2018). Approaches for organizational learning: A literature review. *Sage Open*, 8(3). <https://doi.org/10.1177/2158244018794224>
- Chan, A. (2025, November 26). Root Cellar founders sell grocery store chain, launch employee ownership model. *Chek News*. <https://cheknews.ca/root-cellar-founders-sell-grocery-store-chain-launch-employee-ownership-model-1291584/>
- Coast Capital. (2026a). Become a member. <https://www.coastcapitalsavings.com/become-a-member/personal>
- Coast Capital. (2026b). Our purpose. <https://www.coastcapitalsavings.com/about-us/social-purpose/social-purpose>
- David, F. (2009). *Strategic management: Concepts and cases* (12th ed.). Pearson Prentice-Hall.
- Duncan, D. (2026). How Do Workers Develop Good Judgement in the AI Era? *Harvard Business Impact*. <https://hbsp.harvard.edu/product/H0929Y-PDF-ENG?>
- Finance Blitz* (2024, Aug 8). The RJR Nabisco Takeover: A Story of Ambition and Strategy. https://youtu.be/Lpd0R_ZK8n8?si=HKCZWRTMxy9ErTSK
- Fitriastuti, L.L., Sujoko, S., Herawan, T. & Vemberi, Y. (2019). Knowledge management system usage and organization learning: Recent trends and open problems. *Journal of Advanced Research in Law and Economics*, 10(6 (44), 1832-1849.
- Franc, B. (2019). *The Succession Solution: The strategic guide to business transition*. Woodview Publishing Company.
- Gakure, R.W., Ngugi, P.K., Waititu A.G. & Keraro, V.N. (2013). Succession planning and the sustainability of small and medium family enterprises after the exit of the founders. *Prime Journal of Business Administration and Management*, 3(3): 927-938. https://mpr.aub.unimuenchen.de/91352/1/MPRA_paper_91352.pdf
- GM News* (2025, February 4). GM acquires full ownership of Cruise. <https://news.gm.com/home.detail.html/Pages/topic/us/en/2025/feb/0204-cruise.html>
- Gumbo, C., Ngugi, J., Gakure, R. & Ngugi, P. (2012). Role of succession planning on survival of small and medium family enterprises after retirement/ death of the first-generation entrepreneurs in Kenya, *International Journal of Business and Social Research*, 2 (6): 109 – 124. <https://thejournalofbusiness.org/index.php/site/article/view/138>
- Harrell, E. (2016). Succession Planning: What the Research Says. *Harvard Business Review*. <https://hbr.org/2016/12/succession-planning-what-the-research-says>
- HelioSol Software Solutions Inc. (2026). <https://www.heliosolsoft.com>
- Hellaner, S., Kos, S., Vermoote, J., Werner, S. & Wright, B.J. (2026). Leading after the founder. *Harvard Business Review*, 104(1), 56–65. <https://hbr.org/2026/01/leading-after-the-founder>
- Japanese Times* (2026, February 9). Japan's 1,000-year-old business. <https://www.japantimes.co.jp/business/2026/02/09/companies/japan-1000-year-old-business/>
- Jones, G. & George, J. (2019). *Essentials of contemporary management*. New York, NY: McGraw-Hill Irwin.
- Liao, S.H. & Wu, C.C. (2009). The relationship among knowledge management, organizational learning, and organizational performance. *International Journal of Business and Management*, 4(4), 64-76.

- Longenecker, J.G., & Schoen, J.E. (1978). Management succession in the family business. *Journal of Small Business Management*, 16, 1-6. <https://doi.org/10.4135/9781446247556.n13>
- Marshall, J. P. (2001). The impact of business owners' conflict management and leadership styles on succession planning in family-owned businesses. Unpublished Ph.D. Dissertation, Texas Tech University.
- Personal Communications, Wallace Scott & Shirley Lang, (2025).
- Qualcomm. (2014, Jan 22). Qualcomm Acquires Palm, IPAQ, and Bitfone Patent Portfolio from HP. <https://www.qualcomm.com/news/releases/2014/01/qualcomm-acquires-palm-ipaq-and-bitfone-patent-portfolio-hp>
- Reeves, T. (2010). Mentoring programs in succession planning, *State and Local Government Review*, 42 (1), 61 – 66. <https://www.jstor.org/stable/41057533>
- Roshitsh, K. (2020 June 12). What's Patagonia's Succession Strategy? *Today's Digital Daily*. <https://wwd.com/business-news/retail/patagonia-sudden-succession-strategy-1203651470/>
- Suntracker Technologies Inc., Instructional Video 7 Cerise365+GreenHouseDesigner, <https://youtu.be/DEJKBXqRDA4?si=ChLbZAlhIG39CYgl>
- Suntracker Technologies Inc. Website, (2025) <https://www.suntrackertech.com>
- Teamshares Inc. Canada. (2026). A permanent home for Canadian businesses. <https://www.teamshares.com/canada>
- Today in Lighting* (2023). (<https://youtu.be/86LzULo5dN0?si=5I0DMKJwEfz515PZ>).
- Trelstad, B., Hsieh, N., Norris, M. & Pinckney, S. (2023). Patagonia: Earth is now our only shareholder (Case 323-057, Rev. September 2023). Harvard Business School <https://www.hbs.edu/faculty/Pages/item.aspx?num=63834>
- Wheelen, T. & Hunger, D. (2006). *Concepts in strategic management and business policy*, 10th. Upper Saddle River, New Jersey: Pearson-Prentice-Hall.

