



## Level 4 Ventures, Inc.

14702 Haven Way, Jamul, CA 91935

[www.level4ventures.com](http://www.level4ventures.com)

16 May 2023

Mr. Andre Rivera  
California State Treasurer's Office  
901 P Street, Suite 213B  
Sacramento, CA 95814  
[Andre.Rivera@treasurer.ca.gov](mailto:Andre.Rivera@treasurer.ca.gov)

R.e., Solicitation number: SA000004-23, CALACCOUNT MARKET STUDY AND FEASIBILITY REPORT

Dear Mr. Rivera:

Level 4 Ventures, Inc., (Level 4) is pleased to submit a proposal in response to the above-referenced solicitation. We understand the goals and objectives of this important contract in providing the State Treasurer's Office (STO) with a feasibility study covering a potential "CalAccount Program." Level 4 specializes in helping California government agencies with this type of feasibility study, with experience on many, many directly similar projects. We believe that Level 4 is highly qualified to deliver this support to the STO.

- We have an almost twenty-five-year history of conducting feasibility studies in California. For example, we conducted a very high visibility feasibility study for the STO regarding an initiative to establish a state bank to serve the cannabis industry. For that project, we interviewed stakeholders across the state, including members of the Federal Reserve; we prepared detailed market and financial forecasts; we assessed investment strategy and risk; we led workshops; we prepared both technical and summary reports; we testified before legislative committees; and we supported press conferences. In the end, all parties to this controversial study agreed that our analysis was fair, unbiased, and reasonable.
- We have experience working with the California communities and organizations most likely to be impacted by this initiative. Our ten-year history working with the California Public Utilities Commission (CPUC) has involved performing economic studies specifically related to English as a Second Language (ESL) and Environmental and Social Justice (ESJ) communities, including conducting field work with Community Based Organizations (CBOs) and census data studies across the state. Most recently, we completed an economic cost and benefit analysis for the California Department of Financial Protection and Innovation of proposed legislation affecting payday lenders and other non-bank financial firms serving/targeting underserved communities.

- We have assembled a team of world-class experts in the banking, financial services, and market research areas. We have experience working with RLR (our banking and financial services SME subcontractor) on the previous STO study referenced above.

We have carefully read your RFP, and we understand the RFP requirements. Based on this comprehension, we believe that we offer the lowest risk and best value solution, and we commit to fulfilling all requirements and terms and conditions of the RFP.


I am the responsible executive for this proposal, and I have the authority to commit and bind our firm contractually. I will also be the engagement manager (single point of contact) for this effort. I can be reached at:

Level 4 Ventures, Inc.  
William Roetzheim, CEO  
EIN: 20-4204997  
OSMB: 2007586  
Status: DVBE, Small Business  
14702 Haven Way, Jamul, CA 91935  
Phone: (619) 917-4917  
[William@level4ventures.com](mailto:William@level4ventures.com)

In the words of Robert Frost, "Two roads diverged in a yellow wood..." The narrator in that poem chose the road less traveled, and in many aspects of life that might lead you to interesting places. But for this mission critical project, let us take the road *more* traveled together. Let Level 4 guide this project to a more boring, less exciting destination—a fully successful project.

We thank you for this opportunity.

Sincerely,



Level 4 Ventures, Inc.

William Roetzheim, CEO

## ATTACHMENT 1

### REQUIRED ATTACHMENT CHECKLIST

Complete this checklist to confirm the items in your proposal. Place a check mark or "X" next to each item that you are submitting to the State. For your proposal to be responsive, all required attachments must be returned. This checklist should be returned with your proposal package also.

<u>Attachment #</u>	<u>Attachment Description</u>
<u>X</u>	Attachment 1 - Required Attachment Checklist
<u>x</u>	Attachment 2 - Proposal/Proposer Certification
<u>x</u>	Attachment 3 - Minimum Qualifications Certification
<u>x</u>	Attachment 4 - Proposer References
<u>x</u>	Attachment 5 - Resumes of Key Personnel
<u>x</u>	Attachment 6 - Cost Proposal Worksheet
<u>x</u>	Attachment 7 - Payee Data Record (STD. 204)
<u>x</u>	Attachment 8 - Darfur Contracting Act Certification
<u>x</u>	Attachment 9 - Iran Contracting Act Certification
<u>x</u>	Attachment 10 - Contractor Certification Clauses (CCC 04/2017)
<u>x</u>	Attachment 11 - California Civil Rights Laws Certification
<u>x</u>	Attachment 12 - Bidder Declaration (GSPD-05-105)
<u>x</u>	Attachment 13 - Small Business or Microbusiness Preference*
<u>x</u>	Attachment 14 - Non-Small Business or Microbusiness Preference*
<u>x</u>	Attachment 15 - Commercially Useful Function Evaluation*
<u>x</u>	Attachment 16 - DVBE Participation Requirements*
<u>x</u>	Attachment 17 - Target Area Contract Preference Act (TACPA)*

\*If Applicable

**ATTACHMENT 2**

**PROPOSAL/PROPOSER CERTIFICATION**

This Proposal/Proposer Certification must be signed and returned along with all the "required attachments" as an entire package with original signatures. The proposal must be transmitted in a sealed package in accordance with RFP instructions.

**Do not return the RFP nor the "Sample Agreement" at the end of this RFP.**

- A. Place all required attachments behind this certification.
- B. The signature affixed hereon and dated certifies compliance with all the requirements of this proposal document. The signature below authorizes the verification of this certification.

**An Unsigned Proposal/Proposer Certification  
May Be Cause For Rejection**

1. Company Name Level 4 Ventures, Inc.	2. Telephone Number (619)917-4917	2a. Email william@level4ventures.com
3. Address 14702 Haven Way, Jamul, CA 91935		
Indicate your organization type:		
4. <input type="checkbox"/> Sole Proprietorship	5. <input type="checkbox"/> Partnership	6. <input checked="" type="checkbox"/> Corporation
Indicate the applicable employee and/or corporation number:		C2859742
7. Federal Employee ID No. (FEIN) 204204997	8. California Corporation No.	
9. Indicate applicable license and/or certification information: No license required in San Diego county.		
10. Proposer's Name (Print) William Roetzheim	11. Title CEO	
12. Signature 	13. Date 5/15/2023	
14. Are you certified with the Department of General Services, Office of Small Business and Disabled Veteran Business Enterprise Services (OSDS) as:		
a. California Small Business Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, enter certification number: 2007586		b. Disabled Veteran Business Enterprise Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, enter your service code below: 2007586
<b>NOTE:</b> Proof of Certification is required to be included if either of the above items is checked "Yes" and will be verified.		
Date application was submitted to OSDS, if an application is pending:		

Printed on: 3/2/2023 5:42:45 PM

To verify most current certification status go to: <https://www.caleprocure.ca.gov>



### Office of Small Business & DVBE Services

**Certification ID:** 2007586

**Legal Business Name:**

Level 4 Ventures, Inc.

**Doing Business As (DBA) Name 1:**

**Doing Business As (DBA) Name 2:**

**Address:**

14702 Haven Way

Jamul

CA 91935

**Email Address:**

[william@level4ventures.com](mailto:william@level4ventures.com)

**Business Web Page:**

[www.level4ventures.com](http://www.level4ventures.com)

**Business Phone Number:**

619/917-4917

**Business Fax Number:**

**Business Types:**

Service

Certification Type	Status	From	To
DVBE	Approved	07/10/2021	07/31/2023
SB(Micro)	Approved	07/10/2021	07/31/2023

Stay informed! KEEP YOUR CERTIFICATION PROFILE UPDATED!

-LOG IN at [CaleProcure.CA.GOV](https://www.caleprocure.ca.gov)

Questions?

Email: [OSDSHELP@DGS.CA.GOV](mailto:OSDSHELP@DGS.CA.GOV)

Call OSDS Main Number: 916-375-4940

707 3rd Street, 1-400, West Sacramento, CA 95605

**ATTACHMENT 3**

**MINIMUM QUALIFICATIONS CERTIFICATION**

The company certifies that it fulfills the minimum qualifications outlined in Section B of Request for Proposals (RFP) No. SA000004-23.

On behalf of Level 4 Ventures, Inc.,  
(Company Name)

I certify that said company, including any and all subcontractors, complies with the Minimum Qualifications set forth in Section B of RFP No. SA000004-23.

  
\_\_\_\_\_  
(Authorized Signature)

Level 4 Ventures, Inc.  
\_\_\_\_\_  
(Company Name)

William Roetzheim  
\_\_\_\_\_  
(Print Name)

5/15/2023  
\_\_\_\_\_  
(Date)

CEO  
\_\_\_\_\_  
(Title)

**ATTACHMENT 4**

**PROPOSER REFERENCES**

Submission of this attachment is mandatory. Failure to complete and return this attachment with your proposal may cause your proposal to be rejected and deemed nonresponsive.

List below three references for services performed, which are similar to the scope of work to be performed in the resulting Agreement as stated in RFP section B.1.c). If three references cannot be provided, please explain why on an attached sheet of paper. If more references are submitted, use additional forms. If more space is needed for the descriptions, attach additional pages.

<b>REFERENCE 1</b>			
Name of Organization California State Treasurer's Office			
Street Address	915 Capital Mall, C-194	City Sacramento	State CA Zip 95814
Contact Person	Mark Paxson (formerly with the STO)	Telephone Number	916.201.2102, mpaxson55@gmail.com
Dates of Service	8/15/2018- 12/31/2018	Value or Cost of Service	\$497,950
Brief Description of Service Provided			
Level 4 conducted a feasibility study to determine whether creation of a state-backed financial institution to serve the cannabis industry is advisable. The study considered costs, benefits, risks, and regulatory issues, including capitalization, deposit insurance, and access to interbank funds transfer systems. As part of our work Level 4 conducted 36 interviews with stakeholders; reviewed 330 documents; conducted market research; prepared pro-forma financials and financial analysis; prepared both a detailed technical report and a high-level report summary for the general public; and participated in public hearings before a senate sub-committee.			

<b>REFERENCE 2</b>			
Name of Organization California Public Utilities Commission			
Street Address	505 Van Ness Avenue	City San Francisco	State CA Zip 94102
Contact Person	Arnold Son	Telephone Number	718.200.2087
Dates of Service	05/07/20220 - 06/30/2022	Value or Cost of Service	\$1,478,982
Brief Description of Service Provided			
Level 4 supported the CPUC under several task orders, covering program evaluation for the CHANGES program for English as a Second Language (ESL) services administered by Community Based Organizations (CBOs); rate analysis for intervenor agencies (mostly non-profits); and Risk Spend Efficiency (RSE) for mitigation work, including impact to Environmental and Social Justice (ESJ) communities. As part of this work, we supported new regulation development, including the full public comment and review cycle through ultimate adoption.			

<b>REFERENCE 3</b>			
Name of Organization California Franchise Tax Board			
Street Address	PO Box 2800	City Sacramento	State CA Zip 958212
Contact Person	Duc Truong	Telephone Number	916-479-3830
Dates of Service	10/31/2016 - 12/31/2020	Value or Cost of Service	\$915,840
Brief Description of Service Provided			
Level 4 supported budgeting, economic analysis, and benefit forecasting, including developing custom and customized economic models.			

**SUBCONTRACTOR REFERENCES**

List below three references for services performed, which are similar to the scope of work to be performed in the resulting Agreement as stated in RFP section B.2.b). If three references cannot be provided, please explain why on an attached sheet of paper. If more references are submitted, use additional forms. If more space is needed for the descriptions, attach additional pages.

**SUBCONTRACTOR NAME:** RLR Management Consulting

**REFERENCE 1**

Name of Organization Central Valley Community Bank			
Street Address 7100 N. Financial Drive, Ste. 101	City Fresno	State CA	Zip 93720
Contact Person Brent Coburn, Senior VP & Senior Risk Manager	Telephone Number 559-323-3304		
Dates of Service 2012 - Present	Value or Cost of Service \$1,445,625.00		
Brief Description of Service Provided BSA/AML, ACH Self-Assessment, Deposit Compliance, Loan Compliance, Accounting and Finance, TRID, Red Flag and Identity Theft, Branch Audits, Sox 404 Testing.			

**REFERENCE 2**

Name of Organization Hanmi Bank			
Street Address 3660 Wilshire Boulevard	City Los Angeles	State CA	Zip 90010
Contact Person Bonnie Lee, President & CEO	Telephone Number 213-368-3211		
Dates of Service 2005 - Present	Value or Cost of Service \$920,737.50		
Brief Description of Service Provided Various strategic and technology based engagements focused on core processing, operations efficiency, digital transformation and infrastructure re-design.			

**REFERENCE 3**

Name of Organization First National Bank Alaska			
Street Address 101 W. 36th Avenue, Third Floor	City Anchorage	State AK	Zip 99503
Contact Person Betsy Lawer, Board Chair & CEO	Telephone Number 907-777-5611		
Dates of Service 2010 - Present	Value or Cost of Service \$1,015,817.00		
Brief Description of Service Provided Acting capacity of Chief Information Officer, Annual Audits that include Fair Lending, UDAPP, ERM. Compliance Program Gap Analysis, Consumer Policies and Procedures, Trust Department Evaluation.			



**SUBCONTRACTOR REFERENCES**

List below three references for services performed, which are similar to the scope of work to be performed in the resulting Agreement as stated in RFP section B.2.b). If three references cannot be provided, please explain why on an attached sheet of paper. If more references are submitted use additional forms. If more space is needed for the descriptions, attach additional pages.

**SUBCONTRACTOR NAME:** Aite-Novarica

<b>REFERENCE 1</b>			
Name of Organization: Discover			
Street Address: 2500 Lake Cook Road	City: Riverwoods	State: IL	Zip: 60015
Contact Person: Michael Grzywinski		Telephone Number: (224) 405-2675	
Dates of Service: 11/24/22		Value or Cost of Service: Covered under NDA	

Brief Description of Service Provided: Retail Market/Technology Assessment

<b>REFERENCE 2</b>			
Name of Organization: Mastercard			
Street Address: 2000 Purchase St.	City: Purchase	State: NY	Zip: 10577
Contact Person: Linda Hechtl		Telephone Number: (914) 249-2000	
Dates of Service: 3/22/23		Value or Cost of Service: Covered under NDA	

Brief Description of Service Provided: New Retail Product Market Assessment

<b>REFERENCE 1</b>			
Name of Organization: Paymentus			
Street Address: 18390 NE 68th St	City: Redmond	State: WA	Zip: 98052
Contact Person: Chris Trainor		Telephone Number: (800) 420-1663	
Dates of Service: 2/9/23		Value or Cost of Service: Covered under NDA	

Brief Description of Service Provided: Syndicated and Thought Leadership Banking & Payments Research

## ATTACHMENT 5

### RESUMES OF KEY PERSONNEL

Provide a resume of each key personnel identified in the proposal. Resumes should clearly demonstrate that the minimum qualifications of RFP section B.3, *Team Qualifications*, have been met for:

- project management
- banking regulations
- financial transaction
- market analysis
- market research

250.00

Identify a project manager. The selected Contractor's Project Manager is expected to be a senior staff member, ~~and is expected to be dedicated full-time to the project at least until the Draft Report is submitted~~. The Project Manager will be the primary point of contact for the project.

Experience: 45 years

**MBA**, Statistics, University of La Verne; BA, Chemistry, University of Illinois

30 Post-Graduate Semester Units, **Computer Science**, San Diego State University

**Six Sigma Black Belt**; ISACA Certified Information System Auditor (**CISA**); PMI Certified **PMP** (Project Management Professional); ISACA Certified in Risk and Information Systems Control (**CRISC**); PMI Certified **RMP** (Risk Management Professional); ICEAA Certified Cost Estimation Analyst (**CCEA**); Security Clearance: Active Top Secret

Level 4 Ventures, Inc.	(1994-Present) Founder and CEO
Booz·Allen & Hamilton, Inc.	(1990 - 1994) Business Unit Manager
The MITRE Corporation	(1985 - 1990) Senior Systems Analyst
Honeywell, Inc.	(1983 - 1985) Senior Project Manager
U.S. Navy	(1977 - 1983) Lt., Naval Flight Officer

Mr. Roetzheim is a leader in the areas of portfolio management and governance, benchmarking, organizational analysis, strategic planning, productivity analysis and forecasting, fee analysis, performance reviews, feasibility studies, cost estimation, activity-based costing (ABC), and oversight for large, complex organizations and projects. He has developed two of the industry's leading benchmarking tools (Cost Xpert and ExcelerPlan) and he maintains the industry's largest database of productivity related benchmark data. Mr. Roetzheim has provided this support to Federal agencies including GSA, USPS, DOI, DOE, NASA, DHS, ACF, USAF, CNCS; California state agencies including the Franchise Tax Board, Board of Equalization, Department of Child Support, Department of Social Services, Public Utility Commission, Department of Health Care Services, State Controller's Office, and Covered California; for other large State agencies in Texas, Colorado, Washington, and Florida; and for private companies including BB&T, Wells Fargo, IBM, Accenture, US Bank, Mass Mutual, Halliburton, CGI, and KPMG.

He holds two patents and has written 27 published books, over 100 articles, and three columns dealing with a variety of management and technology issues.

### Experience Includes:

- For the **California State Treasurer's Office**, Mr. Roetzheim led the Level 4 team that conducted a feasibility study to determine whether creation of a state-backed financial institution to serve the cannabis industry is advisable. The study considered costs, benefits, risks, and regulatory issues, including capitalization, deposit insurance, and access to interbank funds transfer systems. As part of our work Level 4 conducted 36 interviews with stakeholders; reviewed 330 documents; conducted market research, prepared both a detailed technical report and a high-level report summary for the general public; and participated in public hearings before a senate sub-committee.
- For the **California Department of Financial Protection and Innovation**, William prepared the California Std. 399 analysis of economic costs and benefit of proposed legislation covering activities of roughly 2,300 debt collectors, payday lenders, and other businesses focused primarily on financial services for California's underserved communities. As part of this work, we reviewed more than eighty submitted comment packages from community and financial services groups.
- **Branch Bank and Trust (BB&T)**: Working at the CIO/CFO level, Mr. Roetzheim supported new governance and demand management processes, and developed and deployed new processes and tools for estimating and budgeting the corporate portfolio of information technology projects.

- **Wells Fargo Bank:** Mr. Roetzheim developed and deployed new governance processes and tools for estimating and budgeting the corporate portfolio of information technology projects and supported estimation for the Wells/Wachovia merger.
- **California Public Utilities Commission (CPUC) (Performance Review and Fee Analysis):** Mr. Roetzheim used a combination of quantitative and qualitative analysis approaches to evaluate the program, including directed interviews with utility, Community Based Organizations (Grant Recipients), CPUC, and contractor personnel across the State; hosting of a series of public workshops; data mining and analysis; statistical analysis of data versus benchmark data; workflow analysis and cost allocation analysis for key program workflows; auditing of financial payment supporting materials; and analysis of data security and integrity risks. Deliverables included a program performance evaluation of and a **fee analysis** for labor rates on over one-hundred contractor organizations.
- **The Colorado Department of Revenue:** Mr. Roetzheim conducted a fee analysis and to recommend changes, if any, to the current fee structure. As part of this work he surveyed the 49 other states to determine benchmark fees; developed a survey and collected relevant financial data from Colorado testing centers; performed an activity based cost allocation analysis, looked at historic labor costs and trends, analyzed the data to determine appropriate fees; and prepared a report outlining Level 4's methodology, results, and recommendations.
- **Visa:** Mr. Roetzheim modeled the portfolio of projects and assisted Visa in prioritizing projects based on business value.
- **American Express:** Mr. Roetzheim modeled information technology assets and provided American Express with an approach to optimizing asset maintenance.
- **Dept. of Interior, BSEE:** Document As-Is budgeting and governance processes; recommend To-be processes; used benchmark data to support process analysis; analyzed fair and reasonable labor rates; configure and validate productivity forecasting models; provide training on new processes.
- **The GSA One Acquisition for System Integration Services (OASIS):** Document As-Is budgeting, governance, and control processes; recommend To-be processes; and used benchmark data to support process analysis. Audited financial/budget forecasting models and recommended changes to those models.
- **The California Franchise Tax Board** processes more than 14 million tax forms per year representing over \$110 billion in revenue collected. Enterprise Data to Revenue (EDR) project is FTB's major tax system modernization initiative. He conducted directed interviews with staff throughout the organization; performed data mining and analysis; conducted statistical analysis of data versus benchmark data; conducted workflow analysis and cost allocation analysis for key program workflows; and forecast cost savings under various alternative scenarios. William was the primary contributor to the **EDR Feasibility Report**, which resulted in acquisition approval; and he wrote the special project budget analysis report that resulted in final funding and award.
- The CROS project is the **California Board of Equalization's** major tax system modernization initiative. Mr. Roetzheim supported development of the **feasibility study** and acquisition package with an emphasis on cost and benefit forecasting and justification for various alternatives. He conducted directed interviews with staff throughout the organization; performed data mining and analysis; conducted statistical analysis of data versus benchmark data; conducted workflow analysis and cost allocation analysis for key program workflows; and forecast cost savings under various alternative scenarios.

- For California's **Employment Development Department**, developed the Strategic Plan, encompassing all aspects of the organization (Unemployment Insurance, Disability Insurance, Labor Market Information, and Job Services). Interviewed all organization managers in the top three organizational levels plus selected stakeholders at other levels in the organizational hierarchy; reviewed the organization's infrastructure and systems; reviewed existing workflows for all major processes and work products within the organization; modeled the organization using activity based costing models; reviewed organizational structures and processes in other States; compared organizational performance with best practices; recommended changes both in organizational structure, processes, and infrastructure; and developed a plan of implementation for the recommended changes.
- For the **US Air Force** Space and Missile Command, Mr. Roetzheim was contract manager for a \$2.4M Level 4 effort to provide portfolio planning, programming, and budgeting support for space-related research, development, production, and lifecycle acquisition activities. Projects supported included Commercially Hosted Infrared Payload (CHIRP), Hosted Payload Office, and Conventional Strike Missile (CSM).
- On behalf of the **Office of the Inspector General**, conducted an Inspection/Evaluation of the Corporation for National and Community Service's ability to provide adequate project management services during the life cycle development of major acquisitions (relating to the initiating, planning, execution, and monitoring of the contract and the contractor's performance) and to ensure that performance meets the Corporation's current and future strategic business goals concerning information technology usage, oversight, and management.
- On behalf of the **Agency for Children and Family (ACF)**, conducted a performance review of the **California Child Welfare Services/Case Management System (CWS/CMS)** covering a ten year period. This review involved over \$1 Billion in Federal expenditures, and encompassed several thousand documents. Was this hired by the State of California to support the development of the **Feasibility Study** and acquisition package for a replacement system with an emphasis on alternative analysis and cost packages. Work included allocation of work components using activity based costing (time and motion) and both internal and external benchmarking, including analysis of fair and reasonable labor rates. He conducted directed interviews with staff throughout the organization; performed data mining and analysis; conducted statistical analysis of data versus benchmark data; conducted workflow analysis and cost allocation analysis for key program workflows; and forecast cost savings under various alternative scenarios. The acquisition was approved by State and Federal funding and oversight agencies.
- **California Child Support Automation System (CCSAS)**: William used parametric activity based costing (time and motion) models and benchmark data to develop cost estimates for funding justification for each annual requisition in support of this project over a number of years. He conducted directed interviews with staff throughout the organization; performed data mining and analysis; conducted statistical analysis of data versus benchmark data; conducted workflow analysis and cost allocation analysis for key program workflows; and forecast cost savings under various alternative scenarios. All funding requests were approved in full.
- **Colorado Automated Child Support Enforcement System**: William provided project oversight for a 2 year effort converting this system from legacy Adabas/Natural to Oracle/Java.

- **Accenture** is one of the leading vendors supporting the **USPS** modernization efforts, a multi-phase, multi-year project with a value over \$1B. Under this contract, Mr. Roetzheim reviewed the Accenture and USPS processes surrounding budget forecasting, made recommendations for changes to those processes, and put in place tools and procedures to support the recommended changes. Models included parametric based activity based cost (P-ABC) allocation. Resultant models were applied in a predictive fashion for 114 USPS initiatives.
- **Washington State Liquor and Cannabis Control Board (WS-LCB)**: Wrote the Washington State Policy 121 compliant **Feasibility Study** for the Licensing and Enforcement System Modernization Project to support licensing and enforcement for **cannabis** sales, including both the central back-office and field mobile components. He conducted directed interviews with staff throughout the organization; performed data mining and analysis; conducted statistical analysis of data versus benchmark data; conducted workflow analysis and cost allocation analysis for key program workflows; and forecast cost savings under various alternative scenarios. As a result of this report, the project was funded and is currently in execution.
- Covered California (**California Department of Healthcare Services**): William developed and deployed benchmarking models, and validated vendor performance against industry benchmarks.
- Transcom DEAMS is a large (roughly \$1B) **Air Force ERP implementation** based on Oracle Financials built using a spiral methodology over a number of years. Mr. Roetzheim was contracted by Accenture to provide an independent review of the DEAMS business requirements and to develop a comprehensive project budget for various competitive situations based on that review. As part of his analysis, He used parametric and stochastic models combined with industry benchmark data to develop budget forecasts to the line-item level for each aspect of the project. He used parametric activity-based-costing to identify and quantify cost drivers both for historical analysis and predictive foreword looking analysis. His analysis included software development, testing, help desk, deployment, training, conversion, and lifecycle support costs. He benchmarked the DEAMS spiral one implementation and spiral two plans against industry standards and made suitable recommendation.
- **Dept. of Veterans Affairs**: Analyze historic data; collect and analyze time and motion (activity) data; visit field offices to interview staff and gather data; conduct surveys; develop staffing forecasting models; develop productivity benchmark data; recommend organizational changes.
- Performed a Feasibility Study for the **Department of Energy** Southwestern Power Administration to determine the feasibility and respective budgets for various modernization alternatives.
- For the **USDA**, reviewed processes and workflows within the Grain Inspection, Packers and Stockyards Administration (GIPSA) to determine effort required to transition to new optimize processes.
- **Denti-Cal**: William provided training and benchmarking models to the State and Vendor team.
- William supported the prime contractor (KPMG) in preparing an alternative analysis and **feasibility study** for maintenance, operations, and information technology support functions of the **Florida Department of Children and Family**. His effort focused on the cost components of the study, and included analysis of the as-is and to-be processes and system components; cost modeling and comparison with benchmarks; activity based

costing; and cost estimating for the one-time and on-going cost components of each alternative.

- **IBM:** Mr. Roetzheim developed and deployed new processes and tools for estimating and budgeting the corporate portfolio of information technology projects.
- **Procter and Gamble:** Mr. Roetzheim developed and deployed new processes and tools for estimating and budgeting the corporate portfolio of information technology projects.

### **Booz-Allen & Hamilton, Inc. (Business Unit Manager)**

- Led the San Diego and Sacramento Booz-Allen & Hamilton, Inc. practices, focusing on SPAWAR and QA/Oversight work. Supported projects including MILSTAR ground control (over \$1B); JTIDS Tactical Digital Network (over \$1B); and the Navy Extremely High Frequency Satellite Program (\$750M).

### **The MITRE Corporation (Senior Systems Analyst)**

- Supported several military projects in a technical and management capacity, including the Navy Extremely High Frequency Satellite Program, the Tactical Digital Information Link testbed, the Joint Tactical Information Display System (JTIDS), and various classified projects.

### **Honeywell, Inc. (Tetra Tech Services Division) (Senior Project Manager)**

- Mr. Roetzheim was the practice lead for military operations, directly managing over 30 projects (mostly for SPAWAR).

### **U.S. Navy**

- In addition to his primary role as Naval Flight Officer flying S-3A Viking from aircraft carriers, Mr. Roetzheim developed a series of tactical software applications, many using artificial intelligence techniques.

### **Partial List of Publications**

#### **Books**

- Why Things Are: How Complexity Theory Answers Life's Toughest Questions (Level 4 Press, 2008)
- Old School Software Development (Level 4 Press, 2007)
- Software Project Costing & Schedule Estimating (Prentice Hall – 1998)
- Enter the Complexity Lab (SAMS Press, 1994).
- The AMA Handbook of Project Management (American Management Association, 1993, contributed chapter on software project management).
- On the Cutting Edge of Technology (SAMS Press, 1993, contributed chapter on chaos theory).
- Developing Software to Government Standards (Prentice-Hall, 1991).

- Structured Design Using HIPO-II (Prentice-Hall, 1990).
- Structured Computer Project Management (Prentice-Hall, 1989).

**Classes Developed and Presented**

- "Information Technology Cost Estimating," 3 day class, presented quarterly with enrollment of 750 to 1,000 students per session.
- "Risk Management", 1 day class
- "Information Technology Strategic Planning", 2 day class
- "Software Models and Methodologies", 3 day class
- "Software Testing", 2 day class

**Columns**

- "Consulting Corner," Programmer's Journal
- "Under the Covers," Tech Specialist (deals with low-level, driver-oriented programming issues).
- "How Do You Manage When ...," MIS Week

**Articles**

- "Forecasting Test Case Counts as an Estimation Artifact," International Conference on Software Quality and Test Management, October 2014
- "Analyzing Quality Factor Impacts on Total Cost of Ownership," International Conference on Software Quality and Test Management, October 2014
- "Hybrid Parametric Estimation for Greater Accuracy," ICEAA Annual Conference (Denver), June 2014
- "Core Estimating Concepts," Crosstalk, February 2013
- "Parametric Modeling to Support System Acquisition", Journal of Software Technology, February 2012
- "Incorporating Function Points into Earned Value Management", Systems and Software Technology Conference, 2011
- "Controlling Project Scope," PMI Roadmap, January 2011
- "Using Genetic Algorithms in Computer Simulation," Presented at the International SCSC Conference, 2007



- “Software Estimating Models: 3 Viewpoints,” Crosstalk, March 2005
- “Litigating Failed Software Projects,” Business Law Today, February 2004
- “Estimating Software Reuse Equivalent Function Points,” Presented at the IFPUG Conference San Diego, 2004
- “Introduction to Fast Function Points,” Presented at the IFPUG Conference San Diego, 2004
- “Estimating and Managing Project Scope for Maintenance and Reuse Projects,” Presented at the Pacific Northwest Software Quality Conference, 2004
- “Estimating and Managing Project Scope for New Development,” Presented at the Pacific Northwest Software Quality Conference, 2004
- “Costing Agile Development,” Presented at the Pacific Northwest Software Quality Conference, 2004
- “System Dynamic Modeling of Software Cost and Schedule”, Software Technology Conference, 2000.
- “Estimating Cost and Schedule for Internet Development Projects”, Software Quality Association, 2000.
- “Risk Tracking”, Trends in Software Engineering Process Management, October, 1999
- “Understanding Software Processes”, Software Development Magazine, February, 1999
- “Risk Optimization”, Trends in Software Engineering Process Management, February, 1999
- “Turning Around a Troubled Software Project”, Trends in Software Engineering Process Management, January, 1999
- “Risk Management Fundamentals”, Project Management Association, 1998
- “A Risk Management Process”, Government Technology Conference, 1998
- “A Strategic Planning Process”, Government Technology Conference, 1997
- “Successful Client Server Projects”, Government Technology Conference, 1996
- “Costing Large Projects”, Government Technology Conference, 1996
- “Putting software standards On-Line”, Software Technology Conference, 1996
- “Information Technology Strategic Planning”, Software Development, 1996

- "Successful Client-Server Implementation Strategies", Government Technology Conference, 1995
- "Zen and the Art of C++ Programming", Government Technology Conference, 1995
- "Prototyping and Alternative Software Lifecycles", Software Development, 1995
- "Managing Software Development as an Engineering Process", Software Development, 1995
- "Developing Client-Server Systems: Learn the Tricks and Traps", Software Development, 1994.
- "Managing Software Development as a Controlled Process", Software Development, 1994.
- "Alternative Software Lifecycles", Software Development, 1994.
- "Community Care Licensing - A C++ Case Study", Borland International Conference, Orlando, FL, 1994.
- "Managing Future Technologies", International Conference of Employment Security Agencies (ICESA), 1993.
- "Software Costing", Software Engineering Institute extended studies series, 1993.
- "Structured Computer Project Management", Software Development '93, February 1992.
- "Fitting Prototyping into the Software Lifecycle", Software Development '93, February 1992.
- "Estimating Project Risk", Software Development '93, February 1992.
- "Enhancing Programmer Productivity", Software Development '93, February 1992.
- "Costing Windows Applications", Software Development '92, February 1992.
- "Applying Object Oriented Methods to DOD-STD-2167A", Software Quality Assurance Symposium, January 1992.

Experience: 9 Years

BA, Economics University of California, San Diego

Certificate of Completion, Cisco Networking Academy

Certified Public Accountant (CPA)

Clearance: Secret

Level 4 Ventures, Inc.	(2020-Present) Senior Manager
1798 Consultants, LLC	(2016-2019) Management Consultant
CASK, LLC	(2015-16) Management Consultant
Cornwell Jackson, PLLC	(2014-2014) Tax Accountant
Miller and Co	(2014-2014) Tax Accountant
Level 4 Ventures, Inc	(2013-2013) Consultant 1

### Areas of Expertise

- Financial analysis: Financial model development, Life-cycle cost estimations, and business intelligence reports.
- Operations analysis: Business process improvements, standard operating procedure development, project/program management & support.

### Summary

Management consultant with nine years of progressive experience leading financial, business process, and strategic assessments for complex healthcare, life science, Department of Defense, and private business engagements.

### Experience

#### Level 4 Ventures, Inc. (Senior Manager) (06/15/2020-Present)

- For the California Department of Financial Protection and Innovation, Luis supported an economic cost and benefit analysis of proposed legislation designed to protect underserved borrowers from Payday lenders and other similar financial organizations.
- For the California Office of Energy Infrastructure Safety (OEIS), Luis facilitated Risk Model Working Group (RMWG) workshops and led the Level 4 effort writing and assembling technical reports and Wildfire Mitigation Plan evaluations.
- For the California Public Utilities Commission (CPUC), provide analytical support to the Risk Spend Efficiency (RSE) project, which involved providing recommendations regarding stochastic modeling and an optimized multi-attribute value function to optimize project selection within a portfolio. Focus included document review, development of the climate change portion of the report, and public workshop coordination.
- Technical contributor to operations research engagements with the State of California.
- Extrapolated data from 4,000 acquisitions reports and prepared data for parametric analysis.

**1798 Consultants (Management Consultant) (06/15/2016-06/15/2019)**

- Led multiple engagements centered around value proposition development, payer messaging, pricing & contracting strategy, competitive benchmarking and healthcare policy implications for oncology and neurology therapies.
- Led financial model development for multiple chronic disease biologics entering multi-billion-dollar markets; developed financial models to quantitatively visualize market entry scenarios and produce desired actionable insights.
- Led cost estimation for new technology advantaged reimbursement engagements; reconciled Medicare data and epidemiologic factors to produce cost burden calculations and secure higher provider payment (100% success rate).
- Reconciled and arbitrated stakeholder interests to negotiate engagement scope, resources, and timeline.
- Reviewed, assessed, and consolidated legal, regulatory, and medical input on promotional materials for pull-through.
- Generated business process improvements through process review, gap assessment, redesign, and development of key performance indicators (KPI)s and standard operating procedures (SOPs) to promote continuous improvement.
- Effectively managed project staff and project budget through negotiation with internal and external stakeholders.
- Developed in-depth business intelligence reports including provider reimbursement rates by disease related group (DRG), DRG and ICD-10 code reconciliation, key opinion leaders (KOLs), sales projections, and pipeline reports.
- Developed firm-wide quantitative capabilities through staff training and process documentation.

**CASK (Management Consultant) (06/15/2015-06/15/2016)**

- Led cost estimation for two defense programs managing scope, planning, milestones, and final delivery.
- Managed the application of cost estimation methodologies to a \$400M life-cycle program.
- Forecasted and addressed budget, operational, and strategic risks to project objectives .

**Cornwell Jackson, PLLC (Tax Accountant)**

- Individual, state, and federal tax return preparation.

**Miller and Co (Tax Accountant)**

- Individual, state and federal tax return preparation.

Experience: 15 years  
 BS Accounting, San Diego State University  
 Certified Public Accountant (CPA)  
 Clearance: Top Secret (Current)

Level 4 Ventures, Inc.	(2014-Present) Consultant III
The Campanile Foundation	(2013-2018) Chief Financial Officer
The San Diego Foundation	(2011-2013) Accounting Manager / Controller
SOLUTE Consulting, Inc.	(2010-2011) Accounting Supervisor
The Arc of San Diego	(2007-2010) Accounting Supervisor

### Areas of Expertise

- Foundation/Non-Profit/Grant accounting and controls
- Budgeting and forecasting analysis, investigative accounting

### Experience

#### Level 4 Ventures, Inc. (Consultant III)

- Mr. Clancy is a Consultant with Level 4, focusing on **financial analysis, special studies, and internal controls/risk.**
- For the **California Department of Financial Protection and Innovation**, Mr. Clancy supported an economic cost and benefit analysis of proposed legislation designed to protect underserved borrowers from Payday lenders and other similar financial organizations.
- **Washington State Department of Natural Resources (DNR):** Level 4 was tasked to analyze alternatives for moving the DNR data center to a State Data Center, the Cloud, or a combination. Mr. Clancy provided support consolidating, reviewing, and analyzing data as part of preparing the alternative estimates.
- **Washington State Gambling Commission:** Level 4 was tasked to define business processes, conduct an alternative analysis, and prepare an OCIO compliant feasibility study and budget. Mr. Clancy provided business analysis optimization and early stage requirement definition support.
- **California Public Utilities Commission (CPUC):** Level 4 was tasked to provide recommendations regarding stochastic modeling and an optimized multi-attribute value function for optimal project selection within a portfolio. Mr. Clancy supported data collection and validation, document analysis, and model review.
- Mr. Clancy supported the Level 4 work for the **Department of Veterans Affairs conducting a Time and Motion study.** Level 4 was tasked to examine historic data related to staffing, workload, and outcomes; develop a staffing model able to assist the VA in determining optimal staffing (FTE) required each fiscal year across the 56 Regional Offices (RO) and National Capital Region Benefits Office (NCRBO); collect time and motion data to quantify staff activities; and use this data to support improving internal processes and procedures. Workload modeling used statistical techniques to include correlation analysis, regression analysis, development of characteristic power functions, and ANOVA. Parametric Activity Based Costing (ABC) approaches were used to balance and reconcile

workload activity to baseline data and to support forecasting based on anticipated future workloads.

- **State of California, Treasurer (California State Bank Feasibility Study):** Mr. Clancy supported Level 4's work analyzing the costs, benefits, risk and feasibility of establishing a California State Bank primarily to support financial transactions within the cannabis industry.
- **California Public Utilities Commission (CPUC) Intervenor Rate Review:** Mr. Clancy supported a Level 4 project to analyze the relationship between experience and compensation for advocates and expert witnesses that work in the administrative law and regulatory sector supporting the CPUC, with an objective of determining reasonable advocate and expert witness fees. During this project we analyzed five years of CPUC proceedings; reviewed national databases of benchmark data; analyzed government data; conducted public hearings; and developed conclusions with supporting documentation.
- **California Public Utilities Commission (CPUC) (CHANGES Performance Review):** Mr. Clancy supported Level 4's work, during which we used a combination of quantitative and qualitative analysis approaches to evaluate the program, including directed interviews with utility, Community Based Organizations (Grant Recipients), CPUC, and contractor personnel across the State; hosting of a series of public workshops; data mining and analysis; comparison of performance with similar programs in other states; statistical analysis of data versus benchmark data; workflow analysis and cost allocation analysis for key program workflows; auditing of financial payment supporting materials; and analysis of data security and integrity risks.
- Mr. Clancy supported the **GSA \$14B One Acquisition for System Integration Services (OASIS)** program, helping GSA senior management to establish information technology governance procedures for OASIS contract management. Level 4's work involved analyzing, documenting, and providing recommendations related to organization; workflows and requirements; architecture and interfaces; financial forecasting models; budgeting; data documentation; management controls; training; and future recommendations and strategic directions.

#### **The Campanile Foundation (Chief Financial Officer)**

- Support CEO with all areas of financial reporting, grant/audit compliance and investment management.

#### **The San Diego Foundation (Accounting Manager / Controller)**

- Support executive management, all internal departments and external customers with special projects, budgets, grant management, analyses and interpretations of financial reports and donor fund statements.

#### **SOLUTE Consulting, Inc. (Accounting Supervisor)**

- Managed accounting functions and processed billings to U.S. federal government and private contractors.

#### **The Arc of San Diego (Accounting Supervisor)**

Experience: 16 years  
 BS Biology, University of California San Diego  
 TS/SCI Clearance (Active)

Level 4 Ventures, Inc.	(2014-Present) Consultant III
NATO E-3A Component	(2011-2017) Deputy Chief, Plans and Programs
US Navy	(2006-2015) Lt. Cmdr., Pilot

### Areas of Expertise

- Process analysis, process management
- Organizational efficiency

### Experience

#### Level 4 Ventures, Inc. (Consultant III)

- Ms. Buron is a Consultant with Level 4, focusing on **process analysis, process efficiency, and governance.**
- For the **California Department of Financial Protection and Innovation**, Ms. Buron supported an economic cost and benefit analysis of proposed legislation designed to protect underserved borrowers from Payday lenders and other similar financial organizations.
- **Washington State Department of Natural Resources (DNR):** Level 4 was tasked to analyze alternatives for moving the DNR data center to a State Data Center, the Cloud, or a combination. Ms. Buron provided support consolidating, reviewing, and analyzing data as part of preparing the alternative estimates.
- **Washington State Gambling Commission:** Level 4 was tasked to define business processes, conduct an alternative analysis, and prepare an OCIO compliant feasibility study and budget. Ms. Buron provided business analysis optimization and early-stage requirement definition support.
- **California Public Utilities Commission (CPUC):** Level 4 was tasked to provide recommendations regarding stochastic modeling and an optimized multi-attribute value function for optimal project selection within a portfolio. Ms. Buron supported data collection and validation, document analysis, and model review.
- **State of California, Treasurer (California State Bank Feasibility Study):** Ms. Buron supported Level 4's work analyzing the costs, benefits, risk and feasibility of establishing a California State Bank primarily to support financial transactions within the cannabis industry.
- **California Public Utilities Commission (CPUC) Intervenor Rate Review:** Ms. Buron supported a Level 4 project to analyze the relationship between experience and compensation for advocates and expert witnesses that work in the administrative law and regulatory sector supporting the CPUC, with an objective of determining reasonable advocate and expert witness fees. During this project we analyzed five years of CPUC proceedings; reviewed national databases of benchmark

- data; analyzed government data; conducted public hearings; and developed conclusions with supporting documentation.
- **California Public Utilities Commission (CPUC) (CHANGES Performance Review):** Ms. Buron supported Level 4's work, during which we used a combination of quantitative and qualitative analysis approaches to evaluate the program, including directed interviews with utility, Community Based Organizations (Grant Recipients), CPUC, and contractor personnel across the State; hosting of a series of public workshops; data mining and analysis; comparison of performance with similar programs in other states; statistical analysis of data versus benchmark data; workflow analysis and cost allocation analysis for key program workflows; auditing of financial payment supporting materials; and analysis of data security and integrity risks.
  - Ms. Buron supported the Level 4 work for the **Department of Veterans Affairs conducting a Time and Motion study.** Level 4 was tasked to examine historic data related to staffing, workload, and outcomes; develop a staffing model able to assist the VA in determining optimal staffing (FTE) required each fiscal year across the 56 Regional Offices (RO) and National Capital Region Benefits Office (NCRBO); collect time and motion data to quantify staff activities; and use this data to support improving internal processes and procedures. Workload modeling used statistical techniques to include correlation analysis, regression analysis, development of characteristic power functions, and ANOVA. Parametric Activity Based Costing (ABC) approaches were used to balance and reconcile workload activity to baseline data and to support forecasting based on anticipated future workloads.
  - Ms. Buron supported the **GSA \$14B One Acquisition for System Integration Services (OASIS) program,** helping GSA senior management to establish information technology governance procedures for OASIS contract management. Ms. Buron's work involved analyzing, documenting, and providing recommendations related to organization; workflows and requirements; architecture and interfaces; financial forecasting models; budgeting; data documentation; management controls; training; and future recommendations and strategic directions.

#### **NATO E-3A Component (Deputy Chief, Plans and Programs)**

- Led international personnel in coordinating company policy and procedure mandates encompassing 1,305 personnel for the operational employment of \$5.6B in NATO air assets.

#### **US Navy (Lt. Cmdr., Pilot)**

- Lead interface officer between three separate agencies, enabled successful accomplishment of 15 anti-proliferation missions throughout Europe.



Experience: 18 years  
 BS Accounting, San Diego State University  
 Certified Public Accountant (CPA, Inactive)

Level 4 Ventures, Inc.	(2014-Present) Consultant III
Moss Adams, LLP	(2013-2014) Assurance Associate
McGladrey, LLP	(2012-2013) Assurance Associate
Witt & Associates, CPA's	(2010-2012) Accountant
American International Theater, Inc.	(2004-2009) Executive Director

### Areas of Expertise

- Internal Controls; Risk Assessment; Operations Management; Financial Reporting

### Summary

Experience in planning and performing financial statement audits, reviews and compilations with an emphasis on internal controls, risk assessment, and operations.

### Experience

#### Level 4 Ventures, Inc. (Consultant III)

- Ms. Clancy is a Consultant with Level 4, **focusing on financial analysis, special studies, and internal controls/risk.**
- For the **California Department of Financial Protection and Innovation**, Ms. Clancy supported an economic cost and benefit analysis of proposed legislation designed to protect underserved borrowers from Payday lenders and other similar financial organizations.
- **Washington State Department of Natural Resources (DNR):** Level 4 was tasked to analyze alternatives for moving the DNR data center to a State Data Center, the Cloud, or a combination. Ms. Clancy provided support consolidating, reviewing, and analyzing data as part of preparing the alternative estimates.
- **Washington State Gambling Commission:** Level 4 was tasked to define business processes, conduct an alternative analysis, and prepare an OCIO compliant feasibility study and budget. Ms. Clancy provided business analysis optimization and early stage requirement definition support.
- **California Public Utilities Commission (CPUC):** Level 4 was tasked to provide recommendations regarding stochastic modeling and an optimized multi-attribute value function for optimal project selection within a portfolio. Ms. Clancy supported data collection and validation, document analysis, and model review.
- Ms. Clancy supported the Level 4 work for the **Department of Veterans Affairs conducting a Time and Motion study.** Level 4 was tasked to examine historic data related to staffing, workload, and outcomes; develop a staffing model able to assist the VA in determining optimal staffing (FTE)

required each fiscal year across the 56 Regional Offices (RO) and National Capital Region Benefits Office (NCRBO); collect time and motion data to quantify staff activities; and use this data to support improving internal processes and procedures. Workload modeling used statistical techniques to include correlation analysis, regression analysis, development of characteristic power functions, and ANOVA. Parametric Activity Based Costing (ABC) approaches were used to balance and reconcile workload activity to baseline data and to support forecasting based on anticipated future workloads.

- **California Public Utilities Commission (CPUC) (Intervenor Rate Study):** Ms. Clancy supported Level 4's work, which involved reviewing historic, benchmark and other state data to develop recommended labor rate models for more than one-hundred advocate organizations statewide; hosting public workshops; and managing public comment cycles to finalize rates.
- **California Public Utilities Commission (CPUC) (CHANGES Performance Review):** Ms. Clancy supported Level 4's work, during which we used a combination of quantitative and qualitative analysis approaches to evaluate the program, including directed interviews with utility, Community Based Organizations (Grant Recipients), CPUC, and contractor personnel across the State; hosting of a series of public workshops; data mining and analysis; comparison of performance with similar programs in other states; statistical analysis of data versus benchmark data; workflow analysis and cost allocation analysis for key program workflows; auditing of financial payment supporting materials; and analysis of data security and integrity risks.
- **State of California, Treasurer (California State Bank Feasibility Study):** Ms. Clancy supported Level 4's work analyzing the costs, benefits, risk and feasibility of establishing a California State Bank primarily to support financial transactions within the cannabis industry.
- Ms. Clancy supported the **GSA \$14B One Acquisition for System Integration Services (OASIS) program**, helping GSA senior management to establish information technology governance procedures for OASIS contract management. Ms. Clancy's work involved analyzing, documenting, and providing recommendations related to organization; workflows and requirements; architecture and interfaces; financial forecasting models; budgeting; data documentation; management controls; training; and future recommendations and strategic directions.

#### **Moss Adams, LLP (Assurance Associate)**

- Performed substantive and analytical procedures for assurance over financial reporting.
- Analyzed and compliance tested internal controls.

#### **McGladrey, LLP (Assurance Associate)**



**Neva McCormick**  
Senior Associate Consultant

Neva McCormick has over 25 years' experience in the financial industry in key roles including SVP, CFO, Controller, IT Manager and Operations Manager. She has comprehensive experience in financial and managerial accounting, budgeting, financial reporting and analysis, contract negotiation and oversight, IT management, project management, Financial Planning and Investment, Trust Management and strategic planning. Neva also had management responsibility for a credit card program and directed this program through conversion and implemented a credit card program including consumer, small business and corporate card programs.

**Her experience includes:**

- In charge of all finance, accounting and operations functions for de novo institution that was initially capitalized with \$35 million and grew to \$220 million
- Responsible for credit card program encompassing small business, consumer and corporate card programs
- Extensively involved and responsible for multiple phases of bank development through merger and conversion process
- Managed Financial Services, Information Technology/Network Administration, Branch Operations, Card Services, Cash Management Operations, Compliance, BSA, Branch Operations, Electronic Banking, Human Resources, Loan Operations, Vendor Management, Secrecy and Security
- Vendor contract negotiations, management of contracts and relationships for all phases of bank operations with contracts ranging up to \$2 million over a 5-year period. Maintaining vendor agreements, privacy and financial reporting
- Risk management assessment processes for vendors, information security, technology, BSA, remote deposit capture and operational processes
- Responsible for all finance, accounting and operations functions for a multi-location institution with growth in excess of 20% per year, assets growing from \$150 million to \$700 million, and coordinating extensive budgeting, project development and acquisition, general ledger oversight
- Development/implementation of Compliance Management System, including Community Reinvestment Act Plan development and reporting
- Development and implementation of bank wide Disaster Recovery Program and corresponding testing and training
- Oversight of Wealth Management Department, conversion of Trust/Investment Management core system, development and implementation of policies, procedures, standards and guidelines for Trust/Investment management operations
- Member of Executive Committee, jointly responsible for Strategic Planning and implementation throughout all processes in the bank
- Project focus on bank conversions, Audit, Project Management, Loan Operations Department Development and efficiency review, SSAE 16 documentation and business process development

**Educations & Certifications:**

B.A. in Accounting, Boise State University

**Consultant Overview**

**Services:**

- Accounting & Finance
- ALLL
- BSA/AML/OFAC
- Credit Card Operations
- BSA Model Validation
- Central Operations & Branch Audit
- Compliance Management Systems
- CRA
- Deposit Compliance
- Electronic Banking
- Financial Management
- Human Resources/Payroll
- Investments
- IRR/Liquidity
- Red Flag Identity Theft
- Regulatory Compliance
- Remote Deposit Capture
- System Conversions
- Trust Services
- UDAAP
- Vendor Management

**Industries:**

- Financial Services

**Community Involvement:**

- Boise Chamber of Commerce
- Women and Children's Alliance



**Valerie McCune**  
Senior Associate Consultant

Val McCune has over 30 years of experience in banking operations and project management. She specializes in all aspects of bank operations and has played a key role in several RFP, conversion and merger/acquisition projects. Her experience in the financial industry includes management of operations in institutions ranging from \$250 million to \$3 billion dollars in assets and management of Correspondent Banking Customer Service at Wells Fargo Bank servicing over 5,000 banks of all asset sizes across the United States. Valerie also managed Card Operations for a financial institution which included card issuance and maintenance, fraud and disputes, implementations, mergers and acquisitions, and reporting

**Her experience includes:**

- Operations management with direct responsibility for ACH and ATM operations, Card Operations, Cash Management, Item Processing and Reconciliation, Retirement Accounts, Documentary Collections, Central Cash Vault Operations, Wire Operations, Legal Processes, Lockbox Operations, Vendor Management, Disaster Recovery, and Compliance
- Successful management of projects related to bank wide system conversions, application conversions, product and service implementation, bank/branch acquisitions, mergers and sales, new branch installations
- Developed a Cannabis Banking Program inclusive of Enhanced Due Diligence, Risk Assessment, Policy, Procedure, and more. Can assist with creating a personalized program for financial institutions whether they have decided to enter the Cannabis Banking space or wish to avoid it
- Compliance and control reviews including recommendations for improvements to meet regulatory mandates and industry best practices
- Management of multiple workflow analysis and process improvement projects successfully achieving productive, and operationally sound environments
- Project Leader of programs related to bank wide training of staff with regard to system conversions, application conversions and product and service implementation
- Served as Project Manager in a FDIC assisted merger/acquisition of two \$10 billion dollar+ banks which involved the conversion of every bank system in a 6 month timeframe from acquisition date to conversion date
- Served as Project Manager for a private bank holding company that had purchased two small institutions and was looking to purchase two large institutions and wanted consistent core, item and card processing platforms for all of their banks to operate on. The holding company was looking to build a strong Cash Management platform with a multitude of services available to their clients. She served as the Project Manager for the RFP, contract and pricing negotiations and assisted with the implementation of the core platform as well as some of the peripherals

**Education & Certifications:**

Certification from American Institute of Banking  
 Certification from Bankers Compliance Group  
 Certifications from National Automated Clearing House Association for courses in various aspects of Banking Operations, Banking Law and Bank Management Training

**Consultant Overview**

**Services:**

- Credit & Debit Card Operations
- ACH Self-Assessment
- Cannabis Banking Compliance/Reviews
- Central Operations & Branch Audit
- Deposit Compliance
- Electronic Banking
- Project Management
- Mergers/Acquisitions
- Red Flag Identity Theft
- Remote Deposit Capture
- Regulatory Compliance
- System Conversions
- Vendor Management
- Wire Operations

**Industries:**

- Financial Services



**Nora Barefield**  
Senior Associate Consultant

Nora Barefield, a Consultant with RLR Management Consulting, has over 20 years of program management experience in financial institutions. Nora has led teams through a variety of banking projects including core and teller platform conversions, full system conversions supporting mergers and acquisitions, ATM set-up, debit and credit card support, and other system conversions. Her experience in the financial industry includes BSA/AML/OFAC Program Management, Retail Management, Branch Operations for 46 branches of a \$12B Colorado regional bank; Deposit and Card (debit and consumer credit) support for a \$10B Community Bank organization (11 member banks), as well as helping to build Community Banks ranging in asset volume from \$20MM to \$1B.

**Her experience includes:**

- Successful management of projects related to enterprise system conversions, application conversions, product implementations, branch acquisitions and sales, new branch installations, workflow analysis and process improvement, and fee revenue enhancement
- Compliance and Control Reviews, including recommendations for process and documentation improvements to meet regulatory mandates
- Deposit Operations Management for two community banks. Direct responsibility included branch operations, deposit products, electronic funds transfers (ACH, ATM, Wire Transfers), credit and debit card processing, item processing and reconciliation, retirement accounts, correspondent services, cash vault services, safe deposit box processing, and branch training and support
- Chair of a cross-functional Operational Risk Committee to identify areas of risk, report gaps and then recommend and implement opportunities for improvement.
- Using eDraw Max software to develop process maps in the BPMN (*Business Process Modeling Notation*) methodology to document various scalable functional procedures
- Serving as Lead Contact for various types of internal audits along with State and Federal Reserve Bank examinations – scope included Safety & Soundness, Compliance, and BSA/AML/OFAC
- Holds a certificate in the ‘4 Disciplines of Execution’ through Franklin Covey and is adept at developing, documenting, and maintaining procedural improvements that reduce redundancy, enhance accuracy and efficiency, and help achieve organizational objectives

**Educations & Certifications:**

Business Administration, University of Phoenix  
4 Disciplines of Execution Certificate, Franklin Covey  
Certified Anti-Money Laundering Specialist (CAMS)

**Consultant Overview**

**Services:**

- ACH Self-Assessment
- BSA/AML/OFAC
- BSA Model Validation
- Credit & Debit Card Operations
- Central Operations & Branch Audit
- Compliance Management Systems
- CRA
- Deposit Compliance
- Electronic Banking
- Enterprise Risk Management
- Mergers/Acquisitions
- Operational Audits
- Project Management
- Red Flag Identity Theft
- Regulatory Compliance
- Remote Deposit Capture
- System Conversions
- Vendor Management
- Wire Operations

**Industries:**

- Financial Services



**Lynn Jarmon**  
Senior Associate Consultant

Lynn Jarmon, a Senior Associate Consultant with RLR Management Consulting, has over 30 years of experience in financial institutions and consulting. She has led financial institution consulting engagements throughout the US, in technology, operations, and compliance specialties. Her experience in the financial industry includes Financial management as a CFO with over 20 years of experience in community banks, operations oversight, Banking compliance and BSA compliance oversight for community banks, and has performed audits and reviews for banks during her most recent 5-year tenure with FIS Risk Management Services (for financial institutions).

**Her experience includes:**

- One year engagement as a Project Manager with Amazon.com performing a 5-year lookback (BSA) of their international payments system. Worked alongside Amazon’s legal department to establish opening account criteria, as well as developed 3 sets of procedures for their alert clearing staff (1,000 employees based in London, India, and US) for 24-hour service. Lynn also trained the department heads to roll out enterprise-wide BSA Regulations applicable to their payment system
- Compliance and control reviews including recommendations for compliance and control improvements to meet regulatory mandates
- Successful management of projects related to bank-wide system conversions, application conversions, product implementations, branch acquisitions and sales, new branch installations, workflow analysis, and process improvement, and fee revenue enhancement
- CFO with over 20 years of experience and has been involved in three de novo bank start ups. Direct accounting-related responsibilities included oversight of the GL and managing transactions by performing/reviewing daily/weekly/monthly reconciliations of the various systems and programs the bank uses for posting to the GL. As CFO, monthly financials, budget planning and management, quarterly Call Report input/submission were performed. Programs and duties included monthly accruals, ALLL monthly calculations, Accounts Payable, Fixed Assets and Leasehold Improvement calculations, Investment purchases/sales, HR, payroll, and benefit administration to name a few
- Director of Operations for a large Southern California bank. Direct responsibility included branch operations, deposit products, electronic funds transfers (ACH, ATM), credit and debit card processing, consumer lending and automated underwriting, cash management services, item processing and reconciliation, retirement accounts, correspondent services, offsite merchant and ATM processing, cash vault services, safe deposit box processing, and branch training and support
- Member of the Information Technology Steering Committee of a large financial institution, with direct management participation in bank-wide systems selections and implementations, including bank-wide conversions, and tabletop emergency training

**Consultant Overview**

**Services:**

- BSA/AML/OFAC
- BSA Model Validation
- Central Operations & Branch Audit
- Compliance Management Systems
- Enterprise Risk Management
- Operational Audits
- Information Technology
- Project Management
- Red Flag Identity Theft
- Regulatory Compliance
- Remote Deposit Capture

**Industries:**

- Financial Services



**John Mason**  
Senior Associate Consultant

John Mason has over 20 years combined experience in financial services, internal audit, SSAE 16s/18s, regulatory compliance, information security, SOX compliance, investigations, risk management and process reengineering. He has held positions such as Chief Internal Auditor and VP of Audit & Compliance in a variety of companies. While at two multi-billion dollar institutions, he was the Chief Information Security Officer and helped establish information risk management programs as well as designing risk-based programs several years before Sarbanes-Oxley.

**His experience includes:**

- Integrated regional and interstate banks' IT-financial audit support for consumer and commercial loans, BSA/OFAC compliance, ALM/IRR, deposit operations, borrower-in-custody, IT, non-depository insurance products (NDIP), GLBA, SOX, branch retail audits, accounting/finance, asset-based lending, and factoring
- Provided key assistance during major IT conversion where the CAO stated that without Internal Audit's help, the conversion would not have succeeded or been aborted
- Reduced compliance reporting costs by 90% and reduced SAR compliance reporting time to 6-8 minutes through personally developed database tools
- Streamlined and reduced up to 40% the SOX compliance work at a major renewable products company
- Established multi-phased and integrated information security and HIPAA solutions resulting in estimated cost-savings of \$25,000+ per client
- Has routinely authored, reviewed, and researched finance control policies and procedures
- Performed audits for governmental agencies
- Performed over 200 SSAE 18/16 SOC audits and readiness assessments
- Managed a full spectrum of financial, operational, SOX compliance and data processing audits; designed, performed, and evaluated domestically and internationally in multiple languages:
  - Operations administration and internal control audits at over 15 different institutions encompassing over 150 locations
  - Lending-related operational and compliance audits at over 12 institutions encompassing over 110 locations
  - Accounting/finance-related operational and compliance audits at over 12 institutions encompassing over 100 locations
  - Foreign exchange and trade finance operational and compliance audits at over 10 institutions encompassing over 80 locations

**Education & Certifications:**

B.A. in Economics, UC San Diego and an M.B.A.  
MBA, CISA, CISM, CFE, CGEIT, CDPSE

**Consultant Overview**

**Services:**

- Internal Audit
- Accounting & Finance
- ALLL
- Compliance Management Systems
- CRA
- Operations Compliance
- Electronic Banking
- Information Technology
- Investments
- IRR/Liquidity
- Lending Compliance
- Regulatory Compliance
- Remote Deposit Capture
- Risk Management
- SSAE 18 SOC1, SOC2 & SOC3 Audits
- SOX Compliance
- TRID
- UDAAP
- Vendor Management
- Website Compliance

**Industries:**

- Financial Services

**Community Involvement:**

- Member of Information Systems Audit and Controls Association (ISACA)
- Member of Association of Certified Fraud Examiners (ACFE)



**Nancy Cook**  
Senior Associate Consultant

Nancy Cook has over 30 years of experience in management for financial institutions. She has managed projects for mergers/acquisitions, internet banking, product development, cash management systems conversions and documentation reviews. Nancy's experience in the financial industry includes merger/integration project management, operational management and treasury services management for two of the top five banks in the country as well as community and de novo institutions in California. Her expertise is in project management, treasury/cash management, product development, and operations efficiency, where she has managed numerous projects from \$5 million to \$20 billion, with project teams of up to 135 people.

**Her experience includes:**

- As part of RLR, has led numerous projects including:
  - Bank integrations/mergers from \$3 Billion to \$20 Billion in asset size
  - Payment system conversions (wire and ACH)
  - Treasury/cash management system conversions (Consumer and Business OLB, Lockbox, Account Analysis, Bill Pay, Cash Vault, etc.)
  - Operation efficiency studies (Centralized Operations, Branch Operations, Wire Operations, Payment Operations, etc.)
  - Policy and procedure consolidations
  - Treasury Management documentation reviews and consolidation
  - Various RFP processes, including Core Platforms, Treasury Management Platforms and Payments platforms
- Successfully managed product management department for 7th largest bank in California, managing the upgrades of all cash management processing systems
- Created and managed new commercial banking product development department which included completing policies, procedures, staffing and implementation of new products
- Successful management of projects related to bank wide systems conversions/upgrades, application conversions, product implementations/conversions, new branch installations, process improvement analysis/implementation, internet banking new product development/implementation and vendor product implementations
- Lead online product development merger teams for three mergers, including the First Union/Core States merger, managing all customer related customization for the online products
- Created and managed new department for statistical reporting, market research and management reporting for large national bank
- Created documentation for product/system testing, program management policies/ procedures, operations procedures, customer training/user manuals, internal training materials, marketing materials, project plans, dashboard reports, RFPs, business cases, cost/benefit analysis and various other documentation as necessary for department and project related processes

**Education & Certifications:**

B.A., University of Redlands  
Certified Cash Manager (CCM) by the Association for Financial Professionals

**Consultant Overview**

**Services:**

- System Conversions
- Project Management
- Mergers/Acquisitions
- Cash Management
- Operational Management
- Treasury Management Services
- Product Development
- Operations Efficiency

**Industries:**

- Financial Services





**Mitch Razook**  
President & COO

Mitch Razook has over 40 years of consulting, banking, and information technology experience. His areas of expertise include retail banking, operations, payment systems and information technology. Mitch has worked with several financial services clients in the areas of strategic and technology transformation, corporate strategy, cost containment, operational effectiveness, and project management.

Mitch has been with RLR Management Consulting for 17 years, during which time he has consulted to numerous financial services clients on varied technology, operations, and strategic engagements, and has personally led a number of large client engagements including the start-up of a commercial bank, SOX 404 documentation and testing, technology planning and implementation, bank due diligence, and merger/acquisition planning and execution. Mitch is also responsible for the daily operations of RLR. Recently, Mitch was asked to be considered for a Board seat on the East Bay Public Bank (in Organization).

Prior to RLR, Mitch spent 10 years with Deloitte Consulting LLP, and was a Principal in their Financial Services Practice. While at Deloitte, Mitch was the lead consulting partner for Visa International, Visa USA and its affiliate companies, and led Deloitte's consulting team at Wells Fargo Bank. He was appointed to lead the financial services national payments practice. Prior to joining Deloitte Mitch held management positions in retail and corporate banking; and managed numerous business and technology areas including retail banking operations, electronic banking, product management, project management and cash management services.

***His experience includes:***

- Bank due diligence and merger/acquisition and integration planning
- Design and planning of a distributed processing card authorization system for a global payments association
- Strategic and economic business case development for in-house vs. third party debit processing for a multi-billion dollar banking client
- Leading several best practices engagements associated with procurement transformation and P-Card growth
- Planning development for image capture and item processing redesign for a multi-billion dollar banking client
- Numerous business strategy, market segmentation, and competitive analyses focused on market penetration, share and volume growth
- Developing an enterprise payment system solution for a large financial services client.
- Leading numerous strategic technology assessments and vendor selections for financial services clients
- Leading SOX 404 planning and testing engagements
- Leading a number of projects associated with commercial bank implementation

***Education & Certifications:***

Marshall School of Business  
University of Southern California

**Consultant Overview**

**Services:**

- Conversion / Implementation Project Management
- Core Systems Contract Review & Negotiations
- De Novo Services
- M&A Due Diligence
- IT and Operational Strategic Planning
- Operational Management
- Operations Efficiency
- Product Development
- RFP – Vendor Evaluation & Selection
- SOX Program Development & Testing
- Treasury Management

**Industries:**

- Financial Services



**Ruth L. Razook**  
Founder & CEO

Ruth L. Razook founded RLR in 1988 to serve community banks primarily in the southern California region. RLR is now a nationwide consulting firm focused on providing high quality consulting assistance to financial institutions in the areas of corporate strategy, organizational analysis, operations and project management, information technology and payments.

Ruth has conducted engagements for RLR's clients for more than 30 years including over 50 start-up banks. She has managed SOX engagements, the relocation of a data center from northern California to southern California and a multitude of other projects. Ruth works closely with Bank management teams and Board of Directors.

Ruth is also a frequent speaker at state and national banking and related technology conferences, annually facilitates regulatory panels, regularly conducts webinars on a variety of banking topics and is an advisor to certain banking industry associations.

***Her experience includes:***

- Building, expanding and leading RLR Management Consulting to prominence as one of the most recognized consulting brands in community banking both on the West Coast and nationally
- One of the most sought-after Community Banking educational speakers in the Western U.S.
- Over 30 years of experience at senior and executive management levels in information technology and bank management, including data center management, project management, system development, and customer service
- Account Manager for Electronic Data Systems (EDS) in Burbank, CA where she had responsibility for their Western Region Data Center, encompassing all facets of production, development, and customer service
- Served with First Interstate Bancorp in Los Angeles as Vice President and Manager of Systems Development
- Managed the development of system requirements and vendor selections for numerous new banks
- Relocation of a 5-terabyte data center for a major health organization
- Spent the last 18 months researching the evolution of banking Cannabis Related Businesses
- Assisted in the development of our Cannabis Banking Program
- Reviewed our Cannabis Related Businesses work program for BSA Audits

***Education & Certifications:***

Alumnus, University of California, Los Angeles

**Consultant Overview**

**Services:**

- Cannabis Banking Compliance/Reviews
- Conversion / Implementation Project Management
- Core System Contract Review & Negotiations
- Merger/Acquisition Due Diligence
- RFP – Vendor Evaluation & Selection

**Industries:**

- Financial Services

## Aite-Novarica Bio



### Christine Barry

Head of Banking & Payments Insights & Advisory

**Areas of Expertise:** Cash Management, Core Systems, Corporate Mobile Banking, Corporate Portals, Customer Onboarding, Digital Transformation, Global Cash Management, Integrated Receivables, RDC/Mobile Capture, Small-Business Banking



Christine Barry serves as the head of Banking & Payments, Insights & Advisory, focusing on the strategies and technology implementations of global banks of all sizes. Her recent research has addressed global cash management trends and technologies, capturing the valuable small-business customer, bank priorities for treasury onboarding, and the drivers of global core banking system replacement. She also leads Aite-Novarica Group's Corporate Banking Executive Council. She is a seasoned banking industry expert with more than 25 years of experience in financial services products and technologies. She has worked with a broad range of U.S. and international clients, analyzing industry trends and identifying market opportunities, product gaps, and potential partners to help them achieve their strategic goals.

Christine has presented her research at various conferences, including the AFP Annual Conference, NACHA Payments and NACHA Global Payments, Windy City Summit, TMANE, and several technology vendor user conferences across the globe. She has been quoted in various media outlets, including The Wall Street Journal, The New York Times, BusinessWeek, American Banker, and Credit Union Times. She has also appeared on CNN.

Before joining Aite-Novarica Group, Christine was a Senior Consultant in the strategy practice at HighQuest Partners, where she helped technology companies to enter, grow, and succeed in U.S. markets. Prior to that, she was a Senior Analyst for Celent's banking group, with a focus on cash management, commercial lending, core banking/processing, small-business banking, mortgages, and biometrics. She did similar work as a Research Analyst for the e-financial services group at Meridien Research (now Financial Insights). She began her career gaining in-house experience as an Associate in commercial and municipal lending at KBC Bank and as a Financial Analyst for Citibank in the firm's global derivatives and strategic initiatives groups.

Christine holds an MBA from Babson College and a B.A. in international business from Villanova University. She is an avid tennis player and a terrible golfer, and has completed six marathons.

## Aite-Novarica Bio



### David Albertazzi

Director, Retail Banking & Payments Practice

**Areas of Expertise:** Bill Payment and Bill Presentment (EBPP), Branch Channel/ATM, Core Systems, Mobile Banking, Online Banking, Personal Financial Management



David Albertazzi is the Director of Aite-Novarica's Retail Banking & Payments practice, and he focuses on retail bank channels and core banking technologies. He specializes in technology solutions used by banks and credit unions to support their mobile banking, online banking, branch, ATM, and call center channels, and he assesses the strategies and technology implementations of financial institutions of all sizes. His recent research has addressed digital banking trends and technologies, including cloud computing, consumer mobile banking, digital onboarding, and the drivers of global core banking system replacement. David also covers electronic bill payment and presentment.

Most recently, David served as Senior Director of Product Management for banking services at Online Resources Corporation, where he was responsible for overall online banking product strategy and product management. Prior to ORCC, he was Vice President of Product Management at Mechanics Bank, where he led new product development as well as initiatives to promote product offerings, including those for the digital channels.

David has been quoted in various media outlets, including *Bloomberg*, *The New York Times*, *USA Today*, *CNN Money*, *American Banker*, *Bank Systems & Technology*, *Bank Technology News*, and *Credit Union Times*.

David holds a Graduate Business Degree with a concentration in Finance and Marketing from Institut de Formation aux Affaires et à la Gestion (IFG) in Lyon, France. He also holds a B.A. from the University of Lyon. He is fluent in both English and French.

## Aite-Novarica Bio



### Sarah Fitzsimmons

Director, Research Design & Data



Sarah Fitzsimmons is the Director of the Research Design & Data team (Aite-Novarica Group's quantitative insights team), in which capacity she collaborates with all eleven Aite-Novarica Group practices on study design, questionnaire development, and statistical data analysis. She brings to Aite-Novarica Group experience in business-to-business and consumer market research.

Before joining Aite-Novarica Group, Sarah was a Researcher at Forrester Research, where she managed a panel of marketers and analyzed their technology uses, budgets, and staffing decisions, helping to produce market share forecasts for marketing methods such as email, social media, and mobile. She also contributed to at least a dozen vendor comparisons known as Forrester Waves. Sarah first developed her analytical prowess working for a boutique political polling firm, The Tarrance Group, during the 2006 congressional election. She further enhanced it at a video analytics startup, VMC, where she built a regression model to predict box office spend based on online trailer viewership.

Sarah holds a bachelor's degree in Political Science with a thematic sequence in Cognitive Psychology from Miami of Ohio. And she is ready for almost anything project-related, having also spent several years as the owner and manager of a B&B inn on Cape Cod.

## Aite-Novarica Bio



### Ariana-Michele Moore

Advisor

**Areas of Expertise:** Bank and Payments Fraud, Card Issuance, Card Products (Credit, Debit, and Prepaid), Consumer Payments, Know Your Customer (KYC), Online Banking, Payments Acceptance Technologies, Return-on-Investment Analysis

**in**

Ariana-Michele Moore is an Advisor in Aite-Novarica's Retail Banking & Payments practice. Ariana covers a variety of topics supporting the practice.

Prior to a career break, Ariana was a senior analyst in Celent's retail banking group. Her research focused on topics such as payment fraud, identity theft, identity verification, payroll cards, stored value cards, biometrics, smart cards, contactless payments, and related issues surrounding debit and credit products. Ariana was entirely focused on helping financial institutions and service providers build best practices around these issues and technologies. Prior to Celent, she worked within the investment banking department of Tucker Anthony Cleary Gull, where she focused on technology for the financial services industry, including online banking. Before her time at Tucker, Ariana was an analyst for the technology investment banking group at Advest Inc.

Ariana has been widely quoted in the press, including publications such as The Wall Street Journal, The New York Times, USA Today, and Investor's Business Daily. Her commentary and articles have also appeared in many trade publications, including American Banker and Bank Systems & Technology. She has also appeared on television and radio programs, including CNBC and National Public Radio. Ariana has spoken at a variety of events, including NACHA Payments.

Ariana received her B.A. in Economics and Mathematics from Smith College.

**ATTACHMENT 6**

**COST PROPOSAL WORKSHEET**

The Cost Proposal Worksheet must be completed. See the instructions following the cost tables for specific requirements and details.

**Cost of Key Personnel**

**Cost Table 1, Cost of Key Personnel**

Name	Project Role	Organization	Hourly Rate	Estimated Hours	% of Total Hours	Estimated Cost
William Roetzheim	Project Manager	Level 4	\$250.00	1,660	22%	\$415,000.00
Luis Medina Travis Clancy	Analysts	Level 4	\$250.00	4,980	65%	\$1,245,000.00
Regina Clancy Elizabeth Buron						
Neva McCormick Valerie McCune						
Nora Barefield Lynn Jarmon	Analysts (Banking/ Finance)	RLR (sub)	\$250.00	1,000	13%	\$250,000.00
John Mason Nancy Cook						
Mitch Razook Ruth L. Razook						
<b>Totals for Key Personnel:</b>						\$1,910,000.00

**Cost of Proposed Expenses**

**Cost Table 2, Cost of Field and Remote Survey Work**

<b>Name of Subcontractor or Supplier</b>	<b>Service Provided</b>	<b>Estimated Cost</b>
Aite-Novarica Group	Independent survey of consumers' challenges, behavior, needs, and preferences. 1,500 respondents plus qualitative interviews.	\$122,500.00
<b>Total for field and telephone survey work:</b>		

**Cost Table 3, Cost of Language Translation Services**

<b>Name of Subcontractor or Supplier</b>	<b>Service Provided</b>	<b>Estimated Cost</b>
California Center For Translation & Interpretation 10940 Wilshire Blvd Ste 1600 Los Angeles, CA 90024	Document translation, video conference interpretation	\$10,000.00
<b>Total for language translation services:</b>		

**Summary**

**Cost Table 4, Summary Cost Table**

<b>Project Cost Element</b>	<b>Project Cost</b>
Total for Key Personnel	\$1,910,000
Total for field and remote survey work	\$122,500
Total for language translation services	\$10,000
<b>Total Cost:</b>	<b>\$2,042,500</b>



**ATTACHMENT 7**

**PAYEE DATA RECORD (STD. 204)**

Contractor must provide a taxpayer identification number (TIN) that has been assigned by the Federal Government. The TIN is entered on the Payee Data Record (STD. 204) and retained in our accounting department.

Click here to access the Payee Data Record (STD. 204) form:  
<http://www.documents.dgs.ca.gov/dgs/fmc/pdf/std204.pdf>

PAYEE DATA RECORD

(Required when receiving payment from the State of California in lieu of IRS W-9 or W-7)

STD 204 (Rev. 03/2021)

Section 1 – Payee Information

NAME (This is required. Do not leave this line blank. Must match the payee's federal tax return)

Level 4 Ventures, Inc.

BUSINESS NAME, DBA NAME or DISREGARDED SINGLE MEMBER LLC NAME (If different from above)

MAILING ADDRESS (number, street, apt. or suite no.) (See instructions on Page 2)

14702 Haven Way

CITY, STATE, ZIP CODE

Jamul, CA 91935

E-MAIL ADDRESS

william@level4ventures.com

Section 2 – Entity Type

Check one (1) box only that matches the entity type of the Payee listed in Section 1 above. (See instructions on page 2)

SOLE PROPRIETOR / INDIVIDUAL

SINGLE MEMBER LLC Disregarded Entity owned by an individual

PARTNERSHIP

ESTATE OR TRUST

CORPORATION (see instructions on page 2)

MEDICAL (e.g., dentistry, chiropractic, etc.)

LEGAL (e.g., attorney services)

EXEMPT (e.g., nonprofit)

ALL OTHERS

Section 3 – Tax Identification Number

Enter your Tax Identification Number (TIN) in the appropriate box. The TIN must match the name given in Section 1 of this form. Do not provide more than one (1) TIN. The TIN is a 9-digit number. Note: Payment will not be processed without a TIN.

- For Individuals, enter SSN.
If you are a Resident Alien, and you do not have and are not eligible to get an SSN, enter your ITIN.
Grantor Trusts (such as a Revocable Living Trust while the grantors are alive) may not have a separate FEIN. Those trusts must enter the individual grantor's SSN.
For Sole Proprietor or Single Member LLC (disregarded entity), in which the sole member is an individual, enter SSN (ITIN if applicable) or FEIN (FTB prefers SSN).
For Single Member LLC (disregarded entity), in which the sole member is a business entity, enter the owner entity's FEIN. Do not use the disregarded entity's FEIN.
For all other entities including LLC that is taxed as a corporation or partnership, estates/trusts (with FEINs), enter the entity's FEIN.

Social Security Number (SSN) or Individual Tax Identification Number (ITIN)

SSN/ITIN input line

OR

Federal Employer Identification Number (FEIN)

20-4204997

Section 4 – Payee Residency Status (See instructions)

CALIFORNIA RESIDENT – Qualified to do business in California or maintains a permanent place of business in California.

CALIFORNIA NONRESIDENT – Payments to nonresidents for services may be subject to state income tax withholding.

No services performed in California

Copy of Franchise Tax Board waiver of state withholding is attached.

Section 5 – Certification

I hereby certify under penalty of perjury that the information provided on this document is true and correct.

Should my residency status change, I will promptly notify the state agency below.

NAME OF AUTHORIZED PAYEE REPRESENTATIVE

William Roetzheim

TITLE

CEO

E-MAIL ADDRESS

william@level4ventures.com

SIGNATURE

William Roetzheim

Digitally signed by William Roetzheim Date: 2022.10.20 15:20:45 -07'00'

DATE

10/20/2022

TELEPHONE (include area code)

619.917.4917

Section 6 – Paying State Agency

Please return completed form to:

STATE AGENCY/DEPARTMENT OFFICE

Secretary of State

UNIT/SECTION

Management Services Division

MAILING ADDRESS

1500 11th Street

FAX

(916) 653-8324

TELEPHONE (include area code)

(916) 695-1471

CITY

Sacramento Level 4

STATE

CA

ZIP CODE

95814

A-12

E-MAIL ADDRESS

Procurement.Services@sos.ca.gov Attachments

**ATTACHMENT 8**

**DARFUR CONTRACTING ACT CERTIFICATION**

Pursuant to Public Contract Code section 10478, if a proposer currently or within the previous three years has had business activities or other operations outside of the United States, it must certify that it is not a “scrutinized” company as defined in Public Contract Code section 10476.

Therefore, to be eligible to submit a proposal, please insert your company name and Federal ID Number and complete only one of the following three paragraphs (via initials for Paragraph # 1 or Paragraph # 2, or via initials and certification for Paragraph # 3):

<i>Company/Vendor Name (Printed)</i>	<i>Federal ID Number</i>
Level 4 Ventures, Inc.	204204997
<i>Printed Name and Title of Person Initialing (for Options 1 or 2)</i>	
William Roetzheim, CEO	

1. WHR  
Initials We do not currently have, and have not had within the previous three years, business activities or other operations outside of the United States.

**OR**

2. \_\_\_\_\_  
Initials We are a scrutinized company as defined in Public Contract Code section 10476, but we have received written permission from the Department of General Services (DGS) to submit a proposal pursuant to Public Contract Code section 10477(b). A copy of the written permission from DGS is included with our proposal.

**OR**

3. \_\_\_\_\_  
Initials  
+ certification below We currently have, or we have had within the previous three years, business activities or other operations outside of the United States, but we certify below that we are not a scrutinized company as defined in Public Contract Code section 10476.

**CERTIFICATION for Paragraph # 3.**

I, the official named below, CERTIFY UNDER PENALTY OF PERJURY that I am duly authorized to legally bind the prospective proposer to the clause listed above in Paragraph # 3. This certification is made under the laws of the State of California.

<i>By (Authorized Signature)</i>	
<i>Printed Name and Title of Person Signing</i>	
<i>Date Executed</i>	<i>Executed in the County and State of</i>

**ATTACHMENT 9**

**IRAN CONTRACTING ACT CERTIFICATION**


(Public Contract Code sections 2202-2208)

Prior to bidding on, submitting a proposal or executing a contract or renewal for a State of California contract for goods or services of \$1,000,000 or more, a vendor must either: a) certify it is **not** on the current list of persons engaged in investment activities in Iran created by the California Department of General Services ("DGS") pursuant to Public Contract Code section 2203(b) and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS; or b) demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code section 2203(c) or (d).

To comply with this requirement, please insert your vendor or financial institution name and Federal ID Number (if available) and complete **one** of the options below. Please note: California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts. (Public Contract Code section 2205.)

**OPTION #1 - CERTIFICATION**

I, the official named below, certify I am duly authorized to execute this certification on behalf of the vendor/financial institution identified below, and the vendor/financial institution identified below is **not** on the current list of persons engaged in investment activities in Iran created by DGS and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person/vendor, for 45 days or more, if that other person/vendor will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

<i>Vendor Name/Financial Institution (Printed)</i>	<i>Federal ID Number (or n/a)</i>
Level 4 Ventures, Inc.	204204997
<i>By (Authorized Signature)</i>	
	
<i>Printed Name and Title of Person Signing</i>	
William Roetzheim, CEO	
<i>Date Executed</i>	<i>Executed in</i>
5/15/2023	San Diego county

**OPTION #2 – EXEMPTION**

Pursuant to Public Contract Code sections 2203(c) and (d), a public entity may permit a vendor/financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or enters into or renews, a contract for goods and services.

If you have obtained an exemption from the certification requirement under the Iran Contracting Act, please fill out the information below, and attach documentation demonstrating the exemption approval.

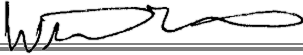
<i>Vendor Name/Financial Institution (Printed)</i>	<i>Federal ID Number (or n/a)</i>
<i>By (Authorized Signature)</i>	
<i>Printed Name and Title of Person Signing</i>	<i>Date Executed</i>

**ATTACHMENT 10**

**CONTRACTOR CERTIFICATION CLAUSES (CCC 04/2017)**

**CERTIFICATION**

I, the official named below, CERTIFY UNDER PENALTY OF PERJURY that I am duly authorized to legally bind the prospective Contractor to the clause(s) listed below. This certification is made under the laws of the State of California.

<i>Contractor/Proposer Firm Name (Printed)</i>		<i>Federal ID Number</i>
Level 4 Ventures, Inc.		204204997
<i>By (Authorized Signature)</i>		
		
<i>Printed Name and Title of Person Signing</i>		
William Roetzheim, CEO		
<i>Date Executed</i>	<i>Executed in the County of</i>	
5/15/2023	San Diego	

**CONTRACTOR CERTIFICATION CLAUSES**

1. **STATEMENT OF COMPLIANCE:** Contractor has, unless exempted, complied with the nondiscrimination program requirements. (Gov. Code §12990 (a-f) and CCR, Title 2, Section 11102) (Not applicable to public entities.)

2. **DRUG-FREE WORKPLACE REQUIREMENTS:** Contractor will comply with the requirements of the Drug-Free Workplace Act of 1990 and will provide a drug-free workplace by taking the following actions:

a. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations.

b. Establish a Drug-Free Awareness Program to inform employees about:

- 1) the dangers of drug abuse in the workplace;
- 2) the person's or organization's policy of maintaining a drug-free workplace;
- 3) any available counseling, rehabilitation and employee assistance programs; and,
- 4) penalties that may be imposed upon employees for drug abuse violations.

c. Every employee who works on the proposed Agreement will:

- 1) receive a copy of the company's drug-free workplace policy statement; and,

- 2) agree to abide by the terms of the company's statement as a condition of employment on the Agreement.

Failure to comply with these requirements may result in suspension of payments under the Agreement or termination of the Agreement or both and Contractor may be ineligible for award of any future State agreements if the department determines that any of the following has occurred: the Contractor has made false certification, or violated the certification by failing to carry out the requirements as noted above. (Gov. Code §8350 et seq.)

3. NATIONAL LABOR RELATIONS BOARD CERTIFICATION: Contractor certifies that no more than one (1) final unappealable finding of contempt of court by a Federal court has been issued against Contractor within the immediately preceding two-year period because of Contractor's failure to comply with an order of a Federal court, which orders Contractor to comply with an order of the National Labor Relations Board. (Pub. Contract Code §10296) (Not applicable to public entities.)

4. CONTRACTS FOR LEGAL SERVICES \$50,000 OR MORE- PRO BONO

REQUIREMENT: Contractor hereby certifies that Contractor will comply with the requirements of Section 6072 of the Business and Professions Code, effective January 1, 2003. Contractor agrees to make a good faith effort to provide a minimum number of hours of pro bono legal services during each year of the contract equal to the lessor of 30 multiplied by the number of full time attorneys in the firm's offices in the State, with the number of hours prorated on an actual day basis for any contract period of less than a full year or 10% of its contract with the State.

Failure to make a good faith effort may be cause for non-renewal of a state contract for legal services, and may be taken into account when determining the award of future contracts with the State for legal services.

5. EXPATRIATE CORPORATIONS: Contractor hereby declares that it is not an expatriate corporation or subsidiary of an expatriate corporation within the meaning of Public Contract Code Section 10286 and 10286.1, and is eligible to contract with the State of California.

6. SWEATFREE CODE OF CONDUCT:

a. All Contractors contracting for the procurement or laundering of apparel, garments or corresponding accessories, or the procurement of equipment, materials, or supplies, other than procurement related to a public works contract, declare under penalty of perjury that no apparel, garments or corresponding accessories, equipment, materials, or supplies furnished to the state pursuant to the contract have been laundered or produced in whole or in part by sweatshop labor, forced labor, convict labor, indentured labor under penal sanction, abusive forms of child labor or exploitation of children in sweatshop labor, or with the benefit of sweatshop labor, forced labor, convict labor, indentured labor under penal sanction, abusive forms of child labor or exploitation of children in sweatshop labor. The contractor further declares under penalty of perjury that they adhere to the Sweatfree Code of Conduct as set forth on the California Department of Industrial Relations website located at [www.dir.ca.gov](http://www.dir.ca.gov), and Public Contract Code Section 6108.

b. The contractor agrees to cooperate fully in providing reasonable access to the contractor's records, documents, agents or employees, or premises if reasonably required by authorized officials of the contracting agency, the Department of Industrial Relations, or the Department of Justice to determine the contractor's compliance with the requirements under paragraph (a).

7. DOMESTIC PARTNERS: For contracts of \$100,000 or more, Contractor certifies that Contractor is in compliance with Public Contract Code section 10295.3.

8. GENDER IDENTITY: For contracts of \$100,000 or more, Contractor certifies that Contractor is in compliance with Public Contract Code section 10295.35.

### **DOING BUSINESS WITH THE STATE OF CALIFORNIA**

The following laws apply to persons or entities doing business with the State of California.

1. CONFLICT OF INTEREST: Contractor needs to be aware of the following provisions regarding current or former state employees. If Contractor has any questions on the status of any person rendering services or involved with the Agreement, the awarding agency must be contacted immediately for clarification.

Current State Employees (Pub. Contract Code §10410):

- 1). No officer or employee shall engage in any employment, activity or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any state agency, unless the employment, activity or enterprise is required as a condition of regular state employment.
- 2). No officer or employee shall contract on his or her own behalf as an independent contractor with any state agency to provide goods or services.

Former State Employees (Pub. Contract Code §10411):

- 1). For the two-year period from the date he or she left state employment, no former state officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements or any part of the decision-making process relevant to the contract while employed in any capacity by any state agency.
- 2). For the twelve-month period from the date he or she left state employment, no former state officer or employee may enter into a contract with any state agency if he or she was employed by that state agency in a policy-making position in the same general subject area as the proposed contract within the 12-month period prior to his or her leaving state service.

If Contractor violates any provisions of above paragraphs, such action by Contractor shall render this Agreement void. (Pub. Contract Code §10420)

Members of boards and commissions are exempt from this section if they do not receive payment other than payment of each meeting of the board or commission, payment for preparatory time and payment for per diem. (Pub. Contract Code §10430 (e))

2. LABOR CODE/WORKERS' COMPENSATION: Contractor needs to be aware of the provisions which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions, and Contractor affirms to comply with such provisions before commencing the performance of the work of this Agreement. (Labor Code Section 3700)

3. AMERICANS WITH DISABILITIES ACT: Contractor assures the State that it complies with the Americans with Disabilities Act (ADA) of 1990, which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA. (42 U.S.C. 12101 et seq.)

4. CONTRACTOR NAME CHANGE: An amendment is required to change the Contractor's name as listed on this Agreement. Upon receipt of legal documentation of the name change the State will process the amendment. Payment of invoices presented with a new name cannot be paid prior to approval of said amendment.

5. CORPORATE QUALIFICATIONS TO DO BUSINESS IN CALIFORNIA:

a. When agreements are to be performed in the state by corporations, the contracting agencies will be verifying that the contractor is currently qualified to do business in California in order to ensure that all obligations due to the state are fulfilled.

b. "Doing business" is defined in R&TC Section 23101 as actively engaging in any transaction for the purpose of financial or pecuniary gain or profit. Although there are some statutory exceptions to taxation, rarely will a corporate contractor performing within the state not be subject to the franchise tax.

c. Both domestic and foreign corporations (those incorporated outside of California) must be in good standing in order to be qualified to do business in California. Agencies will determine whether a corporation is in good standing by calling the Office of the Secretary of State.

6. RESOLUTION: A county, city, district, or other local public body must provide the State with a copy of a resolution, order, motion, or ordinance of the local governing body which by law has authority to enter into an agreement, authorizing execution of the agreement.

7. AIR OR WATER POLLUTION VIOLATION: Under the State laws, the Contractor shall not be: (1) in violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district; (2) subject to cease and desist order not subject to review issued pursuant to Section 13301 of the Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) finally determined to be in violation of provisions of federal law relating to air or water pollution.

8. PAYEE DATA RECORD FORM STD. 204: This form must be completed by all contractors that are not another state agency or other governmental entity.



**ATTACHMENT 11**

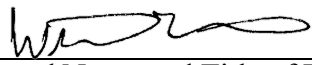
**CALIFORNIA CIVIL RIGHTS LAWS CERTIFICATION**

Pursuant to Public Contract Code section 2010, a person that submits a bid or proposal to, or otherwise proposes to enter into or renew a contract with, a state agency with respect to any contract in the amount of \$100,000 or above shall certify, under penalty of perjury, at the time the bid or proposal is submitted or the contract is renewed, all of the following:

1. **CALIFORNIA CIVIL RIGHTS LAWS**: For contracts executed or renewed after January 1, 2017, the contractor certifies compliance with the Unruh Civil Rights Act (Section 51 of the Civil Code) and the Fair Employment and Housing Act (Section 12960 of the Government Code); and
2. **EMPLOYER DISCRIMINATORY POLICIES**: For contracts executed or renewed after January 1, 2017, if a Contractor has an internal policy against a sovereign nation or peoples recognized by the United States government, the Contractor certifies that such policies are not used in violation of the Unruh Civil Rights Act (Section 51 of the Civil Code) or the Fair Employment and Housing Act (Section 12960 of the Government Code).

**CERTIFICATION**

I, the official named below, certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Proposer/Bidder Firm Name (Printed) Level 4 Ventures, Inc.	Federal ID Number 204204997
By (Authorized Signature) 	
Printed Name and Title of Person Signing William Roetzheim, CEO	
Executed in the County of San Diego	Executed in the State of CA
Date Executed 5/15/2023	

**ATTACHMENT 12**

**BIDDER DECLARATION (GSPD-05-105)**

Complete the Bidder Declaration (GSPD-05-105) form and identify if your company is a Small Business, Micro-Business, and/or Disabled Veteran Business Enterprise. Also indicate any subcontractors, if applicable.

Click here to access the most recent version of the Bidder Declaration (GSPD-05-105) form:  
<https://www.documents.dgs.ca.gov/dgs/fmc/gspd/gspd05-105.pdf>

## BIDDER DECLARATION

1. Prime bidder information (**Review attached Bidder Declaration Instructions prior to completion of this form**):
- a. Identify current California certification(s) (**MB, SB, NVSA, DVBE**): DVBE, MB or None  (If "None," go to Item #2)
  - b. Will subcontractors be used for this contract? Yes  No  (If yes, indicate the distinct element of work your firm will perform in this contract e.g., list the proposed products produced by your firm, state if your firm owns the transportation vehicles that will deliver the products to the State, identify which solicited services your firm will perform, etc.). Use additional sheets, as necessary.  
Project management, most analysis work, most report development
  - c. If you are a California certified DVBE: (1) Are you a broker or agent? Yes  No   
 (2) If the contract includes equipment rental, does your company own at least 51% of the equipment provided in this contract (quantity and value)? Yes  No  N/A

2. If no subcontractors will be used, skip to certification below. Otherwise, list all subcontractors for this contract. (Attach additional pages if necessary):

Subcontractor Name, Contact Person, Phone Number & Fax Number	Subcontractor Address & Email Address	CA Certification (MB, SB, NVSA, DVBE or None)	Work performed or goods provided for this contract	Corresponding % of bid price	Good Standing?	51% Rental?
RLR Mgmt. Consulting Ruth Razook (760) 200-4800	77806 Flora Road, Suite D Palm Desert, CA 92211 info@rlrmgmt.com	None	Banking/Finance SME	20%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>

**CERTIFICATION: By signing the bid response, I certify under penalty of perjury that the information provided is true and correct.**



ATTACHMENT 15

**COMMERCIALLY USEFUL FUNCTION EVALUATION**

Every Certified SB, MB, and DVBE must complete this form if they will be performing any element of work.

<b>CONTRACTOR INFORMATION</b> Level 4 Ventures, Inc.		
"DOING BUSINESS AS" (DBA) NAME:	OSDS CERTIFICATION NUMBER:	EXPIRATION DATE:
	2007586	7/31/2023

PLEASE MARK ALL THAT APPLY:

- Small Business     
 Micro Business     
 Disabled Veteran Business Enterprise  
 Prime Contractor     
 Sub-Contractor

**COMMERCIALLY USEFUL FUNCTION**

All Certified Small Businesses, Micro Businesses, and Disabled Veteran Business Enterprises must meet the commercially useful function requirements under Government Code Section 14837 (d)(4) and/or Military Veterans Code Section 999 (b)(5)(B).

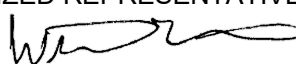
Please answer the following questions as they apply to your business for the goods and/or services being acquired:

- Will your business be responsible for the execution of a distinct element of the resulting work?  Yes  No
- Will your business carry out the obligation by actually performing, managing, and/or supervising the work involved?  Yes  No
- Will your business be performing work that is normal for its business services and functions?  Yes  No
- Will your business be responsible for the products, inventories, materials, and supplies required?  Yes  No
- Will your business be subcontracting a portion of the work that is greater than normal industry standards?  Yes  No

A response of "no" to numbers 1-4 or "yes" to number 5 above will result in your proposal being disqualified.

**AUTHORIZING SIGNATURE**

The signatory of this document must be the certified business owner (or an authorized representative in the case of a corporation) and as such, hereby certifies under penalty of perjury under the laws of the State of California that all information provided herein is truthful and accurate.

AUTHORIZED REPRESENTATIVE SIGNATURE: 	TITLE: CEO
PRINTED NAME: William Roetzheim	DATE: 5/15/2023

## ATTACHMENT 16

### **DISABLED VETERAN BUSINESS ENTERPRISE (DVBE) PARTICIPATION REQUIREMENTS**

The Disabled Veteran Business Enterprise (DVBE) Participation Goal Program for State contracts is established in Public Contract Code (PCC) section 10115 et seq., Military and Veterans Code (MVC) section 999 et seq., and California Code of Regulations (CCR), title 2, section 1896.60 et seq. **This solicitation does not include a minimum DVBE participation requirement. DVBE participation is required optional in the proposal.**

Any contract awarded to a company committing to subcontract with a certified DVBE will follow requirements as provided in MVC 999.7 including permanent withholds and deductions for non-compliance with the STD. 817 reporting process.

#### **DVBE DECLARATION (DGS PD 843)**

**If a proposer is claiming the DVBE incentive identified in RFP section D.4, the Pproposers must submit a completed Disabled Veteran Business Enterprise Declaration, DGS PD 843, which demonstrates DVBE participation.** All disabled veteran owners and disabled veteran managers of the DVBE(s) must sign the form(s) which may be obtained through the following link: [https://www.documents.dgs.ca.gov/dgs/fmc/gd/pd/pd\\_843.pdf](https://www.documents.dgs.ca.gov/dgs/fmc/gd/pd/pd_843.pdf). The completed form must be included with the submitted proposal. **One completed and signed DGS PD 843 form is required for each participating DVBE.**

DVBE participation information submitted by the intended awardee will be verified by the State. If evidence of an alleged violation is found during the verification process, the State or the Department of General Services, Office of Small Business and DVBE Services (OSDS) shall initiate an investigation in accordance with PCC section 10115 et seq., MVC section 999 et seq., and CCR, title 2, section 1896.60 et seq. Contractors found to be in violation of certain provisions may be subject to loss of certification, contract termination, and/or other penalties.

**Only State of California OSDS certified DVBEs** that perform a commercially useful function relevant to this solicitation may be used to comply with the DVBE Participation ~~Goal~~Incentive Program. Please see MVC section 999(b) and CCR, title 2, section 1896.62(l) regarding the performance of a commercially useful function. Proposers are to verify each DVBE subcontractor's certification with OSDS to ensure DVBE eligibility. Proposers cannot demonstrate DVBE Participation ~~Goal~~Incentive Program compliance by performing a good faith effort.

At the State's option prior to contract award, proposers may be required to submit additional written clarifying information. Failure to submit the requested written information as specified may be grounds for proposal rejection.

STATE OF CALIFORNIA – DEPARTMENT OF GENERAL SERVICES PROCUREMENT DIVISION  
**DISABLED VETERAN BUSINESS ENTERPRISE DECLARATIONS**

STD. 843 (Rev. 5/2006)

**Instructions:** The disabled veteran (DV) owner(s) and DV manager(s) of the Disabled Veteran Business Enterprise (DVBE) must complete this declaration when a DVBE contractor or subcontractor will provide materials, supplies, services or equipment [Military and Veterans Code Section 999.2]. Violations are misdemeanors and punishable by imprisonment or fine and violators are liable for civil penalties. All signatures are made under penalty of perjury.

**SECTION 1**


Name of certified DVBE: Level 4 Ventures, Inc. DVBE Reference Number: 2007586  
 Description (materials/supplies/services/equipment proposed): Consulting services  
 Solicitation/Contract Number: \_\_\_\_\_ SCPRS Reference Number: \_\_\_\_\_  
 (FOR STATE USE ONLY)

**SECTION 2**

**APPLIES TO ALL DVBEs. Check only one box in Section 2 and provide original signatures.**

- I (we) declare that the DVBE is not a broker or agent, as defined in Military and Veterans Code Section 999.2 (b), of materials, supplies, services or equipment listed above. Also, complete section 3 below if renting equipment.
- Pursuant to Military and Veterans Code Section 999.2 (f), I (we) declare that the DVBE is a broker or agent for the principal(s) listed below or on an attached sheet(s). (Pursuant to Military and Veterans Code 999.2 (e), State funds expended for equipment rented from equipment brokers pursuant to contracts awarded under this section shall not be credited toward the 3-percent DVBE participation goal.)

All DV owners and managers of the DVBE (attach additional pages with sufficient signature blocks for each person to sign):

<u>William Roetzheim</u> (Printed Name of DV Owner/Manager)	 (Signature of DV Owner/Manager)	<u>5 / 15 / 2023</u> (Date Signed)
_____ (Printed Name of DV Owner/Manager)	_____ (Signature of DV Owner/Manager)	_____ (Date Signed)

Firm/Principal for whom the DVBE is acting as a broker or agent: \_\_\_\_\_  
 (If more than one firm, list on extra sheets.) (Print or Type Name)


Firm/Principal Phone: \_\_\_\_\_ Address: \_\_\_\_\_

**SECTION 3**

**APPLIES TO ALL DVBEs THAT RENT EQUIPMENT AND DECLARE THE DVBE IS NOT A BROKER.**

- Pursuant to Military and Veterans Code Section 999.2 (c), (d) and (g), I am (we are) the DV(s) with at least 51% ownership of the DVBE, or a DV manager(s) of the DVBE. The DVBE maintains certification requirements in accordance with Military and Veterans Code Section 999 et. Seq
- The undersigned owner(s) own(s) at least 51% of the quantity and value of each piece of equipment that will be rented for use in the contract identified above. I (we), the DV owners of the equipment, have submitted to the administering agency my (our) personal federal tax return(s) at time of certification and annually thereafter as defined in Military and Veterans Code 999.2, subsections (c) and (g). Failure by the disabled veteran equipment owner(s) to submit their personal federal tax return(s) to the administering agency as defined in Military and Veterans Code 999.2, subsections (c) and (g), will result in the DVBE being deemed an equipment broker.

Disabled Veteran Owner(s) of the DVBE (attach additional pages with signature blocks for each person to sign):

<u>William Roetzheim</u> (Printed Name)	 (Signature)	<u>9 / 6 / 2022</u> (Date Signed)
<u>14702 Haven Way, Jamul, CA 91935</u> (Address of Owner)	<u>(619) 917-4917</u> (Telephone)	<u>356-42-5950</u> (Tax Identification Number of Owner)

Disabled Veteran Manager(s) of the DVBE (attach additional pages with sufficient signature blocks for each person to sign):

_____ (Printed Name of DV Manager)	_____ (Signature of DV Manager)	_____ (Date Signed)
---------------------------------------	------------------------------------	------------------------

**CALACCOUNT  
MARKET STUDY  
AND  
FEASIBILITY REPORT  
SA000004-23**

**TECHNICAL PROPOSAL**



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# Technical Response

## Background and Experience.

### Company History and Competencies.

Founded in 1994 and incorporated in 2006, Level 4 Ventures, Inc. (Level 4) has an almost thirty-year history supporting government agencies in California with feasibility studies, economic analysis, budgeting, and risk management. Some specific experience includes:



- We conducted a very high visibility feasibility study for the State Treasurer’s Office (STO) regarding an initiative to establish a state bank to serve the cannabis industry. For that project, we interviewed stakeholders across the state, including members of the Federal Reserve; we prepared detailed market and financial forecasts; we assessed investment strategy and risk; we led workshops; we prepared both technical and summary reports; we testified before legislative committees; and we supported press conferences. In the end, all parties to this controversial study agreed that our analysis was fair, unbiased, and reasonable.
- We have experience working with the California communities and organizations most likely to be impacted by this initiative. Our ten-year history working with the California Public Utilities Commission (CPUC) has involved performing economic studies specifically related to English as a Second Language (ESL) and Environmental and Social Justice (ESJ) communities, including conducting field work with Community Based Organizations (CBOs) throughout the state, and census data studies covering these populations across the state. Most recently, we completed an economic cost and benefit analysis for the California Department of Financial Protection and Innovation (CDFPI) of proposed legislation affecting payday lenders and other non-bank financial firms serving/targeting underserved banking communities.
- Other California Feasibility Studies have included work for the Franchise Tax Board, the Department of Child Support, the Department of Social Services, the Department of Tax and Fee Administration, the California Health Exchange, and the Department of Parks and Recreation.
- Level 4 has also performed Feasibility Studies and budgeting for financial organizations, including Wells Fargo, Truist, US Bank, Comerica, Visa, American Express, and Mass Mutual.

We exceed the minimum qualifications, in that:

- We are a California registered corporation and registered with the Office of Small Business and Disabled Veteran Business Enterprise Services (OSDS) as both a small business and a Disabled Veteran owned Business Enterprise (DVBE).
- We have twenty-nine years of experience performing complex feasibility studies and/or market analyses in government program designs at the California state and federal level.
- We have submitted three customer references as part of Attachment 4.
- We are allocating 20% of the project costs to subcontractors.

- Extensive stakeholder management throughout the process improves results and ensures stakeholder buy-in.
- Objective, model-based approach to alternative analysis ensures unbiased and fully supportable conclusions.
- Minimization of new data collection requirements reduces operational disruption.
- Formal risk management reduces project risk.

### **Subcontractor History and Competencies.**

Level 4 is using two subcontractors for this engagement, RLR Management Consulting (RLR) and Aite Novarica Group (ANG). We worked with RLR on the successful Feasibility Study Report for the STO regarding the potential formation of a state bank to serve the cannabis industry. RLR is a leader in banking in general and new financial products. This will be our first time working with the ANG, and we are excited to learn from their deep experience in the financial product market research area. For both subcontractors, we are including their costs with no markup and no profit. We include descriptions of each below, and references for each in Attachment 4.

#### *RLR Management Consulting.*

Founded in 1988, RLR Management Consulting (RLR) is the industry's longest tenured privately-owned consulting firm servicing community financial institutions nationwide in four primary categories: technology, regulations/compliance, operations, and Merger and Acquisition (M&A). A trusted consultancy, RLR's clientele includes De Novo banks and multi-billion-dollar financial services companies, as well as community banks, credit unions and mid-sized regional banks. The company also provides consulting services to mortgage companies, vendors, and third-party service providers.

#### Banking Expertise.

Since 1988 RLR has been working with financial service organizations in all areas of operations. They have worked with over 1,000 financial institutions in their 35-year history, assisting with:

- Operations analysis and optimization.
- Operational policies and procedures.
- Process efficiency.

Within those projects, they have specifically worked with banks to establish new programs for products and services, to include the proper oversight and controls, management and board responsibilities, and staff augmentation. They have established programs for new accounts that include variable product parameters and include related payment services (Automated Teller Machine (ATM), Electronic Funds Transfer (EFT), Payroll, Online Banking), geographic and diverse mechanisms for accessing account funds, and account management tools that facilitate the automation of basic financial transactions.



In addition to establishing the new product and product attributes, they ensure that there is responsibility and accountability of management and the board for the oversight of the implementation of the new product, as well as the day-to-day management of the product. Certain specific banking expertise is required, and they have evaluated staff to 1) ensure they have the requisite expertise; or 2) developed a plan for the individuals to obtain the requisite skills; or 3) assisted in staff augmentation.

Some of the financial institutions that they have assisted in this way include:

- Community West Bank.
- Hanmi Bank.
- Xceed Federal Credit Union.
- North Valley Bancorp.
- Universal Bank.
- Toyota Financial Savings Bank.
- Central Valley Community Bank.

RLR has been conducting Operations and Compliance Audits since 1999. Their audit engagements assist banks in fulfilling their audit initiatives and objectives by bringing a systematic, disciplined approach to evaluating and improving overall effectiveness by using industry best practices. RLR doesn't simply assign a rating to their engagements, rather, they work through each engagement by addressing every observation and finding. They offer an approach that helps the financial institution interpret their results; they assist in making recommendations; and they advise on how best to make corrections and improvements. Their clients believe this significantly differentiates RLR's audit engagements. Operational Audits that they perform include:

- Bank Secrecy Act (BSA)/Anti-Money Laundering (AML)/ Office of Foreign Assets Control (OFAC) audit.
- BSA/AML software data validation.
- BSA/AML optimization (model validation).

- Branch audits.
- Central operations, internal control audits.
- Compliance management program audit.
- Deposit compliance audit.
- Enterprise risk assessment.
- Enterprise risk management.
- Gramm-Leach-Bliley Act (GLBA) privacy review.
- Internet and mobile banking audit.
- Non-Deposit Investment Products (NDIP) audit.
- Red flag identity theft prevention program audit.
- Remote deposit capture audit.
- Wire transfer audit.

They believe that by conducting these operational audits they ensure that new products and services that they develop with the client, or on behalf of the client, are compliant with all state and federal banking regulations, as well as industry best practices.

RLR's consultants are seasoned professionals, each possessing over 25 years of experience. Most of their consultants have extensive line management experience, many of them former Chief Financial Officers (CFOs), Chief Information Officers (CIOs) and/or financial services senior executives. They have a proven track record in working with financial institutions of all sizes in numerous areas including technology, operations, regulatory compliance, and audit services, as well as integrating new solutions technically, culturally, financially, and operationally.

#### *Aite Novarica Group.*

Aite Novarica Group is an advisory firm providing mission-critical insights on technology, regulations, markets, and operations to hundreds of banks, insurers, payments providers, and investment firms—as well as the technology and service providers that support them. Comprising former senior technology, strategy, and operations executives as well as experienced researchers and consultants, their experts provide actionable advice to their client base, leveraging deep insights developed via their extensive network of clients and other industry contacts.

They have a great deal of expertise and knowledge of the unbanked and underbanked market, which they highlight below.

#### Similar Project Samples.

##### *How Americans Pay their Bills (multi-year 2010-2023, U.S.)*

The study was conducted online among 3,025 U.S. consumers who participated in a research panel. The profile of the sample is in proportion to the U.S. population for age, gender, income, geographic region, and race. In addition to being offered the survey in English, survey participants were given the choice to read the questions in Spanish.

Participants in the research indicated that they are involved in paying most or all the bills in their households. Much of the analysis in the study is based on the volume of bills paid by these households:

- 38,063 bill types/309,058 bills paid by 3,025 respondents in 2023.
- 41,720 bill types/303,594 bills paid by 3,039 respondents in 2020.
- 31,238 bill types/285,382 bills paid by 2,429 respondents in 2016.
- 6,748 bill types were paid by 1,107 respondents in 2013.
- 52,319 bill types/595,493 bills paid by 4,696 respondents in 2010.

The data for the full sample for each year has a 2-point margin of error at the 95% level of confidence; statistical tests of significance were conducted at the 95% level of confidence.

*Super-Apps Study (2022, multi-countries, commissioned by Ethoca, a Mastercard company).*

Aite Novarica Group conducted an online survey among 4,523 consumers in eight countries to understand the emerging concept of super-apps in banking. Data were collected from participants in North America (the U.S. and Canada), South America (Brazil), Europe (Germany, Spain, and the U.K.), and the Asia-Pacific (Australia and Singapore). The total number of responses includes approximately 1,000 from the U.S. and approximately 500 from each of the other seven countries.

The study participants met the following qualifications:

- Have a debit or credit card and use it to pay in-store or online at least once per month.
- Log in to a financial account at least once per month.
- Have equal or shared responsibility for managing household finances.

*Financial Behaviors in the U.S., UK, and Canada (2022, multi-countries).*

Aite Novarica Group conducted a study to better understand how consumers conduct their financial lives and how some of these factors affect their actions. This study highlights many of the key findings from this survey and uncovers how banked consumers are similar, and not so similar, across the U.S., Canada, and the U.K. It is based on a study among 3,008 consumers in the U.S., Canada, and the U.K. Those qualified to participate in the study have a relationship with a financial institution and participate in a research panel. The pool of consumers who answered questions to determine their qualification for the study was in proportion to the population of their country for age, gender, income, geographic region, and race.

*Aite Novarica Group Research Publications.*

- *Mitigating the Payments Mayhem: Payments Acceptance Strategies for Multinational Merchants.*
- *U.S. Neobanks: Challenging the Challengers.*
- *A Closer Look at Banked Canadians: A Financial Behaviors Series Report.*
- *Will Banking Apps Be the New Super Apps? Consumer Attitudes Toward New Services in Digital Banking.*
- *Payroll Cards and Earned Wage Access: Alternative Ways to Get Paid in North America.*
- *U.S. Lenders Are Maintaining a Competitive Position: Partnerships Are the Key.*
- *The Collections Industry in 2022: Charting the Course and Steering Toward Success, Part I.*
- *Consumers' Lending Preferences: And Financial Institutions' Plans to Satisfy Them.*
- *Top 10 Trends in Retail Banking & Payments, 2023: Balancing Stability and Growth Amid Economic Volatility.*
- *In-Depth View of U.S. Consumer Cardholders: The Financial Behaviors Series.*
- *U.S. Deposit Account Opening: Trends Among New Checking, Savings, and Money Market Products.*

**Key Personnel.**

Table 1 presents a summary of the Level 4 team, and Table 2 provides the years of relevant experience for each team member in the various identified areas. Resumes for all team members are included as Attachment 5.

**Table 1: Level 4 Team Summary**

<b>Name</b>	<b>Company</b>	<b>Role</b>	<b>Education/Certs</b>	<b>Hours</b>
William Roetzheim	Level 4	Project Management, Study Lead	MBA, PMP, RMP, CISA, CRISC, CCEA	1,660
Luis Medina	Level 4	Analyst	BA, Economics CPA	4,980
Travis Clancy	Level 4	Analyst	BA, Accounting CPA	
Elizabeth Buron	Level 4	Analyst	BA, PMP	
Regina Clancy	Level 4	Analyst	BA, Accounting CPA (inactive)	
Christine Barry	Aite Novarica	Market Research	MBA	Firm Fixed Price
David Albertazzi	Aite Novarica	Market Research	MBA	
Sarah Fitzsimmons	Aite Novarica	Market Research	BA	
Ariana-Michele Moore	Aite Novarica	Market Research	BA, Economics	
Neva McCormick	RLR	Analyst	BA, Accounting	
Valerie McCune	RLR	Analyst		

Name	Company	Role	Education/Certs	Hours
Nora Barefield	RLR	Analyst	BA, Business; CAMS	1,000
Lynn Jarmon	RLR	Analyst		
John Mason	RLR	Analyst	BA, Economics, MBA, CISA, CISM, CFE, CGEIT, CDPSE	
Nancy Cook	RLR	Analyst	BA	
Mitch Razook	RLR	Analyst		
Ruth L. Razook	RLR	Analyst		

**Table 2: Level 4 Team Experience**

Name	Years of Experience				
	Project Management	Banking Regulations and Practices	Financial Transaction Practices	Market and Data Analysis	Market Research & Surveys
William Roetzheim	45	15	15	20	10
Luis Medina	8	1	3	3	1
Travis Clancy	n/a	1	15	9	2
Elizabeth Buron	9	1	1	9	2
Regina Clancy	n/a	1	5	9	2
Christine Barry	20	20	20	20	20
David Albertazzi	17	17	17	12	12
Sarah Fitzsimmons	17	NA	NA	17	17
Ariana-Michele Moore	8	8	8	8	8
Neva McCormick	30	40	40	5	5
Valerie McCune	20	13	9	8	n/a
Nora Barefield	30	30	30	n/a	n/a
Lynn Jarmon	25	25	25	10	n/a
John Mason	15	25	25	7	10
Nancy Cook	30	40	40	5	5
Mitch Razook	35	35	35	25	n/a
Ruth L. Razook	35	35	35	25	10



## Draft Work Plan.

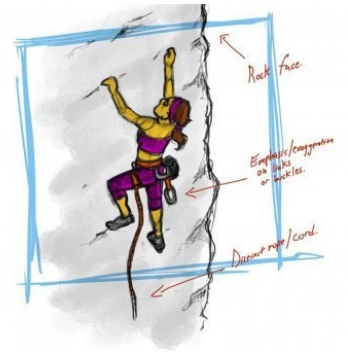
### Major Tasks and Milestones.

Level 4 has a long history of approaching information technology work from a process perspective. Whether we're talking about our *ISO 9001:2015 Quality Implementation Manual*, our *CMMI Level 5 Process Implementation Manual*, or any of our 163 process work products (e.g., guides, templates, checklists, forms), Level 4 is a strong believer in a process approach to project success. Our founder, William Roetzheim, learned the value of processes and checklists during his time as a Naval Flight Officer and he carried those lessons forward into the heart of our corporate culture. And just as with any successful mountain climbing expedition, we'll use these process work products to ensure that the project has the tools that it needs to be successful.



### Initiation and Planning Phases.

Following the Project Management Body of Knowledge (PM-BOK) we begin with a project initiation phase. During this phase we'll conduct a kick-off meeting with key stakeholders, followed immediately by key stakeholder interviews and a review of existing documentation and data relevant to this effort. Level 4 will prepare the agenda, slides, and meeting minutes for the kickoff meeting, and assist the government in identifying relevant documentation and data. We will also prepare interview notes for each interview we conduct, providing the interviewed stakeholder with an opportunity to review and modify those notes as needed. We will prepare a Project Charter, documenting the relevant mission, vision, goals, activities, milestones, stakeholders, assumptions, dependencies, and risks. Finally, we will update our project plan with an emphasis on locking down dates that will require state support, including interview dates, workshop dates, and expected in-process review dates.



### Execution Phase.

During the execution phase, we will:

**Review documentation:** We will conduct a thorough analysis of relevant literature, previous studies, case studies, and other documented prior art that will be useful in creating our report.

**Collect and analyze data:** We will identify, download, and analyze existing data that may be relevant to this study, including census data and the 2021 FDIC

National Survey of Unbanked and Underbanked Households (FDIC Survey), along with the 2023 update when available. For data from government agencies (e.g., within California and within the Federal government), we will request the data and, if necessary, submit Freedom of Information act requests to Federal agencies, or Public Record Act requests to California agencies.

**Conduct interviews:** We will work with the State to jointly prepare a list of relevant stakeholders, which will be defined in the Project Charter. We will then need to interview each of those stakeholders, either individually or in small, related groups. We will coordinate with the STO with respect to the best way for us to schedule those interviews. In most cases, we will be doing interviews using remote collaboration software, but we will conduct in-person interviews when appropriate.

**Conduct the market survey:** Based on our work to date, we will coordinate with our market survey subcontractor to identify the relevant questions both for the survey itself and for the qualitative interview to accompany the survey. We will obtain STO approval of the questions, then authorize our subcontractor to conduct the survey following the procedures described below.

**Perform modeling:** A key aspect of our approach is model informed decision making, allowing us to understand the financial and other aspects of the process under various future scenarios and with differing confidence levels. During this task, we will create those models, building on our ExcelerTools modeling framework. At a high level, this modeling will involve defining the sub-models and sub-model interconnections, defining the modelling inputs, defining the sub-model processing, defining the modelling outputs, and validating the models.

**Perform analysis:** During this task we will use a combination of prior art (from our research stage); survey results; interview results; and model behavior under varying input scenarios to make observations and draw conclusions.

**Prepare the Final Report:** We will prepare the final report. We are proposing to deliver the final report (results) in several versions during the engagement:

- A Deliverable Expectation Description (DED), which is basically an annotated outline.
- One or more results briefing presentations (PowerPoint), where we summarize work to date and key preliminary results and conclusions.
- A draft technical report, which is the full technical results.
- A draft summary report, which is a glossy summary.
- A final technical report.
- A final summary report.
- An Executive Briefing (PowerPoint), which is an executive summary of the report.

## Monitoring and controlling.

Throughout the project we will be conducting project monitoring and controlling, including weekly informal updates, monthly written status reports, risk monitoring and reporting, as well as both quality assurance and quality control of all Level 4 reports. We will be providing monthly status reports covering tasks completed during the past reporting period, and activities planned for the following reporting period, a breakdown of work performed, a summary of new risks including an assessment of potential impact to the overall project scope, schedule and budget, and recommended risk mitigation strategies.



## Closing.

During the closing phase we will ensure that all Level 4 deliverables have been completed, delivered, and accepted. We will then support the document, assisting with legislative questions, testimony, and so on.

## Timeline.

The project Gantt chart is shown in Figure 1. The draft report will be delivered on 5 April 2024, and the final report will be delivered on 13 May 2024. As with our previous Feasibility Study for the STO, we will be delivering two versions of the report. The first will be the full technical report, including all detailed analysis. The second will be a glossy summary report. We will also provide the complete survey data with the report submissions.

*Level 4 was able to work on this project with very-little assistance from me. After we described the task in full, identified the stakeholders for him and provided documents and access to the database, William pretty much worked through the entire project on his own. He met or exceeded all milestones and delivered a completely satisfactory report ahead of schedule and under budget.*

Kyle DeVine, California Public Utility Commission

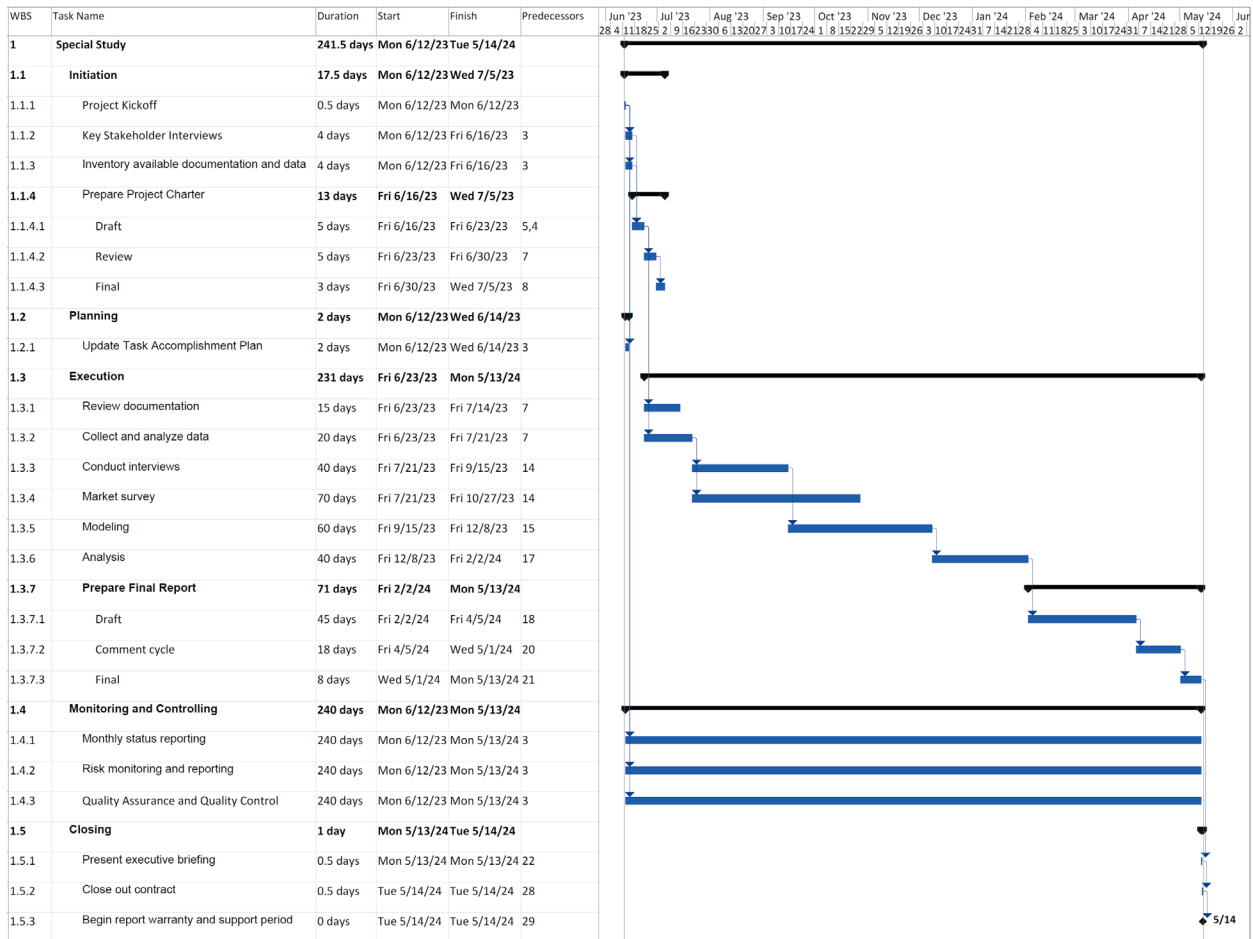


Figure 1: Project Gantt chart.

## Methodology.

There are five elements to understanding our overall methodology, each of which will be discussed individually:

1. Adherence to standards and best practices.
2. Unbiased analysis.
3. Stakeholder Insight.
4. Market survey.
5. Model informed decision making.

### *Adherence to standards and best practices.*

Level 4 is a believer in both processes and standards, and we carry that forward to all our engagements. Project management is performed in accordance with the Project Management Body of Knowledge (PM-BOK) under the supervision of our Project Management Professional (PMP). Business analysis is performed in accordance with the Business Analysis Body of Knowledge (BA-BOK). Pro Forma financials are prepared to Generally Accepted Accounting Principles (GAAP) under the supervision of

our Certified Public Accounts (CPAs). The overall engagement and organizational conflict of interest provisions are managed in accordance with the Generally Accepted Government Auditing Standards for performance audits (GAGAS, also known as the GAO Yellow Book.) Our economic analysis work is compliant with Office of Management and Budget (OMB) Circular A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*, especially with respect to approaches to capturing societal benefits of proposed programs.

### *Unbiased analysis.*

A key element of our success is that we enter these engagements with absolutely no preconceived idea about the likely results, and we avoid forming any conclusions until after the analysis work is complete. This has two significant advantages:

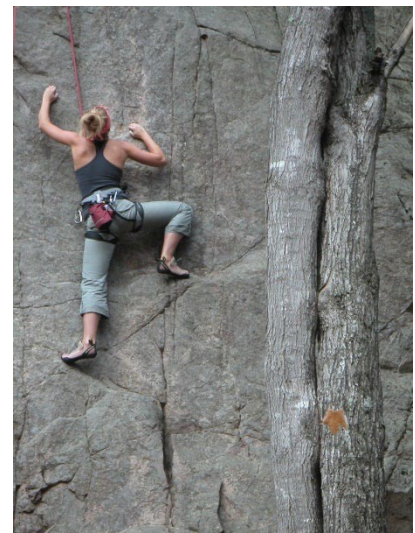
1. It helps us to really hear all the stakeholders, because we are listening to their perspective without any internal filters.
2. It ensures that the models are created without bias, and that our conclusions are formed based on the modeling results, as opposed to creating models specifically designed to support our preconceived ideas (a common flaw in model development).

### *Stakeholder Insight.*

We believe that gaining a thorough understanding of the perspective, and receiving input from, each of the relevant stakeholders is critical both to improve the quality of our results and to assure them that their voices were heard. Our experience with the STO feasibility study regarding an initiative to establish a state operated bank servicing the cannabis industry is illustrative. Ultimately, based on our analysis, we recommended against that course of action, for both risk and financial reasons. During the legislative hearing, we were able to convince key individuals to back away from previous public commitments in this area by demonstrating that we heard and understood the need and the opportunity; that we tried very hard to find a path to success; but that we were unsuccessful; and that proceeding forward would be a mistake. If we had bypassed the first two elements of this (hearing the need and demonstrating that we tried to satisfy that need), then our conclusion in the negative would potentially have been ineffective.

### *Market survey.*

We are relying on a leader in this area, Aite Novarica Group, to conduct the market survey. Their approach is described in more detail below. The survey design will be based on N=1,500 (99% confidence level with a 3-point margin of error), with a 50% Spanish speaking survey sample.



### Model informed decision making.

Building on our ExcelerTools economic modeling framework, we will create a fully configurable economic model. This model driven approach offers several critical advantages over a purely opinion-based report:

1. We can model alternate scenarios and future forecasts, providing insight into the impact of those alternatives.
2. We can use the agreed to mission, vision, and goals to optimize the model results, thereby arriving at a supportable set of recommendations that all parties can agree are fair and unbiased.
3. The model can be easily updated as additional data becomes available, so the study never becomes stale in the face of “boots on the ground” real world data.

At a high-level, all models consist of inputs, some processing, and outputs. Our ExcelerTools modeling framework extends this to support collections of interconnected models working together, a process termed system dynamic modeling. *System* is used because the complete model is really a system of smaller models. *Dynamic* is used because we are interested in studying the behavior of the system itself over varying input scenarios. This modeling, with feeds into the Pro Forma financials, will allow us to thoroughly understand the economics of the proposed new offering.

### Subcontractor Roles.

Table 3 shows the primary roles and responsibilities of Level 4 versus each of our two subcontractors. These roles and responsibilities are somewhat more fluid than would be implied by the simple bullets. For example, we expect that several sections that are the responsibility of Level 4 and/or RLR will be informed by the qualitative survey results developed by Aite Novarica.

Table 3: Subcontractor roles.

Area of Responsibility	Level 4	RLR	Aite Novarica
Project Management	●		
Overall project responsibility	●		
Overall report drafting	●		
Report defense and hearings	●		
i. Feasibility of the CalAccount Program		●	
ii. Potential Modifications to the CalAccount Program	●		
iii. CalAccount Program Costs	●	●	
iv. California’s Unbanked Population			●

v. Low-Cost or No-Cost Options	●		
vi. Program Alternatives		●	
vii. Recommendations	●		
viii. Outreach Alternatives	●		
ix. Public-Private Partnership Governance	●		
x. Costs, Benefits, and Impacts	●	●	
xi. Important Considerations	●	●	

### **Key Performance Indicators.**

We have identified the following key performance indicators for this initiative:

- All deliverables on-time per the approved project plan.
- Work completed on budget per the approved plan.
- Survey: N=1,500 (99% confidence level with a 3-point margin of error).
- 50% Spanish speaking survey sample.
- Pro Formas and financial forecasts at the 95% confidence level.
- All stakeholders in the approved stakeholder register are interviewed.

### **Project Management Methodology and Communications.**

The project will be managed in accordance with the Project Management Institute’s Project Management Body of Knowledge (PM-BOK). As part of that we will maintain an action item register and a risk register. Our proposed project manager is a Project Management Institute certified Project Management Professional (PMP) and a Risk Management Professional (RMP). Communication will use multiple channels, including:

- Weekly verbal status updates.
- Monthly written status reports.
- Advisory committee meetings.
- In-process validation reviews.
- Creation of both a technical and non-technical version of the final report.
- One-on-One and small group interviews.
- Written interview notes.
- Public workshop(s).
- Public comment cycle.
- A project dashboard.

The dashboard will include:

- A project status report, including an executive summary of the status of all major study activities.

- A detailed project schedule, showing dates and progress of tasks.
- Project risks and issues, including impact and mitigations.
- A project budget showing the usage of the contract funds which are allocated for use to the delivery of the Final Report, and the amount of usage after the Final Report until the end of the Agreement.
- A monthly progress report that coincides with the billing period. This monthly report will provide a summary description of the work performed during the month, difficulties encountered, remedial actions, and a statement about the work to be undertaken during the following month.

### Estimate Hours and Costs per Month by Key Personnel.

Table 4 shows the estimated hours and cost by month.

**Table 4: Hours and Cost by Month.**

Personnel	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Follow-on
<b>Hours</b>											
William Roetzheim	158	158	158	158	158	158	158	158	158	158	80
Level 4 Analyst	498	498	498	498	498	498	498	498	498	498	0
RLR Analyst	95	95	95	95	95	95	95	95	95	95	50
TOTAL	751	751	751	751	751	751	751	751	751	751	130
<b>Cost</b>											
William Roetzheim	\$ 39,500	\$ 39,500	\$ 39,500	\$ 39,500	\$ 39,500	\$ 39,500	\$ 39,500	\$ 39,500	\$ 39,500	\$ 39,500	\$ 20,000
Level 4 Analyst	\$ 124,500	\$ 124,500	\$ 124,500	\$ 124,500	\$ 124,500	\$ 124,500	\$ 124,500	\$ 124,500	\$ 124,500	\$ 124,500	\$ -
RLR Analyst	\$ 23,750	\$ 23,750	\$ 23,750	\$ 23,750	\$ 23,750	\$ 23,750	\$ 23,750	\$ 23,750	\$ 23,750	\$ 23,750	\$ 12,500
Aite-Novarica	\$ 24,500	\$ 24,500	\$ 24,500	\$ 24,500	\$ 24,500						
Translation	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000						
TOTAL	\$ 214,250	\$ 214,250	\$ 214,250	\$ 214,250	\$ 214,250	\$ 187,750	\$ 187,750	\$ 187,750	\$ 187,750	\$ 187,750	\$ 32,500

### Market Analysis.

In this section we describe our understanding of and approach to each element described in the Request for Proposal (RFP) section A.4.a), Market Analysis, by subheading. Within those descriptions, we describe the additional tasks or task details that we propose that exceed the work identified in the SOW.

#### i. Feasibility of the CalAccount Program.

We describe our approach to feasibility analysis throughout our proposal. At a high level, some of the items that we'll be examining include:

- Does the program have a reasonable promise of success, with an acceptably low degree of risk?
- Will there be adequate capital structure and supporting revenue streams?



- Will the individuals implementing the program have the necessary and sufficient experience and ability to afford a reasonable promise of success?
- Is there a legitimate need that this program would satisfy, and is this program the most cost effective and lowest risk approach to meeting that need?
- How will this program be regulated?

## ii. Potential Modifications to the CalAccount Program.

We will identify potential modifications to the CalAccount Program that would ease the implementation burdens through the following processes:

- Gathering data through the stakeholder interview process.
- If approved by the STO, conducting an early round of public comments, providing an opportunity for interested parties to provide written comment and feedback.
- In a manner like our recently completed work for the California Department of Financial Protection and Innovation, preparing a State Administrative Manual (SAM) Section 6000 compliant Standard Form 399 Economic cost-benefit analysis of the legislation.
- Using Level 4 prepared financial models to quantify the impact of modifications to ease the implementation burdens.

*Within a four-month time period Level 4 identified, located, and reviewed over 4,000 artifacts and documents related to a mission-critical California statewide IT system [Child Welfare System/Case Management System]. Also, during this time period, Level 4 identified and interviewed key stakeholders, briefed state, and federal executives on findings to date and progress, and authored and delivered several deliverables, including a draft final report (which was so well written it could have been the final report). The federal and state stakeholders were highly complementary of the report and how the walkthrough of the draft report was conducted. The quality of Level 4's work and attention to detail was impressive.*

Patty Lower, California Office of System Integration

## iii. CalAccount Program Costs.

Using our ExcelerTools platform, we will configure the model's assumption driven outputs to generate Pro Forma financials, budget requirements by state fiscal year, breakeven point, net present value, and return on investment. With this approach, we can perform the analysis with varying confidence levels (e.g., at the 95% confidence level); we can perform alternative analysis with different input assumptions; and we can perform a quantitative risk analysis using Monte Carlo techniques. We will also perform cost-benefit calculations, as described in section (x.) below. Determining the cost will include:

- De Novo banking costs, which will largely be determined based on models and data provided by our subcontractor, RLR.
- Various information technology-related costs, which will be determined using our ExcelerPlan estimation tool. ExcelerPlan contains the world’s largest database of California and banking information technology benchmark data, along with suitable estimation models. It is widely used and accepted in California state government agencies as the “gold standard” for cost estimation.
- Other fixed and variable costs, which will be computed using standard economic modeling approaches.

#### **iv. California’s Unbanked Population.**

We will gain a supportable, thorough understanding of California’s unbanked population. We will begin by reviewing the 2021 FDIC National Survey of Unbanked and Underbanked Households<sup>1</sup> along with the 2023 update when available. We will conduct a thorough review of prior published work with an emphasis on material in peer reviewed journals or published by government agencies or reputable research institutions. We will work with state agencies that operate in this space (e.g., the California Department of Financial Protection and Innovation, which licenses financial providers to this population segment), and various stakeholder groups that may have relevant information, including for example:

- The American Financial Services Association.
- The American Fintech Counsel.
- The California Association of Collectors.
- The California Chamber of Commerce.
- The California Creditor’s Bar Association.
- The California Financial Service Providers Association.
- The California Low-Income Consumer Coalition.
- The California Public Interest Research Group.
- The Center for Responsible Lending.
- The Consumer Data Industry Association.
- The Consumer Federation of California.
- The Consumer Relations Consortium.
- The National Consumer Law Center.
- The Online Lender’s Alliance.
- The Receivables Management Association.

In conducting our analysis, we will document:

- The impact of historical redlining on the unbanked and underbanked.

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<sup>1</sup> <https://www.fdic.gov/analysis/householdsurvey/index.html>

- Analysis of gender and racial disparities for the unbanked and underbanked populations.
- Impact on rural communities from the lack of access to financial institutions.
- Analysis of banking services and products offered in unbanked and underbanked communities, compared to those offered in bank-rich areas.
- Analysis of the geographic locations of the underbanked and unbanked.
- ChexSystems and its impact on the unbanked and underbanked.
- Current banks and prevalence of overdraft fees, minimum balance requirements, monthly fees.
- Prevalence of check cashing companies and the cost to workers.

Working through our subcontractor, Aite Novarica Group (ANG), we will survey the unbanked households and underbanked households to assess the range of obstacles to opening accounts faced by each community. The Aite Novarica methodology will be:

- **Develop and finalize the quantitative questionnaire:** To prepare the initial draft, ANG will rely upon input from Level 4 Ventures, market knowledge and domain expertise, and the questionnaire design best practices of the Random Digit Dial (RDD) team. The quantitative survey will be designed to take less than 15 to 20 minutes to complete and will be translated into the applicable languages.
- **Select third-party field services and manage fielding:** ANG's RDD team will select third-party field services to qualify and access the respondents. ANG's RDD team will manage the fielding process from coding/programming the survey, to translation, through data collection. Once the questionnaire is approved and edited, the survey will be programmed and tested for accuracy and clarity.
- **Review the data, chart, and analyze the results:** Once the survey data is gathered, the ANG project team will work directly with the RDD team to analyze the data. The project team will also leverage its existing knowledge base as well as publicly available information to complete the analysis.
- **Track field progress:** As the survey is fielded, the RDD team will frequently track progress, reviewing each response for quality and consistency; further, the team will monitor the rate at which individuals qualify for the study. If the qualification rate is lower than expected, or if other unanticipated issues arise, changes to tactics will be discussed with Level 4 Ventures.

We will supplement the survey methodology with qualitative interviews, both to capture additional informal data and to reach populations that might not be available through the survey methodology. For these qualitative interviews, we will proceed much as we did with the Community Help and Awareness with Natural Gas and Electricity Services (CHANGES) program evaluation for the California Public Utilities Commission, during which we worked with Community Based Organizations (CBOs) in rural and under privileged communities, with those CBOs helping coordinate the interviews and

providing translation assistance when needed. We found that this approach was preferred because the staff in those CBOs had existing relationships of trust with the communities of interest, so the respondents were more at ease and forthright.

Our survey methodology will be tailored to the California communities anticipated to be served by the CalAccount program, and the survey methodology will include discrete survey elements, including but not limited to:

- California migrant communities in temporary housing, e.g., farmworkers; or households where all adults were working at a place of business other than home.
- Surveys in English and Spanish, and possibly other languages.
- Detailed reasons that a household is unbanked or underbanked. For example, household members who: are undocumented and are fearful of government or banking involvement; owe past child support, overdraft debts, or owe back taxes or unfiled taxes; are concerned about potential loss of public benefits; or have income based on the underground economy.
- Detailed data related to the use of alternative means of financial transactions, including the rapid adoption of new financial technologies available to consumers via internet and mobile platforms, i.e., “fintech” alternatives to traditional banking.

We will also develop data on the potential costs to consumers of using these fintech alternatives compared to traditional banking and compared to the potential use of the CalAccount program at the anticipated levels of program engagement by low income California communities (per RFP section A.4.a)xi.11, as well as the potential impact of CalAccount on existing institutions.

We will address these issues with appropriate research, so that any recommendations made in our report can focus on the actual degree of costs, risks, and benefits offered to California’s unbanked population by any solution studied. In addition, we will quantify the degree of uncertainty in the data and use those probabilities in our modeling as part of our risk and alternative analysis.

#### **v. Low-Cost or No-Cost Options.**

In developing our models, we will include low-cost/no-cost options based on federally insured transaction accounts and options such as the BankOn program as one alternative. This analysis will include their risk, costs, effectiveness, and scalability. In developing our survey design, we will gather data related to this option. We will look both at the status quo scenario (e.g., the do-nothing and let the market work) and potential approaches to increasing the effectiveness of these alternate market directions.

## vi. Program Alternatives.

As part of our alternative analysis, we will identify alternative approaches that the state could implement, enact, or support that would accomplish the essential policy objectives of this initiative. During our initial interview and research process, we will identify the alternatives that are the most promising. Some examples:

- Expanding and supporting the BankOn California program. This program was created in 2008 to help consumers access basic financial services while avoiding costly alternative financial products by creating low-fee bank accounts, in addition to creating partnerships with community-based organizations to overcome the lack of trust in the banking system. BankOn connects consumers to safe and affordable bank accounts. The BankOn national platform, led by the nonprofit Cities for Financial Empowerment Fund (CFE Fund), helps individuals navigate the marketplace and easily identify accounts that meet their needs. When an account is BankOn certified, consumers know it has features they are looking for, including low or no fees, no overdraft charges, online bill pay and other basic attributes—giving them more confidence to begin or restart their banking relationship with the right tools to manage their money. Across the country, BankOn coalitions help match consumers with financial institutions in their community that offer the “certified” accounts. To date, 98 state or city coalitions work to connect residents to the 41,000+ financial institution branch locations in the U.S. that currently offer a Bank On-certified account. There are currently over 40 financial institutions in the state of California that offer BankOn accounts.
- Work with existing Financial Institutions to create accounts that will engage with the unbanked and to encourage people to open accounts. Part of banking the unbanked involves shifting people’s perspectives on what a traditional financial institution is and what it offers. If you want to reach the unbanked, the first thing to do is get rid of the things that stand in their way. That can be monthly account fees, minimum balance requirements, or other expectations, such as requiring an account holder to receive direct deposit. People often open an account when they get a job that pays via direct deposit, only to end up closing the account if they lose their job and the source of the deposit later. Start thinking mobile-first. Along with developing mobile apps that give people access to their account information, focus on producing apps that have a lot of functionality. People should be able to transfer money within accounts, pay bills, and deposit paper checks using a mobile banking app. Along with shifting the focus to mobile banking, it’s also useful to shift focus away from physical branches. At some financial institutions, certain tasks can only be performed in-person, such as opening an account. If banking hours and locations aren’t convenient for individuals, they are likely to seek out similar services from companies that are more convenient to them. Finding ways to verify identities, such as biometrics or two-factor authentication, can make it possible for a financial institution to offer services online or through a mobile app that once needed to be performed on-

site. Offering prepaid cards to customers can be an effective way to convince currently unbanked individuals to begin to use other services, such as opening a saving or checking account.

- Exploring partnerships with a fintech company, such as the City of Los Angeles's partnership with a fintech company to offer the Angeleno Connect bank account and debit Mastercard.

### **vii. Recommendations.**

In our report, we will include actionable, fully supported recommendations as to how the state can maximize the number of unbanked California residents who become banked at the lowest cost and risk to the state. These recommendations will focus first and foremost on achieving this policy objective, but they will also include recommendations balancing the needs and concerns of the various impacted stakeholder groups.



### **viii. Outreach Alternatives.**

As part of our research, we will identify the real and perceived barriers to banking. With this understanding in place, we will look at steps required to remove or reduce those barriers and identify the optimum strategy for removing the barriers. We will look at the role the state may have in removing or reducing those barriers, including advantages that the state may have over private sector alternatives. We note that this analysis will include the state's role both with respect to a state-administered banking program and with respect to other alternatives, as we feel that the state may have a role under all alternatives.

### **ix. Public-Private Partnership Governance.**

During the interview process, we will gather input that will allow us to make specific recommendations for public-private partnerships and collaboration opportunities between the public, labor, and Non-Governmental Organization (NGO) partners.

### **x. Costs, Benefits, and Impacts.**

We will perform a cost benefit analysis from a societal perspective, following the approach defined in OMB Circular A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*. While this is a federal guideline, it is useful for equivalent work at the state level as well. We will also prepare a SAM Section 6000 compliant California Standard Form 399 Economic cost-benefit analysis of the legislation. As part of that analysis, pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code, we will ensure that there are no local

government costs, or if local costs will be incurred, we will quantify those. When looking at benefits, we will examine benefits to all aspects of California society, including but not limited to landlords, employers, state government, low-wage workers, and consumers. Our analysis will include direct, indirect, and induced benefits to fully capture all benefit elements correctly. In performing this analysis, we will start with the impact of CalAccount program on low-income families, including:

- Quantifying savings through elimination of fees and penalties.
- Quantifying other financial impacts of banking for unbanked Californians.
- Quantifying the benefits from accessibility of public benefits (such as unemployment, Gifted and Talented Education (GATE) cards, etc.)
- Quantifying benefits from timely and reliable access to paychecks (including electronic payment, ease of cashing paper checks.)
- Identifying and where possible, quantifying longer term impacts tied to stable banking arrangements.

Another source of direct benefits involves benefits to government agencies responsible for benefit distribution (e.g., Employment Development Department (EDD), stimulus payments).

We will also analyze benefits that are more difficult to quantify financially, including:

- Any reduction of the gender and racial disparities in banking.
- The impact on rural communities.
- Potential impacts on homelessness.

## **xi. Important Considerations.**

Financial Institutions are required to have an Anti-Money Laundering (AML) compliance program, which includes a Customer Information Program (CIP). The components of a CIP include:

- Financial institutions (FI's) typically verify customer identities using government-issued documents such as passports, driver's licenses, or national ID cards. FI's may also use non-documentary methods, such as credit reports or public databases.
- Financial institutions are required to notify customers about the CIP and the information collected for identity verification purposes. The notice can be delivered through various means, including in-person, via mail, or electronically.

This may pose an issue for FI's, as the unbanked individuals may not have the qualifying documentation. Failure of an FI to meet the requirements of the CIP program may result in regulatory actions against the FI. We have seen banks placed under regulatory orders for non-compliance with AML, and typically the order is in effect for 3

to 5 years and may prohibit the FI from any merger or acquisitions or branch expansion and may require added scrutiny in the retention of management.

The number of accounts that the unbanked will open and retain is also a consideration. Customer may open an account when they have a job and want to take advantage of the offerings the FI has, however, if they lose their job, they may close the account. This will be vetted in the market analysis; however, it is an important consideration.

Another consideration is the wiliness of existing FIs to open a CalAccount. As mentioned previously, we believe that FIs with a BankOn account would be the most likely to open CalAccounts. However, the risk that is associated with the account is greater than a “normal” customer account and FIs may not be willing to take that risk. It will need to be determined if the existing state and federal regulations support the account, or how the account will need to be set up to ensure that all state and federal regulations are met.

Consideration must also be given to market viability. What is the willingness and appetite for the unbanked to open a CalAccount? Will the FI not only be successful in offering this account, but will they make money? As stated previously, the risk associated with this type of account could be great. Typically, bankers are not risk takers. The proposed elements of the CalAccount require certain parameters, such as maintaining a certain number of ATMs or branches, and these would need to be in specific geographic areas. FIs may not be willing to expand their footprint to offer this type of account. Lastly, the issue of fraud must be addressed. Today, FIs typically have robust fraud mitigation programs in place. However, this type of account introduces additional fraud risk and monitoring. FIs will have to look at that carefully and ensure that they have the controls in place to offer and maintain this type of account.

We address specific RFP items in the paragraphs below.

*1) Number of potential account holders.*

We will configure four sub-models. The first sub-model will calculate the probability of an individual signing up for any form of bank services given various input data, including demographic characteristics (e.g., age, income, primary language spoken at home) and any other variables that our research identifies.

The second model will accept as input individuals seeking to enroll in an account, and a preference model/matrix representing available banking options with characteristics, and then determine the probability of enrollment in each of the available options, including CalAccount.

The third will accept an account type (e.g., CalAccount) and model the churn in that account (e.g., drop-out rate).



The fourth will use current and forecast demographic and economic data by zip code and California county to forecast the number of individuals in the non-banked population segment and the distribution of those individuals by demographic and geographic characteristics.

These models will work together (system dynamic modeling) to support an analysis of the number of CalAccount enrollees over a given period of time and under a given set of input assumptions.

### *2) Availability of Financial Institutions.*

For this analysis, we will use an interview survey approach by our analysts (not our survey subcontractor.) We will begin by clarifying and clearly defining the CalAccount related requirements as they pertain to a financial institution. We will then conduct interviews with a representative sample of those institutions and with regulatory/oversight agencies (both State and Federal) to determine barriers and opportunities.

### *3) Acceptability of Banking Products.*

We will incorporate this into the survey conducted by Aite Novarica, and the results from Aite Novarica's work will be built into the models discussed in sub-section (1) above.

### *4) Participation without a Photo ID.*

We will begin with a clear description of the relevant laws and regulations (both State and Federal), then incorporate this into our discussion with the financial institutions that was covered in sub-section (2) above.

### *5) Potential Sources of Revenue.*

We will model all the potential sources of revenue. Revenue sources that are directly correlated with CalAccount accounts will be incorporated into the individual account model discussed in sub-section (1). Other revenue sources will be separately modeled, based on the source of revenue and the underlying revenue driver(s).

Note that we will also be modeling benefits, which differ from revenue in two key ways:

1. Revenue is modeled from the perspective of CalAccount (as a program), while benefits are measured from the perspective of society. So, for example, reduced check cashing fees or reduced costs for disbursement of payments from state agencies can be a societal benefit even if they are not revenue for CalAccount.
2. Revenue includes direct revenue only. Benefits include direct, indirect, and induced components.

#### *6) Competitors to the CalAccount Program.*

Competitors will be modeled using a preference function (generally, a matrix), within the sub-model used to decide how an individual selects one account over another, as described in sub-section (1). With this approach, changes to the competitive landscape can be modeled as part of our risk and sensitivity analysis simply by changing the preference function and then re-running the models. The initial values for the preference function will be informed by the survey work by Aite Novarica.

#### *7) State Fiscal Risk.*

We will run the models under varying assumptions, including demographic shifts, economic downturns, competitor activities, and other identified areas of uncertainty, and use those results to quantify the state's fiscal risk under various potential future scenarios. In addition, because all our models operate on a probability curve basis, we will be able to provide modeling results at various confidence levels, along with the potential range of outcomes at the +/- one, two, and three standard deviation points.

#### *8) Other Feasibility Considerations.*

We will review all other factors that may impact on the feasibility of implementing a CalAccount program. As part of this, we will be informed by the guidelines used by the CDFPI when approving a new bank or trust company, including:

- Does the program have a reasonable promise of success?
- Are the program capital structure and revenue streams adequate?
- Do the individuals implementing the program have reasonable experience and ability to afford a reasonable promise of successful operation (i.e., they will be able to successfully execute the business plan)?
- Does an appropriate market analysis indicate that there is a need for this program (or are existing programs adequate).

#### *9) Risks and Costs.*

We will look at the various risks and costs of the CalAccount program and look for opportunities for the State to mitigate those risks.

#### *10) Effectiveness and Scalability.*

As part of our initial research, we will be defining the characteristics of other existing programs, including BankOn. While doing this, we will ensure that we understand the definition of "accessible" for each of the examined programs. We will attempt to independently assess the BankOn accessibility to California's unbanked population, though that assessment may be limited based on the potential lack of BankOn detailed data. As a minimum, we can review the impact of any differences in the BankOn definition of accessibility versus the contemplated definition of accessibility.

We will also review the financial institution characteristics that are likely to increase or decrease the attractiveness of the CalAccount program to those institutions. We will use our interview process to assess factors such as access to funds without a computer and availability of accounts despite poor deposit account history.

We will also look at the various approaches to chartering this initiative, the advantages and disadvantages of each, and the impact of the chartering approach on organizations such as CDFPI. We will review governance of the organization, including governance around making decisions about terminating the program if necessary.

Finally, we will look at potential state payment transactions that could be made through the program, and talk to those state agencies about the feasibility, advantages, and disadvantages that would be offered by CalAccount.

### *11) Impact of CalAccount on Existing Institutions.*

Using a combination of input from our subcontractor, RLR, and interviews with existing California depository institutions, we will look at:

- Whether deposits can be used by the participating depository financial institutions in the same manner as the institution's current customer's deposits (e.g., for loans to others, etc.). (See Fin. Code, § 100104, subd. (a)(1)(N), (a)(3)(A), and (c)(5).)
- What, if any, fraud and abuse controls, or other requirements, would be expected from the participating depository financial institutions.
- Who would bear the financial burden for mitigating fraud and abuse.
- Whether the participating depository financial institutions would be required to maintain a certain number of ATMs or branches, or if these would need to be in specific geographic areas.
- Ways to minimize the risk of overdrafts on an account if the institution cannot impose overdraft fees.

Our estimate of the number of customers who currently have an account with a financial institution that may choose to instead open a CalAccount per year over a six-year period will be based on input from the financial institutions that we interview, and the estimates will be very broad because we will not have adequate data to accurately model this. To answer this precisely, we would need:

1. To define the exact characteristics of the CalAccount.
2. To determine what would be involved in switching to a CalAccount (this may vary from bank to bank).

3. To conduct a statewide survey of current banking customers (as opposed to currently unbanked customers) to determine the likelihood of switching under two circumstances.
  - a. Likelihood of switching if their bank offered CalAccount accounts.
  - b. Likelihood of switching from one bank to another to obtain a CalAccount.
4. Define the number of banks and credit unions likely to offer CalAccounts.

We'll be able to use our models as inputs for this, but multiplying probabilities times probabilities times probabilities times probabilities results in a very high standard deviation in the results.

### *12) CalAccount Network Administrators.*

We will identify possible financial services network administrators, including identifying those that are in-state versus out-of-state. For out-of-state entities, we will identify the the anticipated impact on California consumers, businesses, and financial institutions and how an out-of-state financial services network administrator could or should be regulated.

## **Support for Hearings and Meetings**

We will support up to two public hearings during the development of the report, an optional additional public hearing to present the final report, and as many legislative hearings as necessary. We will also support one or more public comment cycles (one recommended) as part of our research.



# Acronyms

AML: Anti-Money Laundering.	ESJ: Environmental and Social Justice.
ANG: Aite Novarica Group.	ESL: English as a Second Language.
ATM: Automated Teller Machine.	FDIC: Federal Deposit Insurance Corporation.
BA-BOK: Business Analysis Body of Knowledge.	GAAP: Generally Accepted Accounting Principles.
BSA: Bank Secrecy Act.	GAGAS: Generally Accepted Government Auditing Standards for performance audits.
CBO: Community Based Organizations.	GATE: Gifted and Talented Education.
CCEA: Certified Cost Estimation Analyst.	GLBA: Gramm-Leach-Bliley Act.
CDFPI: California Department of Financial Protection and Innovation.	ISO: International Standards Organization.
CDPSE: Certified Data Privacy Solutions Engineer.	IT: Information Technology.
CFE: Certified Fraud Examiner.	M&A: Merger and Acquisition.
CFO: Chief Financial Officers.	MBA: Master's in Business Administration.
CGEIT: Certified in the Governance of Enterprise IT.	NDIP: Non-Deposit Investment Products.
CHANGES: Community Help and Awareness with Natural Gas and Electricity Services.	NGO: Non-Governmental Organization.
CIO: Chief Information Officers.	OFAC: Office of Foreign Assets Control.
CISA: Certified Information System Auditor.	OMB: Office of Management and Budget (OMB).
CMMI: Capability Maturity Model Integrated.	OSDS: Office of Small Business and Disabled Veteran Business Enterprise Services.
CPA: Certified Public Accountant.	PM-BOK: Project Management Body of Knowledge.
CPUC: California Public Utilities Commission.	PMP: Project Management Professional.
CRISC: Certified in Risk and Information System Control.	RDD: Random Digit Dial.
DED: Deliverable Expectation Description.	RFP: Request for Proposal.
DVBE: Disabled Veteran owned Business Enterprise.	RLR: RLR Management Consulting.
EDD: Employment Development Department.	RMP: Risk Management Professional.
EFT: Electronic Funds Transfer.	SAM: State Administrative Manual.
	STO: State Treasurer's Office.