Summary

Founder / CTO / System Architect for Several Start-ups

- · Knowledge and experiences span all 9 layers of the "Network Stack", from hardware, firmware, networking, software, systems, devops, marketing, management, starting and running companies
- · Current focus on Big Data, Hadoop Stack, Open Source, Web Services, Ruby on Rails, Embedded Devices, Multimedia, Internet Infrastructure
- · Founded multiple startups in the SaaS, Internet infrastructure and equipment industries
 Integrates working knowledge of business issues, market needs and technological trends to create business opportunities, innovative products and services
- · Created and Managed several engineering organizations. Lead several design and development projects with focuses on Network Infrastructure, Object Oriented Design, sophisticated graphical user interfaces, networking, video / signal processing and significant system / hardware integration issues
- · Well known as an innovative expert in Devops, Internet infrastructure, Wireless and Open Source industries
- · Organizer / Instructor / Speaker at many International Internet / Computer conferences, seminars, tutorials and workshops
- · Author of articles for various industry magazines and journals
- · Extensive customer relations experience, product evangelism, market feedback and customer support
- Deep experience with Devops, AWS/Cloud, Chef, Hadoop/HBase, Linux, Ruby, Rails, Python, Perl
- · Experience with Clojure/Lisp, Java, C/C++, Smalltalk, Cisco IOS, Oracle / Postgres / MYSQL and many other related areas.

Specialties

Technological and Business due diligence, architecture, design review and consulting for hardware, software and services in the Internet and Wireless industries. DevOps, Scalable Web Services, Ruby on Rails, Broadband Wireless, Internet Infrastructure, Open Spectrum, Open Source

Broad experience in software and system design and integration.

Can span and find synergy across all 9 layers of the OSI stack (including the economic and political layers).

Experience

Advisor at

November 2004 - Present (10 years)

offers IT infrastructure management and optimization services including end-to-end NOC based management framework that enables complete remote visibility and management of a multi site infrastructure from core network components to desktops. They have developed a set of hardware, software and remote services that enable afordable and secure access & compliance for IT infrastructure monitoring and management.

These services include:

- * IT Infrastructure Remote Monitoring Management and Alerting
- * Remote DBA
- * Desktops & Laptops Management
- * IT Infrastructure Optimization
- * Application Maintenance, Application Tone, IT Production Support and Sustenance Engineering
- * Outsourcing of Technical Support Partnering Services for Mission-Critical IT Products

http:

Contributions include product architecture, experience with ISP infrastructure, Devops, and remote management as well as supporting their sales and funding efforts.

Owner / Principal at

October 1996 - Present (18 years 1 month)

Consulting firm to assist start-ups, venture capital firms and enterprises, to understand, develop and utilize Internet technology / infrastructure and Open Source.

Previous onsulting and advisory positions have include Intel, Visa, Ascend, Cisco, IDG World Expo, NEA, Athena Tech Ventures, iAsiaWorks, Ipsilon, Firstpoint Communications, Stardust Forums, iPass, Conxion, Sentient, OKI, Kiwi Networks, and AsiaQuest, PepLink (Muni-wireless CPE), Wavion (smart antennas), Camp Ventures, Covad, LinuxWorld, CTO Forum, Interop, Class Data Systems, Alteon, AboveNet, Privada (Confidential Net Access), Xspeed (DSL CPE), Cosine Communications, Qala Communications (Singapore DSL CLEC), Reactive Networks (Anti-DDOS equipment), Vpacket (VoIP IAD), COM21, BizFinity (Web based accounting service), Proxinet (Enable Cell Phones and PDA to better access web content), Jetstream (VoIP DSL), Rainmaker Tech (Wavelet PHY layer), Pulsent (Video delivery), Sandpiper / Digital Island and others.

Principal	at			
April 2013	-	September 2014	(1	year 6 months)

Consulting / Training Service in the realms of DevOps, Big Data / Cloud / Internet Infrastructure.

Focus includes:

- * DevOps Process Development and Integration
- * Continuous Delivery Pipelines
- * Cloud / On Premise Migrations
- * Monitoring / Metrics / Alerting
- * Hadoop Ecosystem
- * Configuration Management and Orchestration

Configuration Management and O	Tenestration
Principal Instructor / CTO / Co-Fou February 2014 - August 2014 (7 mo	
Co-founder and CTO of Hadoop.	to train sysadmins, ops and devs in the realms of Big Data and
CTO / Co-Founder at December 2007 - September 2013 (5 years 10 months)
SaaS for online merchants that incre	eases conversion of Website shoppers to buyers and dramatically
shopper on the merchant's site to cle	delivers personalized Dynamic Promotions for each product to each ose the sale and thus increase online revenues. The Promotion is behavior and context, along with real-time analytics and business rules set
by the merchants.	

Built and led the initial engineering team. Architected the horizontaly scalable stack of Hadoop/HBase, RabbitMQ, Clojure Runtime, Redis, and other components on the AWS Cloud. Oversees the infrastructure and automated deployment, monitoring and management using Opscode Chef, Ironfan, Graphite, and Sensu. Implemented the for PHP, Mivascript, Magento and several custom deployments. 6 recommendations available upon request

Technical Advisory Board Member at February 2005 - December 2011 (6 years 11 months)

invests in early and mid-stage Internet, Networking, Biotech startups.

As a member of their Technical Advisory Board I introduce opportunities, offer due diligence services and help to refine key investment themes, assess technical, product and market risks in new deals, and provide post-investment input.

Advisor at April 2005 - December 2010 (5 years 9 months)

Support-Intelligence "data mines" Internet Infrastructure and huge volumes of SPAM from various sources to discover compromised hosts and other normally anonymous threats on the Internet. The company was founded on the premise that malicious network activity can best be controlled by applying modern machine learning algorithms to large volumes of aggregated traffic data. I am helping them with funding, market focus, partnering and technology. Advisor & Developer at December 2006 - 2010 (4 years) is the leading provider of open cloud infrastructure solutions for cloud-ready applications. The is the first infrastructure-as-a-service solution designed to deliver the cost, performance and scalability benefits of Amazon Web Services (AWS) for public and private clouds. delivers a Based on the industry-supported OpenStack open source project, the has more production OpenStack production-grade solution for open cloud infrastructure. software experience than any other company, including successful deployments with customers such as team are industry veterans who have designed and The deployed large-scale cloud infrastructure for industry pioneers such as is headquartered in San Francisco. Founded in 2006, My work included helping with fund raising, architecture and early development with Ruby, AWS and Chef Advisor at September 2005 - 2010 (5 years) which is a Startup in the WiFi / Social Networking space. Member of the Board of Advisors for I help them with market positioning and technical issues. Also have done some technical prototyping (using RubyCocoa) and testing with their Macintosh client. Advisor at August 2005 - 2009 (4 years) enables content owners to securely stream full-screen, DVD-quality video across the Internet to millions of broadband connected viewers worldwide... is a complete video delivery solution that combines centralized command-and-control The with automated video encoding, sophisticated video syndication capabilities, extensive analysis and reporting capabilities and the industry's toughest security architecture. The result is an end-to-end video publishing system that provides precise control over every aspect of the preparation, management, delivery and

presentation of premium movies and videos."

As an advisor, I help with funding introductions, technology and partners.

Consultant at

March 2007 - April 2008 (1 year 2 months)

Startup in early beta mode developing innovative teleconferencing service.

My work includes software design and development using both standalone Ruby and Ruby on Rails for email, calendar processing with RESTful interfaces. Main work now is on a real-time Ruby on Rails / Ext.js AJAX / Javascript dashboard for the conference calls.

Also includes consulting on infrastructure design and deployment using Linux, virtual machines, VoIP, networking, Sun servers among other things.

Advisor at

November 2005 - November 2007 (2 years 1 month)

had developed "a patent-pending Natural Language Processing technology to generate quantitative scores for domain specific attributes from plain English text, automatic summary from most relevant user sentiments and enables a highly customizable search based on personal preferences."

For their initial domain that exploits their technology, they have chosen Restaurant Reviews. They have a revenue producing website

As an advisor I help with deployment technology issues, funding and partners.

Consultant at

2005 - February 2007 (2 years)

Initially researched the market for Muni-wireless size and requirements. Defined, architected and project managed the creation of the product (using the core products that allowed already made) that allowed to move from a pure WISP vendor to a leading Muni-Wireless equipment vendor.

Worked with internal engineering / manufacturing and China based outsource software development / component manufacturing, and early customers to produce, test and release the product. Based on the results of the product acceptance, shifted its business plan to be primarily muni-wireless oriented.

Developed a muni-wireless coverage and performance test tool prototype using Linux, Ruby, QtRuby and Google Earth.

Consultant at

2007 - 2007 (less than a year)

Introduced the use of Ruby and Rails for their online service

Program Chair at March 1998 - March 2006 (8 years 1 month) Program Chair facilitating the organization of the Technical Program for the throughout the Asia Pacific Region. In the early days this included writing the conference registration system. Later managing the outsourcing and design of the conference registration and speaker management. The main work was finding appropriate speakers and tutorial instructors. Assembling the program and making sure everyone showed up. Vice President of Network Engineering at May 2003 - August 2004 (1 year 4 months) Last Mile wireless service provider that leverages "mesh" 802.11 technology. Developed the network architecture (metro, regional and Internet) which integrated the wireless mesh network into the and interconnects with ISP partners and Internet upstream / peers. Defined, selected equipment, deployed and managed the pilot network. Defined, led the deployment and managed the tech trial network infrastructure which formed the basis of the production network architecture. Evaluated and help select wireless mesh, end-user wireless CPE and backbone network products and services. Developed and deployed acceptance and test procedures for wireless mesh equipment. Domain Expert for the Software Engineering Group to define requirements and review implementations of provisioning, network management and other OSS systems. Worked with Operations Group to define and deploy Network Operations Center and Network Management

System.

Visiting Research I	Fellow at		
November 2002 - A	April 2003 (6 months)		
Led a research pro	oject on Open Spectrum wireless	public networking. Included reports to	clients
such as	and	. Research areas included the	
technological and	policy issues of Ultra-wideband,	Wideband Spread Spectrum, Cognitive Softw	are Defined
Radios.			

Responsibilities included researching and reporting on changes in FCC spectrum policy, explaining the technology issues and communicating this to a variety of audiences on paper, in person and in public

symposiums.

Worked with clients and others to develop strategies to promote Open Spectrum technologies and policies.

CEO / Co-Founder at

August 1999 - July 2002 (3 years)

Early stage start-up for carrier class broadband wireless networking equipment and gateways for next generation broadband wireless carriers/ISPs. Included the matching residential/SOHO gateway devices all leveraging 802.11 technology.

The focus was on innovative software making 802.11 suitable for mesh networking and ease of deployment for service providers. The gateway and infrastructure devices were built leveraging Open Standards and Open Software to allow for high functionality and low cost.

We were able to develop working prototypes of the mesh nodes, but had to shutdown due to lack of funding to move into production (2001 - 2002 was not a good time for startups).

Personal Contributions:

- Strategic business, product and technical planning and development
- •Fund raising and business development (presented to scores of VCs)
- Team building and technical leadership
- Open source software development for embedded systems
- 2 recommendations available upon request

Advisor at

1998 - 2000 (2 years)

Member of the Board of Advisors

Member of Board of Advisors at

1997 - 2000 (3 years)

Used my experience building InterNex to help expand into different services

Advisor at

1996 - 1999 (3 years)

Helped them understand the Internet Service Provider's requirements for delivering scalable Hosting services.

Consultant at

1996 - 1999 (3 years)

Was the first ISP to use products for delivering High Speed Internet via ISDN to businesses and consumers.

Later toured the world giving presentations and lectures on deploying state of the art High Speed Internet

Services.

Founder, Board Member, CEO, CTO VP of Engineering at August 1993 - March 1998 (4 years 8 months)
Founded company to offer innovative business-to-business information services on the Internet. Originally One-Stop-Shopping for Internet access via ISDN (first to offer commercial Internet access via ISDN in the US).
Supplied seed funding. Created business plan. Assembled and led start-up management team, fund raising and mergers. Company was sold to early 1998. Original President / CEO and then Vi of Engineering / CTO after merger, Member of the Board througout.
Built and managed the Engineering, Tech Support, Network Operations teams. Set strategic and technical course for the company. Researched and initiated partnerships and potential merger candidates to enlarge business from regional to international.
Designed next generation distributed ServerFarms suitable for broadcasting audio & video as well as super high volume "fat" content, including the first International collocation hosting service that included clients such as and and I recommendation available upon request
Consulting & Biz Dev at November 1992 - August 1993 (10 months)
• Investigated technological issues and market outlook for starting an Internet business. Created business plans and financial models. Worked with to test and demonstrate Internet access via ISDN. Consulted with various hardware manufactures to help them insure that their ISDN hardware was compatible with Internet access.
• Produced video report on the capabilities of integrated Macintosh/Adobe Premier Video editing system for
Architect & Software Manager at June 1990 - December 1992 (2 years 7 months)
Developed the Software Architecture for a next generation professional video production environment that

Developed the Software Architecture for a next generation professional video production environment that integrated video editing, special effects and production materials management.

- •Instituted and managed the software development effort (6+ team members) of a prototype and initial productization of the integrated video production environment.
- •Led the User Interface Design effort for the productization phase.
- •Evaluated and selected workstation platforms, OO development environments, OO GUI tools, real-time OS

and embedded systems for use in developing the video production environment.
•Defined requirements and oversaw the administration of the internal Unix / Macintosh / PC network at
•Established standards for object oriented system development at an and worked with world wide engineering to establish new software development practices.
Software Engineering Manager at August 1989 - June 1990 (11 months)
Managed the software team. The product integrates real-time Digital Compositing of 4 layers using alpha or luma keying, real-time Digital Video Effects, 32 bit color paint, machine control of up to 6 VTRs and video typography in one video workstation with 4:4:4:4 digital video processing throughout.
•Facilitated the transition from engineering development into shipping the product.
•Brought a higher level of stability and predictability to the software process including the introduction of project planning, scheduling and software release procedures.
•Met extensively with existing and potential customers in the video post production industry (owners, artists and editors) to gain insight into customer needs and to clarify short and long term product direction.
Director of Software Engineering at February 1981 - July 1989 (8 years 6 months)
Was the intial Software person at and built the Software Engineering group there. Defined the architecture of several generations of software and system level products. Built the software group from myself to a team of 20 people.
Pioneered many techniques of integrating real-time image processing into early Sun Workstations and embedded systems.
Computer Graphics Consultant at April 1980 - November 1981 (1 year 8 months)
Designed and implemented (software in C under RT-11 and hardware integration of DEC LSI-11/23 and IKONAS Framebuffer) broadcast quality interactive electronic paint system for the rock music producer video production environment. Used for early Music Video Productions.
Engineering Assistant at September 1978 - November 1979 (1 year 3 months)

Supported the design and implementation of an LSI-11 based image processing workstation. Trouble

shooting of Q-Bus and image processing hardware.

Page9

Fund Raiser / Concert Promoter at April 1978 - August 1978 (5 months)
Full time fund raising for environmental group. Conceived, coordinated and organized very large (20,000+people) concert / demonstration events with performers including and and the second strations were the inspiration for the even larger political concerts of the 80's.
Engineering Assistant at November 1976 - April 1978 (1 year 6 months)
Designed and built mechanical and electrical prototypes as part of an Electron Beam Accessed Memory System (EBAM). A system to act as a "swap memory" for mainframe computers.
Projects
Incorporate Opscode Chef into product March 2013 to Present
Members:
Helped incorporate Opscode Chef into their product
Tool to deploy Continuuity Reactor to Customer on-prem facilities May 2013 to Present
May 2013 to Flobell
Members:

Patents

Multi-dimensional user interface

United States Patent

Issued

Inventors:

The present invention provides apparatus and methods for a multi-dimensional user interface for use in audio visual production.

A user viewing the interface on the display may utilize one of the input devices, such as by way of example, the keyboard, to select, incorporate or otherwise integrate the various system resources to develop a unified multi-media production.

The user interface of the present invention includes a control frame which in practice substantially fills all of the display screen of the display and is consistent for all user applications. The control frame is comprised of control panels which surround a variety of subwindows and acts as a consistent control area for all users of the interface.

Once defined, elements may be selectively placed on an event horizon bar in the control frame. The placement of an element on the event horizon results in the display of timing data for the element, relative to other elements on the event horizon.

Publications

ACM Queue Magazine May 1, 2003

Authors:

Just as open standards and open software rocked the networking and computing industry, open spectrum is poised to be a disruptive force in the use of radio spectrum for communications. At the same time, open spectrum will be a major element that helps continue the Internet's march to integrate and facilitate all electronic communications with open standards and commodity hardware.

Open spectrum is a collection of new radio technologies. The core concept is that technology and standards can dynamically manage spectrum access (and, thus, spectrum sharing), in place of the current static band allocations through bureaucratic "command and control."

Wi-Fi Net News November 23, 2004

Authors:

Back in 2004 I wrote: WiMax and 802.16 will be eclipsed by near-term 802.11 development. And then explained why: 802.11 is recapitulating the evolution of Ethernet into the Wireless realms

Linux Magazine	July 12, 1999
Authors	

It is my contention that just as Quantum Mechanics demands radical changes in the mental models of physicists and mathematicians, technology based on Quantum Mechanics leads to radical shifts in the thoughts, beliefs and actions of individuals and societies that embrace such technology.

This lead us back to Open Standards, Linux and the Open Source movement which I contend is a harbinger of a whole new way of human organization and behavior that expects and creates a world of abundance.

Honors and Awards

Speaker

May 2012

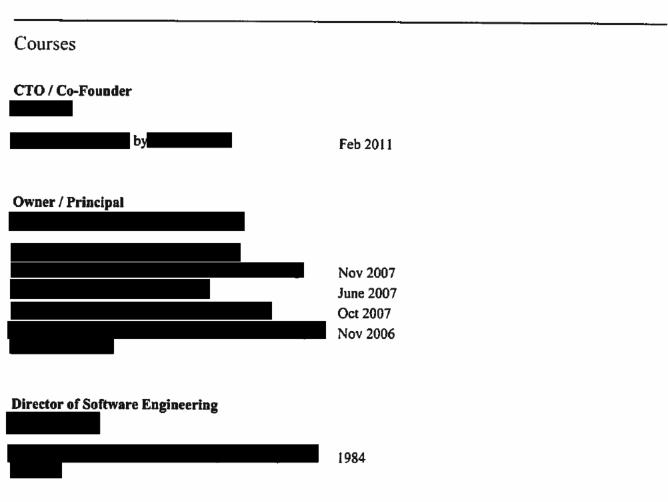
Presentation on how you can represent your complete cluster with one config file and have it deployed to Cloud or Bare Metal. Infochmimps' Ironfan builds on Opscode Chef to allow you to specify and orchestrate all flavors of your cluster's deployment, monitoring and growth.

Not just the core HBase/HDFS/MapReduce/Hive/Flume, etc. but all the elements including web / app servers, mysql, redis, rabbitmq and whatever other servers needed to implement your service.

These same tools can manage variations for development, staging, R&D as well as the target "rendering" to various Clouds, Bare Metal or even Vagrant VMs.

Speaker at		
November 2002		
Speaker and Panelist at	on the Socio-Economic Impacts of Mobile and Wireless	
Technologies	•	
Speaker April 2011		
Presentation on using Ruby and Opsco	de Chef for Deploying Applications at the inaugural 2011	
Plenary Speaker February 2007		
Presented Plenary Talk on 2007 conference.	at the	
Panalist at the conference October 2002		
Panelist on WiFi and Open Spectrum		
Speaker at		

w wireless technologies to policy/regulation issues. Co-hosted by
on Scaling Internet Services
ing. It promises to continue to grow and assimilate legacy WANs and the breeding grounds for entirely new services, marketplaces and industries. developments in high bandwidth network infrastructure, high volume vices that are being deployed in the US.



Skills & Expertise

Technical Leadership HBase Big Data Opscode Chef Ruby **DevOps**

Visionary

Wireless

Internet Services

Internet Entrepreneur

Infrastructure

System Architecture

Software Development

IT Ops

Open Source

Scalability

Telecommunications

C

Mobile Devices

Agile Methodologies

SaaS

Cloud Computing

Distributed Systems

Integration

Hadoop

Software Engineering

Linux

Unix

Ruby on Rails

REST

Apache

Amazon Web Services (AWS)

MySQL

Start-ups

Perl

Python

Web Services

Java

PHP

Thought Leadership

Architecture

Software Design

VoIP

Web Applications

Networking

Entrepreneurship

Cisco Technologies

Enterprise Software

Strategy

Strategic Partnerships

Education

Activities and Societies:

Honors and Awards

* Help create, as well as being a Board of Advisor and Moderator / writer for

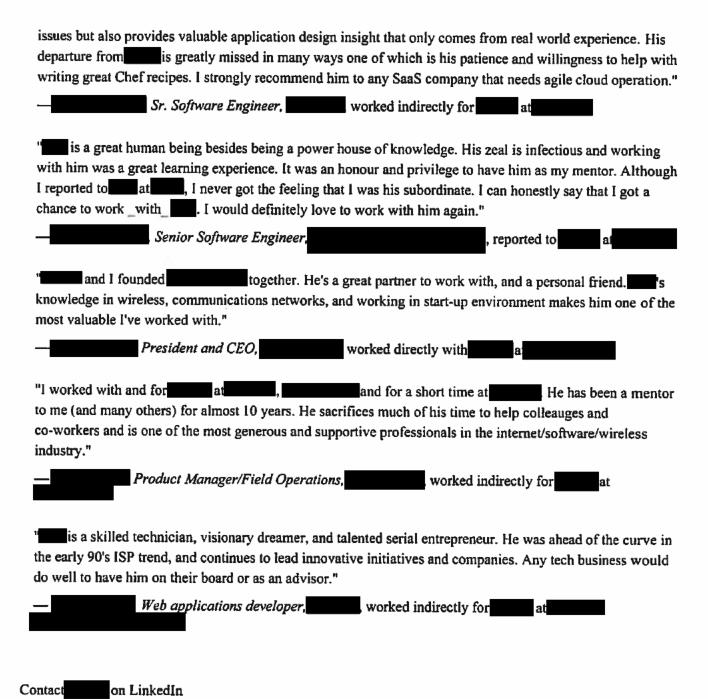
Interests

SaaS, Cloud Based Deployment, Swarm Computing, Collective / Machine Intelligence, Clojure, Ruby, Open Source, Open Spectrum, "mesh" wireless, Internet Infrastructure, Robotics, Internet of Things, Nanotechnology, Genetic Engineering, renewable energy, Space Exploration, sustainable technology and systems

Linked in

9 people have recommended
has one of the best minds and attitudes in the valley! His attention to detail and work ethic are extraordinary. His documentation of the various projects and customer engagements are exceptional. His patience and mentoring skills are appreciated greatly. I was privileged to work with him at and hope our paths will cross again in the future."
Director of Customer Support and Integration, and worked indirectly for at
is one of the most sincere and accomplished professionals I've had the privilege of working with. His vast knowledge and experience make him more than just one of "the smartest people in the room". His deep insight and genuine empathy distinguish him as an exemplary mentor - something to aspire to. is also a consummate technologist. His career accomplishments cover the entire gamut of Internet technologies. 's understanding of infrastructure, and issues of scale is virtually encyclopedic. And he's not just an "ivory tower architect" he's fully hands on and delivery focused. was instrumental in creating initial product architecture and cloud infrastructure, and helped scale these over time to meet the ever changing needs and challenges of the business environment. I learned a great deal from during the time I worked with him at an and I look forward to a future opportunity to work with him again."
"Rock start engineer and a pleasure to work with."
- Accountant/Office Manager, worked with at
is an outstanding technologist with an insatiable curiosity; when something piques his interest he jumps in with both feet, gaining both a deep and broad understanding of the subject. But is not just technically excellent, he also has a keen business sense and can foresee how to exploit a technology, as well as evaluate the risks involved. And to top it off, he is one of the nicest, most helpful, folks you will ever meet. I definitely look forward to one day working with again!"
- Code Wrangler, worked directly with
"Example is very knowledgeable cloud infrastructure architect and someone who knows the tools of his trade extremely well such as opscode Chef. His breadth of knowledge on server systems as well as software

application is astonishing. He is always ready to help the team not only on release and deployment related



PAS DE CHOCOLAT

7018 Hawaii Kai Dr. #208 Honolulu, HI 96825 714 642 5011



We were informed that the current available budget is approximately one quarter of the full project budget (Phase 1 and 2 combined) and were asked to amend the proposed work for these available funds, focusing on Phase 1 work only. The following is our response accounting for budget considerations.

Q. How does the proposal directly tie into the statement of work?

We have addressed each item from the statement of work separately as requested and have indicated the items that were previously planned that are now postponed until additional funds become available.

Phase 1

1. Understand the flow of offenders through the PSD system and the information needed to manage and understand that flow (i.e., inmate transportation, intake and admission, assessment/ risk assessment, probation, case management, corrections program services, changes in risk levels, community integration processes, parole, releases/discharges, etc.) and make recommendations for improvement.

Activities: Working with PSD and REPS we will develop personas/use cases from existing data to be utilized in further investigation of the PSD data infrastructure as a service system. An initial model for the data infrastructure and information flow will also be created based on existing organizational charts, job descriptions, and existing PSD knowledge. We will conduct a facilitated stakeholder meeting to review, revise, and explore the model. Oahu facilities visitations will provide additional high-level on-site observational data on the offender flow, operations, and data systems.

Deliverable: The synthesis of the stakeholder meeting findings will provide a high-level model of PSD's data infrastructure that can be further developed to identify critical information flows, flows of offenders through the system and process goals. This model will assist PSD in visualizing their organization and can help to identify critical components as well as support decision-making processes. Observational data will begin to add a concrete view of current operations to these models.

Postponed: Facilitated division level (or more narrowly scoped) focus group meetings, follow-up interviews and more in-depth site visitations will be postponed until more funds are available. Specific recommendations for process improvement will require these additional analyses.

2. Identify core functions and processes of OffenderTrak®.

Activities: We will conduct meetings with MIS personnel and, if necessary, with their OffenderTrak user group members to capture the core functions and processes of OffenderTrak in addition to goals, concerns, and business objectives.

Deliverable: The synthesis of these meetings will develop some of the content necessary for drafting a business requirements document for OffenderTrak/replacement product. This information (in whatever forms is appropriate to the communication - diagrams/documents/etc.) will provide a baseline understanding of the role OffenderTrak serves in the operations of PSD and will assist PSD in identifying what may be gained or lost with changes made to this component of their data infrastructure.

Pas de Chocolat Page 1 of 7

Postponed: Data-level research and understanding of the core functions and processes (follow-up interviews or queries with Motorola or other support personnel) will be performed later in Phase 1 or at the outset of data-modeling activities in Phase 2 as additional funding allows.

3. Convene multiple meetings with stakeholders, representing various perspectives in the offender management process. Collect general knowledge about current use and application of OffenderTrak® by meeting with key stakeholders including those staff that enter data and staff needing data for reports and collect general knowledge by ancillary data collection methods (i.e., surveys, phone calls, or site visits).

Activities: There will be a facilitated stakeholder meeting that includes division representatives (administrative and line personnel), meetings with MIS (user group individuals to be included as necessary), and Oahu facilities observations. These activities form the primary component of addressing items stated above (#1 and 2). With the existing funding, the initial focus will be on a single large stakeholder meeting from across PSD and a couple of smaller meetings with MIS and OffenderTrak users.

Deliverable: High-level recommendations on the use of OffenderTrak. The activities directly feed into the deliverables of items #1 and 2 as well.

Postponed: The division-level focus group meetings, detailed on-site observation and interview data gathering will be postponed until additional funds are available. Research into what areas are not being utilized in OffenderTrak (from Phase 2, item #8) will also be performed as part of these activities.

4. Review and understand interface standards in use by other criminal justice agencies, such as that used by the Judiciary, (the Justice Information Management Systems or JIMS), the Attorney General (the Criminal Justice Information System or CJIS), the Hawaii Paroling Authority, etc., to the extent possible, to understand the possibilities of electronic data exchange and database population.

Postponed: Understanding the possibilities for electronic data exchange will be explored later in Phase 1 (postponed until funding is available) from a PSD perspective within the more detailed division level focus group meetings and on-site observations and interviews. Phase 2 would direct research towards understanding the opportunities from outside of PSD as well.

5. Review out of the box software solutions and public-domain correctional-systems used in other jurisdictions. Determine pros and cons of each solution, time and expense, and support costs to maintain systems.

Activities: A survey will be created and, with the assistance of PSD, distributed to other jurisdictions to identify other products previously/currently under consideration or in use. Non-corrections-specific solutions will also be identified based on previous experience, current knowledge, and online research of product solutions.

Deliverable: PSD will be provided a list identifying available product solutions with some basic comparisons of features and possible sources of cost variance.

Postponed: If necessary, and as more funds are available, other means of research (online, contacting professionals that work with the corrections industry) will be performed to provide additional data. A more detailed analysis of these various solutions with respect to implementation for PSD would be postponed as it is informed by the more detailed information gathered on-site and in follow-up focus group meetings.

6. Submit a final Phase 1 report and brief the REPS Principal Investigator and PSD administrators.

Activities: The deliverables mentioned above will be provided with the completion of the respective work under which they are listed and reviewed together at the completion of all work to provide a final synthesis. A meeting with PSD administrators and REPS PI are planned for the end of phase 1 as a briefing of the work completed.

Deliverable: A summary report of the work to date and final recommendations and findings for administrators.

Q. Revise the budget and provide additional detail on the hourly rates.

The following budget and budget narrative have been revised to provide the additional information requested and to reflect the adjustments to the proposed work focusing on what can be completed with the available funds.

Hourly Rates

The following are the hourly rates and estimated number of hours at each rate for the revised work for Phase 1:

LEVEL RATE EST. HOURS
Senior Executive \$300 7 hours
SME/Advisor with years of experience at senior executive level

Managers \$200 983 hours

Managers with direct reports and facilitator at market rate

Senior Consultants \$150 67 hours

Non-managerial, senior level expertise

Consultants \$100 208 hours

Non-managerial, mid-level expertise

Analyst \$60 20 hours

Non-managerial, entry-level expertise

Pas de Chocolat Page 3 of 7

Revised Phase 1 Direct Cost by Person						
Employer	Title	Role	Person	Rate	Hours	Cost
Pas de Chocolat	Project Manager	Manager		\$200	180	\$36000
Pas de Chocolat	Design Manager	Manager		\$200	252	\$50400
Pas de Chocolat	Engineering Manager	Manager		\$200	326	\$65200
subcontractor Pas de Chocolat	Research Manager	Manager		\$200	160	\$32000
subcontractor Pas de Chocolat	Facilitator	Manager		\$200	65	\$13000
subcontractor Pas de Chocolat	Engineer	Senior Consultants		\$150	67	\$10050
subcontractor Pas de Chocolat	Designer	Consultant		\$100	193	\$19300
subcontractor Pas de Chocolat	Researcher	Consultant		\$100	98	\$9800
subcontractor Pas de Chocolat	Research Assistant	Analyst		\$60	20	\$1200
subcontractor Pas de Chocolat	Writer and Editor	Consultant		\$100	15	\$1500
subcontractor Pas de Chocolat	SME/Advisor	Senior Executive		\$300	7	\$2100
				Totals	1383	\$240550

Phase 1 Budget Summary

The budget has been revised and an additional breakdown by deliverable is included on the following pages.

Personnel and subcontract totals are based on hourly rates applied to work hour estimates (see following pages for a table of estimates). GET has not been applied and there are no fringe benefits. Majority of work revolves around the gathering, synthesis, and design of information developed in meetings with various stakeholders. Additional work includes on-site observation, secondary research activities and the creation of deliverable materials. The activities and milestones table on the following page highlights the revised phase 1 deliverables.

Office supplies includes consumables (pens, markers, paper, post-its, notebooks, etc.) in the use of research, general work activities, and meetings (for use by participants and project team). Office supplies will be charged at cost.

Printing includes printing/copying of documents/diagrams/posters to be utilized in the execution of work and the creation of materials for meetings and deliverables. Printing will be charged at cost for the volume of prints/copies, related supplies, and printing/copying services provided.

Software included here is for the subscription to project specific applications including communications software, research tools, and design tools such as to provide collaborative workflow. Software will be charged at cost.

Food supplies are the food and related supplies to be furnished at facilitated meetings that are scheduled for 4 or more hours. We have budgeted for a total of 2 of such meetings (estimating up to 35 attendees) in the revised Phase 1. Food supplies will be charged at cost.

Travel was previously included for subcontractors and has since been removed. No travel is expected for personnel in this revised Phase 1.

Pas de Chocolat Page 5 of 7

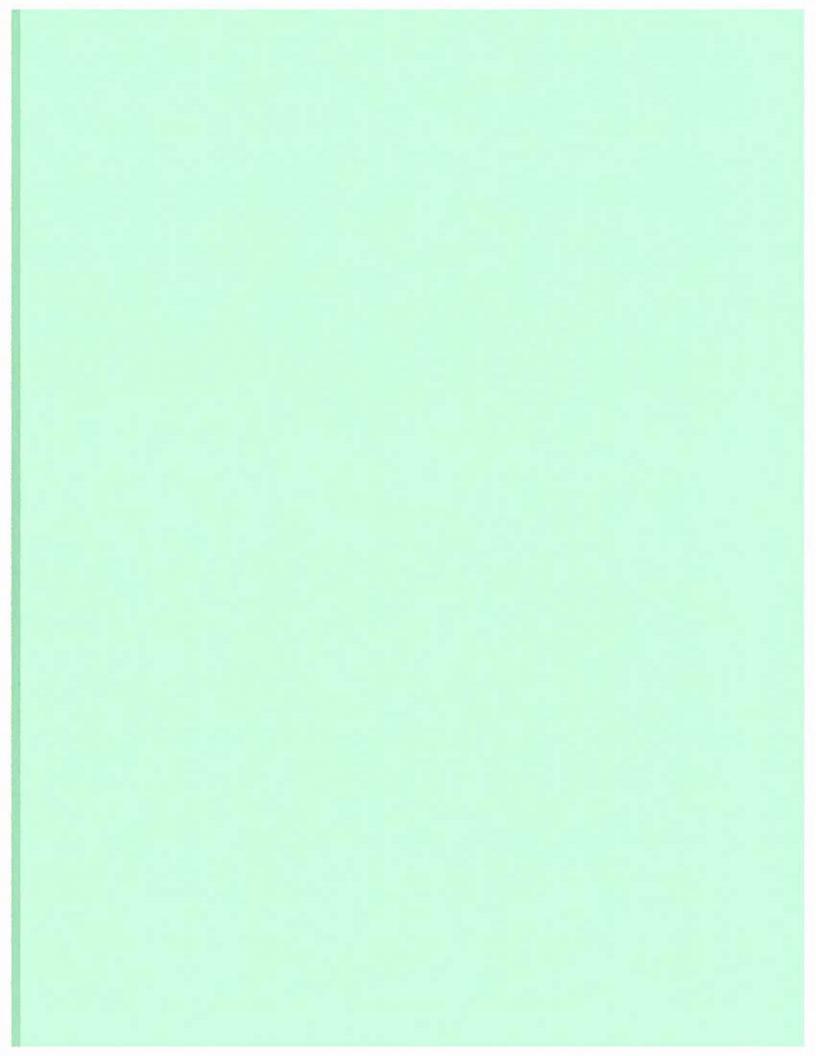
		PHASE 1			Her.
Activities and Milesiones	November	December	January	February	March
Kick-off team meeting w/ representatives from PSD and REPS to organize collaborative roles in project	x				
Meetings with PSD administration to review project expectations		×			
Gather existing information on PSD organizational structure, goals, systems, processes and any recent research on data infrastructure to date		*			1
Draft of PSD data infrastructure based on provided information		X			
Meet with MIS to get preliminary understanding on the scope of use for Offendertrak (high-level), purpose, modules/submodules, information captured for respective processes, stakeholders/users		x			
Create and distribute survey to other jurisdictions with assistance of PSD personnel		x			
Synthesis of MIS meeting output (diagrams/documents)		x			
Investigate current product offerings in the corrections management software category and other non-corrections but similar products based on functional requirements document		x			
List of identified available product options		x			
Develop offender personas with qualified PSD personnel (with knowledge of offender population) to help explore the offender process and information flow (to be used in stakeholder meeting and later in project)	ı		*	Section and a second	allificial development de la constante des el c
Stakeholder meeting to identify assumptions/expectations/ goals for PSD's data infrastructure, explore the offender journey and related information flows using personas			x		000000
MIS followup meeting to review and validate output of previous meeting (including user group members if necessary)			X		
Starting draft of business requirements document for Offender/Trak/replacement product			I.		
Conduct on site observations to capture high-level information on offender and information flows, including high-level identification of data systems (half-day site visitations of PSD's Oahu facilities)				, x	
High-level model of PSD's data infrastructure				x	
Review survey responses from other jurisdictions				x	
Review product options and incorporate information gathered from other jurisdictions				x	
Recommendations on use of OffenderTrak					x
High-level comparative summary of product options					х
Briefing of PSD administration and project management (REPS and PSD) on project outcomes; delivery of final report					*

Pas de Chocolat Page 6 of 7

Deliverable	Budget Category	Cost		
Starting draft of business requirements document for Offendertrak/replacement product (includes administrative meetings and initial MIS meeting)		\$3530		
B 28 8 8 8 8 8 8 8 8 8	Direct Costs	\$34760		
	Office Supplies	\$200		
	Other-Printing	\$100		
High-level model of PSD's data infrastructure (includes PSD/ REPS team meetings, development of personas, full-day stakeholder meeting, and site observations)	Other-Software	\$240 \$124375		
	Direct Costs	\$120330		
	Office Supplies	\$500		
	Other-Printing	\$600		
	Other-Software	\$2420		
Recommendations on use of Offendertrak (includes synthesis of research and followup half-day MIS meeting)	Other-Food Supplies	\$5525 \$11610		
	Direct Costs	\$10860		
	Office Supplies	\$300		
	Other-Printing	SIO		
Eligh-level comparative summary of product options (includes survey of other jurisdictions and competitive product research)	Other-Food Supplies	\$350 \$37460		
	Direct Costs	\$37200		
	Other-Software	\$260		
Briefing of PSD administration and project management (REPS and PSD) on project outcomes; delivery of final report		\$37600		
	Direct Costs	\$37400		
	Office Supplies	\$100		
	Other-Printing	\$100		

Per the RFP, Pas de Chocolat would invoice REPS monthly with a description of work completed. Payment would be based on percentage of work completed towards the final deliverables listed above.

Pas de Chocolat Page 7 of 7



RFP RCUH-2014-01 PHASE 2(a)

SCOPE OF WORK, BUDGET AND TIMELINE

Public Safety Department Data Infrastructure Improvement Project
TO REVIEW CURRENT CORRECTIONS MANAGEMENT SYSTEMS AND NEEDS OF
END USERS AND MAKE RECOMMENDATIONS ON A NEW SYSTEM THAT WILL
ENCOMPASS ALL OFFENDER MANAGEMENT, DATA AND REPORTING NEEDS OF THE
STATE OF HAWAII DEPARTMENT OF PUBLIC SAFETY

Submitted to Research and Evaluation in Public Safety (REPS), RFP RCUH-2014-01

Prepared for: Alexander Michael Wylie, Principal Investigator Prepared by: Cara Oba, President, PAS DE CHOCOLAT, LLC

October 12, 2015

Scope of Work

Based on budgeting constraints agreed upon in discussions with REPS and PSD, the original, three-phase RFP is expected to be completed in four phases. Some of the work proposed as part of Phase 1 in the RFP was postponed to Phase 2 and Phase 2 has been split into two portions—2a and 2b.

Below is the statement of work from the original RFP for phases 1 and 2; completed items are denoted as such; those remaining that are planned for Phase 2a are listed with their corresponding activities and deliverables. Those expected for future phases are mentioned only if changes are expected.

Phase 1

Understand the flow of offenders through the PSD system and the information needed to
manage and understand that flow (i.e., inmate transportation, intake and admission,
assessment/risk assessment, probation, case management, corrections program services,
changes in risk levels, community integration processes, parole, releases/discharges, etc.)
[COMPLETED PHASE 1] and make recommendations for improvement. [PHASE 2a]

Activities: Pending access to data sources (tentatively expecting to include O endertrak®, ISC, ITA, SMS and HPA), data models will be created for the databases. Data will be collected from these data sources into a new interim reporting database. With assistance from PSD stakeholders, data will be reviewed for quality and completeness and to assess existing gaps that may require process interventions or other attention. Data quality findings will be reported as they are identified.

Deliverables: Data models for primary custody data databases. A summary and synthesis of the data review process. Additional user data requirements will be added to the Business Requirements Document.

- 2. Identify core functions and processes of OffenderTrak®. [COMPLETED PHASE 1]
- 3. Convene multiple meetings with stakeholders, representing various perspectives in the offender management process. Collect general knowledge about current use and application of OffenderTrak® by meeting with key stakeholders including those staff that enter data and staff needing data for reports and collect general knowledge by ancillary data collection methods (i.e., surveys, phone calls, or site visits). [COMPLETED PHASE 1]
- 4. Review and understand interface standards in use by other criminal justice agencies, such as that used by the Judiciary, (the Justice Information Management Systems or JIMS), the Attorney General (the Criminal Justice Information System or CJIS), the Hawaii Paroling Authority, etc., to the extent possible, to understand the possibilities of electronic data exchange and database population. [PHASE 2a]

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Activities: PSD database systems will be reviewed to include interfaces with existing databases as well as desired connections based on functional requirements for the custody management system.

Deliverable: Information on existing interfaces that will assist with development considerations will be added to the Business Requirements Document.

- Review out of the box software solutions and public-domain correctional-systems used in other jurisdictions. Determine pros and cons of each solution, time and expense, and support costs to maintain systems. [COMPLETED PHASE 1]
- Submit a final Phase 1 report and brief the REPS Principal Investigator and PSD administrators. [COMPLETED PHASE 1]

Phase 2

Conduct detailed site reviews across the full spectrum of users to gather extensive
information on the current uses of OffenderTrak® [OAHU - COMPLETED PHASE 1]/
[NEIGHBOR ISLAND - PHASE 2a] and the future database and reporting
needs of users. [PHASE 2a/PHASE 2b]

Activities: Neighbor island facilities visitations and interviews will add to the understanding of operations and uses of Onendertrak® which have centered on O'ahu in Phase 1. With the completion of the consolidated database mentioned under item 1, we will draft data dictionaries with the assistance of PSD stakeholders and identify some sample reports to create from the database data. Through review of the reports with PSD stakeholders, we will facilitate discussions on reporting use cases and desired features and functions. Detailed database design and functionality discussions and activity is postponed to Phase 2b.

Deliverables: Data dictionaries for databases being accessed for consolidated database.

- Identify areas not being utilized in OffenderTrak® [COMPLETED PHASE 1] and areas not
 present in OffenderTrak® which could enhance PSD operations if they were used,
 purchased, or developed. [PHASE 2b]
- 9. Provide recommendations on the advantages of out of the box systems or development of a new system. [PHASE 2a] Provide comparative market research to determine pros and cons of out of the box solutions, time and expense of each system, support costs to maintain systems, [COMPLETED PHASE 1] and how to proceed in rolling out a new information system. [PHASE 2b]

RCUH-2014-01

Activities: A pilot small project will look at developing a database with some design customizations for a subset of the custody population data (currently identified as Bridge cases). The pilot project will review available data and data needs for a variety of users such as case managers, security of cers, service providers and administrators to develop a database that provides additional functionality upon existing operations. The purpose of the project is to discover on a smaller scale the types of challenges that may arise in the development of a larger system. Recommendations for system rollout will follow after Phase 2b once additional system requirements have been identified.

Deliverables: Database that extends management capabilities of the Bridge program. Synthesis of the database development process which will include PSD-specific recommendations on advantages for the range of development options from out-of-the-box to custom in-house development.

 Submit a final Phase 2 report and meet with REPS Principal Investigator and PSD administrators on solutions for replacement of the current management system. [PHASE 2b]

Deliverables: An updated Business Requirements Document will be delivered at the end of Phase 2a. A finalized Business Requirements Document will be completed in Phase 2b during which more detailed discussion of desired features and functionality will be reviewed with PSD stakeholders. Additional documents from other activities will be collected and delivered in a final Phase 2a report.

Project Budget and Budget Narrative

Hourly rates for Phase 2a:

LEVEL RATE **EST. HOURS** Senior Executive \$300 4 SME/Advisor Managers \$200 2604 Cara Oba, Project Manager & Design Manager Kyle Oba, Lead & Engineering Manager Research Manager Facilitator Senior Consultants \$150 478 Engineer Engineer Engineer Consultants \$100 224 Researcher Designer Designer Writer/Editor & Administrative Assistant Analyst \$60

Research Assistant

64

Budget Summary (for 10 month period) CATEGORY

Direct Costs	\$619,940			
Travel	\$29,516			
Supplies	\$17,155			
Other	\$12,181			
Total:	\$668,436			

Phase 2a Direct Cost by Person									
Employer	Title	Role	Person	Rate	Hours	Cost			
Pas de Chocolat	Project Manager	Manager		\$200	469	\$93800			
Pas de Chocolat	Design Manager	Manager		\$200	455	\$91000			
Pas de Chocolat	Engineering Manager	Manager		\$200	1306	\$261200			
subcontractor Pas de Chocolat	Research Manager	Manager		\$200	200	\$40000			
subcontractor Pas de Chocolat	Facilitator	Manager		\$200	174	\$34800			
subcontractor Pas de Chocolat	Engineer	Senior Consultants		\$150	162	\$24300			
subcontractor Pas de Chocolat	Engineer	Senior Consultants		\$150	158	\$23700			
subcontractor Pas de Chocolat	Engineer	Senior Consultants		\$150	158	\$23700			
subcontractor Pas de Chocolat	Designer	Consultant		\$100	40	\$4000			
subcontractor Pas de Chocolat	Designer	Consultant		\$100	80	\$8000			
subcontractor Pas de Chocolat	Researcher	Consultant		\$100	40	\$4000			
subcontractor Pas de Chocolat	Research Assistant	Analyst		\$60	64	\$3840			
subcontractor Pas de Chocolat	Writer and Editor	Consultant		\$100	64	\$6400			
subcontractor Pas de Chocolat	SME/Advisor	Senior Executive		\$300	4	\$1200			
				Totals	3374	\$619940			

RCUH-2014-01

Budget Narrative for Phase 2a DIRECT COSTS

Personnel

\$446,000

Subcontracts

\$173,940

Personnel and subcontract totals are based on hourly rates applied to work hour estimates. GET has not been applied and there are no fringe benefits. Work includes activities supporting the following:

> development of data models and data dictionaries for the databases that may be included in an Ollendertrak® replacement project (ISC.) Offendertrak®, ITA, SMS) which includes but is not limited to investigating whether data models are available, review of data tables, defining and validating data used in custody management systems with users:

consolidation of available custody management data and designing with users automated (non-user-facing interface) reports:

development and rollout of a Bridge program (work furlough) database as a pilot project with end-users, and MIS to further identify larger project considerations and provide an example for strategy discussions.

As part of these activities, there is estimated to be 7 facilitated stakeholder meetings, a design workshop and 60 unique site visitations/in-person followup with users.

TRAVEL

Kauai, 4 days/3 nights: \$2,104/person/trip

Air Fare

\$200

Per diem

\$446/day x 4days= \$1,784

Car Rental

 $30/day \times 4days = 120$

2.104/person/trip x 4 trips = 8.416

Maui, 4 days/3nights: \$1,880/person/trip

Air Fare \$200

Per diem

\$390/day x 4days= \$1.560

Car Rental

 $30/day \times 4days = 120$

1.880/person/trip x 8 trips = \$15.040

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Hawaii, 5days/4nights: \$1,515/person/trip

Air Fare \$300

Per diem \$213/day x 5days= \$1,065 Car Rental \$30/day x 5days = \$150 \$1,515/person/trip x 4 trips = \$6,060

Total Neighbor Island Travel: \$29,516

Travel covers personnel travel for the purpose of in-person research—facility visitation, process observation, and interviews. We have estimated for two travelers, sixteen individual roundtrips. We have estimated for four, 4day/3night trips to Kauai, eight 4day/3night trips to Maui, and four 5day/4night trips to Hawaii. Airfare for Maui and Kauai travel are estimated at \$200 per roundtrip. Hawaii is \$300 per roundtrip. The per diems are based on the GSA rates: \$446/day for Kauai, \$390/ day for Maui, \$213/day for Hawaii. Car rental is budgeted at \$30/day.

SUPPLIES

Olice Supplies \$1,825

Office supplies includes consumables (pens, markers, paper, post-its, notebooks, etc.) in the use of research, general work activities, and meetings/workshops (for use by participants and project team).

OTHER

Printing \$800

Software \$12,680 Food Supplies \$3,675

Printing includes printing/copying of documents/diagrams/posters to be utilized in the execution of work and the creation of materials for meetings and deliverables.

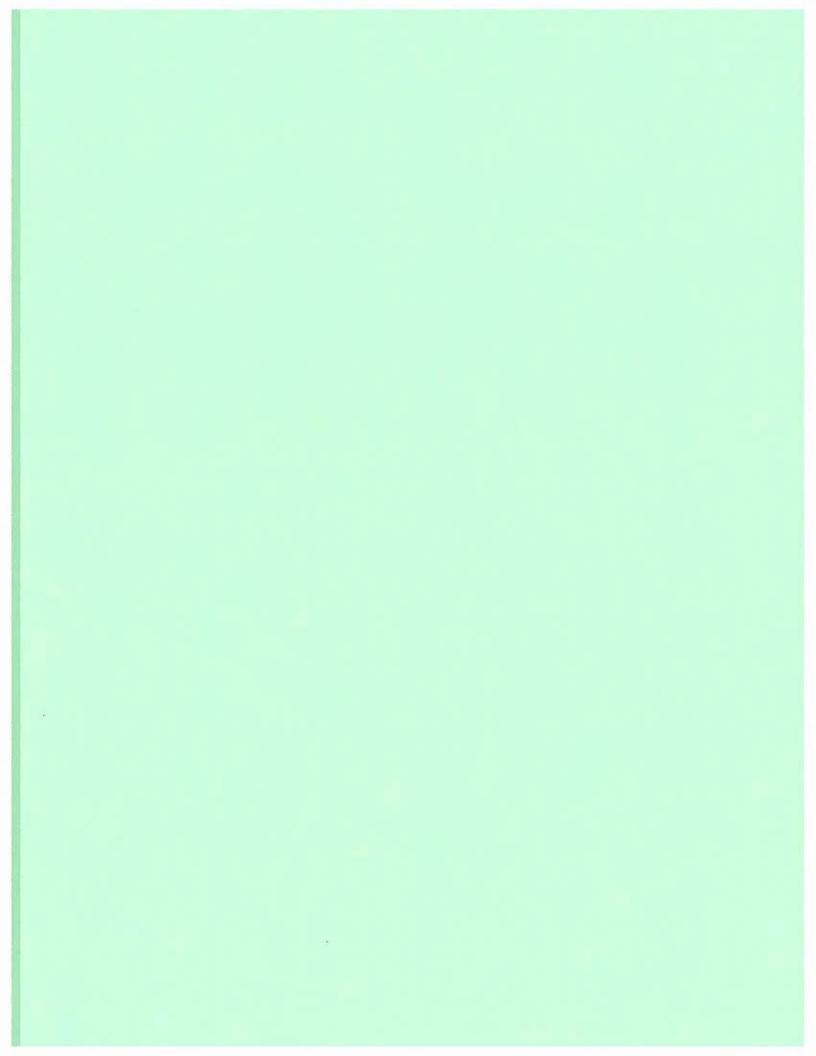
Software included here is for the subscription to project specific applications including communications software, research tools, design tools and development tools. Also included are software development service plans for servers and hosting to be utilized in the creation of the consolidated database and pilot program database.

Food supplies are the food and related supplies to be furnished at facilitated meetings (estimating up to 35 attendees) that are scheduled for 4 or more hours. We have budgeted for a total of 10 meetings—9 shorter (4 hours, meal only) and 1 longer (6 hours, to include a meal and snack).

T.	PHASE 2a					Me	onth					Delivera
	Activities &	1	2	3	4	5	6	7	8	9	10	ble
1	Data models for databases used in the custody management process: ODendertrak®, ISC, ITA	x										\$23,742
2	Identify data being captured by custody management databases (ISC, Onendertrak®, ITA, SMS)	×	x	x								
	On-site followups to clarify/validate data dictionaries (and begin development of functional requirements doc)		x	x	×	, =						
	Data dictionaries for databases currently managed by PSD in the custody management process: O⊟endertrak®, ISC,				x	1						\$142,415
3	Build consolidated database Review data, develop reports, and identify sample reports for testing		x	x	x	×	x x	×	x			
	Review reporting outcomes and discuss reporting use cases with stakeholders								x			\$176,381
	Design/gather requirements for program database with end-users/stakeholders					x	x					·····
	Develop database, design iteration with end-users/stakeholders						x	×	x	x	*	9
	Rollout database									x	×	
	Development, support and process review with stakeholders for new program database									i	x	\$159,036
;	Meet w/ MIS to determine/develop/ followup on IT goals and workplan for phase 2 projects	·	×		x			х				
	Meet w/ stakeholders to discuss administrative and operational requirements for new system								x	x		
	IT strategic planning discussions to review lessons learned from pilot projects										x	\$166,862
1	PHASE 2a			- 1								\$668,436

	PHASE 2a Milestone Costs	Deliverable Cos	
1	Data models for databases used in the custody management process	\$23,742	
	Salaries	\$22,300	
	Supplies	-	
	Printing	-	
	Software	\$1,442	
	Food	-	
	Travel	-	
2	Data dictionaries for databases currently managed by PSD in the custody management process	\$142,415	
	Salaries	\$126,400	
	Supplies	\$700	
	Printing	\$100	
	Software	\$190	
	Food	- 1	
	Travel	\$15,025	
3	Consolidated database w/ automated reports (w/o user-facing interface) for custody management data	\$176,381	
	Salaries	\$167,690	
	Supplies	\$300	
	Printing	-	
	Software	\$4,030	
	Food	\$700	
	Travel	\$3,661	

PHASE 2a Milestone Costs		Deliverable Cost
4 User-facing small project implementation w/ MIS		\$159,036
	Salaries	\$139,550
	Supplies	\$500
	Printing	\$100
	Software	\$1,857
	Food	\$1,225
	Travel	\$15,804
	opment in context	\$166,862
5 Strategic planning recommendations for IT developed of O□endertrak® replacement		
	Salaries	\$164,000
	Salaries Supplies	\$164,000 \$325
	Salaries	\$164,000
	Salaries Supplies	\$164,000 \$325
	Salaries Supplies Printing	\$164,000 \$325 \$600
	Salaries Supplies Printing Software	\$164,000 \$325 \$600 \$187



RFP RCUH-2014-01 PHASE 2(a) and 2(b) SCOPE OF WORK

Public Safety Department Data Infrastructure Improvement Project

TO REVIEW CURRENT CORRECTIONS MANAGEMENT SYSTEMS AND NEEDS OF END USERS AND MAKE RECOMMENDATIONS ON A NEW SYSTEM THAT WILL ENCOMPASS ALL OFFENDER MANAGEMENT, DATA AND REPORTING NEEDS OF THE STATE OF HAWAII DEPARTMENT OF PUBLIC SAFETY

Submitted to Research and Evaluation in Public Safety (REPS), RFP RCUH-2014-01

Prepared for: Ed Suarez, Principal Investigator

Prepared by: Cara Oba, President, PAS DE CHOCOLAT, LLC

Original Submission Date: October 12, 2015

Revisions to scope of work for Phase 2 as follows:

Revision Date: May 20, 2016.

Revision Date: Jun 26, 2017.

Revision Date: Sep 21, 2018. Revising proposed work for phase 2b at remaining budget of \$383,192. All work to be completed within REPS project extension period through June 30, 2019.

Scope of Work

The department is not prepared to take responsibility for managing a large software project at this time and therefore the previously proposed vendor review is not appropriate. Therefore the deliverables will be changed to make the most of their present capabilities towards making progress for project readiness. Vendor-related activities associated with item 9 will be changed towards additional transformational IT work.

Phase I

Understand the flow of offenders through the PSD system and the information needed to
manage and understand that flow (i.e., inmate transportation, intake and admission,
assessment/risk assessment, probation, case management, corrections program services,
changes in risk levels, community integration processes, parole, releases/discharges, etc.)
 [COMPLETED PHASE 1] and make recommendations for improvement. [PHASE 2]

Activities: Pending access to data sources (tentatively expecting to include Offendertrak®, ISC, ITA, SMS and HPA), data models will be created for the databases. Data will be collected from these data sources into a new interim reporting database. With assistance from PSD stakeholders, data will be reviewed for quality and completeness and to assess existing gaps that may require process interventions or other attention. Data quality findings will be reported as they are identified.

Deliverables: Data models for primary custody data databases. A summary and synthesis of the data review process. Additional user data requirements will be added to the Business Recommendations and Requirements Document.

- 2. Identify core functions and processes of OffenderTrak #. [COMPLETED PHASE 1]
- 3. Convene multiple meetings with stakeholders, representing various perspectives in the offender management process. Collect general knowledge about current use and application of OffenderTrak® by meeting with key stakeholders including those staff that enter data and staff needing data for reports and collect general knowledge by ancillary data collection methods (i.e., surveys, phone calls, or site visits). [COMPLETED PHASE 1]
- 4. Review and understand interface standards in use by other criminal justice agencies, such as that used by the Judiciary, (the Justice Information Management Systems or JIMS), the Attorney General (the Criminal Justice Information System or CJIS), the Hawaii Paroling Authority, etc., to the extent possible, to understand the possibilities of electronic data exchange and database population. [PHASE 2]

Activities: PSD database systems will be reviewed to include interfaces with existing databases as well as desired connections based on functional requirements for the custody management system.

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Deliverable: Information on existing interfaces that will assist with development considerations will be added to the **Business Recommendations and** Requirements Document.

- Review out of the box software solutions and public-domain correctional-systems used in other jurisdictions. Determine pros and cons of each solution, time and expense, and support costs to maintain systems. [COMPLETED PHASE 1]
- Submit a final Phase 1 report and brief the REPS Principal Investigator and PSD administrators. [COMPLETED PHASE 1]

Phase 2

Conduct detailed site reviews across the full spectrum of users to gather extensive
information on the current uses of OffenderTrak® [OAHU - COMPLETED PHASE 1] /
[NEIGHBOR ISLAND - PHASE 2a] and the future database and reporting
needs of users. [PHASE 2a/PHASE 2b]

Activities: Neighbor island facilities visitations and interviews will add to the understanding of operations and uses of Offendertrak® which have centered on O'ahu in Phase 1. With the completion of the consolidated database mentioned under item 1, we will draft data dictionaries with the assistance of PSD stakeholders and identify some sample reports to create from the database data. Through review of the reports with PSD stakeholders, we will facilitate discussions on reporting use cases and desired features and functions. Detailed database design and functionality discussions and activity is postponed to Phase 2b. Review and refine use cases with subject matter experts. Facilitate discussion on operational and administrative goals.

Deliverables: Data dictionaries for databases being accessed for consolidated database. Use cases included within the Business Recommendations and Requirements Document (see deliverable for item 10).

8. Identify areas not being utilized in OffenderTrak® [COMPLETED PHASE 1] and areas not present in OffenderTrak® which could enhance PSD operations if they were used, purchased, or developed. [PHASE 2b]

Activities: Work with selected PSD/MIS staff members to improve "transformational IT" capability for PSD. Organize and drive small projects for selected team with a focus on exposure to and the building of IT project implementation and support skills, selecting projects that help to further define department capabilities that will identify build or buy opportunities as well as develop a better understanding of needs and measures for the future system.

RCUH-2014-01

Deliverables: Inclusion of approval processes, measures of success and current limitations as part of the Business Recommendations and Requirements Document (see deliverable for item 10).

9. Provide recommendations on the advantages of out of the box systems or development of a new system. [PHASE 2a] Provide comparative market research to determine pros and cons of out of the box solutions, time and expense of each system, support costs to maintain systems, [COMPLETED PHASE 1] and how to proceed in rolling out a new information system. [PHASE 2b]

Activities: A pilot small project will look at developing a database with some design customizations for a subset of the custody population data (currently identified as Bridge cases). The pilot project will review available data and data needs for a variety of users such as case managers, security officers, service providers and administrators to develop a database that provides additional functionality upon existing operations. The purpose of the project is to discover on a smaller scale the types of challenges that may arise in the development of a larger system. Recommendations for system rollout will follow after Phase 2b once additional system requirements have been identified. Review vendors as selected by PSD and facilitate stakeholder discussion. Participate in preparation for and analysis of vendor demos. Facilitate discussions and review with SMEs and administration. The department's governance abilities, project management and technical capabilities will be assessed through these small projects (item 8 and 9) and will inform recommendations for how to proceed with a replacement project.

Deliverables: Database that extends management capabilities of the Bridge program. Synthesis of the database development process which will include PSD-specific recommendations on advantages for the range of development options from out-of-the-box to custom in-house development. Documented stakeholder questions, stakeholder feedback, and recommendations for vendor follow-up. The Recommendations and Requirements Document will address skill development needs. Recommendations for vendor assessment will be provided within as well.

 Submit a final Phase 2 report and meet with REPS Principal Investigator and PSD administrators on solutions for replacement of the current management system. [PHASE 2b]

Deliverables: An updated Business Requirements Document will be delivered at the end of Phase 2a. A finalized Business Requirements Document will be completed in Phase 2b during which more detailed discussion of desired features and functionality will be reviewed with PSD stakeholders. Additional documents from other activities will be collected and delivered in a final Phase 2a report. Finalized Business Recommendations and Requirements Document to include functional and non-functional requirements of the custody information management system as well as operational and administrative goals for the system replacement project. The document will provide an informational basis for the Request for Proposals (RFP) for a new IT system for PSD.

Project Budget and Budget Narrative

Current hourly rates:

LEVEL RATE EST. HOURS

Senior Executive \$300 4

SME/Advisor

Managers \$200 1670

Cara Oba, Project Manager & Design Manager

Kyle Oba, Lead & Engineering Manager

Research Manager Facilitator

Senior Consultants \$150 250

Engineer
Designer
SME/Advisor

Consultants \$100 64

Writer/Editor & Administrative Assistant

Budget Summary for remainder:

CATEGORY

 Direct Costs
 \$256,065

 Travel
 \$29,516

 Supplies
 \$17,155

 Other
 \$12,181

 Total:
 \$668,436

RCUH-2014-01

Budget Narrative for Phase 2a DIRECT COSTS

Personnel

\$298,000

Subcontracts

\$85,192

Personnel and subcontract totals are based on hourly rates applied to work hour estimates. GET has not been applied and there are no fringe benefits. Work includes activities supporting the following:

development of data models and data dictionaries for the databases that may be included in an Offendertrak® replacement project (ISC, Offendertrak®, ITA, SMS) which includes but is not limited to investigating whether data models are available, review of data tables, defining and validating data used in custody management systems with users;

consolidation of available custody management data and designing with users automated (non-user-facing interface) reports;

development and rollout of a Bridge program (work furlough) database as a pilot project with end-users, and MIS to further identify larger project considerations and provide an example for strategy discussions.

As part of these activities, there is estimated to be 7 facilitated stakeholder meetings, a design workshop and 60 unique site visitations/in-person followup with users.

TRAVEL

No travel is planned at this point in the project.

SUPPLIES

Office Supplies

\$1,825

Office supplies includes consumables (pens, markers, paper, post-its, notebooks, etc.) in the use of research, general work activities, and meetings/workshops (for use by participants and project team).

OTHER

Printing

\$800

Software

\$12,680

	Phase 2b Direct (Cost by Person (for those cu	rrently active))	
Employer	Title	Role	Person	Rate	Hours	Cost
Pas de Chocolat	Project Manager	Manager		\$200	140	\$28000
Pas de Chocolat	Design Manager	Manager		\$200	550	\$110000
Pas de Chocolat	Engineering Manager	Manager		\$200	800	\$160000
subcontractor Pas de Chocolat	Research Manager	Manager		\$200	180	\$36000
subcontractor Pas de Chocolat	SME/Advisor	Senior Consultants		\$150	10	\$1500
subcontractor Pas de Chocolat	Senior Designer	Senior Consultants		\$150	180	\$27000
subcontractor Pas de Chocolat	Engineer	Senior Consultants		\$150	60	\$9000
subcontractor Pas de Chocolat	Writer and Editor	Consultant		\$100	20	\$2000
subcontractor Pas de Chocolat	SME/Advisor	Senior Executive		\$300	4	\$1200
				Totals	1944	\$374700

	PHASE 2a Activities &					Mo	nth							Deliverable
	Milestones	J	A	S	0	N	D	J	F	M	A	M	J	Full Cost
1	Data models for databases used in the custody management process: Offendertrak®, ISC, ITA	x	x	×	x	×	x	×						\$23,742
2	Identify data being captured by custody management databases (ISC, Offendertrak®, ITA, SMS)		×	x		x	x	x	x	x				
	On-site followups to clarify/validate data dictionaries (and begin development of functional requirements doc)					×	×	x	×	×				
	Data dictionaries for databases currently managed by PSD in the custody management process: Offendertrak@, ISC, ITA, SMS										x			\$142,415
3	Build consolidated database			x	x	x	x	x	×	x				
	Review data, develop reports, and identify sample reports for testing								×	x	x			
	Review reporting outcomes and discuss reporting use cases with stakeholders										×	d		\$176,381
4	Design/gather requirements for program database with end-users/stakeholders				x	х	x							
	Develop database, design iteration with end- users/stakeholders					x	x	x	x	x				
	Rollout database								x	x				
2013	Development, support and process review with stakeholders for new program database									X				\$159,036
5	Meet w/ MIS to determine/develop/followup on IT goals and workplan for phase 2 projects	×		×		x		x						
	Meet w/ stakeholders to discuss administrative and operational requirements for new system				T III			x		x				
	IT strategic planning discussions to review lessons learned from pilot projects										x			\$166,862
	Funded (need extension through March 2017)										1			\$487,462
	Unfunded, to be completed by June 30, 2017													\$180,974
	PHASE 2a Total						1							\$668,436

PHASE 2a Milestone Costs	Deliverable Cost
Data models for databases used in the custody management proce	\$23,742
Sala	es \$22,30 0
Supp	es -
Prin	ng -
Softw	re \$1,442
Fe	od -
Tra	vel -
Data dictionaries for databases currently managed by PSD in the custody management process	\$142,415
Sala	es \$126,400
Supp	es \$700
Prins	ng \$10 0
Softw	re \$190
Fo	od .
Tra	/ei \$15,025
Consolidated database w/ automated reports (w/o user-facing nterface) for custody management data	\$176,381
Salar	es \$167,690
Supp	es \$300
Print	ng -
Softw	re \$4,030
Fc Fc	od \$700
Tra	rel \$3,661

	PHASE 2a Milestone Costs	Deliverable Cost
4	User-facing small project implementation w/ MIS	\$159,036
	Salaries	\$139,550
	Supplies	\$500
	Printing	\$100
	Software	\$1,857
	Food	\$1,225
	Travel	\$15,804
5	Strategic planning recommendations for IT development in context	\$166,862
5	Strategic planning recommendations for IT development in context of Offendertrak® replacement	\$166,862
	of Offendertrak® replacement Salaries	\$164,000
	of Offendertrak® replacement	\$164,000
	of Offendertrak® replacement Salaries	\$166,862 \$164,000 \$325 \$600
	of Offendertrak® replacement Salaries Supplies	\$164,000 \$325
	of Offendertrak® replacement Salaries Supplies Printing	\$164,000 \$325 \$600 \$187
5	of Offendertrak® replacement Salaries Supplies Printing Software	\$164,000 \$325 \$600

Project Budget and Budget Narrative

(revised 21Sep2018)

The following are the hourly rates for Phase 2b of the project:

LEVEL

RATE

EST. HOURS

Managers

\$200

1438

Cara Oba, Project Manager & Design Manager

Kyle Oba, Lead & Engineering Manager
Research Manager

TBD, Facilitator

Senior Consultants

\$150

432

Engineer

Project Communications

Designer (change as of 2018)

Consultants

\$125

401

Designer

Writer/Editor & Administrative Assistant

Junior Consultant

\$75

492

TBD, Engineer

COST BY CATEGORY

Direct Costs	\$439,425	
Travel	\$4,848	
Office Supplies	\$1,375	
Other	\$15,629	
TOTAL	\$461,277	

Budget Summary (for 10 month period)

Budget Narrative for Phase 2b DIRECT COSTS

Personnel \$259,600 Subcontracts \$179.825

Personnel and subcontract totals are based on hourly rates applied to work hour estimates. GET has not been applied and there are no fringe benefits. Work includes activities supporting the following:

completion of business requirements document for custody information management system that includes validation of use cases and facilitated discussion on hierarchy of needs and operational goals; Review and refine use cases with subject matter experts. Facilitate discussion on operational and administrative goals for inclusion into the final draft of the business requirements document.

PSD selected vendor demo review and facilitated stakeholder discussion to include additional vendor research; Participate in preparation for and analysis of provided vendor demos. Facilitate discussions and review with SMEs and administration. Document stakeholder questions and feedback. Make recommendations for vendor followup assessment.

work with selected PSD/MIS staff members to improve transformational IT capability Organize and drive small projects for selected team with a focus on exposure to and the building of IT project implementation and support skills. in which PDC works with MIS to work through a series of small projects which may include existing actionable items, outstanding concerns, and development. Assess IT governance abilities, project management and technical capabilities through these small projects and make recommendations for pursuit of replacement project.

TRAVEL

Kauai, 1 day, roundtrip: \$405

Air Fare \$200 Per diem \$135 Car Rental \$70

Total Kauai travel: \$405/trip x 2 trips/person x 2people = \$1,620

Maui, 1 day, roundtrip: \$404

Air Fare \$200 Per diem \$134 Car Rental \$70

Total Maul travel: \$404/trip x 2 trips/person x 2people = \$1,616

Hawaii (Hilo), 1 day, roundtrip: \$403

Air Fare \$250 Per diem \$103 Car Rental \$50

Total Hilo travel: \$403/trip x 2 trips/person x 2people = \$1,612

Total Neighbor Island Travel: \$4,848

Travel covers personnel travel for the purpose of in-person research and small-project feedback and rollout activities. We have estimated for two travelers with two roundtrips each to Kauai, Maui and Hilo. Airfare for Maui and Kauai travel are estimated at \$200 per roundtrip. Hawaii is \$250 per roundtrip. The per diems are based on the Government Services Administration/Department of Defense rates to account for meals and incidentals: \$135/day for Kauai, \$134/day for Maui, \$103/day for Hawaii. Car rental is budgeted at \$70/day for Kauai, \$70/day for Maui and \$50/day for Hilo.

SUPPLIES

Office Supplies \$1,375

Office supplies includes consumables (pens, markers, paper, post-its, notebooks, etc.) in the use of research, general work activities, and meetings/workshops (for use by participants and project team).

OTHER

Printing \$2,400 Software \$8,679 Food Supplies \$4,550

Printing includes printing/copying of documents/diagrams/posters to be utilized in the execution of work, in the creation of materials for meetings and in the creation of final deliverables.

Software included here is for the subscription to project specific applications including communications software, design tools and development tools for use specifically for the project. Also included are software development service plans for servers and hosting.

Food supplies are the food and related supplies to be furnished at facilitated meetings that are scheduled for 4 or more hours or working lunch workshops to reduce impact on client schedule. We have budgeted for a total of 8 of such meetings in Phase 2b.

Deliverable Summary and Schedule

Business Requirements Document \$63,451

Vendor Demos \$68,225

Transformation IT Capability \$329,601 + \$68,255 = 397,856

TOTAL: \$461,277

COMPLETED BUSINESS REQUIREMENTS DOCUMENT

Direct Costs	\$59,900
Travel	\$0
Office Supplies	\$100
Other-Printing	\$1700
Other-Software	\$876
Other-Food Supplies	\$875
TOTAL	\$63451

VENDOR DEMO BUDGET MOVED TO TRANSFORMATIONAL IT

Direct Costs \$66,375 Travel \$0 Office Supplies \$250 Other-Printing \$200 Other-Software \$0 Other-Food Supplies \$1400 TOTAL \$68225

TRANSFORMATIONAL IT CAPABILITY

Direct Costs	84	\$313,150	+ \$68,255 = \$381,405
Travel		\$4,848	
Office Supplies		\$1,025	
Other-Printing		\$500	
Other-Software	4	\$7,803	
Other-Food Supplies		\$2,275	
TOTAL		\$329601	-11-2

TIMELINE	М1	M2	МЗ	M 4	M5	M6	М7	M8	M9	M10
Review use cases	•	•	•							
Define operational and administrative goals	•	•	٠	•	•	•	•	•	•	
Completed Business Requirements Doc										•
Pre-research/prepare for vendor demos	0	0	o	0						
Vendor demos and facilitated PSD review				0	0					
Documented review and recommendations					0					
Kick-off with MIS project team	Δ									
Small project 1	Δ	Δ	Δ							
Small project 2			Δ	Δ	Δ	Δ	Δ			
Small project 3							Δ	Δ	Δ	
Lessons learned			Δ				Δ		Δ	Δ
IT capability review and recommendations										Δ

