Project Key Criteria Summaries

Tax case details

using key criteria summary format

#	Project Name
1501	Acsis - Distributed Software (WIN)
1601	First project started in 2016
1701	Joel Theatrical (Fire curtain) (LOSS)
1702	Novalia (Wind turbines) (LOSS)
1703	Robotx Solutions Inc. (LOSS)
1704	Lifechoice (LOSS)
1705	Formadrain liner development (WIN)
1706	Flavornet (LOSS)
1710	Defining software technology (CRA)
1712	Software security example (CRA)
1713	Artificial Intelligence (AI)
1801	Mac & Mac pipe liner removal process (LOSS)
1802	Lehigh (alt fuels - S 58 shortcut) (LOSS)
1810	Software example - consensus mechanism CRA
1901	A&D Precision “Full spectrum versatile horizontal lathes” (WIN)
1902	A&D precision - Double wheel roll grinding machine (WIN)
1903	Concept Danat process integration (LOSS)
2001	Clevor - Oracle + witness deceased (LOSS)
2002	Kam Press Metal - custom structure (LOSS W
2003	CRL Engineering - distributed computing (WIN)
2004	Exxon - drilling evidence for SRED (LOSS)
2010	Beton Mobile WINS- 3 OF 6 PROJECTS
2012	11-04: Analysis of the influence of binders and
2014	12-01: Development of fast-setting latex-free
2015	12-03: Development of quick-setting latex
2020	Beton Mobile LOSSESS (3 OF 8 PROJECTS)
2021	B-10-12: Development of cavernous concrete
2022	B-11-01: Study of permeability to chloride ions
2023	B-12-02 Improvement of quick setting self-
2101	Andre Lamy MPC - Directly Engaged (WIN)
2102	Indusol - marine software & SI (LOSS)
2103	National R&D - software & SI (LOSS)
2200	Allegro Wireless OVERVIEW (WINS - 3/3 projects

2201	Allegro - Protocol Compliant Methods to Extend
2202	Allegro - Optimize TCP Services over Cellular
2203	Allegro - Multi-point Integration Platform for
2211	Airzone - WIN Optimizing Passive Monitoring of
2212	Airzone - LOSS Solving Combustion Issues to
2215	Global Sustainable - Efficient home - LOSS
2216	Logix Data (solar panels) - LOSS
2217	WD Borger - Pressure activated removable plugs
2220	Beton Workshop OVERVIEW (LOSS 2/2 projects)
2221	Beton - transportable concrete modular panels
2222	Beton - mixing and pouring concrete floors
2301	Buhler - Tractor design WIN
2302	Canafric - food development WIN
2303	ACBK Thermal Storage LOSS
2304	Mold Leaders Mold designs LOSS
2305	Daves Diesel - injector design LOSS
2306	JEC Distributors - welding LOSS
2400	New AI examples from USPTO
2401	AI Anomaly detection method
2402	AI Speech Separation
2402	AI Fibrosis Treatment
2410	Transaxle design using AI
2411	Therapeutic cancer compound using AI

1501 - Acsis - Distributed Software (WIN)	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 10 Articles Patent searches: 10 patents	2015 '1-1 Activity 1
OBJECTIVES	**RESULTS**
CPU Hardware limitations : 100 MHz Data accuracy: 99.9 % correct Response time: 15 seconds / query	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
node and master behaviour	Y
sequence & subscription strategies	
	METHODS
Analysis	854
Trials	1400
Prototypes	
Lines of code	

	COSTS
Hours	
Materials $	
Subcontractor $	
1702 - Novalia (Wind turbines) (LOSS)	
BENCHMARKS	**ACTIVITIES BY YEAR**
Patent searches: 11 patents	2017
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
Turbine power increase: 240 %	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
blade shapes & orientations	
	METHODS
Analysis	
Trials	
Prototypes	
Lines of code	
	COSTS
Hours	550
Materials $	12000
Subcontractor $	
1704 - Lifechoice (LOSS)	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 36 Articles	2017
Suppliers: 8 products	'1-1
Queries to experts: 5 responses	Activity 1
OBJECTIVES	**RESULTS**
Arterial plaque reduction: 95 %	98
Replace intravenous with oral: 1 Yes 1/	0
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
antagonistic effects of ingredients	
EDTA vs DMSA	
effects of chelation process	
	METHODS
Analysis	100
Trials	
Prototypes	
Lines of code	
	COSTS
Hours	200
Materials $	

Subcontractor $	
1705 - Formadrain liner development (WIN)	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 3 Articles	2017
Similar prior in-house technologies: 4	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
Thickness: 4 mm	
Steaming time to activate: 60 min	70
Open time : 60 days	62
Cost : 65 $/m	70
Diameter range: 15 cm	15
Weight: 2.6 kg/m	3.1
Stress resistance: 11 kg/mm	9
Disposable mandrel: 1 yes = 1 / no = 0	1
Access points for mandrel: 1 number	1
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
chuck design	Y
composition of form	Y
mandrel configurations & composition	Y
push vs pull deployment	Y
resin formulation	
	METHODS
Analysis	460
Trials	23
Prototypes	8
Lines of code	
	COSTS
Hours	1072
Materials $	38800
Subcontractor $	23500
	1706 - Flavornet (LOSS)
BENCHMARKS	**AC**
Internet searches: 10 Articles	
Patent searches: 1 patents	'1-1
	Research as described TCC judgment
OBJECTIVES	
Sterol solubility: 40 mg/oz	22
Shelf life: 12 months	12
Suspension fall out: 2 %	38
UNCERTAINTIES & KEY VARIABLES	
1 - Technological uncertainty	
emulsifier integration	Y

ingredients	Y
shearing methods	Y
temperatures	Y
Analysis	122
Trials	8
Prototypes	
Lines of code	
Hours	346
Materials $	6300
Subcontractor $	2500
	1710 - Defining software techno
BENCHMARKS	**AC**
(none)	
	'1-1
	Big data examples
OBJECTIVES	
Reliability: 99 %	88
Scalability: 8500 %	4400
Availability: 99.9 %	99.3
UNCERTAINTIES & KEY VARIABLES	
1 - O/S design issues	
kernel - process, memory & I/O mgmt	Y
process mgmt - scheduler lists & queues	Y
2 - Micro processors	
compilers	
Interface	
linkers	
programming languages	
3 - Other areas	
big data methods (store, process,	
improved infrastructure options	
scaling, reliability & availability options	
technology stack or tool designs	
vision design options	
Analysis	250
Trials	17
Prototypes	
Lines of code	
Hours	100
Materials $	

Subcontractor $	
1713 - Artificial Intelligence (AI)	
BENCHMARKS	**ACTIVITIES BY YEA**
Internet searches: 1 Articles	2017
	'1-1
	Specific vs General Objectives
OBJECTIVES	**RESULTS**
Learn new methods: ? Achieve results: ? Optimality: % Completeness: % Accuracy and precision: % Execution time: 2.2 seconds Virus scanning: 99.8 %	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
Data sets & structures	Y
Hardware (architectures, devices...)	Y
Heuristics for decision making	
SPECIFIC DETAILS ON	
2 - Heuristics (computer science)	
admissibilities	
combinations	
types - top down, inferred, rule of thumb	
	METHODS
Analysis Trials Prototypes Lines of code	60000000 1
	COSTS
Hours Materials $ Subcontractor $	
1801 - Mac & Mac pipe liner removal process (LOSS)	
BENCHMARKS	**ACTIVITIES BY YEA**
Internet searches: 3 Articles Patent searches: 8 patents	2017
	'1-1
	Hydraulicing to remove entire lining
OBJECTIVES	**RESULTS**
Remove 2 layers of liner: 1 1=Yes / 0 =No Remove only inner liner: 1 1=Yes / 0=No Avoid pipe damage: 2 mm	1 3
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Removing entire lining	

length of nozzle arms	
nozzle size & distance	
nozzle speed, spin, rotation	
water pressures & spray angles	
2 - Removing plastic liner	
differing simultaneous water pressures	
number of passes	
pipe rotation speeds & directions	
	METHODS
Analysis	
Trials	
Prototypes	
Lines of code	
	COSTS
Hours	
Materials $	
Subcontractor $	

1810 - Software example - consensus mechanism CRA 2018	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 17 Articles	2018
Competitive products or processes: 6	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
Energy efficiency: 15 kw/h	25
Scalabilty: 100000000 # total nodes	110000000
Reduce redundant operations: 5 %	11
Achieve FAIR distribution among	97
Reduce message overhead: 40 %	23
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Adapt backoff mechanism	
dynamicity (# of joins & leaves)	Y
neighbourhood size & definition	Y
number of nodes	Y
propogation radius	Y
single POW vs multiple blockchain	Y
	METHODS
Analysis	17
Trials	438
Prototypes	3
Lines of code	7300
	COSTS
Hours	1940
Materials $	
Subcontractor $	

1901 - A&D Precision "Full spectrum versatile hor	
BENCHMARKS	**AC**
Internet searches: 1 Articles Patent searches: 5 patents	2006 '1-1 Adapt Tachi lathes
OBJECTIVES	
supported workpiece max.: 100 tons unsupported workpiece max. : 80 tons length of workpiece: 13 m precison of finish : 2 thou./in	
UNCERTAINTIES & KEY VARIABLES	
1 - Technological uncertainty	
methods to control inertia & deflection	
welded vs cast iron structure	
Analysis Trials Prototypes Lines of code	
Hours Materials $ Subcontractor $	

1902 - A&D precision - Double wheel roll grinding machine (WIN)	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 20 Articles Queries to experts: 1 responses	2006 '1-1 2006 to 2008 development
OBJECTIVES	**RESULTS**
Cost: $ Accuracy: thou	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
method to move wheel	Y
preventing spindle overheating	Y
vibration control methods	Y
	METHODS
Analysis Trials Prototypes Lines of code	
	COSTS
Hours Materials $	

Subcontractor $	
2003 - CRL Engineering - distributed computing (WIN)	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2020
	'1-1
	Development
OBJECTIVES	**RESULTS**
Accuracy of data: % Autonomous system: 1 1=yes / 0= no General purpose equipment: 1 1=yes / Distributed data: 1 1=yes / 0=no	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
characteristics physically distributed GP	
use of autonomous system	
	METHODS
Analysis Trials Prototypes Lines of code	10
	COSTS
Hours Materials $ Subcontractor $	1000
2010 - Beton Mobile WINS- 3 OF 6 PROJECTS	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 20 sites / articles Patent searches: 2 patents Competitive products or processes: 3 Similar prior in-house technologies: 1	2020
Suppliers: 3 products	'1-1
Queries to experts: 4 responses	Activity 1
OBJECTIVES	**RESULTS**
Durability: x air: x slump: x temperature : x density / compression): x	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
	METHODS
Analysis Trials Prototypes	

Lines of code	
	COSTS
Hours	
Materials $	
Subcontractor $	
2011 - 10-18: Develop a light self-compacting mortar for mobile concrete mixer	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2020
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
(none)	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
	METHODS
Analysis	
Trials	
Prototypes	
Lines of code	
	COSTS
Hours	34
Materials $	427
Subcontractor $	360
2013 - 11-07: Developing an ultra-fast setting mortar for installation in a marine	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2020
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
(none)	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
	METHODS
Analysis	
Trials	
Prototypes	
Lines of code	
	COSTS
Hours	30
Materials $	394
Subcontractor $	
2016 - 12-07: Development of repair product for roller compacted concrete	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2020

	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
(none)	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
	METHODS
Analysis Trials Prototypes Lines of code	
	COSTS
Hours	102
Materials $	494
Subcontractor $	1917
2020 - Beton Mobile LOSSES (3 OF 8 PROJECTS)	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2020
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
(none)	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
	METHODS
Analysis Trials Prototypes Lines of code	
	COSTS
Hours Materials $ Subcontractor $	
2021 - B-10-12: Development of cavernous concrete with a high vacuum content.	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 1 Articles	2020
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
Vacuum content (void %): 35 % reduce water run off to city: %	35
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
how to achieve vacuum content 35%	

integration with draining concrete	
	METHODS
Analysis	
Trials	1
Prototypes	1
Lines of code	
	COSTS
Hours	
Materials $	
Subcontractor $	
2022 - B-11-01: Study of permeability to chloride ions and durability with various	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 1 Articles	2020
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
chlorine penetration: 2500 coulombs	2800
compression resistance: x	
spalling: x	
freeze thaw stability: x	
air bubble distribution: x	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
adding pozzolan	
effects of latex	
modify mixing method	
	METHODS
Analysis	
Trials	15
Prototypes	
Lines of code	
	COSTS
Hours	
Materials $	
Subcontractor $	
2023 - B-12-02 Improvement of quick setting self-compacting concrete	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2020
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
Cause of aggregate segregation: 1 yes =1	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	

effects of colloidal agents	
effects of plasticizers	
setting agents	
WATER CONTENT & CONTAMINANTS	
	METHODS
Analysis	4
Trials	4
Prototypes	
Lines of code	
	COSTS
Hours	
Materials $	
Subcontractor $	
	2101 - Andre Lamy MF
BENCHMARKS	
Competitive products or processes: 56	
Similar prior in-house technologies: 5	'1-1
Queries to experts: 12 responses	Coronary project
OBJECTIVES	
On pump primary composite outcome	13.3
Off pump primary composite outcome	12.1
On pump repeat coronary	0.8
Off pump repeat coronary	1.4
UNCERTAINTIES & KEY VARIABLES	
1 - Coronary project - on vs. off pump	
Cerebrovascular disease	Y
Effect of diabetes	Y
Euroscore	Y
Left ventricular function: Grade 1 to 4	Y
Number of vessels diseased	
2 - Compass project	
factors affecting Rivaroxaban	
3 - Whether "directly engaged"	
No	
Yes	
Analysis	2
Trials	4752
Prototypes	
Lines of code	
Hours	500
Materials $	
Subcontractor $	

	2102 - Indusol - mar
BENCHMARKS	
Internet searches: 10 Articles	
Similar prior in-house technologies: 2	'1-1
	Technological Uncertainty (TU) Existed
OBJECTIVES	
maximum draft: 8.15 m	
UKC "under-keel clearance": 30 cm	
UNCERTAINTIES & KEY VARIABLES	
1 - 5 Questions - Technological	
How to measure velocity of current in	
Squat for vessels at differing speeds	Y
Squat formula for different sections of	Y
2 - Financial issues	
documentation of time vs. activities	
is software eligible SR&ED material	
Analysis	
Trials	50
Prototypes	
Lines of code	
Hours	800
Materials $	
Subcontractor $	
	2103 - National R&D - software & S
BENCHMARKS	**AC**
Internet searches: 3 Articles	
Internet searches: 1 Articles	
Internet searches: 1 Articles	
Competitive products or processes: 3	'1-1
Suppliers: 1 products	techniques for paging, sorting & indexing
OBJECTIVES	
deterministic and stateful client-side	
develop pivot output mechanism: 1 0=no	
response time: 5 seconds	5
UNCERTAINTIES & KEY VARIABLES	
1 - paging, sorting & indexing method	
ADO, Classic ASP, COM+ and SQL Server	Y
MTA limitations of framework	Y
2 - develop pivot table mechanism	
static vs.dynamic environment	
web browser deployment methods	
3 - stateful client control	

section variables and cookies	
Analysis Trials Prototypes Lines of code	50
Hours Materials $ Subcontractor $	350
2200 - Allegro Wireless OVERVIEW (WINS - 3/3 projects telco	
BENCHMARKS	**ACTIVITIES BY YEA**
(none)	2022
	'1-1
	CRA approved doc system
OBJECTIVES	**RESULTS**
Throttling mechanism: 64 KB Concurrency : 1000 users supported hand held devices: 500 number supported printers: 300 number	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Bug vs. Quirk vs. SR&ED	
Bug vs Quirk	Y
If Quirk - whether SR&ED?	Y
2 - Backgrounds of Witnesses	
Cost vs. benefit	
Exclusionary rules	
Necessity	
Proper qualification	
Relevance	
	METHODS
Analysis Trials Prototypes Lines of code	
	COSTS
Hours Materials $ Subcontractor $	
2201 - Allegro - Protocol Compliant Methods to Extend Bluetooth Functionality	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 10 Articles Patent searches: 5 patents Competitive products or processes: 2	2022

Similar prior in-house technologies: 3	'1-1
Queries to experts: 2 responses	year 1
OBJECTIVES	**RESULTS**
Maximum buffer use: 64 K	62
Fidelity (relevant info retained): 90 %	83
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
“lossy-type scenario” (less data)	Y
buffer overrun - speed vs. clearing	Y
proprietary systems - blackbox issues	Y
throttling - time vs. rate vs. %	Y
transparent compression methods	Y
	METHODS
Analysis	14
Trials	6400
Prototypes	
Lines of code	
	COSTS
Hours	650
Materials $	
Subcontractor $	

2202 - Allegro - Optimize TCP Services over Cellular Networl	
BENCHMARKS	**ACTIVITIES BY YEA**
Internet searches: 20 Articles	2022
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
Scalability: %	
Throughput: MB	
Reduce TCP timeouts: number	
Reduced data vs TCP: 55 %	52
supported devices: 500 number	500
Minimum timeout : 1 minutes	2
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Byte array pool	
causes low package througput	
eliminating buffer under runs	Y
parameters relevant to digital audio	Y
unsafe attributes checking vs speed	Y
2 - Synchronous event wrapper	
firewall and deep packet inspection	
packet loopback process	
parallel session process	
redesign legacy hardwire code for	

sync vs async events	
	METHODS
Analysis	3
Trials	14000
Prototypes	
Lines of code	
	COSTS
Hours	500
Materials $	
Subcontractor $	
2203 - Allegro - Multi-point Integration Platform for Mobile Applications	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 10 Articles	2022
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
distributed transaction timeout: 1 1= yes/	1
intelligent packet routing: 1 yes = 1 / no =	1
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - necessary wait times	
filtering methods vs. latency vs. ...	Y
timeout length vs. queuing mechanisms	Y
	METHODS
Analysis	
Trials	1400
Prototypes	
Lines of code	
	COSTS
Hours	820
Materials $	
Subcontractor $	
2211 - Airzone - WIN Optimizing Passive Monitoring of Low-Concentration Compounds	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 5 Articles	2022
Suppliers: 1 products	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
Detectable compounds: 52 number	52
single protocol for 8 items: 1 protocols	1
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
chromatographic variables	Y
extraction times	Y
solvent polarity vs. aromatic	Y

	METHODS
Analysis	
Trials	10
Prototypes	
Lines of code	
	COSTS
Hours	870
Materials $	3370
Subcontractor $	
2212 - Airzone - LOSS Solving Combustion Issues to Develop Artificial Smouldering	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2022
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
measure emissions: % expected	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
identify compounds	Y
	METHODS
Analysis	
Trials	25
Prototypes	1
Lines of code	
	COSTS
Hours	323
Materials $	2750
Subcontractor $	
2215 - Global Sustainable - Efficient home - LOSS	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2022
	'1-1
	House construction
OBJECTIVES	**RESULTS**
Energuide efficiency rating: 90 %	91
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
effects of natural force interactions	
	METHODS
Analysis	
Trials	
Prototypes	
Lines of code	
	COSTS

Hours Materials $ Subcontractor $	
2216 - Logix Data (solar panels) - LOSS	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2022
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
Cost: $ Performance: 250 W/m2 Snow load: kg Windload: km/h	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
	METHODS
Analysis Trials Prototypes Lines of code	
	COSTS
Hours Materials $ Subcontractor $	
2217 - WD Borger - Pressure activated removable plugs for large box culverts.	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2022
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
(none)	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
hoop stress	
water head pressure	
	METHODS
Analysis Trials Prototypes Lines of code	
	COSTS
Hours Materials $ Subcontractor $	

2220 - Beton Workshop OVERVIEW (LOSS 2/2 projects)	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2022
	'1-1
	lack of "systematic investigation"
OBJECTIVES	**RESULTS**
(none)	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
	METHODS
Analysis Trials Prototypes Lines of code	
	COSTS
Hours Materials $ Subcontractor $	

2221 - Beton - transportable concrete modular panels	
BENCHMARKS	**ACTIVITIES BY YEA**
(none)	2022
	'1-1
	Claimant arguments
OBJECTIVES	**RESULTS**
Thickness: 0.5 inches	0.5
Strength: 100 %	100
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - As claimed = LOSS	
additives	
casting process	
fibres types - weight, porosity, strength	
ingredient proportions	
2 - Documentation weaknesses	
	METHODS
Analysis Trials Prototypes Lines of code	
	COSTS
Hours Materials $ Subcontractor $	

2222 - Beton - mixing and pouring concrete floors	
BENCHMARKS	**ACTIVITIES BY YEA**

Suppliers: 2 products	2022
	'1-1
	Claimant arguments
OBJECTIVES	**RESULTS**
Compressive strength: 50 mPa	50
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - As Claimed = LOSS	
additives	
casting methods	
2 - Ideas per Expert witness	
cement types	
fibre types	
setting times	
super plasiticers & foaming agents	
water types and amounts	
	METHODS
Analysis Trials Prototypes Lines of code	10
	COSTS
Hours Materials $ Subcontractor $	
2301 - Buhler - Tractor design WIN	
BENCHMARKS	**ACTIVITIES BY YEA**
Competitive products or processes: 4 Similar prior in-house technologies: 2	2023
Suppliers: 1 products	'1-1
Queries to experts: 1 responses	Torsion coupler design
OBJECTIVES	**RESULTS**
Power: 500 hp Emission requirement: 2 tier Power bulge: 8 % Torsional coupler spike load capacity: x Price: $	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
cooler face and shapes	
Cooling system design - dust & low airflow	
torsional coupler - whipping,slip joint,	Y
turbulent airflow vs. pressure effects	
	METHODS
Analysis	16

Trials	12
Prototypes	4
Lines of code	
	COSTS
Hours	1400
Materials $	350000
Subcontractor $	
BENCHMARKS	
(none)	
	'1-1
	2013 - 2/5 projects denied
OBJECTIVES	
Shelf life: 10 days	6
reduce salt: %	
increase protein: %	
maintain taste: %	
freeze / thaw credibility: %	
Cooking time: 80 %	
Use of chemical preservatives: 0 %	20
UNCERTAINTIES & KEY VARIABLES	
1 - Technological uncertainty	
cooking techniques to reduce time	
effects of no anitbiotics on meats	
methods to reduce fat & salt	Y
transferability of methods	Y
Analysis	
Trials	
Prototypes	
Lines of code	
Hours	250
Materials $	
Subcontractor $	
2303 - ACBK Thermal Storage LOSS	
BENCHMARKS	**ACTIVITIES BY YEAR**
Patent searches: 1 patents	2023
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
Efficiency : 90 %	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	

basin orientations	
tank size	
water temperatures	
	METHODS
Analysis	
Trials	1
Prototypes	1
Lines of code	
	COSTS
Hours	
Materials $	
Subcontractor $	
2304 - Mold Leaders Mold designs LOSS	
BENCHMARKS	**ACTIVITIES BY YEAR**
Internet searches: 1 Articles	2023
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
units before misalignment: 10000 cycles	
Hardness: 55 hrc	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
	METHODS
Analysis	
Trials	
Prototypes	8
Lines of code	
	COSTS
Hours	
Materials $	
Subcontractor $	
2305 - Daves Diesel - injector design LOSS	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2023
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
remanufacture injectors: 3 number	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
shim thickness	
spring pressure	
	METHODS
Analysis	

Trials	22
Prototypes	3
Lines of code	
	COSTS
Hours	
Materials $	
Subcontractor $	
2306 - JEC Distributors - welding LOSS	
BENCHMARKS	**ACTIVITIES BY YEAR**
Suppliers: 1 products	2023
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
Sensors (per gun vs per cell): 12 number	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
communication protocols	
electrical noise mitigation	
	METHODS
Analysis	
Trials	
Prototypes	
Lines of code	
	COSTS
Hours	
Materials $	
Subcontractor $	
2400 - New AI examples from USPTO	
BENCHMARKS	**ACTIVITIES BY YEAR**
(none)	2024
	'1-1
	Activity 1
OBJECTIVES	**RESULTS**
(none)	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
	METHODS
Analysis	
Trials	
Prototypes	
Lines of code	
	COSTS
Hours	
Materials $	

Subcontractor $	
	2401 - AI Anomaly detection me
BENCHMARKS	**AC**
(none)	
	'1-1
	Circuit design Eligible for patent
OBJECTIVES	
New ASIC chip ANN Methodology: x Malicious attack detection: 99.9 %	17
UNCERTAINTIES & KEY VARIABLES	
1 - Circuit design HARDWARE	
connection methods	Y
layouts	Y
materials	Y
2 - ANN design SOFTWARE / AI	
boundary definition - ordinary vs	
detection techniques	
variation sensitivity	
Analysis Trials Prototypes Lines of code	
Hours Materials $ Subcontractor $	
	2402 - AI Fibrosis Treatment
BENCHMARKS	**ACTIVITIES BY YEA**
(none)	2024
	'1-1
	Screening method AI based - Ineligible
OBJECTIVES	**RESULTS**
System to identify risk : 99.5 % develop anti fibrotic eye drop: 1 0= no / 1 Reduce Post Inflammation: 90 %	97
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
drop formulation	
modelling SNPs - AI	
treatments - drops, microstints, surgery	
	METHODS
Analysis	

Trials Prototypes Lines of code	
	COSTS
Hours Materials $ Subcontractor $	
BENCHMARKS	
(none)	
	'1-1
	AI generated result - Ineligible
OBJECTIVES	
(none)	
UNCERTAINTIES & KEY VARIABLES	
1 - Technological uncertainty	
Analysis Trials Prototypes Lines of code	
Hours Materials $ Subcontractor $	
2411 - Therapeutic cancer compound using AI	
BENCHMARKS	**ACTIVITIES BY YEA**
(none)	2024
	'1-1
	AI provided feedback - Eligible
OBJECTIVES	**RESULTS**
(none)	
UNCERTAINTIES & KEY VARIABLES	**CONCLUSIONS**
1 - Technological uncertainty	
	METHODS
Analysis Trials Prototypes Lines of code	
	COSTS
Hours Materials $ Subcontractor $	

Project Timeline	
Start	**Completion**
2015-01-01	2016-03-31
2016-03-01	2017-05-31
2017-05-09	2018-10-17
2017-07-24	2018-04-11
2017-03-14	2018-04-17
2017-01-26	2018-07-26
2017-09-19	2019-11-29
2017-02-09	2017-10-31
2017-01-02	2018-03-21
2017-03-01	2018-06-20
2017-08-01	2018-12-31
2017-11-06	2018-10-06
2018-04-01	2019-04-30
2018-02-01	2018-11-07
2006-01-15	2009-01-07
2006-01-31	2008-02-29
2019-02-01	2020-01-24
2020-02-02	2020-12-31
2020-01-31	2020-02-29
2020-02-10	2020-08-31
2020-03-01	2020-10-29
2020-03-31	2020-07-31
2020-03-02	2020-12-31
2020-03-13	2020-09-30
2020-03-19	2020-12-31
2020-03-01	2020-09-30
2020-05-01	2020-08-31
2020-01-01	2020-05-31
2020-05-01	2020-09-30
2021-01-01	2022-04-30
2021-01-01	2021-07-30
2021-01-01	2021-12-31
2022-02-01	2022-12-08

2022-01-01	2022-12-31
2022-02-01	2022-11-30
2022-04-12	2022-12-30
2022-02-01	2022-10-31
2022-03-01	2022-11-30
2022-04-01	2022-11-30
2022-05-01	2022-10-31
2022-06-01	2022-12-30
2022-01-13	2022-08-30
2022-05-09	2022-11-30
2022-04-17	2022-11-23
2023-01-01	2023-09-30
2023-02-01	2023-10-31
2023-03-01	2023-10-31
2023-04-01	2023-10-31
2023-05-04	2023-10-31
2023-06-01	2023-11-30
2024-01-01	2024-12-31
2024-01-02	2025-12-23
2024-01-02	2024-12-31
2024-03-04	2024-09-30
2024-01-01	2024-12-31
2024-01-01	2024-12-31

TIVITIES BY YEAR	
2017	
'1-2	'1-3
Questions on witness credibility	5 questions
RESULTS	
CONCLUSIONS	

METHODS	
COSTS	
logy	
TIVITIES BY YEAR	
2017	
'2-1	'3-1
Technology vs. features	Ineligible activities
RESULTS	
CONCLUSIONS	
Y	
Y	
Y	
Y	
METHODS	
147	
13	
7	
14800	
COSTS	
250	

AR
'2-1
Heuristic design
Y
AR
'2-1
Milling method to remove only
1 2

100
50
8

rizontal lathes" (WIN)	
TIVITIES BY YEAR	
2007	2008
'1-2	'1-3
Design 80 ton lathe	Design 80, 60 & 40 ton lathes
RESULTS	
CONCLUSIONS	
Y	Y
Y	Y
METHODS	
COSTS	

?C - Directly Engaged (WIN)		
ACTIVITIES BY YEAR		
2021		2022
'2-1	'3-1	'1-2
Compass - effects Rivaroxaban	Who performed the SR&ED?	2022 development
RESULTS		
CONCLUSIONS		
	Y	
METHODS		
1 27000 2		
COSTS		
180		

rine software & SI (LOSS)		
ACTIVITIES BY YEAR		
2021		
'1-2	'2-1	'2-2
Lack of Systematic investigation	Tracking labour expenses	Software as material cost? (NO)
RESULTS		
CONCLUSIONS		
	Y	
		Y
METHODS		
COSTS		

I (LOSS)	
TIVITIES BY YEAR	
2021	
'2-1	'3-1
pivot output mechanism	deterministic and stateful
RESULTS	
0	1
CONCLUSIONS	
Y	

METHODS	
5 3	5
COSTS	
220	180

m)
AR
'2-1
Roles of Expert witnesses
Y
Y
Y
Y

ks
AR
'2-1
Supporting Activity
Y
Y
Y
Y

Y
550

AR
'2-1
Expert witness rebuttal
AR

'2-1
Expert witness critique
AR
'1-2
Cooling system design
500 2 8
Y
Y
Y

1600		
500000		
30000		
2302 - Canafric - food development WIN		
ACTIVITIES BY YEAR		
2023		
'1-2	'1-3	'1-4
2014 - 3/3 projects denied	2015 - 3/7 projects denied	2016 - 3/6 projects denied
RESULTS		
85		
CONCLUSIONS		
Y		
Y		
METHODS		
COSTS		

thod	
TIVITIES BY YEAR	
2024	
'2-1	'2-2
General anomaly detection -	Packet method for security -
RESULTS	
	99.5
CONCLUSIONS	
	Y
	Y
	Y
METHODS	
COSTS	

R
'1-2
Custom eyedrops - Eligible
1 93
Y
Y

2410 - Transaxle design using AI		
ACTIVITIES BY YEAR		
2024		
'1-2	'1-3	'1-4
Transaxle to practice - Ineligible	Redesign on horizontal plane	AI input on fabrication - Eligible
RESULTS		
CONCLUSIONS		
METHODS		
COSTS		
AR		
'1-2		
AI provided solution - Ineligible		

'1-5

Judges ruling and rationale

'1-5
AI system designer - Ineligible inventor