FINANCIALS
The Factoid Authority
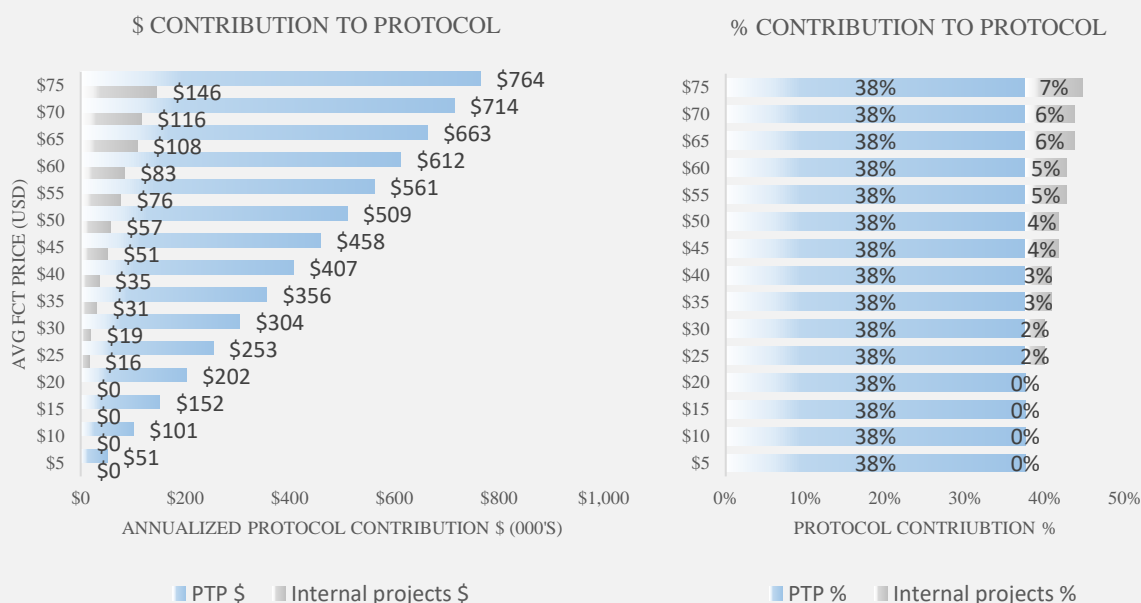
Contents

Financials

We have used 2 Authority Servers as the basis for the following calculations, however it should be noted that we have modelled extensively using 1 & 3 – 5 servers as well. **The Factoid Authority (TFA)** will be pursuing 3 – 5 Authority Servers for the short to medium term with the understanding that eventually this will be reduced to 1 in the future.

Protocol Contributions

We have carried out income & profitability projections, cash-flow exercises and other financial analysis to identify how we may be positioned under various conditions. After extensive review & keeping in line with our vision of becoming a leading Factom software company, the following table of protocol support has been determined:

Server	PTP % (per server)	PTP % (cumulative)	Internal %* (per server)	Total % (cumulative)
1	25	25	0 – 5	25 – 30
2	50	38	0 – 7	38 – 45
3	50	42	0 – 10	42 – 52
4	50	44	TBD	TBD
5	50	45	TBD	TBD

Internal % is defined as the percentage of server revenue marked for internal projects i.e. furthering the protocol outside of the grant system e.g. Factom Block Explorer, FactomDB etc. Internal contribution percentage is dependent upon FCT price (illustrated below).

$ CONTRIBUTION TO PROTOCOL

AVG FCT PRICE (USD)	PTP $	Internal projects $
$75	$764	$146
$70	$714	$116
$65	$663	$108
$60	$612	$83
$55	$561	$76
$50	$509	$57
$45	$458	$51
$40	$407	$35
$35	$356	$31
$30	$304	$19
$25	$253	$16
$20	$202	$0
$15	$152	$0
$10	$101	$0
$5	$51	$0

ANNUALIZED PROTOCOL CONTRIBUTION $ (000'S)

% CONTRIBUTION TO PROTOCOL

AVG FCT PRICE (USD)	PTP %	Internal projects %
$75	38%	7%
$70	38%	6%
$65	38%	6%
$60	38%	5%
$55	38%	5%
$50	38%	4%
$45	38%	4%
$40	38%	3%
$35	38%	3%
$30	38%	2%
$25	38%	2%
$20	38%	0%
$15	38%	0%
$10	38%	0%
$5	38%	0%

PROTOCOL CONTRIUBTION %

The company will review contributions quarterly, which are pursuant to:

- Providing as much value to the protocol as possible through a mix of PTP contributions and internal projects
- Ensuring that the company retains adequate liquid assets to cover liabilities and that profit targets are on track

Profitability

To realize our vision of establishing a leading Factom software company, we must remain profitable under any price conditions perceivable. Net Profitability is an important measure of TFA's financial performance, we can effectively track it and influence it by controlling variable expenses as well as managing non-cash assets. TFA will take initiatives to remain profitable:

- Track to a **minimum** of 100k USD or 12% Net Profit (PA) for the first 12 months
- Base salaries & other variable expenses on FCT price
- Review contributions to the PTP quarterly
- Review internal projects frequently & manage them effectively
- Budget monthly to mitigate FCT price volatility
- Set aside funds for proactive infrastructure scaling, such as servers

We have employed various techniques & tools to ensure the company remains on target to reach these goals, please see Tracking Profitability for an overview.


TFA PROFITIBILITY PROJECTION AT VARYING PRICE POINTS
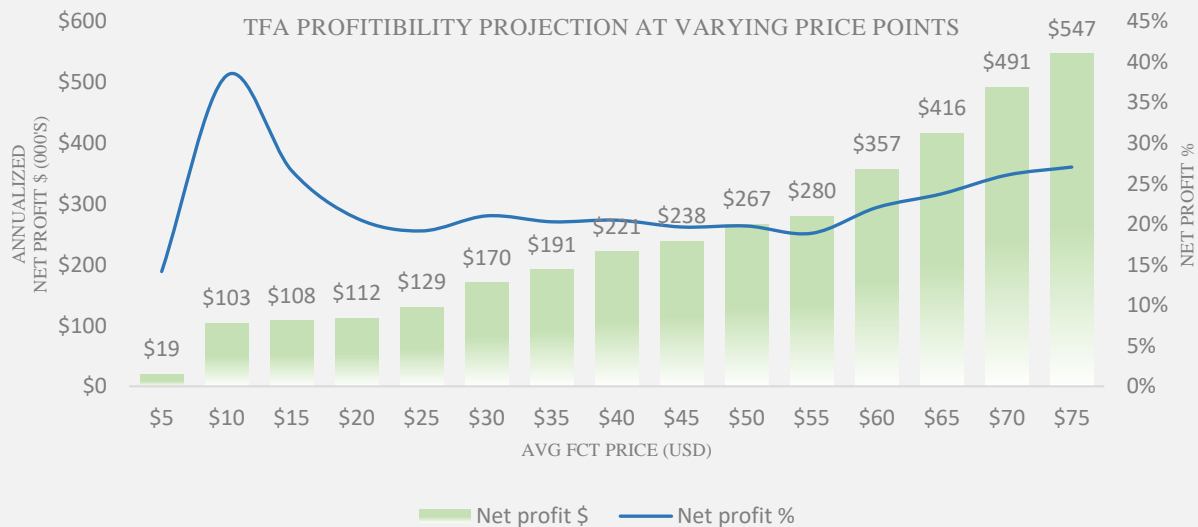
Expenses

The Factoid Authority will cost just over $13k USD to get started with $7k of that towards incorporation expenses to setup in Singapore. TFA's proposed structure will incur 0% corporate tax.

Expense Type	Detail	Cost (PA)
Start-up	Breakdown in TFA Income Projection Calculator	$13,033
Fixed	Authority Servers / Guard Nodes + Backup Servers	$36,900
	Company Fees	$2,508
	Accounting Fees	$2,709
	Facilities	$0
Variable	Internal Projects (FCT price dependent)	$0 - $145,551
	Payroll (FCT price dependent)	$0 - $500,000
	Travel	$8,000
	Other Fees / Subscriptions	$2,000
Taxes	Corporate tax	$0

Fixed expenses total $42k (PA), the majority coming from Server expenses ($37k). We have budgeted for seven servers (Guard nodes + backups for brain swaps and updates) in addition to our Authority Servers, as well as room to scale.

As mentioned previously, TFA's payroll expense will vary considerably depending on FCT price:

DIRECTOR SALARIES (PA) & TOTAL PAYROLL / REVENUE %
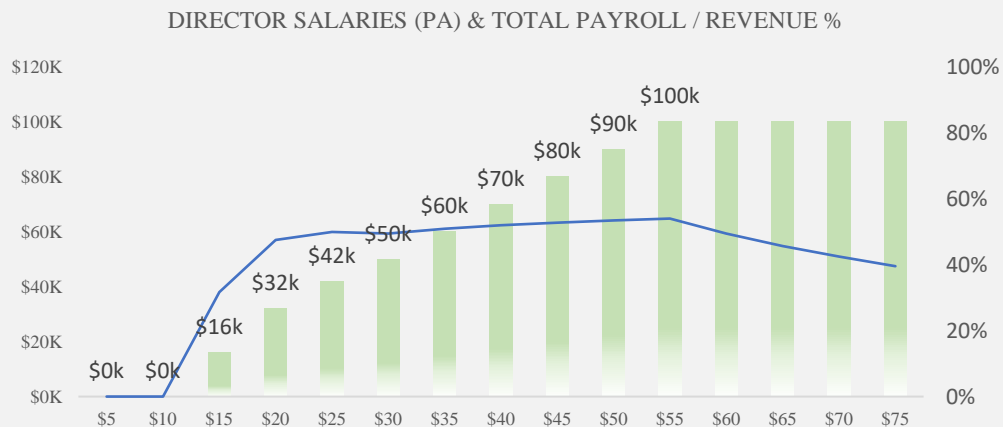
Ideally, we are looking to have all our members transition into full-time roles for TFA to fulfill our vision of supporting continuous Factom-related development and establishing TFA as a leading software company. At lower FCT prices, this transition may not be immediate, nevertheless we will ensure the company continues to operate effectively and we can offer this assurance for the following reasons:

- The majority of TFA members are independently financially secure, removing pressure from the company to provide payroll and dividends

- Members who are unable to transition to full-time work due to low FCT price will continue working for TFA in a part-time capacity
- TFA will seek additional revenue through securing grants

To be most effective, our members are seeking guaranteed full-time compensation, irrespective of FCT prices. Given the appropriate resources, we can apply our company to provide the greatest value to the protocol.

For simplicity, $100,000 (PA) can be considered full-time compensation. The below table outlines at what FCT price points (after PTP allocation and expenses) TFA members are all be compensated full-time.

Server	Factoid Price* (USD)	PTP % (cumulative)
1	70	25
2	55	38
3	35	42
4	25	44
5	20	45

Approximate annual average price at which each member can be fully compensated

As the number of Authority Servers operating under TFA increases, so does the efficiency of the company; our contributions to the grant pool increase and the effect of FCT price dictating our operations diminishes. We envisage in the future we will all be compensated full-time with only 1 server in our control.

Financial Tools

TFA Cash-Flow Calculator

- Calculates disposable cash (and number of Factoids) on hand at period-end
- Tracks gross revenue based on actual FCT sales
- Alerts to possible cash-flow problems and automatically deducts FCT to cover expenses
- Useful for forecasting & budgeting next month and tracking profitability targets
- Useful for calculating elasticity and break-even points

TFA Income Projections Calculator

- Allows variable inputs to measure & plan for different scenarios
- Useful for modeling profitability and creating targets
- Useful for modeling "what-if" scenarios
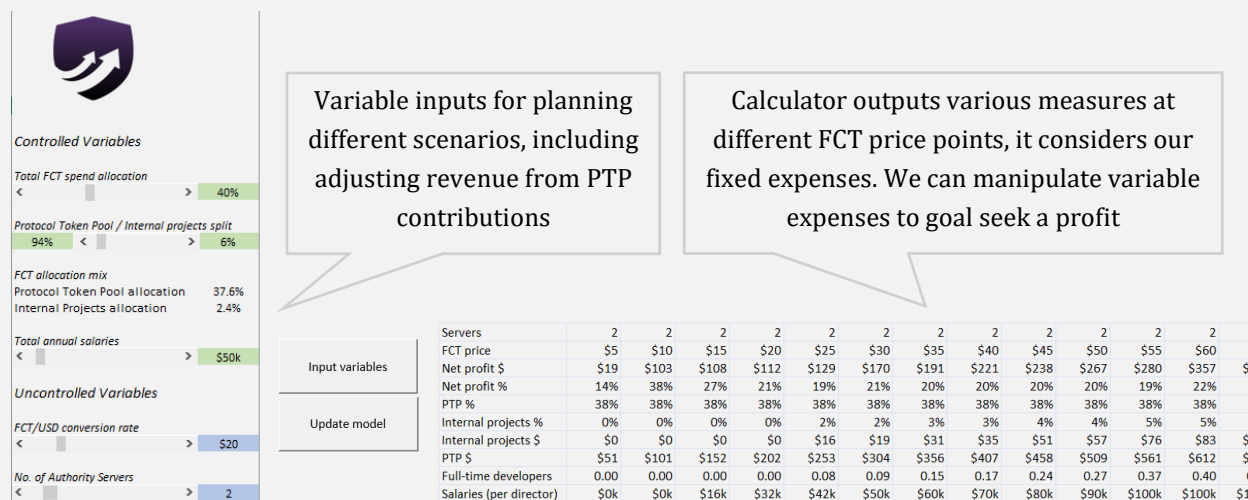- Summarizes key performance indicators

TFA Grant Costing Calculator

- Allows for project planning
- Calculates labor break-down
- Useful for cost estimations & operational overheads

Tracking Profitability

The following is a condensed version of our methodology for tracking company profits.

Using TFA Income Projections Calculator, we produce a model with a series of profit projections based on varying FCT price. We input variables (No. of servers, protocol contributions % etc.) and our calculator determines both $ and % Net Profit. We can refine the model further, by adding or removing expenses and revenue streams.

Controlled Variables

Total FCT spend allocation — 40%

Protocol Token Pool / Internal projects split — 94% / 6%

FCT allocation mix
Protocol Token Pool allocation — 37.6%
Internal Projects allocation — 2.4%

Total annual salaries — $50k

Uncontrolled Variables

FCT/USD conversion rate — $20

No. of Authority Servers — 2

Input variables

Update model

Variable inputs for planning different scenarios, including adjusting revenue from PTP contributions

Calculator outputs various measures at different FCT price points, it considers our fixed expenses. We can manipulate variable expenses to goal seek a profit

Servers	2	2	2	2	2	2	2	2	2	2	2	2	
FCT price	$5	$10	$15	$20	$25	$30	$35	$40	$45	$50	$55	$60	
Net profit $	$19	$103	$108	$112	$129	$170	$191	$221	$238	$267	$280	$357	$4
Net profit %	14%	38%	27%	21%	19%	21%	20%	20%	20%	20%	19%	22%	2
PTP %	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	3
Internal projects %	0%	0%	0%	0%	2%	2%	3%	3%	4%	4%	5%	5%	
Internal projects $	$0	$0	$0	$0	$16	$19	$31	$35	$51	$57	$76	$83	$
PTP $	$51	$101	$152	$202	$253	$304	$356	$407	$458	$509	$561	$612	$
Full-time developers	0.00	0.00	0.00	0.00	0.08	0.09	0.15	0.17	0.24	0.27	0.37	0.40	0
Salaries (per director)	$0k	$0k	$16k	$32k	$42k	$50k	$60k	$70k	$80k	$90k	$100k	$100k	$1

This forms the basis for our profitability targets.

Every month revenue is derived from actual volume-weighted FCT sales and can be calculated using TFA Cash-flow Calculator.

Month	Day 1		Day 2		Day 3		Day 4		Day 5	
1	23.20		23.33		19.08		11.85		17.81	
1	FCT/USD	Vol sold	FCT/USD	Vol sold	FCT/USD	Vol sold	FCT/USD	Vol sold	FCT/USD	Vol sold
1	25	100	22.5	100	19	1000	11	50	17	555
1	24	150	24	100	19.5	200	12	75	18	400
1	25	20	25	10			15	10	16	5
1	23	55	23	2					17.5	5
1	22	76							19	55
1	21	89							21	88
1	17	6							22.5	7

FCT sales will be recorded from exchange data, calculating a running monthly average

Cash-flow Calculator

At month-end an average FCT price is pulled through to the cash-flow calculator, this forms the basis for distributing variable expenses, as well as determining revenue for the month

CONTROL PANEL			Month 1		Month 2		M
Updates all months							
Reset No. of paid servers	RESET	2	Starting cash	0 FCT $0	Starting cash	209 FCT $2,784	Starting cas
Reset Factoid Price	RESET	$10	No. of paid servers	2	No. of paid servers	2	No. of paid servers
			Factoid price (avg sell $22.52)	$23	Factoid price (avg sell $23.2)	$23	Factoid price (avg sell $
			% of Factoids allocated to PTP	38%	% of Factoids allocated to PTP	38%	% of Factoids allocated t
			Cash in (after PTP)	1,393 FCT $32,030	Cash in (after PTP)	1,393 FCT $32,030	Cash in (after
			% of Factoids sold to USD	85%	% of Factoids sold to USD	20%	% of Factoids sold to US
					Insufficient USD to cover expenses. Sell more Factoids, or Factoids will be sold from reserves		
			Before expenses		*Before expenses*		*Before expenses*
			Factoids held	209	Factoids held	1,323	Factoids held

Payroll and internal project contributions (or any variable dependent on FCT price), will be set by the monthly average FCT price.

> *For example, consider an average monthly FCT price of $25, we have determined that at this price point the company should have the following characteristics:*
> *Net Profit: $129k (PA)*
> *Payroll: $210k (PA)*
> *Internal Projects: 2.4% (of Gross Revenue) or 16k (PA)*
> *Thus, for this month; we would have Payroll of $210k/12 = $17.5k and we would budget 16k/12 = 1.4k for Internal Projects*

These methods ensure at any given month, irrespective of FCT price, TFA's annual profitability targets remain on track.