# Cost Structure and Funding Sources of the Python Software Foundation between 2016 and 2017



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# **Abstract**

This report looks into the financial position of the Python Software Foundation (PSF), whose mission is to advance the Python programming language and the community around it, considering data from the years 2016 and 2017.

Analysing the revenue side of the foundation showed that major sources of funding are membership fees, donations and sponsorship. Through these sources, a total of \$2.4 million and \$2.9 million was made available to PSF in 2016 and 2017, respectively. PSF keeps its operating reliance ratio higher than 1 through the given time period which is an indication of its sustainability. PSF heavily relies on sponsorship from big corporates that use python within their environments which can be seen as a healthy, mutually beneficial relationship.

The money was used to fund administrative, travel and personnel expenses, as well as activities of the foundation. The latter makes up around 80% of total expenses in both years (roughly \$2.2 million in 2016 and \$2.5 million in 2017) and comprises learning opportunities (workshops, trainings...), opportunities to meet and connect (meetups, conferences,...) and open source projects.

Overall, both expenses and revenues increased, but expenses never outweighed revenues, which indicates a healthy growth of PSF. A high operating expense ratio shows that PSF re-invests all of its profits into its activities, which is in line with its obligations as an open source foundation. Furthermore, a current ratio above 1 indicates that PSF is able to meet its short term obligations. Lastly, a high debt ratio let's assume a strong reliance on external funding, which while being still feasible is suggested to decrease in future years.

In conclusion, the PSF is in a healthy financial position and therefore able to live up to its mission. Taking into account that generalizations from case studies are to be treated with care, PSF can serve as guideline for other foundations backing open source communities.

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# 1. Introduction

In her talk "Where money meets open source", Nadia Eghbal from GitHub raises the question "why we should bother talking about money in open source at all" (*Where money meets open source - Nadia Eghbal (GitHub)*, 2017/2017). While she continues to explore how money could be spent on open source projects, her question touches upon a common misperception: the belief that free and open source software remains unrelated to commercial concepts.

At first sight, this might seem true as contributions are made on a voluntary basis, hence the considerable cost factor of human resources in traditional business becomes obsolete. Furthermore, the software itself is made available for free use, and will not constitute a direct source of income to the creator/provider.

However when taking a closer look, it occurs that most open source initiatives are non-profit organizations which do not aim to make a profit, but nevertheless deal with cost and revenue streams necessary for the curation of their free/libre and open source software (FLOSS) communities and the development of their open source projects.

A variety of intriguing questions come to mind: Which activities do FLOSS communities perform that demand financial activity? Where do they find support? And what are the motivations of supporters to sustain a certain FLOSS community? Is this a sustainable way of conducting "business"?

# 2. Research Question

This paper aims to answer these questions by exploring cost structures and funding sources of FLOSS communities through investigating the case of the open source initiative Python Software Foundation (PSF), looking at data between the years 2016 and 2017. The research looks into the activities of the foundation that need funding, thereby establishing its cost structure, and analyses the various sources of funding the community relies on to finance the described activities and money outflows.

The goal of the paper is to answer the following research question:

"What is the financial position of the Python Software Foundation, taking into account the costs it incurred and the corresponding funding sources in 2016 and 2017?"

Additionally, this paper tries to conclude if the Python case can be used to guide the establishment of other open source projects in respect to finances.

# 3. Background of Python Software Foundation

In order to provide a general understanding of the analysed entity - the Python Software Foundation - this chapter outlines several aspects relating to the background of the organization, such as its purpose of existence, how it is organized and who is part of it.

# 3.1. History

The Python Software Foundation (PSF) is a non-profit foundation that keeps the intellectual property rights of Python while maintaining it free and open to the public. PSF has the mission of promoting, protecting and advancing the Python programming language as well as supporting the community of its programmers, this includes funding Python related development with grants program and special projects. The foundation makes sure to work with the Open Source Initiative to ascertain that the PSF licence complies with the Open Source Definition ("Executive Summary," 2008).

## 3.2. Purpose

Purpose of the existence of PSF manifests in its mission, defined by the organization as being the following: "The mission of the Python Software Foundation is to promote, protect, and advance the Python programming language, and to support and facilitate the growth of a diverse and international community of Python programmers." ("Executive Summary," 2008)

# 3.3. Scope of Activities

PSF produces the core Python distribution which includes the language, standard libraries, documentation, installers, source code, educational materials, assorted tools and applications. The foundation protects the python name, names, service and trademarks associated with all other intellectual property in possession of PSF. The foundation aims to publicise and promote the adoption and development of Python-related technologies as well as educational resources. Maintaining a public website, planning Python conferences, offering grants to Python-related open source projects are examples to this ("Executive Summary," 2008).

# 3.4. Organization & Legal Incorporation

The PSF is organized as a non-profit organization based in the US, with members all over the world. There are different types of members (i.e. supporting or contributing ones or fellows), who nominate and vote new members into the organization ("Explaining the Python Software Foundation (PSF) Part 1," 2011). A group of officers and a board of directors leads the organization, fulfilling administrative tasks and ensuring that the mission of the foundation is lived up to ("PSF/DutiesAndResponsibilitiesOfDirectors," 2018).

Registered as non-profit, the PSF is exempted from taxes. The charitable status also allows the organisation to accept donations, which is fundamental to its business ("Python Software Foundation Public Records," n.d.).

# 3.5. Community

The Python community is made up of the members of the PSF, open for anyone to join who uses or supports the programming language ("PSF Membership FAQ," n.d.). It comprises both individuals who contribute their time and companies who sponsor the foundation ("Executive Summary," 2008). In order to ensure a supportive work environment, members are encouraged to act by the principles of the community: "open", "considerate" and "respectful" ("Python Community Code of Conduct," 2013). Working mostly remotely, the community uses conferences as opportunities to gather physically ("Conferences and Workshops," n.d.).

#### 3.6. License and Trademarks

After continued development at different entities, the Python Software Foundation was finally founded in 2001. Guido van Rossum, Python's creator, remains its principal author ("History and License — Python 3.7.2rc1 documentation," n.d.), but contributions are made by many individuals and organizations, who retain the copyright, licensing it to the PSF. Python is licensed under multiple open source licenses, the PSF license being the strongest, covering all content added since version 2.0.1 (most recent version is 3.7.2) ("Executive Summary," 2008). The PSF license is a permissive license ("Python Software Foundation License - Wikipedia," n.d.), with many parts being GPL compatible which allows integration with other software. The terms and conditions of the latest version outline its rights, making the PSF a free software: "PSF hereby grants Licensee a nonexclusive, royalty-free, worldwide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 3.7.2rc1 alone or in any derivative version" ("History and License — Python 3.7.2rc1 documentation," n.d., "Python Software Foundation License - Wikipedia," n.d.).

The PSF owns the trademarks (logos and name) for the Python programming language and grants usage through its trademarks committee ("Explaining the Python Software Foundation (PSF) Part 1," 2011). The PSF protects name and logos to prevent other programming languages from using similar names that could lead to confusion between the languages. Through its concept of nominative use, the PSF encourages to use the unaltered name and logo widely and without permission ("Executive Summary," 2008, "Python Software Foundation Public Records," n.d.).

# 4. Data Collection

The following chapter gathers the data necessary to conduct the analysis of the cost structure and funding sources of the PSF between the years 2016 and 2017. It first zooms in on the cost side of the organization, differentiating between fixed and variable costs and listing liabilities. The chapter further provides data on the revenue streams of the PSF, looking at the different types of funding available to the organization, as well as assets the foundation owns.

#### 4.1. Cost structure

In order to determine the cost structure of PSF, its fixed and variable costs are considered. The foundation being a service provider, fixed costs relate to administrative expenses and variable costs to staff wages and activities the organization performs. The data is collected by looking at the financial statements of the organization, its organizational structure and the described activities it performs.

#### 4.1.1 Administrative Costs (Fixed Costs)

The following fixed costs have been taken from the treasury reports from 2016 ("2016 financial statements," n.d.) and 2017 ("2017 financial statements," n.d.):

Table 1 – Fixed Costs in 2016 & 2017

	2016	2017
Insurance	\$3,393	\$14,446
Legal and professional fees	\$20,900	\$54,044
Occupancy expenses	\$7,511	\$9,657
Office / administrative expenses	\$24,117	\$31,548
Taxes	\$149	/
Total	\$66,070	\$109,695

The numbers show a \$43,625 increase in fixed costs.

#### 4.1.2 Staff Wages (Variable Costs)

The board of directors performs its duties on a purely voluntary basis. The only positions within the foundation which are remunerated are officer positions, namely the position of

- the director of operations (also the Secretary & Director at Large),
- the treasurer,

- the controller,
- the event coordinator (also the assistant secretary) and
- the IT manager

("PSF/DutiesAndResponsibilitiesOfDirectors," 2018).

Their compensation is set and voted upon by the board of directors ("PSF Bylaws," 2017). In 2016, \$4,789 was accounted for as payroll expenses (including taxes), in 2017 it was \$7,646. The number of officers developed from ten (10) in 2015/16 to fourteen (14) in 2016/17 to eleven (11) in 2017/18. These changes comprised newly appointed positions such as a general counsel, a second event coordinator and an assistant secretary and ceased positions such as the communications officer and one of the vice chairs ("PSF/DutiesAndResponsibilitiesOfDirectors," 2018).

Appendix I gives an overview of the officers in place between 2016 and 2017.

#### 4.1.3 Activities (Variable Costs)

The activities of the PSF aim to enable the Python community to thrive in their work. A broad set of activities is performed, that ranges from one-off workshops to the annual PyCon conference.

A total of \$1,790,405 was spent on such programs in 2016. Considering that overall expenses amounted to \$2,192,600 in that year, program expenses made up 81,66% of it.

In 2017, it was a total of \$1,976,486. This constitutes \$186,081 more than in the previous year and 79,45% of the total expenses of \$2,487,646.

Program expenses are broken down into fiscal sponsorship service expenses, grant and project support expenses and other program-related service expenses in the treasury report. The following chart shows the division in 2016 and 2017.

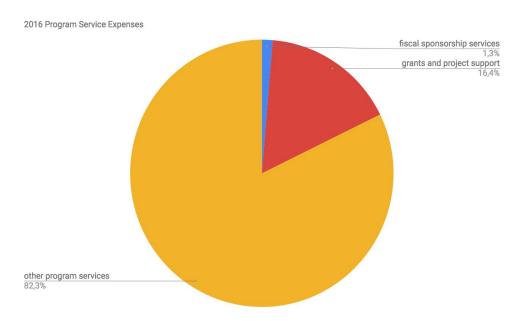


Figure 1 – 2016 Program Service Expenses

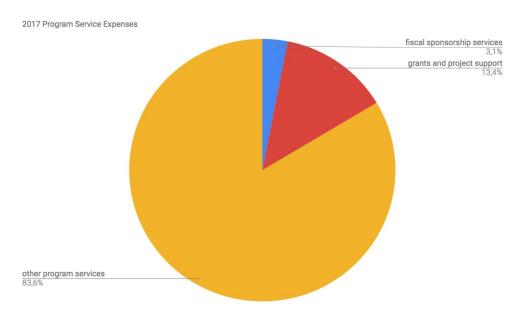


Figure 2 – 2017 Program Service Expenses

In the following, the various activities and programs the PSF executes are described in greater detail.

#### PyCon Conference

The PyCon conference is the original conference of the Python Software Foundation, first held in 2003 in the United States, and since then takes place annually there as well as in other countries all around the globe. The conference is an opportunity for the developer community to meet physically, participate in workshops and discussions, development sprints or attend presentations and panels. The conference is organized entirely by volunteers, financially backed by the PSF and draws upon (low) registration and sponsor fees. Due to its popularity,

the conference has thus far been profitable for the organization; profits are reinvested into the PyCon or sponsor daughter-conferences around the world ("Executive Summary," 2008).

#### **Grant Programs**

The PSF set up a variety of grant programs supporting (1) sprints, meetups, community events or projects, (2) educational and training workshops, (3) open source projects, (4) and the ambassador program ("Grants - Frequently Asked Questions," n.d.). A clear focus on advancing Python, developing Python-related technology, educational or vocational workshops or programs around Python is preferred. Anyone can apply for a grant, which should describe a specific project with defined outcomes and timelines. The proposals are reviewed by the grants workgroup ("PSF Grants Program," n.d.)

#### **Working Groups**

13 active workgroups exist, i.e. one focusing on trademarks and another one on marketing ("Workgroups of the Python Software Foundation," n.d.), responsible for the managing specific projects brought to them by resolutions from the board of directors or voting members ("PSF Bylaws," 2017b). They are mostly made up of volunteer contributors, however, occasionally paid consultants are contracted to support with specific activities ("InfrastructureWG - PSF Wiki," 2018).

#### **Infrastructure Activities**

Infrastructure activities such as fundraising, running the mailing lists or maintaining the job board are mostly run by volunteers and no significant costs are involved ("Volunteer," n.d.).

#### 4.1.4 Other Variable Costs

Another not insignificant cost factor at the PSF is travel and entertainment costs. The foundation does not expose how the money was spent; in 2016 this amounts to \$15,909 and in 2017 to \$18,544, which depicts 0.73% and 0.75% of total expenses, respectively.

#### 4.1.5 Liabilities

The balance sheet states total liabilities of \$634,874 in 2016 and \$1,026,114 in 2017. This presents an increase in debt by \$391.240. Liabilities are made up of accounts payable, payroll (including taxes) and deferred revenue. Out of these items, accounts payable, hence liabilities towards other entities, increased by 914% from \$44,955 in 2016 to \$455,921 in 2017. Also, payroll, liabilities towards personnel, increased from \$4,789 to \$7,646 from 2016 to 2017.

#### 4.1.6 Total Expenses

According to the income statement, total expenses in 2016 amount to \$2,192,600. In 2017, total expenses amount to \$2,487,646. Hence, total expenses increased by \$295,046.

#### 4.2. Revenue streams

The Python Software Foundation has three major sources of income. The foundation accepts donations from individuals and organizations who show interest in the Python language and its community. PyCon, a volunteer-run conference also brings in cash from sponsors and participation fees. Finally, the newly introduced "Associate Membership" system brings in regular income for the foundation. In brief, PSF has three main income sources; sponsors, members and donations.

#### 4.2.1 Sponsors

There are different types of sponsorships, corporate and small business sponsors, that differ in amount.

Table 2 – Sponsorship Overview

	Sponsorship Type	Sponsorship Amount	Number of Sponsors	Revenue from Sponsorship Type in 2018
Corporate	Principle	\$100,000/year	x2	\$200,000/year
Sponsorship	Diamond	\$70,000/year	x4	\$280,000/year
	Platinum	\$50,000/year	x1	\$50,000/year
	Gold	\$30,000/year	x2	\$60,000/year
	Silver	\$15,000/year	x4	\$60,000/year
Small	Bronze	\$5,000/year	x7	\$35,000/year
Business Sponsorship	Copper	\$2,000/year	x13	\$26,000/year
	Iron	\$500/year	x28	\$14,000/year
	Infrastructure	\$500/year	x1	\$500/year

("PSF Sponsorship," n.d.)

You can find a detailed table of current sponsors as of 2018 with their names and the amounts they contribute in appendix II.

Due to no data being available of sponsorship revenue from 2016 and 2017 the following presents current sponsorship data (as of 2018).

Sponsorship support received from the corporate sponsors in 2018 amounts to \$650,000 from a total of 13 different corporates and the amount of sponsorship support received from small businesses was \$75,500 from a total of 49 different businesses. The total amount of sponsorship support received by PSF amounts to \$725,500. Among these sponsors are large companies such as Facebook, Google, Amazon, Microsoft, RedHat and CapitalOne.

#### 4.2.2 Members

In 2014 a new membership model has been approved by the board. This new model consists of different types of memberships: basic, supporting, sponsor, managing, contributing members and fellows. Each of these members contributes to the foundation in a different way.

Basic members are the only members with no voting rights and no contribution, yet they can join member meetings. Supporting members contribute \$99 or more to the foundation per year while holding voting rights just as the rest of the memberships do. Sponsor members contribute an undisclosed sum of money and can vote via delegates in meetings. Managing members provide 5 hours per month for workgroups in PSF and contributing members provide 5 hours per month for projects in the foundation. Finally, fellows are voted in from people who showed an extraordinary effort to impact the Python community and the language

("PSF Membership FAQ," n.d.-b).

#### 4.2.3 Donations

Due to the unavailability of data for the years 2016 and 2017, this section refers to the only published data, which is from 2006 and 2018.

PSF receives donations from small businesses and individuals. In 2006, individual donors made 13% of the total \$168K revenue and in 2018 Q4, PSF raised a total of \$25,849 from donors. Donors can use credit cards, Paypal, check, wire transfers and other methods to donate to the foundation ("Donating to the PSF," n.d.).

PSF receives funding from various points. In 2006, the total revenue of \$168,000 came from PyCon sponsors and registration fees(51%), PSF sponsor fees(17%), Google Summer of Code program(14%), individual donors(13%), investments and other minor sources(5%). At the same time, PSF spent a total of \$158,000 to cover the PyCon 2006 expenses(%67), grants(13%), the advocacy special project(10%), payrolls(5%) and other expenses(5%) ("Executive Summary," 2008, "PSF Membership FAQ," n.d.-b).

PSF tries to keep a healthy balance of income and outcome to be able to take on the responsibility of organizing PyCon each year as well as being ready for any unexpected expenses such as legal issues.

#### 4.2.4 Overall Revenues

According to the income statement, total revenue in 2016 amounted to \$2,432,354. In 2017, total revenue amounted to \$2,886,514. Hence, total revenues increased by \$454,160. Appendix III gives a detailed overview of the revenue, gains (possibly contributions) and

# 5. Data Analysis

other support received in 2016 and 2017.

The chapter analyses the previously collected data by bringing the two sides (expenses and revenue) together, thereby showing the financial position of PSF.

## 5.1 Expense Analysis

The scope of activities the PSF performs is diverse and expenses are accounted for on several ends. This allows for greater flexibility in case cost reductions become necessary. The majority of costs are incurred through programs, which among other items comprise open source projects, workshops, trainings, grants and sponsorship for them as well as the PyCon conference.

The PSF shows relatively high variable costs compared to fixed costs, which might mean strong fluctuations from year to year. This in turn makes forecasting more difficult and might drive away potential sponsors or other stakeholders.

Total expenses increased from 2016 to 2017, which - taking program expenses as largest cost factor into account - might indicate that a greater number of open source projects were supported. This assumption is also supported by the significant increase in liabilities, namely accounts payable. The increase amounts to less than \$300,000 (\$295,046), which in the light of total expenses seems like a small and healthy increase. However, if this assumption holds true has to be concluded by comparing the increase in expenses to the net change in revenue.

# 5.2 Revenue Analysis

Total sponsorship value from 2018 amounts to 25.1% of the total revenue in 2017. Unfortunately further details about the rest of the revenue are not disclosed and the bulk of the revenue is presented under the title "Program Service Revenue" which does not give any information about the details of this income source. So it can be assumed that as 25.1% of the whole revenue, the sponsorship income is one of the most significant revenue sources for PSF if not the most.

About 90% of all the donations received by PSF come from 13 corporations, including Facebook, AWS, Google Microsoft and others. These corporations use the Python language

on their main products and are interconnected with its community creating value for their corporates. This is assumed to be the main motivation for these companies to make sure the foundation is in good financial shape and keeps improving on the language and the community so it is a mutually beneficial relationship for these corporates (olha, 2011).

The insufficiency of data on totals of donations, membership and sponsorship makes it difficult to come to conclusions about the revenue system in place in PSF. Despite this, we can conclude that the Python Software Foundation relies mainly on the revenues that come from sponsorships, Pycon sponsor and fee income and individual donors as well as membership income. For the exception of PyCon sponsor and fee income and the corporate sponsorships, these income streams can be unpredictable as they are not bounded by any contract this can lead to harm for the foundations' sustainability and financial predictability in the long run.

PSF has an Operating Reliance Ratio of 1.10 and 1.09 in 2016 and 2017 respectively. These ratios (1 or higher) indicate that the foundation is able to sustain itself and is in a healthy financial situation.

### 5.3 Financial Position Analysis

Seeing changes between the years 2016 and 2017 of both expenses and revenues in light of each other is essential to drawing conclusions about the financial position of the PSF. The PSF being a non-profit organization, the analysis does not aim to identify opportunities for profit or revenue maximization, but rather wants to conclude if the available financial sources are used responsibly and with long-term intentions ("How to Understand a Nonprofit Financial Statement," n.d.).

Operations in 2016 generated a positive income of \$239,754, which together with existing assets left PSF with \$1,865,732 at the end of 2016. In 2017, \$398,868 was earned, which left PSF with assets of \$2,264,601. This depicts a healthy increase of \$398,869. Due to being a non-profit, the earnings have to be fully reinvested into the organization.

The ratio of total income to total expenses, the operating expense ratio, lay at 90% in 2016 and at 86% in 2017. This is high and while it would mean an inefficient use of resources in a for-profit context, in the case of a non-profit, it means the organisation is fulfilling its duties and reinvests almost all its assets into program activities.

With a current ratio of 3.93 and 3.21 in 2016 and 2017, respectively, the organization is well-positioned to meet its short-term obligations (such as accounts payable, wages, fiscal sponsorship, etc).

PSF had a debt ratio of 35% in 2016 and 50% in 2017. This percentage indicates to what extent the organization is financed through debt. Whether it is healthy depends on the average ratio from peers in the industry; in the context of PSF as a foundation, where revenue streams are somewhat stable, a 50% ratio is totally acceptable.

The calculations backing the ratios can be found in appendix IV.

# 6. Conclusion

# 6.1 Answer to research question

Taking costs and expenses from the years 2016 and 2017 into account, it can be concluded that PSF is in a healthy financial position, which allows it to live up to its mission of "promoting, protecting and advancing the Python programming language as well as supporting the community of its programmers" ("Mission Statement," 2009).

Positive attributes of PSF's financial situation are

- that the organisation is growing and able to finance this growth;
- it re-invests its assets into activities, that aim at advancing the programming language and building up the competences of the community;
- it operates sustainably, especially in the short-run;
- its legal incorporation as non-profit allows it to be exempted from taxes.

Negative attributes of PSF's financial situation are

- a relatively high reliance on external funding, mostly from few corporate sponsors, which brings some risk with it;
- a high ratio of variable costs, which leaves room for fluctuations from year to year.

Overall, the Python Software Foundation was in a healthy financial position in the observed period of time. While it is fine to continue operations in the same way in the future, it is recommendable to reduce the reliance on sponsorship and generate more revenue from activities.

# 6.2 Shortcomings

The analysis has to be seen in the light of shortcomings in the data collection process.

Firstly, many ratios and conclusions would usually be seen in comparison to industry standards to allow for more sophisticated conclusions rather than assumptions. However, such a comparison would go beyond the scope of this research, which is why the results have to be dealt with care.

Secondly, data availability is inconsistent, which makes a clear interpretation of results from the years 2016 and 2017 difficult. For example, a more in-depth interpretation of the data would usually include ratios referring to the statement of cash flow, which is not publicly available. Furthermore, data from sponsorship, donations and membership come from various years and not necessarily the observed period of time. This again means, that the results should be dealt with with care.

# 7. Outlook

This study is conducted on a single entity in a limited time range. For this reason, it may not be wise to take up the financial model of PSF and apply to other potential open source projects without any modifications. However, as the study shows what has worked so far for this organisation and what could be potential pitfalls for a prospective open source organisation, it can be considered as a guideline when designing a cost structure for new organisations.

A similar approach to PSF can be taken when constructing a new open source foundation. This includes creating value with your idea for corporates and individuals, which in turn sponsors the activities of the foundation, and donates to the foundation through membership programmes or direct donations. Also the metrics and ratios discussed in this paper are important signals for the health of such organisations and should be monitored throughout the lifetime of every non-profit organisation. As mentioned before, the lack of data can create vague points in the analysis of the financial health of organisations so it is crucial to keep track of every expense and income through the lifetime of an organisation.

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# Appendices

Appendix I – Officers in place between 2016 and 2017

Name	Positions 2015/16	Positions 2016/17	Positions 2017/18
Guido van Rossum	President	President	President
Van Lindberg	Chair	Vice Chair, General Counsel	Vice Chair, General Counsel
Kurt Kaiser	Treasurer	Treasurer	Treasurer
Diana Clarke	Communications	Chair	
Brandon Rhodes	PyCon Chair	PyCon Chair	
Ewa Jodlowska	Director of Operations, Secretary	Director of Operations, Event Coordinator, Secretary	Director of Operations, Event Coordinator, Secretary
Lynn Root	Vice Chair		
Naomi Ceder	Vice Chair	Vice Chair	Chair
Betsy Waliszewski	Event Coordinator / Administrator	Event Coordinator, Assistant Secretary	Event Coordinator, Assistant Secretary
Ernest W. Durbin III			PyCon Chair
Kushal Das		Communications	
Lorena Mesa		Communications	

("History of PSF Officers & Directors," n.d.)

The names of people, who held a position in the board of directors while serving as officer, are marked in bold.

Appendix II – Sponsorship Details 2018

Sponsorshi p Type	Sponsorship Amount	Numbe r of Sponso rs	Revenue from Sponsorship Type in 2018	Sponsor Names
Principle	\$100.000/yea r	x2	\$200.000/year	Facebook, CapitalOne
Diamond	\$70.000/year	x4	\$280.000/year	Fastly, Rackspace, Amazon Web Services, Google

Platinum	\$50.000/year	x1	\$50.000/year	Bloomberg
Gold	\$30.000/year	x2	\$60.000/year	Red Hat, Indeed
Silver	\$15.000/year	x4	\$60.000/year	Microsoft, Travis Cl, Heroku, Union Investment
Bronze	\$5.000/year	x7	\$35.000/year	Edgestream Partners, Enthought, HostingFacts.com, AQR, Adimian, DigitalOcean, SignalFx
Copper	\$2.000/year	x13	\$26.000/year	ActiveState, O'Reilly Media Inc., BizRate, OpenEye, KNMP, Lincoln Loop, Anaconda, Infinite Code, Webucator, Tivix, PythonAnywhere, Sticker Mule, StickerYou
Iron	\$500/year	x28	\$14.000/year	Acties.nl, The Developer Society, Fusionbox, Newlogic, The Odoo Community Association, Open Data Services, Saleduck, 1Korting.com, AirportRentals.com, bespaardeals kortingscodes, MESIKA LIMITED, Verzekeringvergelijk.nl( VZVG), Python Academy GmbH & Co. KG, DataCamp, Accelebrate, UK Web Host Review, CrossCompute, HostPapa Web Hosting, REVSYS, confirm IT solutions, Motorhome Republic, vpn diensten, YourLabs, OpenEDG Python Institute, VPNGids.nl, Cyber Infrastructure, "CIS", HRank, Hostinger, Icons8
Infrastructu re	\$500/year	x1	\$500/year	SurveyMonkey

<sup>(&</sup>quot;Python Software Foundation Sponsors," n.d.)

Appendix III – Revenue, gains and support received in 2016 and 2017

Revenue, Gains and Other Support 2016	Unrestricted(\$)	Temporarily Restricted(\$)	Total(\$)
Contributions	110,645	37,380	148,024
Program Service Revenue	2,283,445	-	2,283,445

Other Revenue	186	1	186
Investment Income	699	1	699
Net Assets Released From Program Restrictions	23,614	(23,614)	-
Total Revenue, Gains and Other Support	2,418,588	13,765	2,432,354

("2016 Financial Statements," 2018)

Revenue, Gains and Other Support 2017	Unrestricted(\$)	Temporarily Restricted(\$)	Total(\$)
Contributions	262,419	60,629	323,048
Program Service Revenue	2,392,451	170,000	2,562,451
Other Revenue	162	-	162
Investment Income	853	-	853
Net Assets Released From Program Restrictions	60,475	(60,475)	-
Total Revenue, Gains and Other Support	2,716,361	170,154	2,886,514

("2017 Financial Statements," 2018)

#### Appendix IV – Revenue, gains and support received in 2016 and 2017

#### Current Ratio (CR)

What it shows: indication of ogranization's ability to pay obligations in short term (12 months)

How to interpret: if 1 or higher, the organisation is well-positioned Formula: current ratio = current assets / current liabilities

Calculation PSF for 2016: CR (PSF, 2016) = \$2,495,822 / \$634,874 = 3.93

Interpretation: PSF was well positioned to meet obligations in short term

Calculation PSF for 2017: CR (PSF, 2017) = \$3,290,715 / \$1,026,114 = 3.21

Interpretation: PSF was well positioned to meet obligations in short term

#### Operating Expense Ratio (OER)

What it shows: indicator of cost of operation

How to interpret: if low, few income is dedicated to meet expenses from activities such as programs

Formula: OER = operating expenses / operating income

Calculation PSF for 2016: OER (PSF, 2016) = \$2,192,600 / \$2,432,354 = 0.9014 = 90%Interpretation: high ratio; assets are almost fully allocated towards activities

Calculation PSF for 2017: OER (PSF, 2017) = \$2,487,646 / \$2,886,514 = 0.8618 = 86%

Interpretation: high ratio; assets are almost fully allocated towards activities

#### Debt Ratio (DR)

What it shows: indicator for reliance on external funding

How to interpret: the higher the ratio, the more leverage is the organisation Formula: debt ratio = total liabilities / total unrestricted net assets

Calculation PSF for 2016: DR (PSF, 2016) = \$634,874 / \$1,817,092 = 0.3494 = 35%

Interpretation: a third of PSF's assets are financed by debt

Calculation PSF for 2017: DR (PSF, 2017) = \$1,026,114 / \$2,045,807 = 0.5016 = 50%

Interpretation: half of PSF's assets are financed by debt

#### Operating Expense Ratio (OER)

What it shows: indicator of cost of operation

How to interpret: if low, few income is dedicated to meet expenses from activities such as programs

Formula: OER = operating expenses / operating income

Calculation PSF for 2016: OER (PSF, 2016) = \$2,192,600 / \$2,432,354 = 0.9014 = 90%Interpretation: high ratio; assets are almost fully allocated towards activities

Calculation PSF for 2017: OER (PSF, 2017) = \$2,487,646 / \$2,886,514 = 0.8618 = 86%Interpretation: high ratio; assets are almost fully allocated towards activities