Chapter 21

Private Sector Strategies: ByStar Open Business Plan

Our ultimate goal is to drive global awareness of the flaws within the Western Intellectual Property Rights regime, fostering societal consensus to dismantle the current copyright and patent systems. In their place, we aim to establish Libre-Halaal governance models for polyexistentials. Building on these models, we seek to create a Libre-Halaal digital ecosystem that upholds privacy, autonomy, and individual liberties.

In Part V —*Formulation of Libre-Halaal Oriented Societal Policies* —we focus on strategies at the societal scale. In Chapter 20 —*Theoretical Western Societal Cures* —we acknowledge that the IPR regime is deeply embedded within Western cultural and legal frameworks. It would be unrealistic to expect a complete rejection of Intellectual Property constructs in the United States or across the West within the span of our lifetime. The material adoption of the Libre-Halaal model is not a viable expectation in these contexts.

However, the world extends beyond America and the West. In Chapter 22 —*Eastern Societal Libre-Halaal Strategies* —we explore the realistic prospects of abolishing the Western IPR regime in societies such as China and Iran, where alternative models may find stronger cultural and political alignment.

In the American context, with inside of IPR strategies that we describe in Chapter 19 — Societal Adoption of Libre-Halaal Strategies, it is possible to ameliorate the situation in its periphery. This of course could be more material when it is combined with a for profit business strategy.

In the American model, the private sector and profit are the drivers. It is far more realistic to think of America as a business than it is to think of America as a society. Therefore, in the American context, a business plan is called for.

21.1 Revisiting This Book as a Business Plan

Instead of fighting American Capitalism we adapt to it. In this chapter, we pivot our perspective and reconsider all the philosophical, ethical, and societal concepts we've introduced, framing them within the context of American-style business.

From a certain angle, one can think of the entirety of this book as an intricate "Open Business Plan". An open and ethical business plan. An enlightened Venture Capitalist or a qualified investor reading this book would have recognized that in addition to being an ethics-oriented book, what he is reading is also a very large, complex and sophisticated business plan.

Yet, clearly this book is very different from traditional business plans. Traditional business plans are primarily written to raise capital. Entrepreneurs and investors converge around money — everything else is secondary. This is not our model. Morality and ethics are our primary drivers. With this book in place, all participants

understand where we are going — what has been accomplished, what needs to be accomplished, and the roadmap for accomplishing it. And here we also describe how we can profit from it.

In this context, the heart of our proposal lies in the "Libre-Halaal ByStar Digital Ecosystem". Its scale is vast, its ambitions lofty, its approach interdisciplinary, and its workings intricate. Indeed, it takes a comprehensive book like this to fully articulate our plans. Now, with this book serving as our foundation, we can explain how everything comes together as a for-profit endeavor.

In simple terms, with ByStar we are providing basic internet application services (email, web-publication, synchronization, direct inter-autonomous interactions, mediated inter-autonomous interactions, usage environments, etc.) based on a model that offers real and tangible autonomy and privacy on very large scale based on the traditional subscription and untargeted advertising business model.

The ByStar story is about redecentralizing the whole of internet services and the scope of our work are all internet services — everything. The "*" in "By*" is Unix's globing and wildcard (everything) symbol. From a business perspective one could view our strategy as that of inverting the existing model of internet application services and then placing ByStar on top of the newly created environment.

The nature of the business of ByStar Libre-Halaal internet application services is such that it demands large amounts of investment. Dynamics of increasing returns are at work. In theory, based on the existing Venture Capitalist (VC) frameworks, ByStar can receive the investments that it needs if the Venture Capitalists were to understand that rejection of traditional copyright and patents are an essential ingredient of the ByStar business plan. ByStar software and services can further be cultivated based on the existing software public licenses model as "Inside of IPR Libre-Halaal strategies."

ByStar isn't about introducing new features or products; it's a fundamental shift away from the status quo. This is not a faster, cheaper, better story. In terms of functionality, what we offer is generally same as what exists today. ByStar challenges the existing proprietary American digital ecosystem while operating concurrently alongside it.

And all of this we are doing in the open. All ByStar software and services are internally transparent. Think of ByStar as: "An Inversion to the Proprietary Internet Services Model". Think of ByStar as an alternative to the existing proprietary digital ecosystems dominated by giants like Google, Apple, Microsoft, Meta, and Amazon. From a scaling perspective, this is the scale.

These proprietary American companies are in the business of exploitation of autonomy and privacy. In contrast, we provide genuine autonomy and tangible privacy. The business model required for offering true tangible autonomy and privacy is very different from traditional current practices.

With this book in place, we can now refer to some key parts of the book from a business oriented perspective.

- We are addressing a real problem. American Surveillance Capitalism is very real and it has endangered humanity. In Section 15.3 — Individual's Autonomy and Privacy are Being Crushed, we elaborate on this.
- There is a real demand for autonomy and privacy. Hillary Clinton decided to run her own email server in the basement of her house. With ByStar anyone can do that easily, conveniently and cheaply. Autonomy and privacy does not have to be limited to the rich and the powerful. In Section 17.7.2, Ramifications of Libre-Halaal Edge-Oriented Strategies, we position some ByStar offerings with the Hillary Clinton example in mind.
- Internet application services can only genuinely claim autonomy orientation and privacy if they are internally transparent and non-proprietary. In Section 13.5.4 — Operation in the For-Profit and Non-Proprietary Quadrant, we describe how businesses can be profitable and non-proprietary.
- The entirety of ByStar software is publicly available and is subject to Affero GPL. In Section 15.2.1 — Definition of Libre-Halaal Software, we describe the ramifications of AGPL and Libre-Halaalness.
- Regarding the American perspective on validity of IPR, from a business perspective we are ambivalent. In Chapter 19, Societal Adoption of Libre-Halaal Strategies, we describe the concepts of "Inside of IPR Strategies" and "Outside of IPR Strategies". Towards our goals, in the American context we are only focusing on "Inside of IPR Strategies".

- In Chapter 11, Introducing Halaal and Haraam Into Globish, we describe what Halaal means and why we have chosen the Libre-Halaal label. In Section 12.1.3 — The Right Label for Correct Manner-of-Existence of Software, we describe why FOSS (Free and Open Source Software) as a label is ill directed.

- Positioning such a non-proprietary business offering at the scope and scale of a digital ecosystem has never been done before. In Part IV — Libre-Halaal ByStar Digital Ecosystem, we introduce a blue print for a comprehensive healthy digital ecosystem which is rooted in tangibly preserving autonomy and privacy of the individual

- Our business model is different from current practices. In Chapter 13 — Global Polyexistential Capitalism, we positioned a proper model for capitalism in the context of Libre-Halaal polyexistentials. In Section 13.7.2 — Libre-Halaal Internet Services Capitalism, we describe ByStar's position on the cube of Figure 13.3. In the ByStar model, Halaalness is positioned above profit.

- ByStar software and services are inherently consistent and cohesive because all of ByStar uses a common foundation. This foundation is called BISOS — ByStar Internet Services OS. In Chapter 17 — Technology of ByStar: BISOS, we provide an overview of the software that drives ByStar.

- Tangible autonomy is realized through asserting that ByStar software and services belong to the user and the public — not the provider. In Section 17.7 — BISOS Possession Assertable Libre Services (PALS), we describe how PALS accommodate optional self-hosting. PALS represent abstractions of autonomous individuals within ByStar DE. Various Libre-Halaal services then facilitate collaborative and social interactions between these individual representations.

- In Section 17.6 — BISOS Portable Objects (BPO), we introduce a fundamental abstraction of BISOS, encapsulated in *ByStar Portable Objects* (BPOs), facilitating synchronization, information mobility, and the composition of information and services. ByStar Portable Objects represent cohesive units of information that enable the realization and materialization of various BISOS constructs. PALS (Possession Assertable Libre Services) are specialized forms of BPOs. BPOs are based on Git and are fully integrated in many ByStar features and its usage environments.

- Usage environments are a cornerstone of digital ecosystems. Google's ecosystem features Chrome and Android, while Microsoft's revolves around Windows. ByStar introduces its own with Blee and BxGnome. Refer to Section 17.10 — ByStar Libre-Halaal Emacs user Environment (Blee). What sets Blee apart is its all-encompassing nature. It serves as a usage environment, an IDE (Interactive Development Environment), a systems and services configuration and management environment, a desktop publishing interface, and a mail user environment. Everything is integrated in a very elegant and sophisticated environment.

- In Section 17.7.1 — Network Abodes and Transferability, we introduce the concept of "Rims", as the autonomous edge of the network which is under the full control of the owner-user. Capabilities for providing the equivalent of Google-Nest and entertainment centers are important parts of ByStar.

- The scope of ByStar is global. ByStar is not Western and American centric. From a business perspective, we anticipate billions of users, who are not just Americans or Americanists. In Chapter 9 — Americanism: Root of the IPR Mistake, we adopt an anti-American tone. Such extraordinary positioning provides a unique and powerful global marketing message. And it also happens to be true.

- This book is backed by real software and real internet application services. A solid starting point for BISOS is in place. Our fellow engineers can try it. In Chapter 18 — Engineering Adoption of BISOS and ByStar, we provide the needed pointers for adoption of a beginning. All of ByStar is Libre-Halaal and the source code for all of ByStar software and all of ByStar internet services is made available to the engineering profession. You can independently assess validity of the tangible starting point that we claim is on the table.

All of these interrelated concepts work together towards creating a business oriented environment for ByStar.

21.2 ByStar and BISOS Business Models and Commercial Offerings

Early on, untargeted advertising and targeted advertising needed to happen on the American internet to get it going as a widespread commercial reality. Towards the more lucrative profits of targeted advertising, economic dimensions of Americanism then took this to the extreme of making the user's autonomy and privacy the implicit American internet currency. In addition to targeted advertising, other aspects of exploitation of this implicit American internet currency then took it to where we are today with surveillance capitalism.

Our business model rejects surveillance capitalism. The internet industry is ever evolving even to the extent of being regarded as a momentary industry. ByStar is about change. Change is possible.

In our model of autonomy oriented Libre Services, autonomy comes with responsibility. Autonomous Libre Services are to be paid for with real money. We have a very simple business model. ByStar autonomous Libre Services are based on a simple subscription business model. This primary subscription business model is then augmented by a few other revenue sources. The ByStar digital ecosystem is of course broader than just autonomous Libre Services and various other aspects of ByStar provide various other commercial offerings. Here, we provide a brief summary.

21.2.1 Subscription Business Model of PALS

In Section 15.2.3.1 — Definition of Possession-Assertable Libre Services, we introduced the concept of Possession-Assertable Libre-Halaal Services (PALS).

PALS are user-owned internet application services which are tangibly autonomous. At will, at any time, any user can assert her tangible autonomy and transport the service to her own premise and possess not just her own data but her own services as well. Therefore, PALS are inherently transportable services.

Subscription business model of autonomous Libre Services (PALS) are fundamentally same as the existing traditional subscription business models. The business model is the same. When hosted, owner-users pay Libre Service providers for the hosting services.

The ownership model of proprietary internet application services is fundamentally different from the ownership model of autonomous Libre Services but the subscription business model for delivering the service to the user or owner-user is the same.

Service portability is an inherent feature of autonomous Libre Services and therefore, some may think that the autonomous Libre Services subscription business model is less "sticky" than the proprietary subscription business model.

We believe that the now well recognized dynamics of immense scale plus the first mover advantage plus the increasing returns dynamics, well over shadow the less sticky aspect.

21.2.2 Untargeted Advertising Business Model of Intermediary Libre Services

In Section 15.2.3 — Definition of Libre-Halaal Internet Application Services, we introduced the concept of Libre-Halaal Internet Application Services. Possession-Assertable Libre-Halaal Services (PALS) are one type of Libre-Halaal Internet Application Services. There are other types.

In Figure 15.1 — A Governance Oriented Taxonomy for Internet Application Services, we provide a taxonomy for Libre-Halaal internet application services. A simplified model would have PALS and "Intermediary Libre Services". In this simplified model, Intermediary Libre Services facilitate interactions among PALS. In the previous section, we described the subscription business model of PALS. The business model of Intermediary Libre Services is a combination of the untargeted advertising business model and the subscription business model.

Obviously, the targeted advertising business model and the surveillance capitalism models fully contradict with

Libre Services' autonomy and privacy objective. So, we are clearly and explicitly excluding the targeted advertising business model from our business plan.

Given the scope and scale that we have outlined, this can be quite a gigantic venture based on full and explicit rejection of the American surveillance capitalism models.

21.2.3 Offering Layer 7 Opportunities to Layer 3 Providers

Let's say that a competent and smart business developer at say Comcast, T-Mobile, Sprint, AT&T, Orange, Vodfone, Hamrah-e Aval (MCI), Irancell (MTN), China Mobile, China Telecom, etc. was to read this book and understand the opportunities that ByStar as a set of comprehensive internet application services offers existing Layer 3 providers. All of these layer 3 businesses can adopt ByStar services and start being layer 7 players.

Each of these layer 3 service providers have a direct subscription relationship with millions of subscribers with whom they can now also have layer 7 relationships based on ByStar Libre Services that they themselves offer — or perhaps indirectly offer.

These layer 3 service providers are typically Western IPR proponents and ByStar's rejection of validity of IPR (or our anti-Americanist tone) may come across as obstacles. A competent and smart business developer would recognize that what matters are the services and the revenues that they generate. The rest can be spawn, positioned and resolved.

Software of ByStar is publicly available and layer 3 providers can use them to integrate their existing services with ByStar. We can support such dynamics in two ways. First as origin of ByStar, we can well support such integrations, second since the Affero GPL (AGPL) license of ByStar is perceived to be overly restrictive to most traditional layer 3 providers, we can offer them commercial licenses for ByStar software.

21.2.4 Offering Layer 7 Services Opportunities to Distro Providers

Over the years, many organizations have been involved in packaging Linux and many applications into various "distributions" (distros).

Over the years these distro providers have established close relationships with their users. Some of these distro providers are: Red Hat (now IBM), Ubuntu, Oracle Linux, Huawei OpenEuler. The relationship that these distro providers have established with their user base can be augmented by also providing end-user internet application services.

In some ways, in the context of Linux distro providers, providing internet application services as ByStar end-user-owned services can be considered low hanging fruit. Because:

1. Linux-distro users usually understand the superiority of the collaborative Libre-Halaal (open source) model over the competitive proprietary model.
2. Linux-distro users are usually more open to understanding the logic of polyexistentials towards rejection of the Western IPR regime.
3. Linux-distro users are usually more aware of the harm of the proprietary American digital ecosystem and value their autonomy and privacy more than the typical Americanist. Hence, they are more willing to explore ByStar autonomous internet services.
4. Usage environments of ByStar (Blee and ByStar-Gnome) can be easily integrated with the distro to provide a ready to use out of the box experience.
5. Service environments of ByStar can be easily integrated with the distro to provide a ready to use out of the box experience.

Software of ByStar is publicly available and given the assets, the expertise and the infrastructure that Linux-distro providers possess, it would be very easy for them to integrate ByStar with their flavors of Linux. As origin of ByStar, we can well support such integrations.

21.2.5 Commercial Support for BISOS

ByStar Internet Services Operating System (BISOS) is both the foundation of ByStar internet application services and also a general purpose internet services OS.

The rich and vast capabilities that BISOS provides on top of Debian are the types of capabilities that has been implemented over and over in various similar proprietary contexts.

BISOS is fundamentally edge oriented and unlike traditional Linux-distros that are large data center oriented, it targets a highly distributed model where most computing and communication takes place on the edges.

BISOS can be used for building private internet application services and for providing proprietary internet application services. BISOS is expandable through the general model of BISOS-Capabilities. Some BISOS-Capabilities can be proprietary.

Software of BISOS is publicly available. We provide commercial support for such proprietary usages of BISOS in two ways. First as origin of BISOS, we can well support such integrations, second since the Affero GPL (AGPL) license of BISOS is perceived to be overly restrictive to many proprietary oriented users, we also offer commercial licenses for BISOS software.

We are talking about the type of software support services that the likes of Redhat and Ubuntu have been providing for Linux. Think of BISOS as a layer on top of Linux. The software support services business model is the same.

21.3 Monetization of the ByStar Story

This book has created a business oriented environment in which the ByStar story can be monetized. And, we intend to monetize the ByStar story. Full potentials of ByStar can best be realized in an environment that includes a business context.

By “Monetization” we mean converting ByStar offerings into money and then using that money to further enhance ByStar offerings. The ByStar domain is inherently an increasing returns environment.

In Figure 21.1, we depict the environment that we have created for monetizing the ByStar story. The top five arrows coming out of the “ByStar Story” represent ByStar offerings — Software and Services — and the needed structures and activities involved in the monetization process. The arrow going back into the “ByStar Story” represents the generated income from the various identified sources.

With ByStar we are creating something ethical and good from which we intend to generate revenues and profit. The American/Western corporations model separates these two. To do good and be ethical, you are expected to create a non-profit organization and to generate revenues, you are expected to create a for-profit organization. So, we have done both. The “Libre-Halaal Foundation” (LHF) is a non-profit organization and “Neda Communications, Inc.” (Neda) is a for profit organization. Each of these play particular roles in the ByStar story. This is shown in the top part of Figure 21.1.

Our ”Marketing and Communications” strategy is highly unusual. It is focused on telling the truth and avoiding common corrupt beliefs surrounding the IPR regime. The scope of our MarCom strategy includes both Neda and LHF.

Our income sources are depicted in the bottom part of Figure 21.1. In the early stages, the ByStar story requires investment. We are willing and ready to even engage Western venture capitalists.

21.4 Venture Capitalists as an Audience

The audience for this book is all of humanity. Anyone who is curious, who wants to think and engage.

In the context of this chapter, we adopt an additional particular intended audience: an open minded qualified investor (e.g., Venture Capitalist — VC). So, moving forward when we say “you”, or when we say “reviewer” we are referring to a qualified investor or a VC. This is not a general investment solicitation. We remain scholarly. But

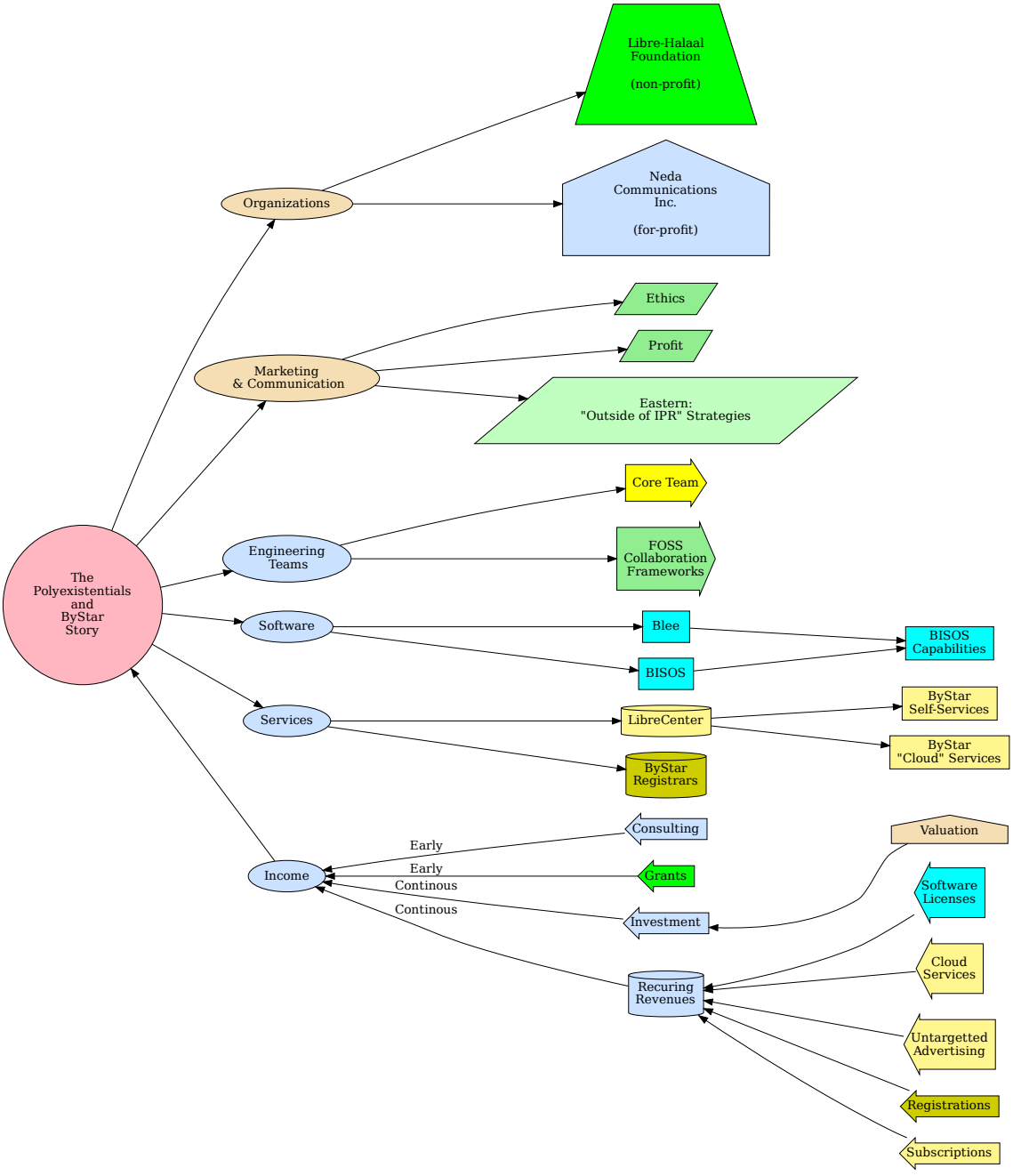

Figure 21.1: Monetization of the ByStar Story

if a real qualified investor wants to further investigate what we claim is on the table (an entire digital ecosystem), they are welcome to reach us.

21.4.1 Traditional Venture Capitalist Model and ByStar

In the Western Venture Capitalist (VC) model, the entrepreneur comes up with some new ideas, he writes a business plan for his new ideas. He then presents the business plan to investors, perhaps they invest, they then build it, they then generate profit from what was built, the entrepreneur makes some money, the investors make some money and all is good. In the end, in this model what gets built may or may not be healthy and ethical. The focus is profit and everything else is secondary.

The basic model of bringing together the right ideas together with the right people and money resulting in profit for the participants can be quite productive. The American proprietary digital ecosystem has been built based on the Western Venture Capitalist model.

Could this well established model work for the Libre-Halaal ByStar digital ecosystem as well?

It is bloody unlikely that the traditional Western IPR centric VC model could work for the Libre-Halaal ByStar digital ecosystem because with ByStar our primary goal is to build something good — profit is secondary. But we believe that it is conceivable that some flexible investors could participate in ByStar after it has been planted, after it is partially in place and after it has been fully articulated. This book is now in place. And a starting point for the software that backs this book is now in place.

The IPR model is the sacred-cow of Western Venture Capitalist. In the context of ByStar, our unconventional strategy of overturning their sacred-cow — Copyright and Patent models — gives us a huge competitive advantage.

We are claiming this is likely the largest venture that has ever been presented to traditional investors. Yet what we are proposing is more than plausible. The ByStar venture is very complex — as it needs to be.

At its highest level, this open business plan has two dimensions.

1. We will safeguard humanity by correcting the current state and direction of internet application services.
2. We will profit enormously from the process we have created for safeguarding humanity.

This order conflicts with VC values.

To the extent that Venture Capitalists are an audience of the ByStar open business plan, we know that talking morality to a Venture Capitalist is like talking chastity to a prostitute. From the perspective of a Venture Capitalist, morality *per se* is of no interest whatever. But the moral dimension is an essential component of our marketing strategy, and from the perspective of an intelligent Venture Capitalist, this is what matters.

Our motivations in building ByStar include addressing our responsibilities with respect to the engineering profession. On the other hand, clearly venture capitalists have no responsibilities in the context of their profession. It is all just about money. And, in that context, for a serious and complex plan like ours, there are good VCs and there are bad VCs.

If we show disrespect to Venture Capitalists in our communications, this is part of the execution of our marketing plan. Only the Venture Capitalist who understands this entangled strategy fully—that being held in contempt as a Venture Capitalist represents an investment opportunity—is a suitable investor candidate for this open business plan.

In a sense, the ByStar business model is very crisp. Broad and deep usage of these software and these internet application services will create revenue opportunities that are similar to those of large internet application service providers today. These revenues include subscriber fees, untargeted advertising, customization consultation, general consultation and interaction facilitation fees. Significance and emphasis of these revenues source will evolve. What we will not do is engage in surveillance capitalism.

We have created a complete parallel Libre-Halaal Digital Ecosystem to stand against and in contrast to the existing Proprietary American Digital Ecosystem. And now we want to make its adoption very widespread.

Such a large undertaking by such a small group would normally amount to not much more than pipe dreams. The typical first reaction to our claim is a chuckle. Some say it is insane. Many say that the notion of creating a parallel digital ecosystem is so very lofty that it can't be realistic.

We believe widespread usage of what we are building is more than plausible. It is viable and likely.

21.5 Obstacles: Venture Capitalist Challenges

While very logical and well articulated, there are a good number of obstacles that you may have to overcome in understanding what we are presenting.

There is not much that we can do about these obstacles other than making you aware of them.

21.5.1 Complexity of Scope and Scale — Complexity of the Sheaf of Opportunities

The ability to think and analyze at the full scope of an entire global digital ecosystem is rare.

Erecting a fresh new global digital ecosystem represents many large opportunities that we have well analyzed. Absorbing all of that analysis involves effort and patience.

21.5.2 Un-Western Phobia — Conscious and Unconscious Biases

Some of you are likely Americans, Westerners or Americanists who do not recognize that design of proper Global digital ecosystems should not be just rooted in Western models and values.

We are well aware that, for example, the "Halaal" in our "Libre-Halaal" label provokes Islamophobic negative connotations among many reviewers. Design of ByStar is based on choosing, building and doing the right things — not on pleasing the Western audience.

If in fact you are bothered by or do not like our choice of Halaal in the Libre-Halaal label or other of our Un-Western positioning choices, then our filters are working well.

21.5.3 Not in Their Interest to Understand

Many reviewers are vested in the proprietary model (e.g., are copyright and patent holders or are associated with them) and it is not in their interest to understand that the IPR model is invalid. The existing proprietary model is vulnerable to the inversion that we have put forward. Such reviewers would not wish to recognize that the logic that we have presented is correct. It is not in their interest to understand.

Some of our reviewers are likely Americanists. To them, the current Proprietary American model is perceived as economically beneficial and they would have no interest in seeing something like ByStar disrupt it.

Upton Sinclair aptly captures this dilemma:

> It is difficult to get a man to understand something when his salary depends upon his not understanding it.

Indeed, financial incentives can obscure judgment and foster resistance to new ideas or information that challenge established interests.

21.6 Legal Entities Supporting ByStar

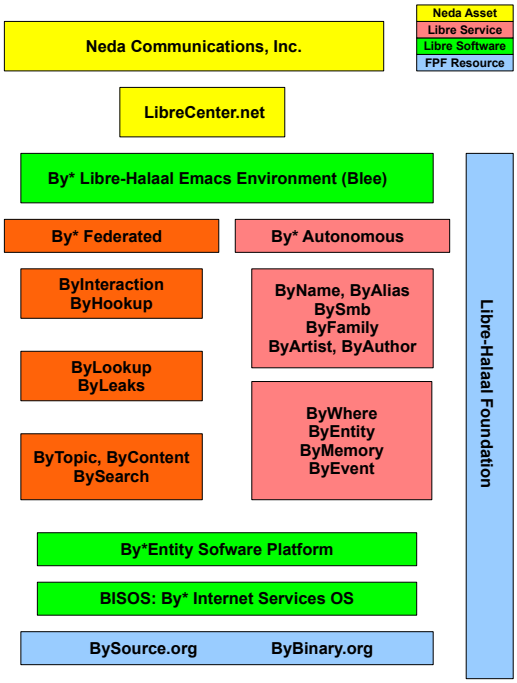

Figure 21.2: Libre Services Supporting Organizations

A snapshot of the organizations, services and software that form the ByStar Digital Ecosystem today are shown in Figure 21.2.

Libre-Halaal Foundation central resources are shown in violet in Figure 21.2. Neda resources are shown on the top. Current ByStarEntity generators are shown under the "ByStar Autonomous" label and ByStar federated services are shown next to them. ByStar software consists of three major layers, these are shown in the lower part.

The Libre-Halaal Services initiative is big and ambitious. Something this big is not accomplished by any single company acting alone. Instead it takes place as a distributed industry-wide enterprise, involving many participants.

Such diverse participation does not take place in a vacuum. Instead, it is greatly facilitated if there exists an enabling framework for participation. To this end we have established a coherent framework for participation by all relevant constituencies.

21.6.1 Libre-Halaal Foundation - non-profit, non-proprietary

Libre-Halaal Foundation is the non-profit legal entity that facilitates collaborative development, maintenance and administration of Libre-Halaal Services and ByStar.

The **Libre-Halaal Foundation** (LHF) is responsible for defining and promoting deployment and usage of Libre-Halaal Services, the common public side of this initiative. Among other things this includes responsibility for establishing the conceptual definition, creating written materials to articulate and promote the concept, and establishing a framework for collaborative engineering development of Libre-Halaal Services software. All general industry enabling work is the responsibility of the LHF, including administration of global names and number authorities of ByStar.

21.6.2 Neda Communications, Inc. – for-profit, non-proprietary

Neda Communications, Inc. is the for-profit legal entity that has developed Libre-Halaal ByStar Services. The core of ByStar software is subject to the Affero v3 General Public License and also the Neda Commercial License (dual licensed). Neda plans to profit from widespread usage of The Libre-Halaal ByStar Digital Ecosystem in a variety of ways.

Neda has been involved in the Internet since the very beginning, and is regarded as a long-time student of the medium. As an example note that Neda's domain was registered before that of Microsoft:

```
$ whois neda.com
Registrant:
   Neda Communications, Inc.
   (NEDA-DOM)

Domain Name: NEDA.COM
Record Created On 20-Mar-91
```

```
$ whois microsoft.com
Registrant:
   Microsoft Corporation
   (MICROSOFT-DOM)
One Microsoft Way
Redmond, WA 98052, US
Domain Name: MICROSOFT.COM
Record Created On 02-May-91
```

Neda established the ByName and other By* domains as far back as 1998, long before any of the recent proprietary offerings in this space:

```
$ whois byname.net
Registrant:
   By Name Services
   C/O Neda Communications, Inc.
   Domain Name: BYNAME.NET
   Record created on 21-Aug-1998
```

The creation of ByStar assets so far has been self financed. To date Neda has received no external financing.

21.7 ByStar Value Chain Analysis

ByStar value chain is a chain of activities that we perform in order to deliver valuable internet services to the market. It is a high-level model of how we take raw, externally developed Libre-Halaal software as input, add value to these software packages through various processes, and sell finished services to our customers.

In Figure 21.3, we illustrate the ByStar value chain on the left column and its inter-mixing with proprietary value chains on the right column.

Focusing on the right column of Figure 21.3, notice that "Neda Operated By* Services" establish a direct relationship with Subscribers and Users at the very top. Note that the scope of these Internet services is everything – the * in By* – and that the intended scale of these services is planet-wide. By definition, no Internet services opportunity can be bigger than that.

The arrows between Neda Services and User/Subscriber in Figure 21.3 include an element of "trust, loyalty, and respect" which is the result of "ByStar Ideology" that we presented earlier. The element of trust and respect is fully absent in the left column. In business terms, Trust and Respect, translate into "stickiness" – where the user is more committed to the service. So, all our investments in ideology are actually also business wise.

All of the ByStar value chain software is Libre-Halaal (Free and Open Source) software. ByStar software in Figure 21.3 is shown in two different places.

The software in the lower part represents Debian and/or Ubuntu GNU/Linux and the specific software packages that we have chosen. These are externally developed open-source software packages which are typically subject to the free software GPL license (or similar) which permits their inclusion in proprietary services. This is often referred to as ASP loophole.

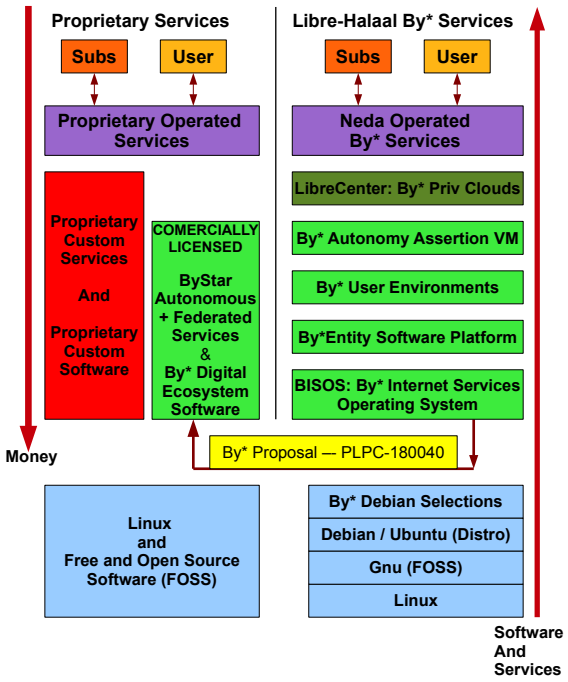

Figure 21.3: ByStar Value Chain

The software in the middle is the software that Neda has developed. It is subject to the "Affero General Public License Version 3" (AGPL3) and Neda Commercial License (Dual Licensed). AGPL3 closes the ASP loophole. Any ASP which uses ByStar software must subject its changes and improvements to AGPL3 and make its changes and improvements publicly available. Those ASPs not wishing to do so, can use ByStar software through the Neda Commercial License.

In the left column of Figure 21.3, we illustrate a typical proprietary ASP who is incorporating ByStar as part of its services based on the Neda Commercial License.

In this environment the model for implementation of By* service functionality is not one of original software development. Rather, it is a matter of selection and integration of already available software packages. Virtually all existing By* service functionality has been created this way—in building By* we have written almost no new software components at all.

Thus we are not so much in the business of software development, as we are in the business of software integration. But the integration of software components to produce a coherent service is far from trivial. We have created a sophisticated technical integration environment for this purpose, called the **BISOS: ByStar Internet Services Operating System** [34].

Design of BISOS recognizes the evolution of underlying external software (bright blue) in the ByStar value chain. This is the extraordinary magic of Libre-Halaal software and services: the ability to take things and reuse them at extremely low cost. This is the fundamental growth dynamic of Libre Services, and the powerful generative force that is lacking in the proprietary model. This is the key dynamic that causes the By* Libre Services eventually to surpass the proprietary model entirely in terms of features and functionality.

21.8 Competition

It is customary for traditional business plans to include a section titled: "Competition".

However, traditional notions of competition do not naturally align with the ByStar model, which is inherently

collaborative rather than competitive.

In Section 16.2.6 — Relationship With Existing Realities — we discuss how ByStar interacts with existing realities. While ByStar challenges the proprietary American digital ecosystem, it is also designed to coexist and, when beneficial, interoperate with existing systems — whether proprietary or Libre-Halaal.

Many engineers and technologists have recognized that something is fundamentally flawed in the existing proprietary digital ecosystem. Various attempts have been made to create isolated, autonomy- and privacy-oriented services. However, these efforts have largely been engineering-centric, resulting in solutions that are limited in scope and marginal in impact.

None of these initiatives aims to address the problem at the scale of a complete digital ecosystem. In that respect, ByStar is unique. Most such efforts are Western in origin, with a narrow focus on "freedom," often lacking a comprehensive societal analysis. From this perspective, they are not true peers of ByStar. At present, it may be accurate to say that ByStar has no true peer.

Below, we provide a summary of notable privacy- and autonomy-oriented internet application services.

Freedom-Oriented Component Projects (e.g., Tor):

> Various projects offer valuable partial solutions at the component level. For instance, the Tor software protects users by routing communications through a distributed network of relays operated by volunteers worldwide. It helps conceal browsing activity from network surveillance, hides physical location from visited websites, and enables access to blocked content.

FreedomBox Project:

> FreedomBox attempts to consolidate several freedom-oriented component projects into an integrated platform. While this is a useful step, it fails to acknowledge that what is truly needed is not merely a secure box, but a comprehensive and integrated digital ecosystem.

Private Clouds (e.g., ownCloud, Nextcloud):

> Various open-source platforms provide self-hosted private cloud storage solutions. Among the most prominent are Nextcloud and ownCloud, but others include FileRun, IPFS, and Cozy Cloud. These tools empower users with greater data control, yet remain limited to specific application domains.

Privacy-Oriented Social Networking (e.g., Mastodon, Diaspora, Fediverse, Solid):

> These platforms serve as open-source, privacy-conscious alternatives to major social media services such as Twitter and Facebook. Through the likes of Fediverse, they represent a decentralized response to Big Tech's centralized models.

While each of these initiatives contributes to advancing digital autonomy in its own right, none have tackled the challenge with the scope and cohesion of a fully integrated, comprehensive digital ecosystem. Moreover, few have addressed the issue at a societal scale. Most are rooted in Western paradigms of individualism and personal freedom, and consequently lack the systemic integration and socio-technical grounding that *ByStar* embodies.

Tim Berners-Lee's *Solid* project (`https://solidproject.org/`) represents a step toward redecentralizing the web. However, *ByStar* transcends this by addressing the broader domain of internet application services, which encompasses more than just the web (e.g., email).

Over time, the best elements of these efforts may be absorbed into ByStar. The strength of the BISOS platform lies in its robust integration capabilities, which support the ongoing incorporation of complementary tools and services. It is worth noting that none of the initiatives listed above have recognized the necessity of a general-purpose internet integration platform such as BISOS.

To the extent that these existing projects may be considered competitors, their presence is in fact encouraging. They serve to validate the problem domain and demonstrate a clear demand for autonomy, privacy, and freedom

in the digital realm. Rather than undermining the ByStar model, they help affirm the significance of its goals and the urgency of its comprehensive approach.

Thus far, our examination of competition has focused on ideologically aligned initiatives aimed at digital autonomy and privacy. However, if we shift to a purely functional lens, the true competitive landscape becomes much clearer. In functional terms, *ByStar* is positioned as an alternative to the dominant players that currently define the global digital environment: Google, Facebook, Apple, Microsoft, and Amazon—or more precisely, the tightly interlocked ecosystem they collectively represent.

This is the scale and scope of what we mean by a **cohesive and complete digital ecosystem**. Unlike fragmented alternatives that target specific services or features, *ByStar* is designed as a comprehensive replacement—an integrated societal platform that redefines the ethical and structural foundations of digital engagement.

21.9 Market Size

Traditional business plans often include a section titled: "Market Size."

For anyone who truly grasps the scope and ambition of the *ByStar* model, the enormity of its market is self-evident. In fact, to quantify it narrowly risks diminishing its significance. Nonetheless, in the interest of conformity and completeness, we offer the following framing.

The conventional notion of "market size" is typically defined in monetary terms, often guided by corporate interests and commercial metrics. However, when approaching digital ecosystems from a societal perspective—as *ByStar* does—it becomes necessary to reconceptualize what is meant by "market."

ByStar does not merely compete for commercial share within predefined categories; instead, it seeks to **transform the structure and ethics of digital engagement**. Consequently, our understanding of "market size" is rooted in the number of individuals, communities, institutions, and nations who **require** autonomy, privacy, sovereignty, and liberation from exploitative digital architectures.

From this vantage point, the total addressable domain for *ByStar* includes:

- **Over 5 billion internet users globally** (as of 2025), the vast majority of whom currently interact with digital services through extractive, centralized platforms.
- **Billions of devices** (personal, industrial, and institutional) embedded in a vertically controlled, opaque digital infrastructure.
- **Governments and institutions** across the Global South seeking greater digital sovereignty and alternatives to Western-dominated digital infrastructure.

Even a conservative segmentation reveals a significant potential:

- **Digital Autonomy Advocates and Privacy-Conscious Users**: Estimated at 250 million globally—a rapidly growing demographic seeking alternatives to surveillance capitalism.
- **Self-hosting and Open Source Communities**: Millions of users already engaged with platforms like Nextcloud, Mastodon, or Tor, who could benefit from broader integration and cohesion.
- **State-level Initiatives for Digital Sovereignty**: Countries such as Iran, China, India, and members of the African Union are actively exploring national-level alternatives to American Big Tech dependency.

The total addressable market (TAM), even by conventional estimates within the decentralized internet and privacy tech domains, exceeds **$200 billion USD** globally. However, the *ByStar* vision positions us not just as a participant in this market, but as an **agent of systemic transformation** within it.

ByStar's initial Serviceable Obtainable Market (SOM) includes:

- **Technically literate users and institutions in select regions** (e.g., parts of Asia, the Middle East, and Europe) who are ideologically aligned with the Libre-Halaal model.
- **Academic and civil institutions** exploring digital independence frameworks.
- **Diaspora networks** and affinity groups seeking ethical digital alternatives.

By centering on *ethical completeness* and *systemic cohesion*, rather than fragmented tools, *ByStar*'s market size cannot be captured by narrow analytics alone. Its true domain is defined by a growing **global movement toward digital self-determination**—a trend whose magnitude is increasing with each data breach, censorship event, or geopolitical shift.

21.10 Current Status of Various ByStar Services

ByStar Services are vast in scope. They are designed to be ever growing. Basic structures of ByStar are in place and many services are built or partially built. The Libre-Halaal Services collaborative framework allows for ByStar to grow dynamically.

Thus far our focus has been in making sure that the overall architecture of the ByStar Digital Ecosystem is sound. We have been designing big and implementing gradually. A complete stable system is in place. It is now a matter of expanding and improving it.

21.10.1 Current Status and Span of ByStarEntity Generators

A number of ByStarEntity Generators—the machinery required for fully automated creation of new service instantiating—are in place for a number of ByStarEntityTypes. Current ByStarEntity Generators are shown in Figure 21.2 under the "ByStar Autonomous" label. We thus have the ability to create unlimited numbers of new accounts in batch mode, or at any time we can "enable" the services, to permit self-service account creation by individual and business users.

21.10.2 Current Status and Scope of ByStar Federated Services

A number of sites are in place for facilitating inter-autonomous relations. Current Federated Services are shown in Figure 21.2 under the "ByStar Federated" label.

Our initial focus among federated service is those used for information aggregation. These include ByTopic, ByContent and BySearch.

21.10.3 Growth of user base: timing

An important consideration is the point at which we will begin to accept the burden of significant numbers of users.

In the case of a conventional service deployment there is typically a major emphasis placed on early and rapid growth of a user base, to demonstrate demand and marketplace viability of the service, and lay claim to a particular portion of functional territory. This was the modus operandi during the dot con era, where claims of user base numbers were an integral part of spin-and-flip and pump-and-dump models. Some of those attitudes still persist.

However, we are not following this standard early proof-of-service approach. This may be appropriate for a conventional new service, where service functionality is the central and most critical issue. But for ByStar, a different timing strategy is required.

First, as a super-set of numerous existing services, proof of service for By* in functional terms is already demonstrated by the Internet Services industry as it exists today. It is far more important to prove the model itself rather than its functional manifestations, and hasty creation of a user base does little to accomplish this.

Instead, we have provided a coherent and complete description of the model in this and our other documents. The theoretical basis for the model is solid, and this will be clear to anyone willing to invest the time to understand it. In addition, a number of working By* implementations are already in place; examples are provided. Though the scale of usage remains small, these are sufficient to demonstrate the viability of the Libre-Halaal model and the ByStar design, and the value of the resulting services to paying clients.

A far more important consideration is that installed base is very costly in terms of maintenance and support, and premature exposure to these costs can jeopardize the more critical work of building the underlying model machinery. Therefore, we will not take on the burden of user base until the time and/or context is right for this. This means either that we are fully ready to accept the associated costs of ownership, or that the user base is being taken on in an appropriate context, such as a suitable business partnership.

Under either scenario our strategy is the same: at the right time we will populate the services at large scale by mass creation of By* service accounts for large existing user bases.

21.11 ByStar Open Business Plan

As part of our responsibility to create a viable implementation construct, we have fully analyzed the business dimension, and we have formulated the business model in the form of an Open Business Plan, titled:

> **The Libre-Halaal ByStar Open Business Plan**
> **An Inversion to the Proprietary Internet Services Model**
> **Neda Communication Inc.'s Open Business Plan**
> http://www.by-star.net/PLPC/180014 — [33]
> http://www.neda.com/strategicVision/businessPlan

ByStar open business plan is available in 3 forms; the Condensed Summary (about 12 pages), the Executive Summary (about 15 additional pages) and the full plan (about 85 pages).